



Water Resources Data Arkansas Water Year 2003

Water-Data Report AR-03-1



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

Prepared in cooperation with the
State of Arkansas
and with other agencies



CALENDAR FOR WATER YEAR 2003

2002

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2	1	2	3	4	5	7	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				

2003

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4						1							1	
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29
														30	31					

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5					1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30				25	26	27	28	29	30	31	29	30					

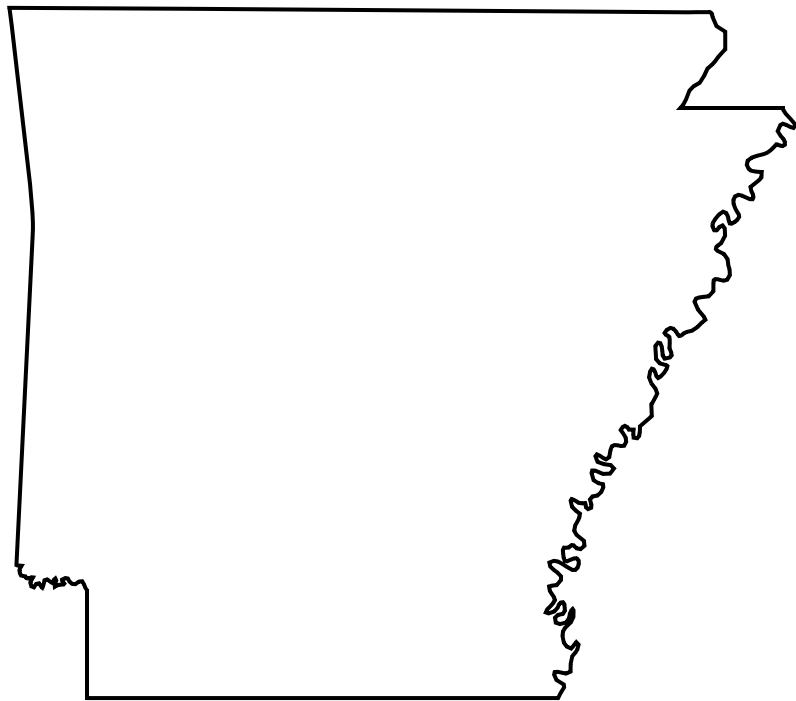
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2		1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31			24	25	26	27	28	29	30	28	29	30				

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

Water Resources Data Arkansas Water Year 2003

By D.A. Evans, T.H. Brossett, and T.P. Schrader

Water-Data Report AR-03-1



Prepared in cooperation with the
State of Arkansas and with other agencies



U. S. DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For information on the water program in Arkansas write to
District Chief, Water Resources Discipline
U.S. Geological Survey
401 Hardin Road
Little Rock, Arkansas 72211

2004

PREFACE

This volume of the annual hydrologic data report of Arkansas 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, ground-water levels, and quality of water provide the hydrologic information needed by local, State, 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. The authors had primary responsibility for ensuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines.

These data were collected, computed, and processed by the following personnel:

Greg Alexander	Jan Jones Heavener
William Baldwin	Dwight Lasker
Christine Barnett	Celeste Maes
Elizabeth Beavers	Matt Moix
Ty Blacklock	Ralf Montanus
Jeanne DeLanois	Chris O'Dell
Johnny Douglas	Tom Porter
Rene' Freret	Larry Remsing
Jaysson Funkhouser	Lisa Richardson
Marsha Gipson	John-Erik Schroeder
Alan Hall	Phil Stephens
Charles Heavener	Scott Wallace

Sharon Tuschner assembled the text for the report and Steve Bearden and Brian Clark modified the illustrations for the report.

This report was prepared in cooperation with the State of Arkansas and with other agencies under the general supervision of W. Reed Green, Acting Surveillance and Analysis Section Chief and John E. Terry, District Chief, Arkansas.

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
March, 2004

3. REPORT TYPE AND DATES COVERED
Annual-October 1, 2002 to September 30, 2003

4. TITLE AND SUBTITLE

Water Resources Data--Arkansas, Water Year 2003

5. FUNDING NUMBERS

6. AUTHOR(S)

D.A. Evans, T.H. Brossett, and T.P. Schrader

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

U.S. Geological Survey, Water Resources Discipline
401 Hardin Road
Little Rock, Arkansas 72211

8. PERFORMING ORGANIZATION
REPORT NUMBER

USGS-WDR-AR-03-1

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Geological Survey, Water Resources Discipline
401 Hardin Road
Little Rock, Arkansas 72211

10. SPONSORING / MONITORING
AGENCY REPORT NUMBER

USGS/WDR-AR-03-1

11. SUPPLEMENTARY NOTES

Prepared in cooperation with the State of Arkansas 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)

The Water Resources Discipline of the U.S. Geological Survey, in cooperation with State, Federal, and other local governmental agencies, obtains a large amount of data pertaining to the water resources of Arkansas each year. These data, accumulated during many water years, constitute a valuable database for developing an improved understanding of the water resources of the State.

Water resources data reported for the 2003 water year for Arkansas consist of records of discharge and water quality (physical measurements and chemical concentrations) of streams, water quality of lakes, and ground-water levels and ground-water quality. Data from selected sites in Louisiana, Missouri and Oklahoma also are included. This report contains daily discharge records for 108 surface-water gaging stations, 76 peak-discharge partial-record stations, 9 stage-only stations, water-quality data for 73 surface-water stations and 17 wells, and water levels for 15 observation wells. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements.

14. SUBJECT TERMS

*Arkansas, *Missouri, *Oklahoma, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses

15. NUMBER OF PAGES

443

16. PRICE CODE

17. SECURITY CLASSIFICATION
OF REPORT

Unclassified

18. SECURITY CLASSIFICATION
OF THIS PAGE

Unclassified

19. SECURITY CLASSIFICATION
OF ABSTRACT

Unclassified

20. LIMITATION OF ABSTRACT

Preface	iii
Report Documentation Page	iv
List of surface-water stations, in downstream order, for which records are published	vii
List of ground-water stations, for which records are published	xi
List of discontinued surface-water-discharge stations	xiii
List of discontinued surface-water-quality stations	xv
Introduction	1
Cooperation	1
Summary of hydrologic conditions	2
Surface water	2
Surface-water quality	5
Ground water	6
Definition of terms	7
Station identification numbers	25
Downstream order and station number	25
Numbering system for wells and miscellaneous sites	26
Special networks and programs	27
Explanation of stage and water-discharge records	29
Data collection and computation	29
Data presentation	30
Station manuscript	30
Peak discharge greater than base discharge	31
Data table of daily mean values	31
Statistics of monthly mean data	32
Summary statistics	32
Identifying estimated daily discharge	34
Accuracy of field data and computed results	34
Other data records available	34
Explanation of precipitation records	34
Data collection and computation	34
Data presentation	35
Explanation of water-quality records	35
Collection and examination of data	35
Water analysis	35
Surface-water-quality records	36
Classification of records	36
Accuracy of the records	36
Arrangement of records	36
On-site measurements and sample collection	37
Water temperature	37
Sediment	37
Laboratory measurements	37
Data presentation	38
Remark codes	39
Water-quality control data	39
Blank samples	39
Reference samples	40
Replicate samples	40
Spike samples	40
Explanation of ground-water-level records	41
Site identification numbers	41
Data collection and computation	41
Data presentation	41
Water-level tables	42
Hydrographs	42
Ground-water-quality data	43
Data collection and computation	43

CONTENTS

	Page
Laboratory measurements	43
Access to USGS water data	43
Publications on Techniques of Water-Resources Investigations	44
Surface-water records	50
Peak discharge and stage at partial-record stations and miscellaneous sites	404
Discharge measurements made at special study and miscellaneous sites	411
Ground-water records	415
Precipitation	443
Index	

ILLUSTRATIONS

Figure 1. Graph showing comparison of discharge at four representative long-term gaging stations for the 2003 water year with the median of the monthly and annual mean discharges for a 40-year base period	3
2. Map showing locations of continuous-record gaging stations in Arkansas	48
3. Map showing locations of water-quality stations in Arkansas	49
4. Map showing locations of ground-water quality sampling sites and observation wells in Arkansas	414

HYDROLOGIC-DATA STATIONS IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

Note.--Data for partial-record stations and miscellaneous sites for surface-water quantity are printed in a separate section of this report.

[Letters after station name designate type of data: (d) daily mean discharge, (c) chemical, (b) biological, (m) microbiological, (o) dissolved oxygen, (t) water temperature, (s) sediment.]

Page

MISSISSIPPI RIVER BASIN

ST. FRANCIS RIVER BASIN

St. Francis River at Fisk, Missouri (d,c,s).....	07040000	50
St. Francis River near Glennonville, Missouri (s).....	07040060	53
Wilhelmina Cutoff near Campbell, Missouri (s).....	07040070	54
St. Francis River at St. Francis (d,c,s).....	07040100	55
St. Francis River near Piggott (s).....	07040110	58
St. Francis River at Holly Island (s).....	07040130	59
St. Francis River at Lake City (d,c,s).....	07040450	60
Right Hand Chute of Little River at Rivervale (c,s).....	07046600	64
St. Francis River at Parkin (d).....	07047800	65
St. Francis River Floodway near Marked Tree (d,c,s).....	07047810	67
Cross County Ditch near Birdeye (s).....	07047815	71
St. Francis Bay at Riverfront (d,c,s).....	07047900	72
Clark Corner Cut-off near Colt (c,s).....	07047904	75
St. Francis River at Madison (c,s).....	07047907	76
L'Anguille River near Colt (d,c,m,s).....	07047942	77
L'Anguille River at Palestine (d).....	07047950	81

WHITE RIVER BASIN

White River:

Middle Fork White River:

Town Branch at B.R. 62 at Fayetteville (d).....	07048480	83
Town Branch Tributary at Hwy 16 at Fayetteville (d).....	07048490	85
West Fork White River east of Fayetteville (d,c,m,s).....	07048550	87
White River near Fayetteville (d,c,m,s).....	07048600	91
White River near Goshen (c,m,s).....	07048700	95
Richland Creek at Goshen (d,c,m,s).....	07048800	98
Beaver Lake at Hwy 412 bridge near Sonora (c,m).....	07048910	102
War Eagle Creek near Hindsville (d,c,m,s).....	07049000	105
Beaver Lake near Lowell (c,m).....	07049200	109
Beaver Lake at Hwy 12 bridge near Rogers (c,m).....	07049500	113
Beaver Lake near Eureka Springs (c,m).....	07049690	118
White River at Beaver Dam near Eureka Springs (c,o,t).....	07049691	125
Kings River near Berryville (d,c,m,s).....	07050500	128
Table Rock Lake:		
Long Creek near Denver (d).....	07053207	131
Yocum Creek near Oak Grove (d,b,c,m,s).....	07053250	133
Table Rock Lake near Branson, Missouri (c).....	07053400	137
White River below Table Rock Dam near Branson, Missouri (c).....	07053450	140
Bear Creek near Omaha (d).....	07054410	141
Bull Shoals Lake near Flippin (c).....	07054500	143
White River at Bull Shoals Dam near Flippin (c,o,t).....	07054501	146
White River below Bull Shoals Dam at Bull Shoals (c,o,t).....	07054502	149
White River below Bull Shoals Dam near Fairview (o,t).....	07054527	152
Crooked Creek at Yellville (d).....	07055608	154

WHITE RIVER BASIN--continued

White River:

Buffalo River near Boxley (d,b,c,m,s).....	07055646	156
Richland Creek near Witts Spring (d)	07055875	159
Calf Creek near Silver Hill (d,c,m,s)	07055893	161
Buffalo River near St. Joe (d,c,m,s).....	07056000	164
Bear Creek near Silver Hill (d,c,m,s)	07056515	168
White River near Norfolk (d).....	07057370	172
Norfolk Lake:		
Bennett's River at Vidette (d).....	07058980	174
Big Creek near Elizabeth (d)	07059450	176
Norfolk Lake near Norfolk (c)	07059500	178
North Fork River at base of Norfolk Dam near Norfolk (o,t)	07059998	181
North Fork River at Norfolk Dam near Norfolk (c).....	07060000	184
White River at Calico Rock (d,t,c,m,s).....	07060500	185
Sylamore Creek:		
North Sylamore Creek near Fifty-Six (d,b,c,m,s).....	07060710	190
White River at Batesville (d).....	07061000	193
Black River near Corning (d).....	07064000	195
Black River at Pocahontas (d).....	07069000	197
Spring River:		
Mammoth Spring at Mammoth Spring (d).....	07069190	199
Spring River at Town Branch bridge at Hardy (d)	07069305	201
Spring River at Imboden (d).....	07069500	203
Eleven Point River near Ravenden Springs (d)	07072000	205
Black River at Black Rock (d).....	07072500	207
Strawberry River near Poughkeepsie (d)	07074000	209
Black River at Elgin Ferry (d)	07074420	211
White River at Newport (d).....	07074500	213
White River near Augusta (d)	07074850	215
Greers Ferry Lake:		
South Fork Little Red River at Clinton (d).....	07075300	217
Greers Ferry Lake near Heber Springs (c).....	07075900	219
Little Red River near Heber Springs (c,o,t)	07076000	221
Little Red River near Dewey (d).....	07076517	224
White River at Devalls Bluff (d,c,m,s)	07077000	226
Cache River at Egypt (d).....	07077380	229
Cache River at Patterson (d,c,m,s).....	07077500	231
Cache River near Cotton Plant (d).....	07077555	234
Bayou DeView near Morton (d,c,m,s).....	07077700	236

ARKANSAS RIVER BASIN

Arkansas River:

Illinois River at Savoy (d,c,m,s)	07194800	239
Clear Creek:		
Mud Creek:		
Mud Creek Tributary at Township Street at Fayetteville (d).....	07194809	242
Osage Creek near Cave Springs (d).....	07194880	244
Osage Creek near Elm Springs (d,c,m,s).....	07195000	246

ARKANSAS RIVER BASIN--continued

Arkansas River:

Illinois River near Siloam Springs (d)	07195400	249
Illinois River south of Siloam Springs (d,c,m,s).....	07195430	251
Flint Creek at Springtown (d)	07195800	255
Flint Creek near West Siloam Springs, Oklahoma (d)	07195855	257
Baron Fork at Dutch Mills (d,c,m,s).....	07196900	259
Poteau River at Cauthron (d,c,m,s).....	07247000	262
James Fork near Hackett (d,c,m,s).....	07249400	265
Lee Creek at Short, Oklahoma (d)	07249800	268
Little Lee Creek near Greasy, Oklahoma (d).....	07249870	270
Little Lee Creek near Short, Oklahoma (d)	07249910	272
Lee Creek near Short, Oklahoma (d,c,m,s).....	07249985	274
Lee Creek at Lee Creek Reservoir near Van Buren (d)	07250085	277
Arkansas River at James W. Trimble Lock and Dam near Van Buren (d,c,m,s)	07250550	279
Frog Bayou:		
Jones Creek at Winfrey (d)	07250935	282
Frog Bayou near Winfrey (d).....	07250965	284
Jack Creek near Winfrey (d).....	07250974	286
Mulberry River near Mulberry (d).....	07252000	288
Big Piney Creek at Hwy 164 near Dover (d).....	07257006	290
Little Piney Creek near Lamar (d).....	07257200	292
Illinois Bayou near Scottsville (d)	07257500	294
Arkansas River at Dardanelle (d).....	07258000	296
Petit Jean River near Booneville (d)	07258500	298
Dutch Creek at Waltreak (d).....	07260000	300
Petit Jean River at Danville (d).....	07260500	302
West Fork Point Remove Creek near Hattieville (d)	07260673	304
Cadron Creek near Guy (d).....	07261000	306
Fourche LaFave River near Gravelly (d).....	07261500	308
Fourche LaFave River near Aplin (d).....	07263012	310
Maumelle River at Williams Junction (d,c,m,s)	07263295	312
Bringle Creek at Martindale (c,m,s)	072632962	317
Lake Maumelle west of Hwy 10 bridge near Wye (c,m).....	072632965	318
Lake Maumelle at State Hwy 10 near Wye (d,c,m,s)	072632966	319
Lake Maumelle east of Hwy 10 Bridge near Wye (c,m)	07263297	322
Yount Creek near Martindale (c,m,s)	072632971	325
Reece Creek at Little Italy (c,m,s)	072632982	326
Lake Maumelle near Little Italy (c,m).....	07263299	327
Lake Maumelle near Natural Steps (c,m)	072632995	330
Maumelle River at Maumelle Dam at Natural Steps (d)	07263300	333
Arkansas River at Murray Dam at Little Rock (d).....	07263450	335
Fourche Creek:		
Rock Creek at 36th Street at Little Rock (d)	07263580	337
Arkansas River at David D. Terry Lock and Dam below Little Rock (c,s).....	07263620	339
Bayou Meto near Lonoke (d).....	07264000	343

RED RIVER BASIN

Red River at Index (d,t,c,m,s)	07337000	345
Little River near Horatio (d)	07340000	350
Ouachita River:		
Cossatot River near Vandervoort (d,c,m,s)	07340300	352
Saline River near Lockesburg (d)	07341200	355
Ouachita River near Mount Ida (d)	07356000	357
Ouachita River below Rammel Dam above Jones Mill (d)	07359002	359
Caddo River near Caddo Gap (d)	07359610	361
Little Missouri River near Langley (d)	07360200	363
Antoine River at Antoine (d)	07361500	365
Ouachita River at Camden (d,c,m,s)	07362000	367
Smackover Creek near Smackover (d)	07362100	370
Moro Creek near Fordyce (d)	07362500	372
Lake Winona:		
Alum Fork Saline River near Reform (d,c,m,s)	07362587	374
Lake Winona downstream from Stillhouse Creek near Reform (c,m)	07362588	378
Lake Winona downstream from Gillis Branch near Reform (c,m)	07362589	379
Lake Winona at Reform (c,m)	07362590	381
Saline River:		
Middle Fork Saline River near Owensville (d)	07362693	384
Saline River at Benton (d)	07363000	386
Saline River near Sheridan (d)	07363200	388
Hurricane Creek below Sheridan (d)	07363400	390
Saline River near Rye (d)	07363500	392
Bayou Bartholomew at Garrett Bridge (d,c,m,s)	07364133	394
Bayou Bartholomew near McGehee (d,c,m,s)	07364150	397
Bayou Bartholomew near Portland (d)	07364185	400
Bayou Macon at Eudora (d)	07369680	402

GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

[Letters after station name designate type of data: (c) chemical, (m) monthly water levels,(r) continuous records]

Arkansas County

03S04W03DCA1 (r) -----	342649091251916	415
02S05W34ABC1 (c) -----	342925091314701	416

Ashley County

18S08W28DDD2 (r) -----	.330624091552801	418
------------------------	------------------	-----

Benton County

20N30W06DCD1 (c)-----	362548094123501	419
21N29W35DBB2 (c)-----	362636094012602	421

Calhoun County

14S13W12CCB1 (c) -----	333040092240301	423
12S16W26AAD1 (c)-----	333944092430401	423

Chicot County

14S03W32DCB1 (c) -----	332613091255101	424
------------------------	-----------------	-----

Columbia County

19S20W09CBD1 (c) -----	330555093112801	426
17S20W17CDA1 (c) -----	331519093115901	426

Desha County

09S02W26DDC1 (r) -----	335258091152301	426
------------------------	-----------------	-----

Garland County

02S19W33CBD1 (r) -----	343048093030401	428
------------------------	-----------------	-----

Jefferson County

06S08W16CCC1 (m) -----	341138091551601	429
------------------------	-----------------	-----

Lonoke County

03N08W32ABB1 (r) -----	345057091525601	429
03N08W11ACA1 (r)-----	345413091493401	430

Montgomery County

01S26W29DCC1 (m) -----	343726093481801	431
------------------------	-----------------	-----

Phillips County

02S03E15ACD1 (r)-----	343108090462601	432
-----------------------	-----------------	-----

Poinsett County

10N01E15DBB1 (c) -----	352930090582501	433
------------------------	-----------------	-----

Stone County

16N12W25DCB1 (m) -----	355927092122401	434
------------------------	-----------------	-----

Union County

19S16W35DDC1 (c) -----	330107092432301	435
19S11W25AAA1 (c)-----	330219092111201	435
18S17W22BDD1 (c)-----	330855092505601	436
18S16W11AAB1 (c)-----	331041092431401	437
17S15W31DDA (r)-----	331144092410601	438
17S13W31BAD1 (c)-----	331203092290801	439
17S15W28DBA1 (r) -----	331346092391101	439
17S17W30DCD1 (c)-----	331351092572701	440
17S16W24BDB1 (c)-----	331358092424301	441
17S15W18DBB1 (m) -----	331438092411901	441
16S16W01DDD1 (c)-----	332113092421001	442

Claiborne Parish

CL-150 (c)----- 325103092434901 442

Union Parish

UN-202 (c) ----- 325004092260801 442

DISCONTINUED GAGING STATIONS

The following continuous-record streamflow stations in Arkansas have been discontinued or converted to partial-record stations. Daily streamflow records were collected and published for the period of record shown for each station.

Station number	Station name	Drainage area (mi ²)	Period of record
ST. FRANCIS RIVER BASIN			
07047000	St. Francis River floodway near Marked Tree (Dam)	4,644	1934-65
07047500	St. Francis River at Marked Tree	5,148	1934-73
07047815	Cross County Ditch near Birdeye	--	1995-00
07047882	Straight Slough near Birdeye	--	1995-00
07047904	Clark Corner Cut-Off near Colt	--	1995-00
WHITE RIVER BASIN			
07048000	West Fork White River at Greenland	83.1	1945-83
07048500	West Fork White River near Fayetteville	118	1937-45
07049500	White River near Rogers	1,020	1952-63
07049563	Prairie Creek northeast of Rogers	2.6	2000-02
*07055000	White River near Flippin	6,081	1928-80
07057000	Buffalo River near Rush	1,096	1928-70
07057250	White River at Shipps Ferry	8,007	1963-64
07060892	Sullivan Creek at Sandtown	27.2	1990-91, 1993-94 1987-94
07068890	Fourche River above Pocahontas	229	1964-70
07069220	Spring River near Mammoth Springs	280	1988-94
07073000	Strawberry River near Evening Shade	217	1939-79
07073500	Piney Fork at Evening Shade	99.2	1939-84
*07075000	Middle Fork of Little Red River at Shirley	302	1939-84
07076000	Little Red River near Heber Springs	1,153	1927-80
07076620	Little Red River near Searcy	1,648	1983-96
*07076750	White River at Georgetown	22,387	1991-94
07076850	Cypress Bayou near Beebe	166	1961-76
07077930	Big Creek near Moro	77.4	1961-70
07077950	Big Creek at Poplar Grove	448	1970-93
07078000	LaGrue Bayou near Stuttgart	176	1935-54
ARKANSAS RIVER BASIN			
07194760	Illinois River near Viney Grove	80.7	1986 1986
*07249500	Cove Creek near Lee Creek	35.3	1950-70
07251000	Frog Bayou near Mountainburg	74.2	1936-61
*07251500	Frog Bayou at Rudy	216	1950-70
07252500	Sixmile Creek Subwatershed No. 6 near Chismville	4.23	1960-70
07253000	Sixmile Creek at Chismville	24.1	1954-70
07253500	Sixmile Creek near Branch	36.7	1954-70
07254000	Sixmile Creek Subwatershed No. 5 near Chismville	2.76	1960-70
07254500	Sixmile Creek Subwatershed No. 2 near Caulksville	5.81	1960-70
07255000	Sixmile Creek at Caulksville	104	1954-70
07255100	Sixmile Creek near Subwatershed No. 23 near Branch	4.49	1960-70
07255500	Hurricane Creek near Branch	17.2	1954-70
07256000	Hurricane Creek near Caulksville	53	1954-70
*07256500	Spadra Creek at Clarksville	61.1	1952-70
07259500	Petit Jean River near Waveland	516	1939-80
07262500	Fourche LaFave River near Nimrod	684	1936-80

WATER RESOURCES DATA FOR ARKANSAS, 2003

DISCONTINUED GAGING STATIONS--CONTINUED

Station Number	Station name	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN--CONTINUED			
07263465	Storm Ditch at Rolling Oaks Drive at Maumelle	0.36	1997
07264500	Bayou Meto near Stuttgart	574	1935-54
RED RIVER BASIN			
*07339500	Rolling Fork near DeQueen	182	1948-80
*07340500	Cossatot River near DeQueen	360	1938-80
*07341000	Saline River near Dierks	121	1938-80
07349430	Bodcau Creek at Stamps	234	1958-70
07356500	South Fork Ouachita River at Mount Ida	64	1949-70
07358000	Ouachita River near Hot Springs	1,405	1922-30
07359700	Caddo River at Glenwood	201	1988
07361000	Little Missouri River near Murfreesboro	380	1928-31, 1937-77
07364000	Saline River near Warren	2,476	1928-31, 1937-40
*07365800	Cornie Bayou near Three Creeks	180	1956-87
07365900	Three Creeks near Three Creeks	50.3	1956-71

*Converted to partial-record station

**Converted to stage-only station

WATER RESOURCES DATA FOR ARKANSAS, 2003

xv

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following water-quality stations have been discontinued in Arkansas. Continuous daily records of water temperature or sediment and monthly or periodic samples of chemical quality were collected and published for the period of record shown for each station.

Station number	Station name	Type of record	Period of record
MISSISSIPPI RIVER MAIN STEM			
07024181	Mississippi River at Huffman	Chem.	1974-83
07029150	Mississippi River at Barfield	Chem.	1974-83
07032010	Mississippi River at West Memphis	Chem.	1969-70
07040496	Cockle Burr Slough Ditch near Monette	Chem, Sed.	1979-97
07047970	Mississippi River at Helena	Chem.	1972-74
07265450	Mississippi River near Arkansas City	Chem.	1974-93
		Sp. Cond.,	1974-81
		Temp.	
07265455	Mississippi River near Greenville, Mississippi	Chem.	1973-74
ST. FRANCIS RIVER BASIN			
07040350	Big Slough Ditch near Paragould	Chem., Sed.	1978-84
07040424	Locust Creek Ditch near Paragould	Chem., Sed.	1978-84
07040428	Eight Mile Ditch near Paragould	Chem., Sed.	1978-84
07040440	Thompson Creek near Lester	Chem., Sed.	1978-81
07040445	Big Bay Ditch near Lester	Chem., Sed.	1978-81
07040500	Cockle Burr Slough Ditch near Black Oak	Chem., Sed.	1978-79
07046500	Big Lake Outlet near Manila	Chem., Sed.	1972-83
07046535	Pemiscot Bayou near Yarbrow	Chem.	1972-74
07047400	Pemiscot Bayou near Dell	Chem.	1974-83
07047500	St. Francis River at Marked Tree	Chem.	1946, 1950-55, 1966-73
07047560	Tyronza River near Dyess	Chem.	1977
07047570	Tyronza Bayou near Dyess	Chem.	1977
07047575	Tyronza River Ditch No. 40 near Chelford	Chem.	1977
07047585	Tyronza River Ditch No. 6 near Lepanto	Chem.	1977
07047590	Tyronza River near Spear Lake	Chem.	1977
07047700	Tyronza River near Twist	Chem.	1974-88
07047800	St Francis River at Parkin	Chem.	1973-94
07047810	St Francis River Floodway near Marked Tree	Sed.	1990-2000
07047815	Cross County Ditch near Birdeye	Sed.	1996-2000
07047882	Straight Slough near Birdeye	Chem., Sed.	1977-1984 1996-2000
07047904	Clark Corner Cut-Off near Colt	Sed.	1990-2000
07047936	L'Anguille River near Cherry Valley	Chem., Sed.	1981-84
07047950	L'Anguille River at Palestine	Chem., Sed.	1978-79, 1981-84
07047968	St. Francis River north of Helena	Chem.	1972-83
WHITE RIVER BASIN			
07048000	West Fork White River at Greenland	Chem.	1946-54, 1956-57, 1959,1963, 1976-79 1976-81
07049693	White River at Campground E near Busch	Temp., D.O.	1991-Dec 98

WATER RESOURCES DATA FOR ARKANSAS, 2003
DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
07049695	White River above Busch	Chem., Temp.	1969, 1972-82
07050000	White River at Beaver	Chem.	1945-46, 1948-53, 1974-83
07053700	Lake Taneycomo at Branson, Missouri	Chem.	1977-91
07054471	Bull Shoals Lake below Big Music Creek near Midway fishpens	Chem.	1978-91
07054474	Bull Shoals Lake below Big Music Creek near Midway mouth of cove	Chem.	1978-79, 1982-91
07054535	White River below Bruce Creek near Lakeview	D.O., Temp	1992-93
07055000	White River near Flippin	Chem.	1945-50, 1953,1979
07055550	Crooked Creek Tributary near Dog Patch	Chem.	1947-59, 1966-82
07055600	Crooked Creek at Pyatt	Chem.	1963,1964, 1974-78
07055630	White River at Buffalo City	Temp.	1963-64
07055700	Little Buffalo River at Jasper	Temp.	1963-70
07056507	Bear Creek west of Marshall	Chem.	1983-86
07057000	Buffalo River near Rush	Chem.	1946-54, 1958-59, 1961,1963
07057246	White River near Lone Rock	Temp.	1979-82
07057250	White River at Shipps Ferry	Temp.	1963-64
07060000	North Fork River at Norfork Dam	Temp., D.O.	1991-98
07060004	North Fork River near Salesville	Temp., D.O.	1993-94
07060010	North Fork River at Norfork	Chem., Temp.	1974-83
07060660	White River at Sylamore	Temp.	1967-82
07060700	South Sylamore Creek at Allison	Chem.	1957-63, 1987-88, 1992-93
07060839	White River above Lock and Dam 3 near St. James	Temp., D.O.	1989-91
07061000	White River at Batesville	Chem.	1983-86
07061094	White River near Salado	Chem.	1983-86
07061950	Clearwater Lake at Carter Hollow, Missouri	Chem.	1978-91
07061980	Clearwater Lake near Carter Spring on Webb Creek, Missouri	Chem.	1978-91
07068600	Little Black River at Success	Chem., Temp.	1965, 1980-86
07068867	Fourche River near Middlebrook	Chem.	1969-75
07069268	South Fork of Spring River near Moko	Chem.	1972-74
07069500	Spring River at Imboden	Chem.	1945-63, 1966-72, 1976-79
07072000	Eleven Point River near Ravenden Springs	Chem.	1945-60, 1963,1966, 1972-79
07072500	Black River at Black Rock	Chem.	1946,1953, 1967-94

WATER RESOURCES DATA FOR ARKANSAS, 2003

xvii

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
WHITE RIVER BASIN--CONTINUED			
07073000	Strawberry River near Evening Shade	Chem.	1946-57, 1979
07073500	Piney Fork at Evening Shade	Chem.	1959,1979
07074000	Strawberry River near Poughkeepsie	Chem.	1949-60, 1971,1972, 1979
07074490	Black River at Jacksonport	Chem.	1964, 1974-83
07074491	White River at Jacksonport	Chem.	1983-86
07074595	Village Creek near Walnut Ridge	Chem.	1973-74, 1976-77
07074645	Lick Pond near Alicia	Chem.	1976-77
07074660	Village Creek near Swifton	Chem.	1973-74, 1976-77
07074665	Maple Ditch near Swifton	Chem.	1976-77
07074675	Swan Pond Ditch near Tuckerman	Chem.	1976-77
07074700	Village Creek near Newport	Chem.	1960-61, 1963-64, 1973-74, 1976-77
07074849	White River above Augusta	Temp.	1967-71
07074850	White River near Augusta	Chem.	1954,1979
07075000	Middle Fork of Little Red River at Shirley	Chem.	1954,1979
07076200	Little Red River near Wilburn	Chem., Temp.	1968-83
07076500	Little Red River at Pangburn	Temp.	1967-82
07076620	Little Red River near Searcy	Temp.	1967-82
		Chem.	1984-93
07076634	Little Red River at Judsonia	Chem.	1975-83
07076640	Little Red River near West Point	Temp.	1967-72
07076750	White River at Georgetown	Temp.	1967-81
07076850	Cypress Bayou near Beebe	Chem.	1976-78
07077000	White River at DeValls Bluff	Temp.	1963-70
07077080	Little Cache River Ditch No. 1 near McDougal	Chem.	1973-75
07077380	Cache River at Egypt	Chem.	1966, 1976-79, 1996-98
07077400	Cache River near Cash	Chem.	1974-83
07077555	Cache River near Cotton Plant	Chem.	1987-90, Nov 1992- June 1993, Oct 1994-98
07077600	Cache River at Brasfield	Chem.	1974-83
07077750	Bayou DeView near Brasfield	Chem.	1956-57, 1974-83
07077790	Cache River at 100 Yards below Dredging	Chem.	1977-80
07077794	Cache River at Mouth near Clarendon	Chem.	1977-80
07077800	White River at Clarendon	Chem., Temp.	1948-67, 1970-86
07077950	Big Creek at Poplar Grove	Chem.	1972, 1976-79

WATER RESOURCES DATA FOR ARKANSAS, 2003
DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
07077952	Big Creek near Poplar Grove	Chem.	1970-73
07077960	Big Creek near Watkins Corner	Chem.	1974-83
07078120	Little LaGrue Bayou near Stuttgart	Chem.	1954-55
07078285	White River at Arkansas Post Canal near Nady	Chem.	1972-83
ARKANSAS RIVER BASIN			
07188910	Butler Creek near Sulphur Springs	Chem.	1969-93
07195686	North Flint Creek near Springtown	Chem.	1995-96
07195800	Flint Creek at Springtown	Chem.	1975-79 1996
07195850	Flint Creek north of Siloam Springs	Chem.	1972-81
07195855	Flint Creek near West Siloam Springs	Chem.	1979-96
07196950	Evansville Creek at Evansville	Chem.	1958-59
07247012	Poteau River south of Bates	Chem.	1972-83
07247903	Lee Creek near Natural Dam	Chem.	1972-74
07250000	Lee Creek near Van Buren	Chem.	1951-59, 1972-79
07252000	Mulberry River near Mulberry	Chem.	1947-59, 1975-79
07252400	Arkansas River at Ozark	Chem.	1962-63, 1965-66
07252500	Sixmile Creek Subwatershed near Chismville	Chem.	1959-67
07256040	Short Mountain Creek west of Paris	Chem.	1987-93
07257000	Big Piney Creek near Dover	Chem.	1951-56
07257500	Illinois Bayou near Scottsville	Chem.	1971-72
07257995	Lake Dardanelle at Dardanelle	Chem.	1966-67
07260500	Petit Jean River at Danville	Chem.	1949-52, 1976-78
07260640	Petit Jean River near Centerville	Chem.	1974-83
07261000	Cadron Creek near Guy	Chem.	1976-78
07261235	East Fork Cadron Creek north of Conway	Chem.	1973
07261250	Cadron Creek west of Conway	Chem.	1955-56, 1973-83
07263010	Fourche LaFave River near Aplin	Chem.	1952-53
07263150	Fourche LaFave River near Bigelow	Chem.	1975-83
07263500	Arkansas River at Little Rock	Chem.	1946-69
07263650	Arkansas River at Pine Bluff	Chem.	1963
07263720	Arkansas River near Altheimer	Chem.	1954
07264000	Bayou Meto near Lonoke	Chem.	1968-83
07263750	Arkansas River at Lock and Dam 3 near Swan Lake	Chem.	1974-83
07264050	Bayou Two Prairie near Furlow (formerly published as "near Cabot")	Chem.	1975-83
07264500	Bayou Meto near Stuttgart	Chem.	1950-52, 1973-74
07265280	Arkansas River at Pendleton	Chem.	1963
RED RIVER BASIN			
07339500	Rolling Fork near DeQueen	Temp.	1976-79
07339850	Rolling Fork near Horatio	Chem.	1974-83
07340500	Cossatot River near DeQueen	Temp.	1976-79
07340520	Cossatot River near Lockesburg	Chem.	1974-83
07341000	Saline River near Dierks	Temp.	1975-79

WATER RESOURCES DATA FOR ARKANSAS, 2003

xix

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Type of record	Period of record
07341280	Millwood Lake on Mine Creek near Okay	Chem.	1983-93
07341500	Red River at Fulton	Chem., Temp.	1946-47, 1952-61, 1978-79
07342000	Red River at Garland	Chem.	1976
07344290	Days Creek south of Texarkana	Chem.	1973-74
07344340	Sulphur River near Fort Lynn	Chem.	1975-78
07348615	Bayou Dorcheat near Bussey	Chem.	1973-74
07348680	Crooked Creek at Arkansas-Louisiana State Line	Chem.	1973-74
07349445	Bodcau Creek near Taylor	Chem.	1952, 1973-74
07349453	Wheeler Creek near Arkana	Chem.	1973-74
07349455	Bear Creek near Arkana	Chem.	1973
07349457	Dooley Creek near Arkansas-Louisiana State Line	Chem.	1973
07356150	Ouachita River near Washita	Chem.	1970-72
07356320	Irons Fork Creek near Fannie	Chem.	1970-78
07356500	South Fork Ouachita River at Mount Ida	Chem.	1970-72, 1978
07357500	Lake Ouachita near Hot Springs	Chem.	1970-78
07357501	Ouachita River at Blakely Mountain Dam near Hot Springs	Chem.	1970-83
07357503	Ouachita River at Mountain Pine	Temp.	1979-82
07358501	Ouachita River at Carpenter Dam near Hot Springs	Chem.	1974-86
07359900	DeGray Lake near Arkadelphia	Chem.	1950-52, 1976-78
07359910	Caddo River at DeGray Regulating Dam near Arkadelphia	Chem.	1976-78
07360000	Ouachita River at Arkadelphia	Chem.	1949-70
07360162	Ouachita River near Sparkman	Chem.	1974-83
07360182	Brushy Creek near Ouachita	Chem.	1978-81
07360250	Little Missouri River near Newhope	Chem.	1970-78
07360350	Self Creek near Daisy	Chem.	1970-72, 1976-78
07360500	Lake Greeson near Murfreesboro	Chem.	1970-72, 1976-78
07361022	Prairie Creek at Murfreesboro	Chem.	1984-93
07361025	Prairie Creek near Murfreesboro	Chem.	1984-93
07361500	Antoine River at Antoine	Chem.	1976-79
07363080	Saline River near Tull	Chem.	1974-75
07363400	Hurricane Creek below Sheridan	Chem.	1950-55
07363500	Saline River near Rye	Chem.	1947-55, 1958-60, 1968-71, 1976-80
07364020	L'Aigle Creek at Hermitage	Chem.	1980
07364060	Bayou Lapile at Strong	Chem.	1952-55
07364080	Ouachita River near Felsenthal	Chem., Temp.	1950-67, 1971-81
07364088	Coffee Creek near Crossett	Chem.	1973-83
07365900	Three Creeks near Three Creeks	Chem.	1953-55, 1973-74
07366105	Little Cornie Bayou east of Junction City	Chem.	1973-74
07367666	Big Bayou near Jerome	Chem.	1974-81
07367695	LaFourche Bayou near Wilmot	Chem.	1973-74

Page Left Blank Intentionally

INTRODUCTION

The Water Resources Discipline of the U.S. Geological Survey, in cooperation with local, State, and other Federal agencies, obtains a large amount of data pertaining to the water resources of Arkansas each water year (October 1 through September 30). These data, accumulated during many water years, constitute a valuable database 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, these data are published annually in this report series entitled "Water Resources Data-Arkansas" and are stored in the U.S. Geological Survey National Water Information System (NWIS) and U.S. Environmental Protection Agency STORET databases.

Water resources data reported for the 2003 water year for Arkansas consist of records of discharge and water quality (physical measurements and chemical concentrations) of streams, water quality of lakes, and ground-water levels and ground-water quality. Data from selected sites in Louisiana, Missouri and Oklahoma also are included. This report contains daily discharge records for 108 surface-water gaging stations, 76 partial-record stations, and 9 stage-only stations; water-quality data for 73 surface-water stations and 17 wells, and water levels for 15 observation wells. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements.

Records of stream discharge or gage height, and contents, volume, or elevation of lakes were first published in a series of U.S. Geological Survey Water-Supply Papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these Water-Supply Papers were in an annual series and for 1961-65 and 1966-70 were in a 5-year series. Records of chemical constituent concentrations, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of Water-Supply Papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of Water-Supply Papers entitled "Ground Water Levels in the United States." Water-Supply Papers may be consulted in the libraries of the principal cities in the United States or may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, Colorado, 80225-0286.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual Water-Data Reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate Water-Data Reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an annual Water-Data Report on a State-boundary basis. These annual Water-Data Reports carry 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 report is identified as U.S. Geological Survey Water-Data Report AR-03-1. Water-Data Reports are for sale in paper copy or on microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

COOPERATION

The Geological Survey and agencies of the State of Arkansas have had cooperative agreements for the systematic collection of surface-water records since 1927, and for collection of ground-water and water-quality records since 1946. Organizations that assisted in collecting information through cooperative agreement with the Geological Survey in water year 2003 are:

Arkansas Soil and Water Conservation Commission, J. Randy Young, Director
Arkansas Department of Environmental Quality, Marcus C. Devine, Director
Arkansas Geological Commission, Mac B. Woodward, State Geologist
Arkansas Highway and Transportation Department, Dan Flowers, Director
Arkansas Game and Fish Commission, Scott Henderson, Director
Arkansas Department of Parks and Tourism, Richard W. Davies, Director
Central Arkansas Water, James T. Harvey, Manager
Beaver Water District, Alan Fortenberry, Engineer-Manager
City of Batesville, Joe M. Biard, City Mayor

WATER RESOURCES DATA FOR ARKANSAS, 2003

City of Cabot, Mickey (Stubby) Stumbaugh, City Mayor

City of Fayetteville, Gary Coover, City Engineer

City of Fort Smith, Steve Parke, Director of Utilities

Rogers Water Utilities, Tom McAlister, Utility Manager

Union County Conservation District, Ken Rudder

Union County Water Conservation Board, Robert Reynolds

Assistance in the form of funds or services was provided to collect records for some of the gaging stations and water-quality stations published in this report by the U.S. Army Corps of Engineers, National Park Service, Southwestern Power Administration, Entergy, U.S. Fish and Wildlife Service, National Weather Service, and Natural Resources Conservation Service. Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Streamflow varies seasonally in Arkansas and generally reflects precipitation patterns unless a stream is regulated. Below-average rainfall resulted in below-average runoff throughout most of the State during the 2003 water year. Streamflow for the year (as a percentage of the median for the base period 1961-2000) was 60 percent for the index station on the Buffalo River near St. Joe, in northern Arkansas, 29 percent for the index station on the James Fork near Hackett, in western Arkansas, 61 percent for the index station on the Big Piney Creek at Highway 164 near Dover, in west-central Arkansas, and 110 percent for the index station on the Saline River near Rye, in southern Arkansas. Monthly and annual mean discharges for the 2003 water year, and median for the monthly and annual mean discharges for the base period 1961-2000 at the St. Joe, Hackett, Dover, and Rye sites are shown on figure 1.

Slightly below-average rainfall occurred during the 2003 water year. During late spring, however, wetter conditions occurred over the southern half of the State with a series of large storms occurring during June. On June 12, 2003, one storm produced over 6 inches of rain in southern Arkansas. However, no outstanding peaks occurred during this event.

Streamflow statistics for the 2003 water year compared to the streamflow statistics for the period of record at 10 stations are presented below.

Station identification	Period of record	Statistics of discharge during 2003 water year (cubic feet per second)			Statistics of discharge during period of record (cubic feet per second)		
		Maximum instantaneous	Minimum instantaneous	Mean	Maximum instantaneous	Minimum instantaneous	Mean
07047942 L'Anguille River near Colt	1970-03	7,790	a	757	16,600	0.99	724
07060710 North Sylamore Creek near Fifty-Six	1965-03	1,330	a	24.7	25,200	1.0	46.1
07077380 Cache River at Egypt	1964-03	4,510	.00	909	8,490	.00	868
07196900 Baron Fork at Dutch Mills	1958-03	1,730	.00	13.8	20,900	.00	44.8
07249400 James Fork near Hackett	1958-03	2,100	.90	43.0	30,000	.00	145
07261000 Cadron Creek near Guy	1954-03	16,200	.07	197	24,200	.00	270
07264000 Bayou Meto near Lonoke	1954-03	1,420	.00	227	5,750	.00	288
07340300 Cossatot River near Vandervoort	1967-03	5,770	8.1	102	32,000	5.5	193
07356000 Ouachita River near Mt. Ida	1941-03	15,300	33	526	102,000	2.3	730
07364150 Bayou Bartholomew near McGehee	1938-42, 1945-03	4,190	12	730	6,870	.20	695

a not determined

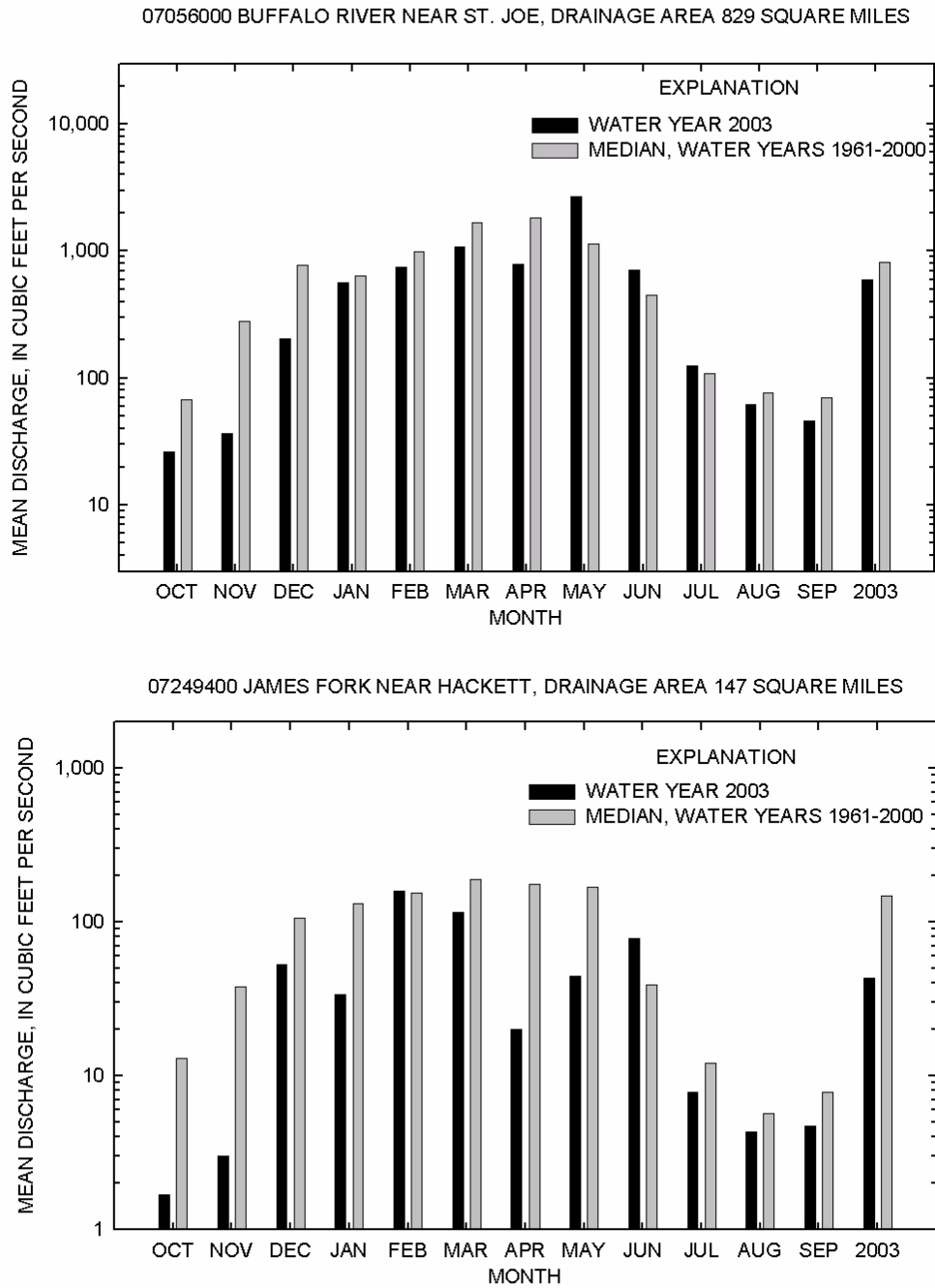
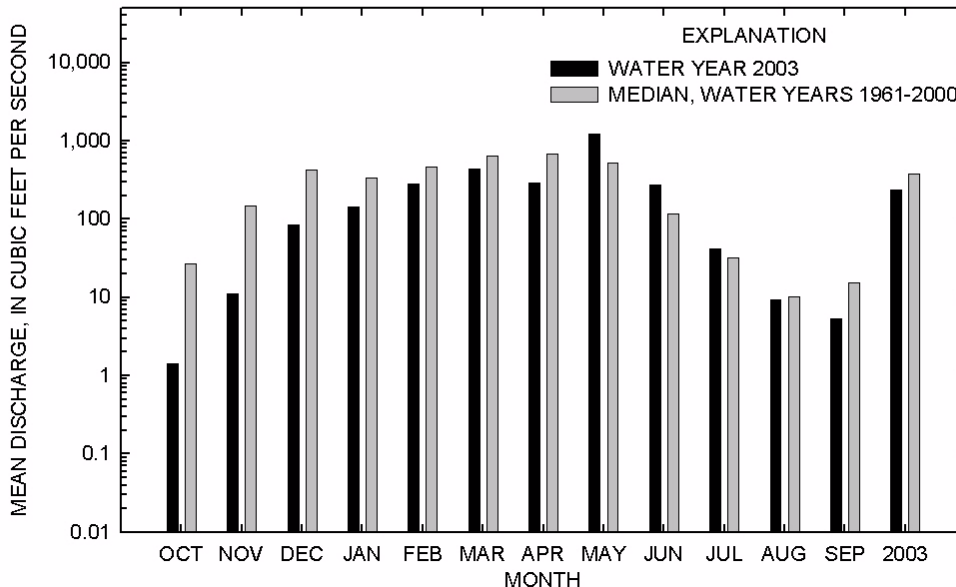


Figure 1.--Comparison of discharge at four representative long-term gaging stations for the 2003 water year with the median of the monthly and annual mean discharges for a 40-year base period.

WATER RESOURCES DATA FOR ARKANSAS, 2003

07257006 BIG PINEY CREEK AT HIGHWAY 164 NEAR DOVER, DRAINAGE AREA 297 SQUARE MILES



07363500 SALINE RIVER NEAR RYE, DRAINAGE AREA 2,102 SQUARE MILES

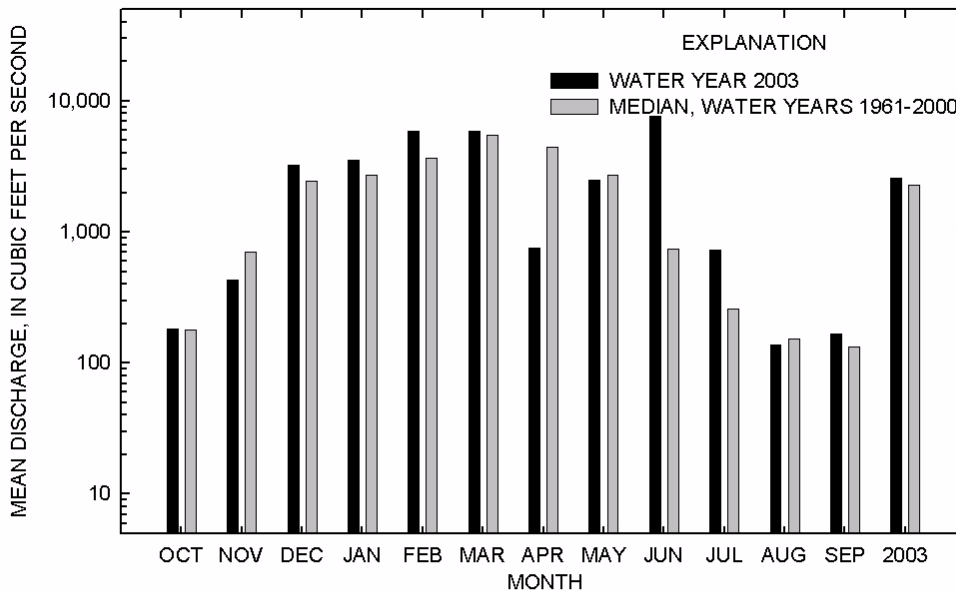


Figure 1.--Comparison of discharge at four representative long-term gaging stations for the 2003 water year with the median of the monthly and annual mean discharges for a 40-year base period-continued.

Surface-Water Quality

Arkansas streams provide an abundant supply of water of good quality that is suitable for many uses. Localized stream contamination occurs in some areas of agricultural-chemical use, near large urban areas, and near some industrial areas.

Both point and non-point sources of contamination adversely affect the suitability of surface water for drinking, recreation, and aquatic life. The Mississippi Alluvial Plain in the State is particularly susceptible to non-point source effects because of extensive farming and current agricultural practices.

In the Ozark Plateaus, which are experiencing rapid population growth, surface water locally is affected by both point and non-point sources of contamination. Principal point sources are wastewater-treatment plants. Principal non-point source contributions are related to animal farming practices. Watersheds where point and non-point source contamination is a major concern are the upper White River and Illinois River.

Streams in the West Gulf Coastal Plain of southern Arkansas locally are affected by point sources of contamination. Many of these point sources are related to oil and gas production.

Although the Arkansas River and other streams in the Arkansas Valley are affected locally by contaminant sources, they continue to be considered as a source of water for public supply and irrigation. Many of the small streams continue to show effects of coal mining. Municipal and industrial discharges to the Arkansas River may affect its potability, however, upgrading of wastewater-treatment plants, storage effects of the Arkansas River Navigation System, and tributary dams have moderated the effects of inflowing contaminants.

Retrieving data for water-quality sites now can be achieved via the internet. Real-time data from monitors and water-quality data from laboratory analyses can be retrieved from the website at:

<http://waterdata.usgs.gov>

Concentrations of selected water-quality constituents are listed below for sampling sites on some principal streams in the State. Concentrations of the constituents for the 2003 water year are compared to concentrations for the period of record to indicate changes in water quality.

The highest suspended-sediment concentration found in the selected streams in 2003 water year was 567 mg/L in the Right Hand Chute of Little River at Rivervale. Suspended-sediment concentrations, in milligrams per liter, for selected stream sampling sites are presented below.

	Period of Record	2003 water year		Period of record through 2003	
		Minimum	Maximum	Minimum	Maximum
07046600 Right Hand Chute of Little River at Rivervale	1977-03	58	567	25	1,070
07047942 L'Anguille River near Colt	1970-03	54	147	4	2,410
07060710 North Sylamore Creek near Fifty-Six	1966-03	1	28	0	198
07263620 Arkansas River at David D. Terry Lock and Dam below Little Rock	1969-03	3	22	2	4,140
07362000 Ouachita River at Camden	1947-52, 1974-03	15	28	6	639
07337000 Red River at Index	1947-56, 1980-03	107	242	16	8,200

WATER RESOURCES DATA FOR ARKANSAS, 2003

The highest fecal-coliform bacteria density found in selected streams in 2003 water year was E1,200 colonies per 100 mL in L'Anguille River near Colt. Fecal-coliform bacteria densities, in colonies per 100 mL, for selected stream sampling sites are presented below. [E, Results estimated]

	Period of Record	2003 water year		Period of record through 2003	
		Minimum	Maximum	Minimum	Maximum
07047942 L'Anguille River near Colt	1970-03	70	E1,200	<3	E6,800
07053250 Yocum Creek near Oak Grove	1993-03	E19	410	<1	E15,000
07060710 North Sylamore Creek near Fifty-Six	1966-03	<1	790	<1	1,400
07362000 Ouachita River at Camden	1947-52, 1974-03	E10	89	<1	1,600

The highest dissolved-solids concentration found in selected streams in 2003 water year was 528 mg/L in the Arkansas River at David D. Terry Lock and Dam below Little Rock. Dissolved-solids concentrations, in milligrams per liter, for selected sampling sites are presented below.

	Period of Record	2003 water year		Period of record through 2003	
		Minimum	Maximum	Minimum	Maximum
07047942 L'Anguille River near Colt	1970-03	109	309	45	424
07263620 Arkansas River at David D. Terry Lock and Dam below Little Rock	1969-03	266	528	85	690

The highest dissolved chloride concentration found in selected streams in 2003 water year was 211 mg/L in the Arkansas River at David D. Terry Lock and Dam below Little Rock. Dissolved chloride concentrations, in milligrams per liter, for selected sampling sites are presented below.

	Period of Record	2003 water year		Period of record through 2003	
		Minimum	Maximum	Minimum	Maximum
07047942 L'Anguille River near Colt	1977-03	7.50	26.0	1.9	49
07053250 Yocum Creek near Oak Grove	1970-03	9.56	11.7	4.6	16.1
07060710 North Sylamore Creek near Fifty-Six	1966-03	.88	2.01	.3	18
07263620 Arkansas River at David D. Terry Lock and Dam below Little Rock	1969-03	59.6	211	11	290
07362000 Ouachita River at Camden	1947-52, 1974-03	2.40	7.90	2.1	79

The highest total phosphorus concentration found in selected streams in 2003 water year was 0.62 mg/L in Yocum Creek near Oak Grove. Total phosphorus concentrations, in milligrams per liter, for selected sampling sites are presented below. [E, Results estimated]

	Period of Record	2003		Period of record through 2003	
		Minimum	Maximum	Minimum	Maximum
07053250 Yocum Creek near Oak Grove	1977-02	0.24	0.62	<0.01	0.45
07060710 North Sylamore Creek near Fifty-Six	1970-02	E.002	.020	E.002	.34
07263620 Arkansas River at David D. Terry Lock and Dam below Little Rock	1966-02	.075	.135	<.01	.61
07362000 Ouachita River at Camden	1969-02	<.02	.04	<.01	.31

Ground-Water

A majority of the ground-water consumption in Arkansas is from two major aquifers--the Mississippi River Valley alluvial aquifer (hereafter referred to as the alluvial aquifer) and the Sparta-Memphis aquifer. The alluvial aquifer occurs within the Quaternary deposits of the Mississippi Alluvial Plain, which covers approximately the eastern one-third of the State, and is the most productive aquifer within Arkansas. The Sparta-Memphis aquifer occurs within the Sparta and Memphis Sands of the Claiborne Group of Eocene age

and is the second most productive aquifer within the State. The Sparta-Memphis aquifer underlies the alluvial aquifer within the Mississippi Alluvial Plain and extend into the West Gulf Coastal Plain in the south-central part of the State. The alluvial aquifer provides a majority of Arkansas' ground-water used for irrigation and fish farming; the Sparta-Memphis aquifer provides most of the ground water for industry and public supply.

The regional potentiometric gradient in the alluvial aquifer is toward the south and southeast from an altitude of approximately 280 feet above NGVD of 1929 in the northeastern part of the State to about 80 feet in the southern part. The natural gradient of the water surface has been interrupted at two locations where large withdrawals for irrigation have created cones of depression. The first cone of depression has become elongated along a northwest to southeast axis, and is located in parts of Lonoke, Prairie, and Arkansas Counties; the second cone has developed by the convergence of two cones west of Crowleys Ridge into one larger cone. The second cone extends through Craighead, Cross, Poinsett, western St. Francis, western Lee, and eastern Monroe Counties. The third cone has developed in eastern Monroe and western Lee and St. Francis Counties.

The regional potentiometric gradient of the Sparta-Memphis aquifer generally is southeastward except where affected by large withdrawals. Three cones of depression, centered in Columbia, Union, and Jefferson Counties, have developed because of large withdrawals for industrial and public supplies in those areas. Additional large withdrawals for irrigation in the Grand Prairie region have resulted in a northeasterly elongation of the cone centered under Arkansas County. The deepest water level in the Sparta-Memphis aquifer during the spring of 2003 was 454 feet below land surface, which occurred in Union County.

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from <http://water.usgs.gov/glossaries.html>.

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 a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also "Biomass" and "Dry weight")

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 that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas 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.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

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.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (m^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter (m^3/cm^2). See also "Phytoplankton" and "Periphyton"

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (m^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } \frac{4}{3} r^3 \quad \text{cone } \frac{1}{3} r^2 h \quad \text{cylinder } r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume (m^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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 where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. 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 or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft³/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 or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, (ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms (*Bacillariophyta*) are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water 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 concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved solids concentration in water is the quantity of dissolved material in a sample of water. It 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 the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas 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 contains a drainage system with a common outlet for its surface runoff. (See “Drainage area”)

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also “Ash mass,” “Biomass,” and “Wet mass”)

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also “Wet weight”)

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also “Substrate embeddedness class”)

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants. (See also “Bacteria”)

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (*E. coli*) are bacteria present in the intestine and feces of warmblooded 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 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also “Phytoplankton”)

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae (*Chlorophyta*) are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating “moss” in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA Web site:

<http://www.co-ops.nos.noaa.gov/tideglos.html>

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \text{sum} \frac{n}{N} a,$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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 USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term 'non-detection value' (NDV).

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

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_0 e^{-L},$$

where I_0 is the source light intensity, I is the light intensity at length L (in meters) from the source, is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$= -\frac{1}{L} \log_e \frac{I}{I_0}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA Web site:*
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also “Daily mean suspended-sediment concentration” and “Suspended-sediment concentration”)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also “Discharge”)

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also “Datum”)

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

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

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

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, g/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, g/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, g/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 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, S/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 is 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 milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, 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> (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

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.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

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 sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

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 USGS 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 uses 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, as 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 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, 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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

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

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

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 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

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

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See “Recurrence interval”)

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged (“runs off”) from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also “Annual runoff”)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment 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 affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water 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.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

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 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.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as 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 water-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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also “Sediment”)

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 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also “Sediment” and “Suspended sediment”)

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, 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 (ft³/s) x 0.0027. (See also “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. 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. (See also “Sediment”)

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	Hexagenia
Species:	Hexagenia limbata

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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 resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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 a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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 water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also “Bacteria”)

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 in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 in bottom material.”

Total length (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume”)

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also “Bedload,” “Bedload discharge,” “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also “Sediment,” “Suspended-sediment load,” and “Total load”)

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution because of the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to USEPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See “Water-table aquifer”)

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) 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 VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are 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.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

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

Water year in USGS 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, 2003, is called the "2003 water year."

Watershed (See "Drainage basin")

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.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

STATION IDENTIFICATION NUMBERS

Each data station, whether stream site 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 system used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water sites will differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order and Station Number

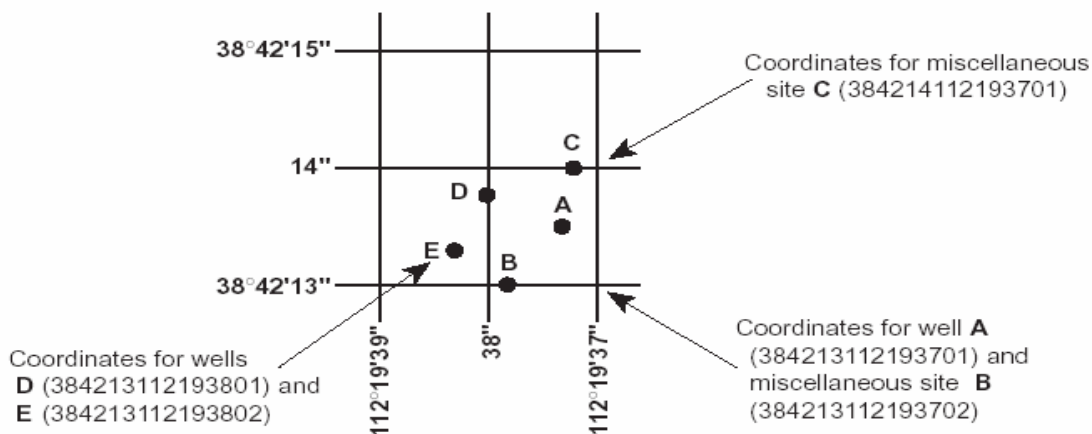
Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indentation in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-

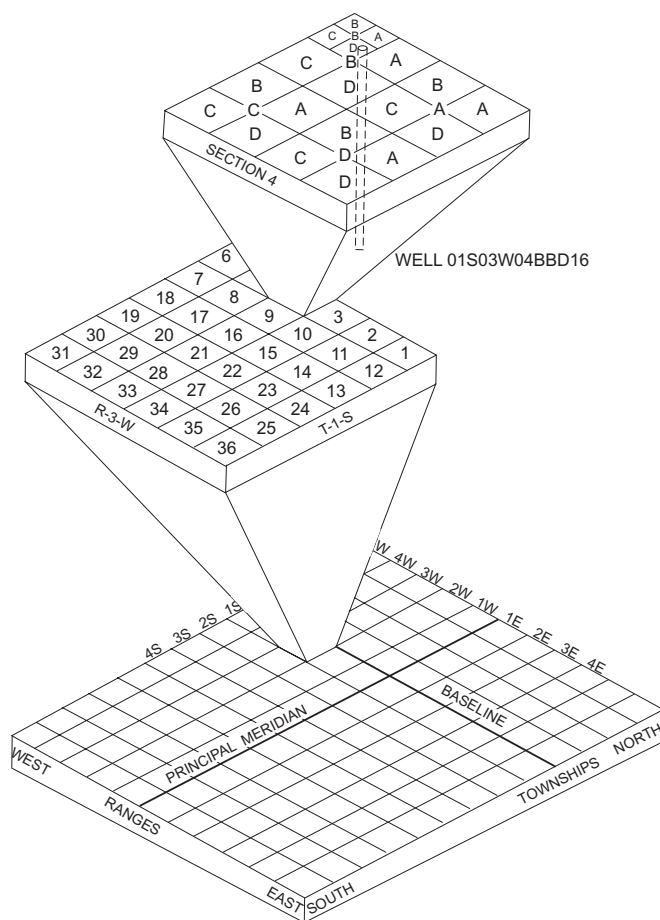
digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

Numbering System for Wells and Miscellaneous Sites

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells. The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.



In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the U.S. Bureau of Land Management's system of land subdivision. This well number is familiar to the water users of Arkansas and shows the location of the well by quadrant, township, range section, and position within the section. The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian—A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more wells are located within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried.



The well-numbering system used in this report is based upon the location of the wells according to the Federal land survey used in Arkansas. The component parts of a well number are the township number; the range number; the section number; three letters which indicate, respectively, the quarter section, the quarter-quarter section, and the quarter-quarter-quarter section in which the well is located; and a sequence number of the well in the quarter-quarter-quarter section. The letters are assigned counterclockwise, beginning with "A" in the northeast quarter or quarter-quarter or quarter-quarter-quarter section in which the well is located. For example, well 01S03W04BBD16 (is located in Township 1 South, Range 3 West, and in the southeast quarter of the northwest quarter of the northwest quarter of section 4. This well is the 16th well in this quarter-quarter-quarter section of section 4 from which data were collected. Wells were located using a Global Positioning System (GPS) capable of accuracy to one-tenth of a second of latitude and longitude, referenced to North American Datum 1983.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid

deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. 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 (NAWQA) Program; (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. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provide continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <http://bqs.usgs.gov/acidrain/>.

The USGS National Water-Quality Assessment (NAWQA) Program 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; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 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 is 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 water-resources managers to use in making decisions 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 may be accessed from <http://water.usgs.gov/nawqa/>.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of

streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 2) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters 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).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence 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 at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, 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.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that 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; and (5) a hydrograph of discharge.

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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station 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, given for only a few stations, 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. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 District Office at 401 Hardin Road, Little Rock, Arkansas 72211, to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records 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 arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is 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). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect 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 volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (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 values. 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. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are 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 records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are 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 heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that 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.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

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 7 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.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, 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 about 326,000 gallons or 1,233 cubic meters.

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

Inches (INCHES) indicate the depth to which the drainage area would be covered 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.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

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

Accuracy of Field Data and Computed Results

The accuracy of streamflow data 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 observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. “Excellent” indicates that about 95 percent of the daily discharges are within 5 percent of the true value; “good” within 10 percent; and “fair,” within 15 percent. “Poor” indicates that daily discharges have less than “fair” accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

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, values 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 Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol “---” in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs. A list of TWRIs is provided in this report.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross-section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from

the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2359 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A *continuous-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 is usually less than quarterly. A *miscellaneous sampling site* is a location other than a continuous- or partial-record station, where 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 *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 3.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[, less than or equal to; ±, plus or minus value shown; C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	±0.2 C	±0.2 to 0.5 C	> ±0.5 to 0.8 C	> ±0.8 C
Specific conductance	±3%	±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	±0.3 mg/L	±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	±0.2 unit	±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	±5%	±5 to 10%	> ±10 to 15%	> ±15%

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. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published

with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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 given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. These TWRI's are listed in this report. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in

analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. 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, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

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 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

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

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://waterdata.usgs.gov/nwis>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No

descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

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

Printed Output	Remark
E or 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).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs.

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

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 above NGVD of 1929 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 in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

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 of water of several hundred feet, the error in 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 a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figure 4; each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1983 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and 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 continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, 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 National Geodetic Vertical Datum of 1929 (NGVD 29); 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, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA**Data Collection and Computation**

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide.

Most methods for collecting and analyzing water samples are described in the TWRI. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Measurements of alkalinity, pH, water temperature, and specific conductance are performed onsite. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4.

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 and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from <http://water.usgs.gov>.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (see address that is shown on the back of the title page of this report).

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey 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. Geological Survey, 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 p.
- 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 p.

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

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

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 p.

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 p.
- 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 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

- 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 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 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 p.
- 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 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 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 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

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 p.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 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 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
- 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 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

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 p.

- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.
- 4-A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at <http://water.usgs.gov/pubs/twri/twri4a3/>. (Accessed August 30, 2002.)

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

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 p.

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 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.

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 p.

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 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.
- 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. A6, 1996. 125 p.
- 6-A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7, 2002. 77 p.

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 p.
- 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 p.

- 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 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

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 p.

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 p.
- 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 p.

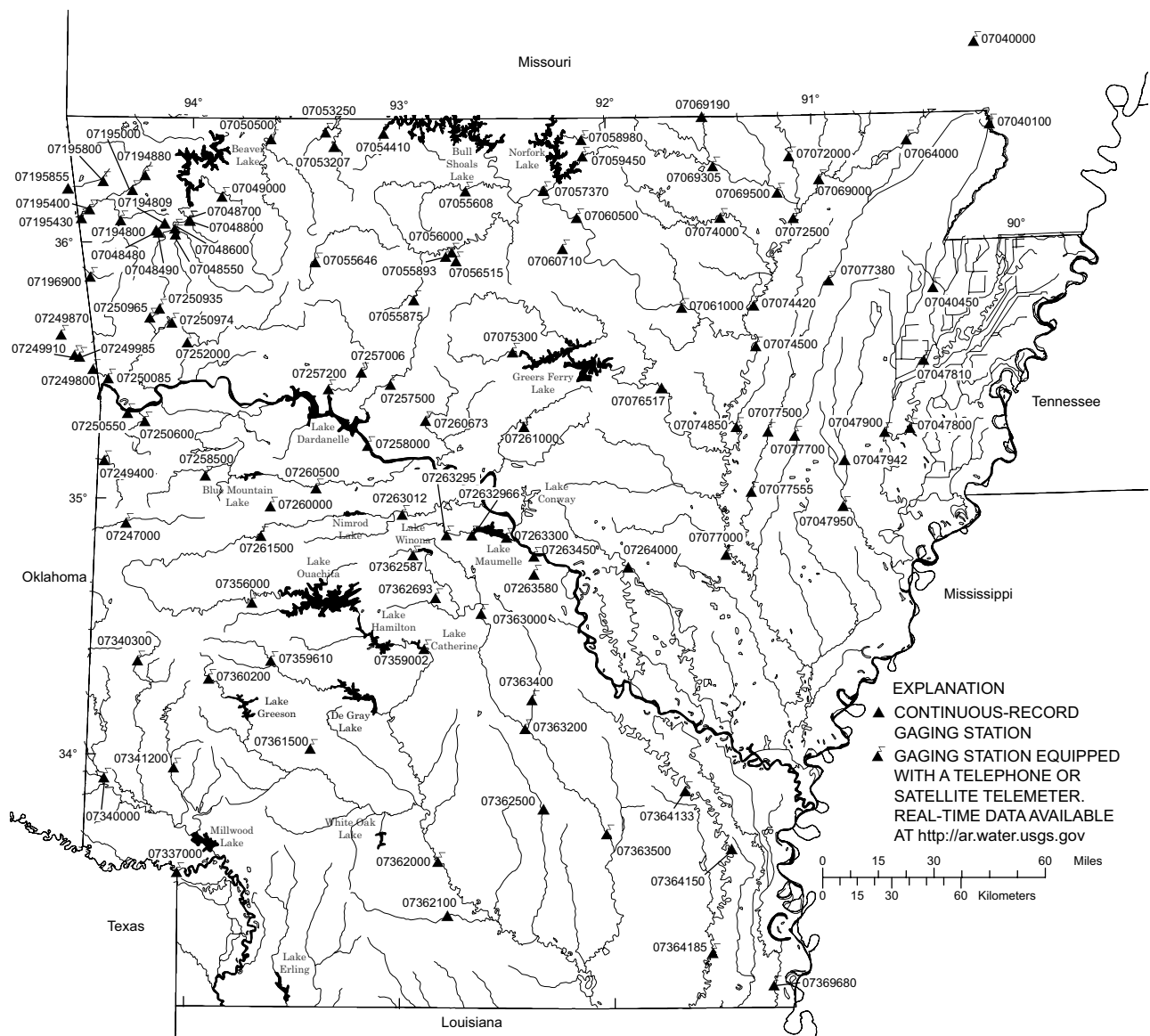


Figure 2.--Locations of continuous-record gaging stations in Arkansas.

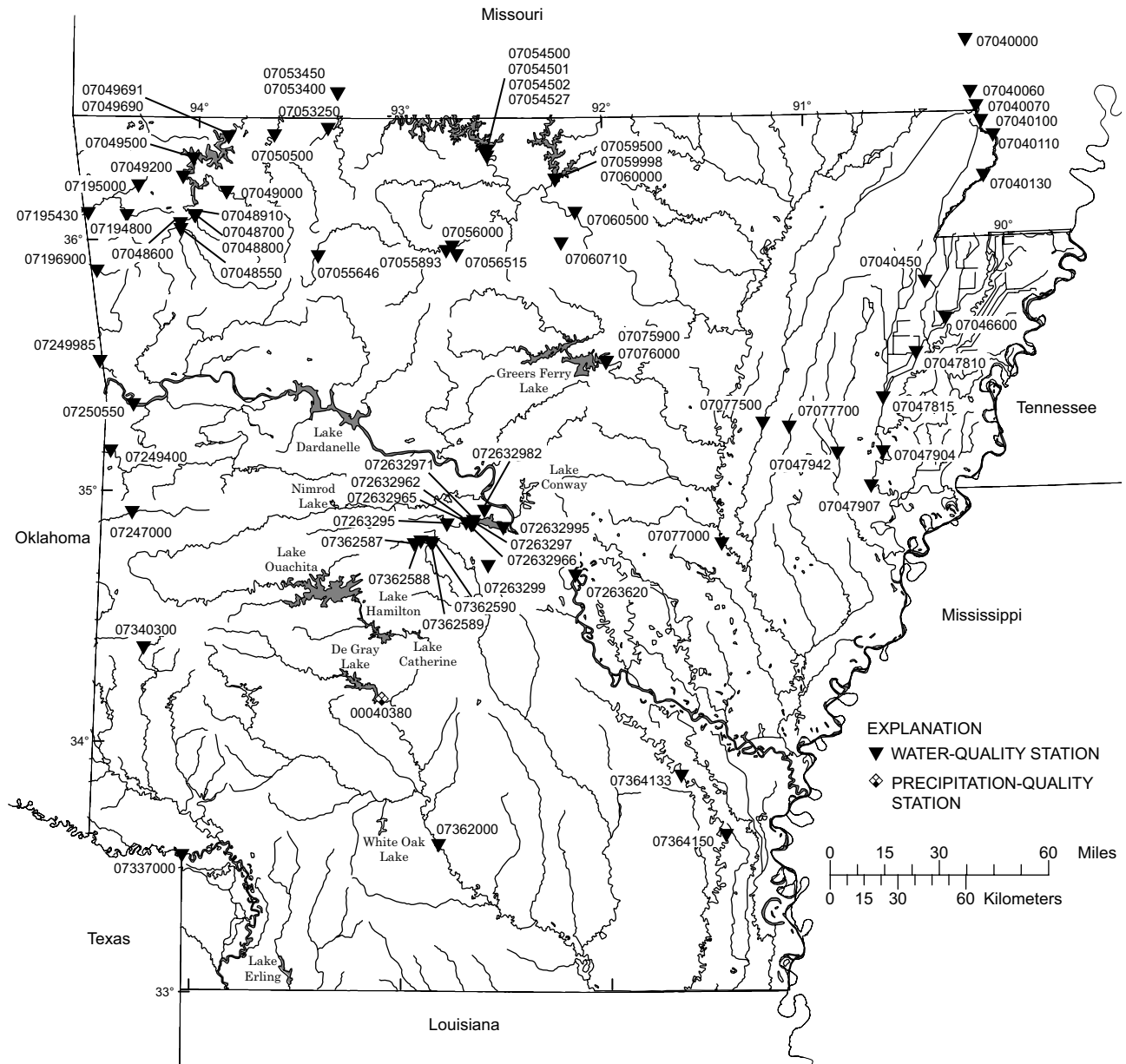


Figure 3.--Locations of water-quality stations in Arkansas.

ST. FRANCIS RIVER BASIN

07040000 ST. FRANCIS RIVER AT FISK, MISSOURI

LOCATION.--Lat 36°46'50", long 90°12'08", in NW1/4SW1/4 sec.28, T.24 N., R.8 E., Butler-Stoddard County line, Hydrologic Unit 08020203, at bridge on State Highway 51, at Fisk, Missouri.

DRAINAGE AREA.--1,370 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1941 and October 1997 to current year. Daily stages January 1917 to February 1922 and August 1992 to date, daily discharges January 1984 to date, and results of discharge measurements March 1935 to September 1997 in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 307.46 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges which are poor. Some regulation by Wapapello Lake, 36.3 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1917, 28.0 ft, from floodmark, Apr. 18, 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e180	e570	e190	3670	517	3800	1060	2310	3750	997	569	539
2	e130	e560	e280	3410	514	3520	767	2420	3580	834	601	700
3	e180	e530	e330	3700	514	3260	680	2450	3430	773	718	1350
4	e270	e430	e330	4020	511	3060	672	2460	3190	667	813	701
5	e260	e430	e450	4170	506	2940	614	2230	2880	550	828	898
6	e250	e490	e490	4180	509	2810	566	1930	2580	371	829	1480
7	e240	e430	e420	4130	506	2630	815	2110	2270	297	838	1820
8	e230	e320	e290	4080	576	2330	766	2220	1930	285	1020	2220
9	e220	e250	e170	4020	617	2050	888	2530	1490	280	1060	2300
10	e210	e310	e168	3950	618	1730	1150	2870	1180	279	958	2260
11	e200	e420	168	3860	616	1510	1220	3320	899	275	833	2210
12	e190	e420	168	3680	614	1370	1230	3500	820	276	710	2180
13	e180	e460	171	3470	615	1260	1230	3470	834	274	562	1980
14	e180	e460	174	3230	715	1200	1230	3340	1110	271	513	1710
15	e180	e450	215	2990	1010	1040	1220	3460	1820	263	448	1520
16	e180	e440	324	2740	1360	849	1060	3440	2300	279	414	1290
17	e190	e420	527	2460	1650	791	905	3250	2860	297	411	1020
18	e190	e410	821	2220	2120	786	863	2670	3130	316	408	745
19	e190	e350	1380	1950	2660	888	859	3260	3130	341	382	486
20	e190	e300	1430	1650	3580	1030	849	3480	3050	394	350	347
21	e180	e320	1400	1330	4290	1480	673	3680	2820	426	344	290
22	e180	e380	1950	1080	4820	1800	516	4100	2570	424	343	269
23	e180	e300	2400	870	5050	1870	417	4280	2310	375	340	263
24	e175	e280	2490	647	5120	1840	356	4280	2020	386	339	260
25	e170	e260	2490	541	5140	1430	358	4110	1760	417	339	257
26	e160	e220	2470	434	4960	1490	375	4140	1630	419	337	256
27	e150	e200	2460	416	4510	1670	758	4180	1600	418	336	283
28	e180	e190	2450	412	4100	1460	1440	4160	1470	419	337	301
29	e380	e190	2430	412	---	1360	1790	4110	1340	425	337	301
30	e510	e190	2410	473	---	1350	2030	4050	1200	437	396	301
31	e560	---	3350	514	---	1330	---	3910	---	474	527	---
TOTAL	6865	10980	34796	74709	58318	55934	27357	101720	64953	12939	17240	30537
MEAN	221	366	1122	2410	2083	1804	912	3281	2165	417	556	1018
MAX	560	570	3350	4180	5140	3800	2030	4280	3750	997	1060	2300
MIN	130	190	168	412	506	786	356	1930	820	263	336	256
AC-FT	13620	21780	69020	148200	115700	110900	54260	201800	128800	25660	34200	60570

ST. FRANCIS RIVER BASIN

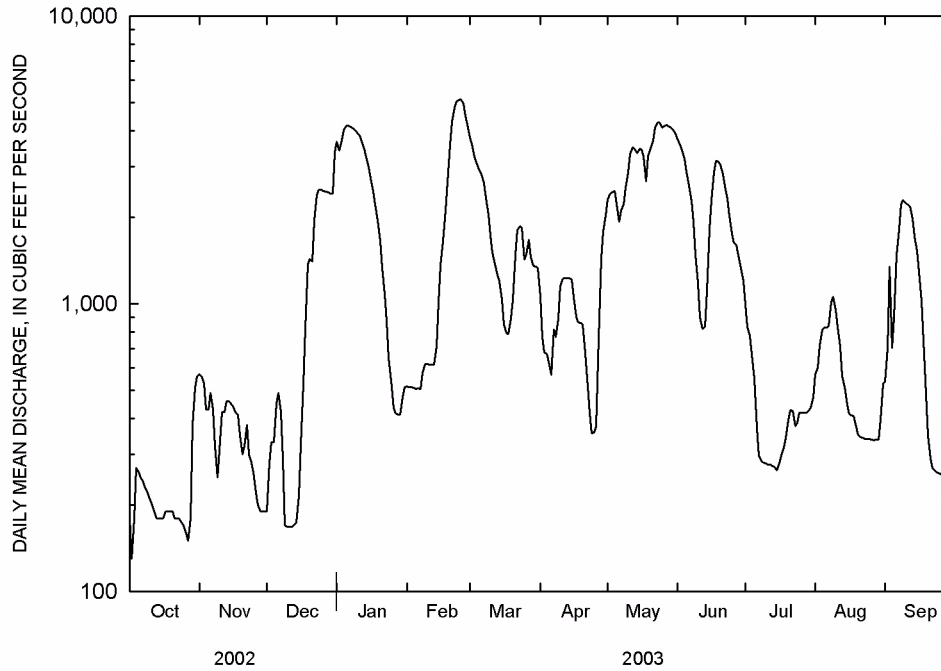
07040000 ST. FRANCIS RIVER AT FISK, MISSOURI--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928-41, 1998-03, BY WATER YEAR (WY)

MEAN	326	550	1279	2367	1992	2378	2531	2235	1631	568	423	279
MAX	1115	1587	3751	7905	4817	5506	5107	7332	8572	1780	2204	1018
(WY)	1937	1937	1928	1937	1999	1935	1999	2002	1928	1928	1998	2003
MIN	125	205	243	272	319	328	326	195	148	112	101	58.8
(WY)	1941	2000	1939	1931	1934	1941	1941	2000	1936	1941	1936	1999

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1928-41, 1998-03	
ANNUAL TOTAL	952349		496348			
ANNUAL MEAN	2609		1360		1377	
HIGHEST ANNUAL MEAN					2773 2002	
LOWEST ANNUAL MEAN					437 1941	
HIGHEST DAILY MEAN	10100	May 18	5140	Feb 25	36000	May 16 1933
LOWEST DAILY MEAN	130	Oct 2	130	Oct 2	8.0	Jul 25 1940
ANNUAL SEVEN-DAY MINIMUM	163	Sep 8	171	Oct 21	16	Jul 20 1940
MAXIMUM PEAK FLOW			5190	Feb 25	49900	Mar 13 1935
MAXIMUM PEAK STAGE			12.59	Feb 25	26.71	Mar 13 1935
INSTANTANEOUS LOW FLOW					5.0	Jul 26 1940
ANNUAL RUNOFF (AC-FT)	1889000		984500		997500	
10 PERCENT EXCEEDS	7220		3490		3520	
50 PERCENT EXCEEDS	1570		791		534	
90 PERCENT EXCEEDS	180		226		145	

^eEstimated



ST. FRANCIS RIVER BASIN

07040000 ST. FRANCIS RIVER AT FISK, MISSOURI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)
OCT													
08...	1335	80513	82913	232	.12	760	8.1	89	7.4	214	19.9	96	96
NOV													
12...	1535	80513	82913	421	.18	765	10.1	94	7.4	220	12.5	96	96
DEC													
09...	1600	80513	82913	172	.49	768	11.1	84	7.9	195	4.0	93	93
JAN													
14...	1510	80513	82913	3180	.18	766	10.6	80	7.3	195	4.0	87	91
FEB													
10...	1515	80513	82913	570	.46	757	15.0	114	8.0	196	3.6	90	90
MAR													
17...	1625	80513	82913	856	.24	750	10.8	103	7.6	118	12.4	82	82
APR													
07...	1700	80513	82913	866	.15	770	8.2	80	7.9	181	14.7	92	92
MAY													
19...	1805	80513	82913	3430	.15	757	8.9	102	6.6	130	21.5	90	94
JUN													
09...	1555	80513	82913	1410	.09	757	7.6	88	7.0	327	22.0	91	94
JUL													
08...	1545	80513	82913	284	.52	760	8.2	108	7.3	127	29.6	58	64
AUG													
11...	1530	80513	82913	772	.27	757	8.0	104	7.9	176	28.6	43	46
SEP													
09...	1525	80513	82913	2470	.12	760	7.9	97	8.1	281	25.6	80	83
Date		Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)	Bed sediment, falldia dst wat percent <2 mm (80163)	
OCT													
08...		100	--	--	101	63	11	32	94	99	100	--	
NOV													
12...		100	--	--	39	44	15	58	98	98	100	--	
DEC													
09...		93	98	100	37	17	35	50	86	98	100	--	
JAN													
14...		93	100	--	43	369	2	7	90	99	100	--	
FEB													
10...		90	100	--	34	52	6	21	97	100	--	--	
MAR													
17...		85	91	100	46	106	36	68	97	99	100	--	
APR													
07...		98	100	--	91	213	24	36	77	92	92	100	
MAY													
19...		99	100	--	138	1280	24	56	96	97	98	100	
JUN													
09...		96	100	--	76	289	21	42	96	100	--	--	
JUL													
08...		98	100	--	149	114	1	2	26	95	100	--	
AUG													
11...		97	100	--	219	456	18	29	90	98	98	100	
SEP													
09...		90	100	--	166	1110	19	39	86	98	100	--	

ST. FRANCIS RIVER BASIN

53

07040060 ST. FRANCIS RIVER NEAR GLENNONVILLE, MISSOURI

LOCATION.--Lat 36°34'22", long 90°11'06", in NE1/4NW1/4 sec.10, T.22 N., R.8 E., Butler-Dunklin County line, Hydrologic Unit 08020203, at bridge on Missouri State Highway 53, 1.7 mi southwest of Glennonville, Missouri.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Temperature, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 13...	0755	80513	82913	519	.15	11.8	96	96	100	--	--	54	76
DEC 10...	0725	80513	82913	206	.46	3.2	100	--	--	--	--	28	16
JAN 15...	0710	80513	82913	3270	.15	3.5	78	83	96	100	--	111	980
FEB 11...	0715	80513	82913	681	.30	3.0	92	92	92	92	100	31	57
MAR 18...	0855	80513	82913	1040	.21	12.4	96	97	98	100	--	48	135
APR 08...	0845	80513	82913	2240	.09	13.9	96	97	98	100	--	325	1970
MAY 20...	0900	80513	82913	4200	.09	21.2	87	89	99	100	--	128	1450
JUN 10...	0820	80513	82913	1460	.12	23.2	89	89	96	100	--	103	406

Date	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)	Bed sediment, falldia dst wat percent <2 mm (80163)
NOV 13...	5	7	77	100	--	--
DEC 10...	1	1	7	71	98	100
JAN 15...	6	24	95	100	--	--
FEB 11...	46	71	98	100	--	--
MAR 18...	.0	.0	27	97	100	--
APR 08...	14	70	99	99	100	--
MAY 20...	.0	2	72	99	100	--
JUN 10...	21	41	96	99	100	--

ST. FRANCIS RIVER BASIN

07040070 WILHELMINA CUTOFF NEAR CAMPBELL, MISSOURI

LOCATION.--Lat 36°30'53", long 90°09'30", in SW1/4SW1/4 sec.25, T.22 N., R.8 E., Dunklin County, Hydrologic Unit 08020203, at bridge on county road 4.7 mi northwest of Campbell, Missouri, off Missouri State Highway 53.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV													
12...	1355	80513	82913	470	.12	12.3	99	99	100	--	--	189	240
DEC													
09...	1415	80513	82913	343	.37	3.2	94	94	94	100	--	38	35
JAN													
14...	1335	80513	82913	3480	.12	4.1	68	82	96	98	100	101	950
FEB													
10...	1415	80513	82913	734	.34	3.5	90	90	96	100	--	43	85
MAR													
17...	1505	80513	82913	939	.18	13.4	93	93	95	100	--	47	119
APR													
07...	1545	80513	82913	6350	.09	9.8	89	91	99	100	--	--	--
MAY													
19...	1650	80513	82913	4020	.15	22.0	94	96	99	100	--	124	1350
JUN													
09...	1445	80513	82913	1680	.15	23.0	89	92	100	--	--	104	472

Date	Bed sediment, dry svd percent <2 mm (80169)	Bed sediment, dry svd percent <4 mm (80170)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)
NOV							
12...	--	--	22	40	95	100	--
DEC							
09...	--	--	.0	1	92	100	--
JAN							
14...	--	--	4	20	93	100	--
FEB							
10...	98	100	.0	2	13	77	96
MAR							
17...	--	--	.0	.0	40	98	100
APR							
07...	--	--	57	74	89	98	100
MAY							
19...	--	--	1	5	82	100	--
JUN							
09...	--	--	14	37	95	100	--

ST. FRANCIS RIVER BASIN

55

07040100 ST. FRANCIS RIVER AT ST. FRANCIS

LOCATION.--Lat 36°27'21", long 90°08'13", in sec.18, T.21 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on U.S. Highway 62 at St. Francis, and at mile 229.

DRAINAGE AREA.--1,772 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1930 to September 1977, October 1985 to September 1987, and October 1997 to current year. January 1930 to December 1946 in files of U. S. Army Corps of Engineers, Memphis District. January 1946 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of Corps of Engineers. Gage-height records since 1916 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 270.57 ft above NGVD of 1929. Prior to Apr. 1, 1946, nonrecording gage.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Some regulation by Wappapello Lake (Missouri), 80 mi upstream, since Aug. 1, 1941, capacity 625,000 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	648	242	17100	619	5440	1230	2290	4640	2040	925	3280
2	147	661	244	15800	615	4920	989	3430	4460	1650	1280	1950
3	117	689	245	11700	615	4510	766	2850	4230	1400	1020	5470
4	113	673	305	8340	606	4110	703	2730	3960	1250	917	4600
5	109	545	376	6460	590	3840	712	3100	3590	1080	937	2330
6	299	601	385	5610	592	3630	715	3020	3210	883	1760	2030
7	412	569	503	5200	592	3400	4700	3290	2850	654	1160	2350
8	340	565	520	5020	596	3060	4020	3510	2450	552	948	2600
9	272	467	425	4930	660	2610	1390	3130	1940	551	1060	2900
10	250	438	278	4850	693	2170	1240	3360	1480	525	1030	2920
11	236	367	277	4760	713	1810	1310	3880	1660	495	894	2860
12	229	477	308	4630	790	1570	1290	4540	3750	492	773	2810
13	223	530	364	4430	776	1480	1260	4490	1730	476	658	2710
14	213	515	799	4120	2790	1350	1230	4360	1340	473	520	2440
15	216	510	699	3750	5740	1240	1220	4300	1590	430	459	2160
16	214	495	514	3420	4500	1090	1180	4530	2320	417	390	1910
17	213	481	531	3030	3030	957	1080	6450	2810	410	343	1630
18	213	468	709	2650	2590	939	1020	8560	3330	363	333	1320
19	226	453	4740	2250	4010	1130	970	5460	3520	375	332	1010
20	241	358	5990	1880	6480	1370	955	4770	3510	377	316	728
21	240	278	2850	1520	5910	1340	909	4760	3400	362	274	533
22	227	254	1860	1260	8510	1710	757	4800	3120	390	244	460
23	231	294	2260	e1070	13300	1910	632	5010	2790	391	232	410
24	206	358	2740	e875	12700	1930	631	5110	2430	377	216	367
25	163	337	3160	e770	11200	1740	1460	5080	2050	385	215	335
26	151	274	2800	e635	9750	1450	1710	4970	2780	402	215	308
27	147	252	2640	e540	8220	1610	912	4960	5660	381	235	298
28	141	248	2570	578	6500	1600	1110	4960	3890	369	237	317
29	147	248	2540	529	---	1370	1550	4930	2440	1430	209	347
30	226	250	2580	538	---	1310	1840	4870	2040	1090	863	353
31	520	---	8660	589	---	1290	---	4790	---	1280	4240	---
TOTAL	6888	13303	53114	128834	113687	67886	39491	136290	88970	21750	23235	53736
MEAN	222	443	1713	4156	4060	2190	1316	4396	2966	702	750	1791
MAX	520	689	8660	17100	13300	5440	4700	8560	5660	2040	4240	5470
MIN	109	248	242	529	590	939	631	2290	1340	362	209	298
AC-FT	13660	26390	105400	255500	225500	134700	78330	270300	176500	43140	46090	106600

ST. FRANCIS RIVER BASIN

07040100 ST. FRANCIS RIVER AT ST. FRANCIS--CONTINUED

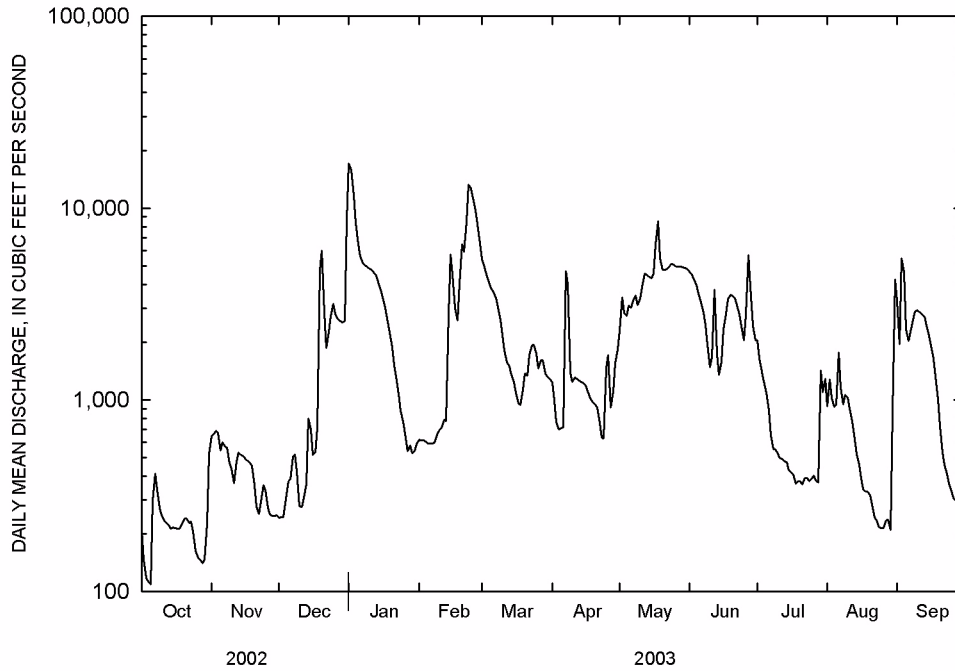
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930-77, 1986-87, 1998-03, BY WATER YEAR (WY)

MEAN	538	1044	1896	3059	3194	3815	4047	3421	1976	1051	586	511
MAX	3754	5428	9014	13660	12300	9556	14680	11680	9294	6467	4514	1929
(WY)	1950	1973	1974	1950	1949	1935	1945	1945	1957	1945	1945	1951
MIN	91.5	77.7	254	306	344	384	473	308	211	194	121	95.9
(WY)	1957	1954	1954	1956	1963	1941	1941	1987	1936	1964	1965	1955

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1930-77, 1986-87 1998-03	
ANNUAL TOTAL	1270684		747184			
ANNUAL MEAN	3481		2047		2102	
HIGHEST ANNUAL MEAN					4886 1973	
LOWEST ANNUAL MEAN					548 1941	
HIGHEST DAILY MEAN	19400	Mar 27	17100	Jan 1	37900	Mar 16 1935
LOWEST DAILY MEAN	109	Oct 5	109	Oct 5	55	Sep 20 1954
ANNUAL SEVEN-DAY MINIMUM	169	Oct 24	169	Oct 24	63	Nov 15 1953
MAXIMUM PEAK FLOW			17800	Jan 1	39200	Mar 15 1935
MAXIMUM PEAK STAGE			22.79	Jan 1	28.20	Mar 15 1935
INSTANTANEOUS LOW FLOW			101	Oct 5	155	Sep 20 1954
ANNUAL RUNOFF (AC-FT)	2520000		1482000		1523000	
10 PERCENT EXCEEDS	10500		4860		5600	
50 PERCENT EXCEEDS	2370		1110		879	
90 PERCENT EXCEEDS	244		247		181	

¹Minimum instantaneous low flow for the period 1978-97, 48 ft³/s

^eEstimated



ST. FRANCIS RIVER BASIN

07040100 ST. FRANCIS RIVER AT ST. FRANCIS--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	
OCT	09...	0805	80513	82913	289	.15	762	8.5	91	7.0	226	18.5	94	94
NOV	12...	1300	80513	82913	497	.12	765	8.7	81	7.6	277	12.3	41	76
DEC	09...	1315	80513	82913	346	.37	770	11.2	83	7.8	202	3.3	80	80
JAN	14...	1220	80513	82913	4220	.12	768	10.1	77	7.1	220	4.1	55	64
FEB	10...	1315	80513	82913	686	.40	757	14.4	109	8.2	185	3.4	97	97
MAR	18...	1055	80513	82913	941	.21	750	10.0	97	7.5	142	13.1	100	--
APR	08...	1245	80513	82913	3330	.09	775	8.9	83	7.4	125	13.0	98	99
MAY	20...	1150	80513	82913	4700	.09	764	7.0	79	6.6	120	21.3	88	92
JUN	10...	0945	80513	82913	1480	.12	757	7.5	88	7.0	310	23.2	97	97
JUL	08...	1335	80513	82913	518	.49	763	9.1	120	7.3	149	29.6	93	98
AUG	11...	1335	80513	82913	908	.24	760	8.6	110	7.8	164	27.8	86	90
SEP	10...	0805	80513	82913	2920	.18	763	6.0	72	8.1	318	24.7	93	93

Date	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, dry svd sve dia <2 mm (80169)	Bed sediment, dry svd sve dia <4 mm (80170)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)	Bed sediment, falldia dst wat percent <2 mm (80163)	
OCT	09...	97	100	57	44	--	--	12	28	94	99	100	--
NOV	12...	99	100	--	--	98	100	18	47	93	96	97	--
DEC	09...	93	100	51	48	--	--	3	14	89	99	100	--
JAN	14...	97	100	127	1450	--	--	2	8	84	99	100	--
FEB	10...	97	100	45	83	--	--	2	5	28	74	97	100
MAR	18...	--	--	48	122	--	--	1	2	80	99	100	--
APR	08...	100	--	424	3810	--	--	70	87	98	100	--	--
MAY	20...	99	100	151	1920	--	--	1	10	95	99	100	--
JUN	10...	100	--	98	392	--	--	16	32	93	100	--	--
JUL	08...	100	--	207	290	--	--	8	23	93	98	100	--
AUG	11...	100	--	164	402	--	--	16	31	92	98	98	100
SEP	10...	100	--	231	1820	--	--	7	27	92	98	100	--

ST. FRANCIS RIVER BASIN

07040110 ST. FRANCIS RIVER NEAR PIGGOTT

LOCATION.--Lat 36°23'50", long 90°04'40", in SE1/4SW1/4 sec.3, T.20 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on State Highway 1, 6.0 mi east of Piggott.

DRAINAGE AREA.--1,776 mi².

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, falldia dst wat percent <.063mm (80158)
OCT 08...	1050	80513	82913	385	.15	19.1	100	--	--	--	60	62	.0
NOV 12...	1220	80513	82913	421	.12	12.1	99	99	100	--	105	119	.0
DEC 09...	1205	80513	82913	442	.27	3.9	82	82	91	100	39	47	1
JAN 14...	1115	80513	82913	3450	.09	4.1	50	62	98	100	145	1350	50
FEB 10...	1200	80513	82913	709	.34	3.4	96	96	98	100	39	75	2
MAR 17...	1405	80513	82913	991	.30	13.5	97	97	97	100	61	163	.0
APR 07...	1245	80513	82913	4300	.09	11.2	92	96	100	--	--	--	26
MAY 19...	1530	80513	82913	4390	.06	21.6	95	97	98	100	161	1910	1
MAY 19...	1605	80513	82913	120	.09	22.1	43	43	57	100	119	39	55
JUN 09...	1345	80513	82913	1750	.12	23.0	90	93	100	--	130	614	1
JUL 08...	1235	80513	82913	580	.37	31.5	98	98	98	100	110	172	9
AUG 11...	1125	80513	82913	936	.21	28.3	96	96	100	--	124	313	.0
SEP 09...	1245	80513	82913	2660	.12	24.8	89	91	98	100	264	1900	2

Date	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)	Bed sediment, falldia dst wat percent <2 mm (80163)	Sample source, code (72005)
OCT 08...	.0	88	100	--	--	--
NOV 12...	1	83	100	--	--	--
DEC 09...	3	82	100	--	--	--
JAN 14...	86	98	100	--	--	--
FEB 10...	2	12	75	98	100	--
MAR 17...	1	63	99	100	--	--
APR 07...	52	83	93	98	100	--
MAY 19...	10	94	100	--	--	67.00
MAY 19...	62	98	100	--	--	68.00
JUN 09...	2	66	98	100	--	--
JUL 08...	25	92	100	--	--	--
AUG 11...	1	75	99	100	--	--
SEP 09...	50	100	--	--	--	--

ST. FRANCIS RIVER BASIN

59

07040130 ST. FRANCIS RIVER AT HOLLY ISLAND

LOCATION.--Lat 36°14'11", long 90°07'52", in SW1/4NE1/4 sec.32, T.19 N., R.9 E., Clay County, Hydrologic Unit 08020203, at bridge on State Highway 90, at Holly Island.

DRAINAGE AREA.--1,788 mi².

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, falldia dst wat percent <.063mm (80158)
OCT 09...	1045	80513	82913	344	.18	19.0	97	97	97	100	59	55	18
NOV 13...	1200	80513	82913	468	.12	12.4	98	98	100	--	100	126	4
DEC 10...	1020	80513	82913	365	.37	3.6	95	95	95	100	31	31	5
JAN 15...	1110	80513	82913	3400	.15	3.9	52	54	95	100	152	1390	1
FEB 11...	1015	80513	82913	705	.30	3.5	98	98	98	100	34	65	.0
MAR 17...	1315	80513	82913	1110	.50	12.7	98	98	100	--	57	171	6
APR 07...	1415	80513	82913	2290	.09	12.4	90	94	99	100	395	2440	2
MAY 19...	1345	80513	82913	4410	.06	21.5	81	86	98	100	233	2770	18
MAY 19...	1420	80513	82913	870	.09	22.2	99	99	99	100	100	235	31
JUN 09...	1240	80513	82913	11500	.12	23.0	97	97	99	100	155	4810	42
JUL 08...	1120	80513	82913	2210	.46	34.5	98	98	98	100	94	561	5
AUG 12...	0755	80513	82913	262	.27	27.3	97	97	98	100	114	81	19
SEP 09...	1100	80513	82913	225	.12	24.8	97	98	99	100	214	130	13

Date	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)	Bed sediment, falldia dst wat percent <2 mm (80163)	Sample source, code (72005)
OCT 09...	35	94	99	100	--	--
NOV 13...	25	96	99	100	--	--
DEC 10...	12	90	98	100	--	--
JAN 15...	2	77	98	100	--	--
FEB 11...	.0	15	65	100	--	--
MAR 17...	12	88	99	100	--	--
APR 07...	4	68	99	100	--	--
MAY 19...	30	66	89	98	100	67.00
MAY 19...	43	72	90	99	100	68.00
JUN 09...	73	98	99	100	--	--
JUL 08...	30	97	100	--	--	--
AUG 12...	35	97	99	100	--	--
SEP 09...	18	81	99	100	--	--

ST. FRANCIS RIVER BASIN

07040450 ST. FRANCIS RIVER AT LAKE CITY

LOCATION.--Lat 35°49'16", long 90°25'56", in SE1/4 sec.22, T.14 N., R.6 E., Craighead County, Hydrologic Unit 08020203, at bridge on State Highway 18 at Lake City, and at mile 173.6.

DRAINAGE AREA.--2,374 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1931 to September 1977, October 1997, October 1999 to current year. January 1931 to December 1945 in files of Corps of Engineers. January 1946 to December 1963 in reports of Mississippi River Commission. January 1964 to November 1997 and September 1999 to date in reports of the U.S. Army Corps of Engineers. Gage-height records 1916 to November 1997 and September 1999 to date in files of the U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 217.69 ft above NGVD of 1929. Prior to Sept. 1, 1948, non-recording gage at railroad bridge 0.1 mi downstream at present datum.

REMARKS.--Water-discharge records fair except estimated daily discharges, which are poor. Some regulation by Wappapello Lake (Missouri) 135 mi upstream since Apr. 1, 1941, capacity, 625,000 acre-feet. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	708	351	491	7800	1240	9980	1780	1850	e3900	3140	4370	1880
2	651	346	473	8780	1080	9800	1720	1820	4220	3830	3960	1180
3	593	382	464	8660	1010	9370	1640	1820	4340	4060	3370	1200
4	562	475	505	7620	993	8690	1560	1990	4200	3280	2750	1540
5	515	781	605	8040	984	7770	1860	3230	4000	2540	2920	2110
6	450	1220	654	9610	997	6890	2010	4780	3770	2020	2140	2490
7	398	1230	636	10100	1020	6090	3110	8390	3530	1680	1790	2730
8	363	1040	620	9840	1000	5410	3500	8740	3250	1390	1760	3070
9	365	873	622	9180	972	4820	3090	6990	3020	1120	1920	3260
10	585	809	630	8110	966	4320	2550	5720	2810	979	1930	3090
11	803	813	647	7190	1100	3920	2420	7480	2750	884	1790	2760
12	738	885	661	6520	1240	3550	2880	8280	2660	798	e1560	2540
13	654	922	699	6040	1230	3230	3170	6520	2410	736	e1400	2570
14	557	854	888	5750	2960	2900	2950	5290	2560	704	e1310	3030
15	487	775	1010	5590	6080	2530	2550	4560	2960	671	1160	3140
16	451	715	969	5450	8830	2180	2230	4610	2840	647	1050	3110
17	428	687	870	5230	8840	1870	1950	9880	2540	622	939	3090
18	412	676	909	4910	7280	1630	1660	13300	2240	602	877	2990
19	410	674	4760	4650	6750	1820	1420	12500	2080	690	810	2800
20	436	675	6720	4390	7270	2050	1340	10600	1940	756	769	2550
21	437	674	5810	4140	6930	1660	1250	9250	e1870	707	704	2290
22	420	670	4970	3870	8830	1390	1160	8050	e1870	643	663	2100
23	407	662	4010	3540	10200	1240	1070	7190	e1900	599	780	1800
24	398	638	3830	3100	10600	1190	1100	6320	e2000	551	701	1490
25	393	602	4130	2860	10300	1290	2630	5470	e2150	516	638	1150
26	392	561	4140	2630	9650	2700	3430	4820	2610	504	578	918
27	388	536	3860	2300	9410	3050	3010	4420	2640	502	528	787
28	392	530	3580	2000	9640	2740	2450	e4150	2440	488	496	700
29	381	525	3470	1840	---	2370	1950	e4000	2260	856	477	635
30	370	511	3540	1710	---	1980	1850	e3800	2250	2720	471	595
31	360	---	4530	1480	---	1850	---	e3700	---	4170	1040	---
TOTAL	14904	21092	69703	172930	137402	120280	65290	189520	84010	43405	45651	63595
MEAN	481	703	2248	5578	4907	3880	2176	6114	2800	1400	1473	2120
MAX	803	1230	6720	10100	10600	9980	3500	13300	4340	4170	4370	3260
MIN	360	346	464	1480	966	1190	1070	1820	1870	488	471	595
AC-FT	29560	41840	138300	343000	272500	238600	129500	375900	166600	86090	90550	126100

ST. FRANCIS RIVER BASIN

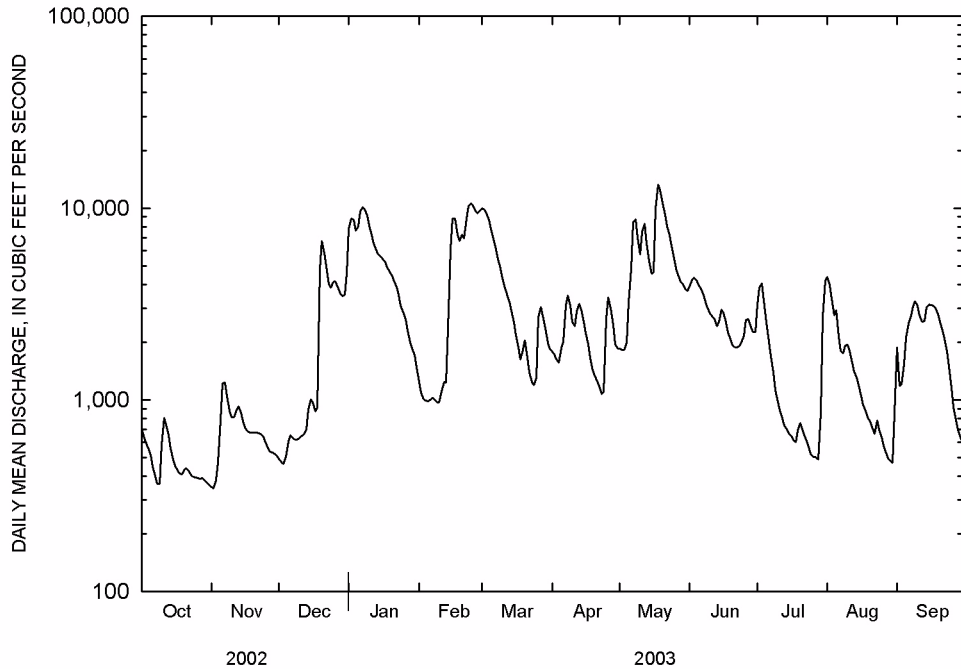
07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930-77, 1997, 2000-03, BY WATER YEAR (WY)

MEAN	733	1456	2534	4279	4655	5253	5533	4730	2843	1608	900	752
MAX	5125	9582	11100	18200	17270	10710	18160	14440	13370	7720	5303	2494
(WY)	1950	1958	2002	1950	1950	1975	1945	1973	1945	1957	1945	1965
MIN	111	114	227	496	553	836	831	634	202	187	109	126
(WY)	1954	1954	1954	1944	1977	1941	1941	2001	1932	1934	1936	1941

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1930-77, 1997, 2000-03	
ANNUAL TOTAL	1727244		1027782			
ANNUAL MEAN	4732		2816		2961	
HIGHEST ANNUAL MEAN					6937 1973	
LOWEST ANNUAL MEAN					782 1941	
HIGHEST DAILY MEAN	18900	May 19	13300	May 18	36700	Jan 22 1937
LOWEST DAILY MEAN	326	Sep 16	346	Nov 2	39	Oct 7 1999
ANNUAL SEVEN-DAY MINIMUM	361	Sep 11	369	Oct 28	41	Oct 2 1999
MAXIMUM PEAK FLOW			13500	May 18	¹ 36700	² Jan 22 1937
MAXIMUM PEAK STAGE			9.42	May 18	³ 13.30	² Jan 22 1937
INSTANTANEOUS LOW FLOW			344	Nov 2	37	Oct 8 1999
ANNUAL RUNOFF (AC-FT)	3426000		2039000		2145000	
10 PERCENT EXCEEDS	11500		7220		7630	
50 PERCENT EXCEEDS	3840		1930		1450	
90 PERCENT EXCEEDS	469		513		282	

¹Maximum discharge outside period of record, 42,700 ft³/s April 3, 1979
²Also January 23-24, 1937
³Maximum gage height outside period of record, 14.37 ft April 3, 1979
^eEstimated



ST. FRANCIS RIVER BASIN

07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat un/c uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Suspnd. sedi-ment, falldia dst wat percent <.063mm (70342)	Suspnd. sedi-ment, falldia dst wat percent <.125mm (70343)
OCT													
09...	1445	80513	82913	374	.09	763	7.2	77	7.3	285	18.9	97	97
NOV													
13...	1330	80513	82913	961	.12	767	8.2	76	7.5	218	12.2	87	91
DEC													
10...	1500	80513	82913	630	.27	764	11.3	87	7.7	250	4.4	98	98
JAN													
15...	1545	80513	82913	2070	.12	772	9.7	73	7.2	201	4.0	85	85
15...	1620	80513	82913	3480	.21	772	8.8	66	7.3	211	4.1	74	74
FEB													
11...	1430	80513	82913	1010	.15	765	15.8	122	7.8	233	4.6	95	95
11...	1440	80513	82913	110	.30	765	15.4	124	7.8	235	6.2	89	89
MAR													
18...	1320	80513	82913	1520	.18	750	8.1	82	7.6	132	15.3	82	84
APR													
09...	0900	80513	82913	2950	.09	777	7.8	70	7.5	159	11.2	96	96
MAY													
20...	0820	80513	82913	2390	.09	766	5.3	58	6.4	102	20.2	94	94
20...	0850	80513	82913	6820	.09	766	5.6	62	6.5	126	20.4	95	95
JUN													
10...	1230	80513	82913	1440	.12	758	6.5	75	6.9	255	22.4	98	98
10...	1330	80513	82913	1420	.15	757	6.1	71	6.8	265	22.8	94	94
JUL													
09...	0935	80513	82913	1140	.43	763	5.0	63	7.9	190	27.6	97	97
AUG													
12...	1025	80513	82913	1260	.21	762	5.6	68	7.3	200	25.0	96	96
12...	1130	80513	82913	330	.24	762	5.2	65	7.2	193	26.5	94	94
SEP													
10...	1125	80513	82913	1500	.12	765	7.2	82	7.4	351	22.2	91	92
10...	1220	80513	82913	1600	.21	765	6.8	79	7.4	349	22.8	96	96

Date	Suspnd. sedi-ment, falldia dst wat percent <.25mm (70344)	Suspnd. sedi-ment, falldia dst wat percent <.5 mm (70345)	Suspnd. sedi-ment, falldia dst wat percent <1 mm (70346)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)	Bed sedi-ment, dry svd sve dia percent <2 mm (80169)	Bed sedi-ment, dry svd sve dia percent <4 mm (80170)	Bed sedi-ment, dry svd sve dia percent <8 mm (80171)	Bed sedi-ment, dry svd sve dia percent <16 mm (80172)	Bed sedi-ment, falldia dst wat percent <.063mm (80158)	Bed sedi-ment, falldia dst wat percent <.125mm (80159)	Bed sedi-ment, falldia dst wat percent <.25mm (80160)	Bed sedi-ment, falldia dst wat percent <.5 mm (80161)
OCT													
09...	98	100	--	55	56	99	100	--	--	12	22	62	92
NOV													
13...	95	97	100	135	350	--	--	--	--	24	30	63	94
DEC													
10...	98	100	--	43	73	--	--	--	--	6	10	49	90
JAN													
15...	92	100	--	47	263	--	--	--	--	4	24	94	99
15...	83	100	--	45	423	69	69	69	100	12	17	42	64
FEB													
11...	98	100	--	60	164	--	--	--	--	12	28	74	93
11...	96	100	--	36	11	--	--	--	--	.0	.0	18	78
MAR													
18...	95	95	100	63	259	--	--	--	--	11	34	90	99
APR													
09...	98	100	--	111	884	--	--	--	--	2	8	93	98
MAY													
20...	98	100	--	131	845	--	--	--	--	5	19	88	100
20...	99	100	--	106	1950	--	--	--	--	.0	1	79	98
JUN													
10...	100	--	--	87	338	--	--	--	--	1	7	81	100
10...	100	--	--	92	353	--	--	--	--	2	4	37	86
JUL													
09...	97	100	--	85	262	--	--	--	--	4	8	37	88
AUG													
12...	98	100	--	72	245	--	--	--	--	36	41	71	97
12...	97	100	--	64	57	--	--	--	--	36	47	69	92
SEP													
10...	98	100	--	72	292	--	--	--	--	3	9	84	100
10...	96	100	--	60	259	80	90	100	--	7	13	40	62

ST. FRANCIS RIVER BASIN

07040450 ST. FRANCIS RIVER AT LAKE CITY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sedi- ment, fall dia dst wat percent <1 mm (80162)	Bed sedi- ment, fall dia dst wat percent <2 mm (80163)	Sample source, code (72005)
OCT			
09...	98	--	--
NOV			
13...	100	--	--
DEC			
10...	97	100	--
JAN			
15...	100	--	67.00
15...	67	--	68.00
FEB			
11...	99	100	67.00
11...	98	100	68.00
MAR			
18...	100	--	--
APR			
09...	100	--	--
MAY			
20...	--	--	67.00
20...	100	--	68.00
JUN			
10...	--	--	67.00
10...	100	--	68.00
JUL			
09...	100	--	--
AUG			
12...	100	--	67.00
12...	98	100	68.00
SEP			
10...	--	--	67.00
10...	74	--	68.00

ST. FRANCIS RIVER BASIN

07046600 RIGHT HAND CHUTE OF LITTLE RIVER AT RIVERVALE

LOCATION.--Lat 35°40'20", long 90°29'12", in SW1/4 sec.10, T.12 N., R.7 E., Poinsett County, Hydrologic Unit 08020204, at bridge on State Highway 135 at Rivervale, 9.0 mi upstream from St. Francis River.

DRAINAGE AREA.--2,106 mi².

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia, percent <.063mm (70342)	Suspnd. sediment, falldia, percent <.125mm (70343)
OCT													
10...	0820	80513	82913	445	.15	760	8.2	88	7.1	427	18.7	99	100
NOV													
13...	1435	80513	82913	1360	.37	768	10.2	98	7.6	306	13.8	100	--
DEC													
10...	1350	80513	82913	1040	.37	765	11.1	87	7.7	243	5.3	92	95
JAN													
15...	1400	80513	82913	2640	.15	773	9.8	75	7.2	130	4.6	99	99
FEB													
11...	1230	80513	82913	1360	.30	765	14.1	112	7.8	364	5.6	100	--
MAR													
18...	1515	80513	82913	2280	.18	750	8.8	89	7.8	200	15.3	96	96
APR													
09...	1225	80513	82913	5350	.09	777	8.8	78	7.9	243	11.1	93	97
MAY													
20...	1555	80513	82913	12900	.06	766	4.2	48	6.3	96	22.6	93	94
JUN													
10...	1525	80513	82913	1790	.15	758	8.4	103	7.2	285	25.2	98	98
JUL													
09...	1050	80513	82913	1270	.49	763	7.2	93	7.8	178	28.8	68	80
AUG													
12...	1335	80513	82913	E980	.46	763	8.8	114	7.8	185	28.9	98	98
SEP													
10...	1440	80513	82913	5280	.18	764	7.2	85	7.5	310	23.7	95	96

Date	Suspnd. sediment, falldia, percent <.25mm (70344)	Suspnd. sediment, falldia, percent <.5 mm (70345)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, falldia, percent <.063mm (80158)	Bed sediment, falldia, percent <.125mm (80159)	Bed sediment, falldia, percent <.25mm (80160)	Bed sediment, falldia, percent <.5 mm (80161)	Bed sediment, falldia, percent <1 mm (80162)	Bed sediment, falldia, percent <2 mm (80163)
OCT													
10...	--	--	58	70	--	--	--	6	21	88	99	100	--
NOV													
13...	--	--	65	239	--	--	--	10	22	91	99	100	--
DEC													
10...	97	100	91	256	--	--	--	7	17	80	99	100	--
JAN													
15...	99	100	138	982	--	--	--	2	7	92	100	--	--
FEB													
11...	--	--	61	224	--	--	--	40	40	77	93	100	--
MAR													
18...	96	100	100	616	--	--	--	10	14	23	93	98	100
APR													
09...	100	--	567	8190	94	95	100	37	52	77	88	90	--
MAY													
20...	98	100	204	7110	--	--	--	66	90	97	100	--	--
JUN													
10...	99	100	162	783	--	--	--	.0	2	30	80	97	100
JUL													
09...	100	--	129	442	--	--	--	10	28	84	98	100	--
AUG													
12...	98	100	66	--	--	--	--	12	34	95	99	100	--
SEP													
10...	99	100	63	898	--	--	--	11	23	86	99	100	--

Remark codes used in this report:
E -- Estimated value

ST. FRANCIS RIVER BASIN

07047800 ST. FRANCIS RIVER AT PARKIN

LOCATION.--Lat 35°16'23", long 90°33'33", in NE1/4SE1/4 sec.33, T.8 N., R.5 E., Cross County, Hydrologic Unit 08020203, at bridge on U.S. Highway 64 at Parkin, 1.1 mi downstream from Tyronza River, and at mile 102.0.

DRAINAGE AREA.--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 mi².

PERIOD OF RECORD.--January 1930 to September 1982, October 1985, September 1994 ,October 1997 to current year. January 1930 to date in reports of Mississippi River Commission. Gage-height records since December 1892 in reports of Mississippi River Commission and National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 175.30 ft above NGVD of 1929. Prior to Sept. 11, 1948, nonrecording gage, and Sept. 11, 1948 to Apr. 24, 1968, water-stage recorder at site 1.8 mi downstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good except those after Dec. 18 that exceeded 2,000 ft³/s, which are poor. There are no daily values for July 16 to Sept. 30. The greater part of St. Francis River floodflow is diverted through St. Francis River floodway at lock and dam about 4.0 mi northwest of Marked Tree, and is not included in records for this station. Diverted flow is included in records for St. Francis Bay at Riverfront and returns to the St. Francis River below Marianna (see station 07047900). Some regulation by Wappapello Lake (Missouri), 207 mi upstream since Apr. 1, 1941, capacity, 625,000 acre-ft. Stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

EXTREMES.--Maximum discharge for the period Oct. 1, 2002 to July 15, 2003, 13,000 ft³/s May 20-21; maximum stage 27.93 ft May 21.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1892, 41.6 ft Apr. 4-6, 1897 (not comparable to stages since 1930 due to levee construction).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2370	872	163	2020	315	3510	1560	1540	3120	1900	---	---
2	1870	881	159	2490	305	3310	1510	1700	2830	1930	---	---
3	1630	932	161	2580	302	2840	1520	1680	2500	2060	---	---
4	1570	1010	364	2380	314	2310	1540	1600	2170	2060	---	---
5	1560	1280	1040	2060	340	1910	1520	2200	1990	1990	---	---
6	1480	2410	1170	1600	368	1530	1540	3690	1920	1920	---	---
7	1470	3000	1020	1210	702	1260	1640	5230	1890	1860	---	---
8	1390	2670	680	987	754	1080	2070	6800	1850	1750	---	---
9	1290	2040	445	856	567	969	2120	7190	1800	1670	---	---
10	1980	2390	342	758	518	851	1950	6760	1750	1630	---	---
11	4450	3080	296	676	554	790	1830	6480	1730	1650	---	---
12	5730	2680	257	606	735	750	1710	6590	1800	1670	---	---
13	5870	2000	377	547	829	740	1590	6030	1920	1670	---	---
14	5060	1610	1210	502	1820	682	1540	5560	1940	1670	---	---
15	3570	1500	1780	467	4160	638	1550	5440	2090	1670	---	---
16	2290	1450	1510	450	6390	612	1540	4820	2830	---	---	---
17	1690	1380	947	434	7380	582	1520	9700	2920	---	---	---
18	1480	1330	636	410	7380	560	1510	12100	2570	---	---	---
19	1450	1300	2970	389	6400	629	1490	12800	2710	---	---	---
20	1790	1250	5690	384	4890	760	1490	13000	2860	---	---	---
21	1920	1210	7020	378	3730	833	1470	13000	2580	---	---	---
22	1700	1180	7290	374	4070	740	1440	12700	2200	---	---	---
23	1500	1100	6830	345	6090	610	1430	12100	1970	---	---	---
24	1360	682	6520	306	7170	527	1460	10900	1820	---	---	---
25	1160	320	6310	303	7140	500	1480	9420	1720	---	---	---
26	1030	224	5610	304	6110	513	1480	7800	1710	---	---	---
27	963	200	4210	300	4560	556	1590	6220	1790	---	---	---
28	925	189	3150	306	3690	1190	1660	4680	1930	---	---	---
29	904	180	2340	331	---	1570	1580	3850	1970	---	---	---
30	884	171	1730	339	---	1580	1550	3590	1930	---	---	---
31	874	---	1440	324	---	1580	---	3370	---	---	---	---
TOTAL	63210	40521	73667	25416	87583	36512	47880	208540	64810	---	---	---
MEAN	2039	1351	2376	820	3128	1178	1596	6727	2160	---	---	---
MAX	5870	3080	7290	2580	7380	3510	2120	13000	3120	---	---	---
MIN	874	171	159	300	302	500	1430	1540	1710	---	---	---
AC-FT	125400	80370	146100	50410	173700	72420	94970	413600	128600	---	---	---

ST. FRANCIS RIVER BASIN

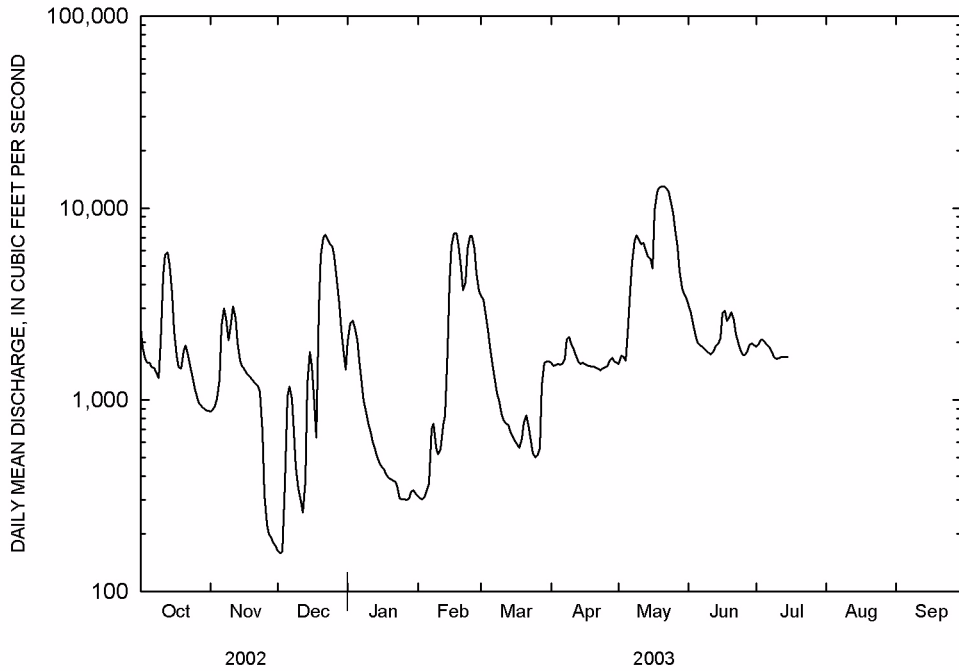
07047800 ST. FRANCIS RIVER AT PARKIN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930-82, 1986-94, 1998-03, BY WATER YEAR (WY)

MEAN	1165	1632	2386	3226	4067	3900	3943	3515	2700	2060	1536	1242
MAX	3898	6532	9082	14140	18100	9627	14360	12900	8172	4038	3998	3920
(WY)	1946	1958	2002	1932	1932	1932	1933	1933	1933	1945	1998	1950
MIN	141	97.3	201	197	382	928	1080	1054	685	879	376	83.7
(WY)	2001	2000	1990	2000	1964	1954	1954	1977	1977	1941	1990	2001

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR WATER YEARS 1930-82, 1986-94, 1998-03

ANNUAL TOTAL	854491	
ANNUAL MEAN	2341	2621
HIGHEST ANNUAL MEAN		6511 1933
LOWEST ANNUAL MEAN		1145 1977
HIGHEST DAILY MEAN	12000	Mar 22 21600 Jan 31 1932
LOWEST DAILY MEAN	120	Sep 16 11 Oct 9 2001
ANNUAL SEVEN-DAY MINIMUM	175	Nov 27 16 Oct 4 2001
MAXIMUM PEAK FLOW		25300 Jan 31 1930
MAXIMUM PEAK STAGE		34.20 Feb 4 1937
INSTANTANEOUS LOW FLOW		10 Oct 10 2001
ANNUAL RUNOFF (AC-FT)	1695000	1898000
10 PERCENT EXCEEDS	4970	5500
50 PERCENT EXCEEDS	1750	1890
90 PERCENT EXCEEDS	654	490



ST. FRANCIS RIVER BASIN

67

07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE

LOCATION.--Lat 35°32'15", long 90°29'05", in SE1/4NE1/4 sec.31, T.11 N., R.6 E., Poinsett County, Hydrologic Unit 08020203, at bridge on U.S. Highway 63 3.6 mi west of Marked Tree.

DRAINAGE AREA.--Not determined

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to September 1970, October 1990 to current year. Results of discharge measurements April 1973 to March 1977 and daily stages and flows February 1977 to date in reports of U.S. Army Corps of Engineers. Prior to October 1, 1965 published as "07047000 St. Francis River Floodway near Marked Tree (Dam)".

GAGE.--Water-stage recorder. Datum of gage is 188.83 ft above NGVD of 1929. Prior to October 1, 1965 non-recording gage 4.8 mi upstream at datum 3.25 ft higher. Prior to February 1977 non-recording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Flow diverted from St. Francis River bypasses Marked Tree and returns to St. Francis River below Parkin. Some regulation by Wappapello Lake (Missouri) since April 1, 1941 (capacity, 625,000 acre-ft). Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	328	1040	7140	3770	19800	2920	4650	7820	6380	9210	590
2	1050	337	1190	8470	3520	19900	2680	3380	6850	8470	9220	810
3	860	421	1040	e10600	3830	19100	2950	3160	6990	8810	9140	1480
4	676	348	1140	e12000	4200	17800	2780	3510	7230	8960	8760	3450
5	654	286	1180	13400	3940	16300	2880	4420	7220	8680	7710	7610
6	433	497	1260	e14500	3640	14500	3170	7190	6970	7430	5310	8640
7	485	924	1420	e15100	3370	12800	3390	9220	6630	5070	4850	8770
8	408	1010	1530	15600	3440	11600	4020	10600	6320	4420	4920	8600
9	291	1180	1740	15600	2990	10600	5820	12500	5980	3520	4690	8510
10	459	1090	1690	e14800	3200	9870	7810	13900	5640	1740	3080	8200
11	987	1130	e1400	e13600	3330	8980	6810	15200	4860	1900	2080	7040
12	1740	1070	e1670	e12300	3440	7290	3970	15800	4620	1880	1830	4330
13	2000	1070	2170	e11600	3610	6340	2100	16400	4490	1800	1640	3360
14	1920	1080	2270	e10700	4210	6140	2870	16900	4970	1680	1290	3370
15	1140	1130	2420	e9430	6870	6030	3280	16700	6030	1430	884	2980
16	610	1060	2190	e8060	9330	5770	3380	16000	9240	1130	877	2740
17	472	1060	2920	e7560	11400	5160	2680	17300	9800	1050	717	2750
18	363	1090	3950	e6520	12900	5130	2840	17700	9730	1050	725	2700
19	388	1030	6080	e6690	14600	5180	2950	18400	9740	1040	686	2570
20	536	825	8870	6710	15700	5080	2810	19500	9120	961	511	2110
21	572	828	9640	6290	16200	5070	2560	20700	8320	831	544	2180
22	365	830	10900	6180	17000	5320	2370	21000	6660	944	574	2190
23	389	1140	11800	6110	17500	5130	2290	21100	5040	1010	433	2240
24	544	1420	e12700	5200	18100	4550	2330	20500	3740	948	575	2230
25	635	1640	e13300	4770	18900	4330	2220	19500	3490	763	727	2200
26	607	1700	e13300	4630	19600	4080	2520	18400	3520	695	717	1480
27	546	1160	e12900	4600	20000	3590	3240	16700	3840	543	704	1230
28	520	1050	e11800	3930	20200	3550	3810	14400	4020	436	637	958
29	526	1090	10600	3880	---	3420	5100	12400	4180	561	560	504
30	605	1230	8690	4250	---	4150	6410	10700	4600	1830	559	242
31	611	---	6620	4270	---	4010	---	9310	---	7840	529	---
TOTAL	22992	29054	169420	274490	268790	260570	104960	427140	187660	93802	84689	106064
MEAN	742	968	5465	8855	9600	8405	3499	13780	6255	3026	2732	3535
MAX	2000	1700	13300	15600	20200	19900	7810	21100	9800	8960	9220	8770
MIN	291	286	1040	3880	2990	3420	2100	3160	3490	436	433	242
AC-FT	45600	57630	336000	544500	533100	516800	208200	847200	372200	186100	168000	210400

ST. FRANCIS RIVER BASIN

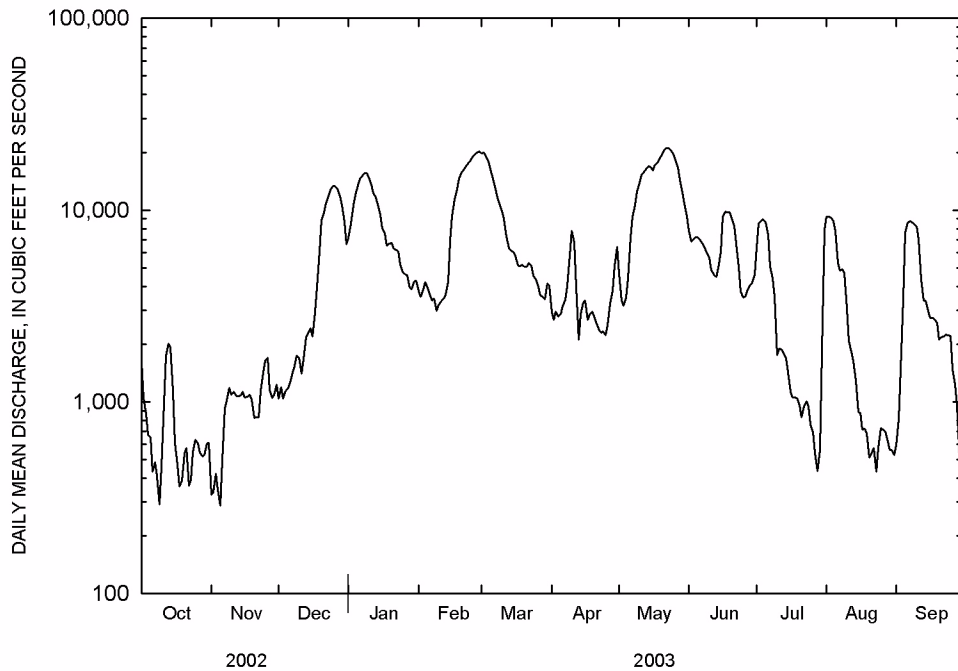
07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935-70, 1991-03, BY WATER YEAR (WY)

MEAN	828	1758	4393	6853	8056	8339	8708	6952	4472	2130	1090	682
MAX	5933	19780	20270	31060	30990	22970	30180	20530	23550	12630	12880	3970
(WY)	1950	1958	2002	1950	1950	1997	1945	1945	1957	1957	1998	1965
MIN	0.000	0.000	0.000	39.1	190	225	441	0.39	0.000	0.000	0.000	0.000
(WY)	1935	1944	1944	1944	1936	1941	1941	1941	1941	1941	1936	1935

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1935-70, 1991-03	
ANNUAL TOTAL	2550921		2029631			
ANNUAL MEAN	6989		5561		4502	
HIGHEST ANNUAL MEAN					10390 1950	
LOWEST ANNUAL MEAN					258 1941	
HIGHEST DAILY MEAN	26700	Apr 2	21100	May 23	48300	Jan 27 1937
LOWEST DAILY MEAN	141	Aug 10	242	Sep 30	1 ¹ 0.00	Oct 1 1934
ANNUAL SEVEN-DAY MINIMUM	313	Aug 6	404	Oct 31	0.00	Oct 1 1934
MAXIMUM PEAK FLOW			21200	May 23	2 ² 48300	3 ³ Jan 26 1937
MAXIMUM PEAK STAGE			24.10	May 23	4 ⁴ 31.10	3 ³ Jan 26 1937
INSTANTANEOUS LOW FLOW			220	Nov 5	0.00	at times
ANNUAL RUNOFF (AC-FT)	5060000		4026000		3261000	
10 PERCENT EXCEEDS	18500		14500		12300	
50 PERCENT EXCEEDS	5010		3640		2050	
90 PERCENT EXCEEDS	545		599		0.00	

¹No flow at times in most years prior to 1965
²Maximum discharge during period 1971-90 67,000 ft³/s April 7, 1979
³Also January 27-28, 1937
⁴At former site and datum
^eEstimated



ST. FRANCIS RIVER BASIN

07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)
NOV													
14...	0735	80513	82913	1040	.21	764	9.1	84	7.4	270	11.8	100	--
DEC													
11...	0755	80513	82913	1370	.24	766	11.5	89	7.7	250	4.9	90	95
JAN													
21...	1215	80513	82913	5680	.09	764	11.8	90	7.2	221	3.9	87	90
21...	1255	80513	82913	1180	.12	--	--	--	--	--	4.0	52	54
FEB													
12...	0715	80513	82913	2830	.15	769	12.4	97	8.0	335	5.4	96	96
12...	0740	80513	82913	357	.15	--	--	--	--	--	5.4	95	95
MAR													
19...	0830	80513	82913	4550	.15	750	8.7	89	7.3	176	15.7	84	88
19...	0905	80513	82913	490	.15	--	--	--	--	--	15.6	85	89
APR													
09...	1435	80513	82913	5240	.09	777	8.8	79	7.8	219	11.4	97	98
09...	1510	80513	82913	840	.09	--	--	--	--	--	11.5	96	98
MAY													
21...	1145	80513	82913	12400	.09	767	7.0	78	6.4	107	21.1	75	79
21...	1215	80513	82913	832	.15	767	5.8	65	6.4	107	21.0	96	96
21...	1240	80513	82913	4870	.12	--	--	--	--	--	21.2	97	97
21...	1310	80513	82913	1970	.09	--	--	--	--	--	21.5	96	96
21...	1345	80513	82913	492	.09	--	--	--	--	--	21.8	97	97
JUN													
11...	0830	80513	82913	3710	.12	757	6.7	80	7.2	270	23.6	96	96
11...	0905	80513	82913	784	.12	--	--	--	--	--	23.5	99	99

Date	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, dry svs dia percent <2 mm (80169)	Bed sediment, dry svs dia percent <4 mm (80170)	Bed sediment, dry svs dia percent <8 mm (80171)	Bed sediment, dry svs dia percent <16 mm (80172)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)
NOV													
14...	--	--	--	46	129	--	--	--	--	2	35	96	99
DEC													
11...	97	100	--	67	248	--	--	--	--	3	17	89	99
JAN													
21...	94	100	--	60	920	--	--	--	--	16	58	98	100
21...	61	98	100	118	376	--	--	--	--	1	6	88	100
FEB													
12...	99	100	--	50	386	--	--	--	--	2	15	92	99
12...	95	100	--	77	74	--	--	--	--	.0	1	33	87
MAR													
19...	90	98	100	81	995	--	--	--	--	2	24	93	99
19...	98	100	--	64	85	--	--	--	--	.0	.0	42	98
APR													
09...	99	99	100	389	5500	--	--	--	--	9	31	95	99
09...	100	--	--	411	932	--	--	--	--	13	23	84	99
MAY													
21...	94	100	--	128	4290	--	--	--	--	4	30	75	93
21...	99	100	--	181	407	--	--	--	--	18	34	71	90
21...	97	100	--	187	2460	--	--	--	--	4	33	81	95
21...	99	100	--	280	1490	--	--	--	--	35	43	57	89
21...	99	100	--	280	372	33	44	70	100	2	2	4	16
JUN													
11...	98	100	--	81	811	--	--	--	--	6	44	97	99
11...	99	100	--	72	152	--	--	--	--	1	11	48	89

ST. FRANCIS RIVER BASIN

07047810 ST. FRANCIS RIVER FLOODWAY NEAR MARKED TREE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bed sedi- ment, falldia dst wat percent <1 mm (80162)	Bed sedi- ment, falldia dst wat percent <2 mm (80163)	Sample source, code (72005)
NOV			
14...	99	100	--
DEC			
11...	100	--	--
JAN			
21...	--	--	67.00
21...	--	--	68.00
FEB			
12...	100	--	67.00
12...	99	100	68.00
MAR			
19...	100	--	67.00
19...	100	--	68.00
APR			
09...	100	--	67.00
09...	100	--	68.00
MAY			
21...	100	--	67.00
21...	98	100	68.00
21...	100	--	68.00
21...	100	--	68.00
21...	30	--	68.00
JUN			
11...	100	--	67.00
11...	100	--	68.00

ST. FRANCIS RIVER BASIN

07047815 CROSS COUNTY DITCH NEAR BIRDEYE

LOCATION.--Lat 35°21'38", long 90°39'00", in NE1/4SE1/4 sec.34, T.9 N., R.4 E., Cross County, Hydrologic Unit 08020203, at bridge on State Highway 42 2.3 mi east of Birdeye.

DRAINAGE AREA.--Not determined

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Temperature, water, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 2002													
14...	0925	80513	82913	930	.18	11.9	99	99	99	100	--	68	171
DEC													
11...	0925	80513	82913	1400	.21	5.1	88	88	93	100	--	66	250
JAN 2003													
21...	1455	80513	82913	6370	.12	3.5	79	81	91	100	--	98	1690
FEB													
12...	0915	80513	82913	3250	.15	5.0	95	95	97	100	--	68	597
MAR													
19...	1100	80513	82913	6250	.15	15.8	95	97	97	97	100	113	1910
APR													
10...	0900	80513	82913	7620	.09	10.8	91	95	99	100	--	356	7320
MAY													
22...	0805	80513	82913	19300	.09	20.8	82	87	96	100	--	112	5840
22...	0845	80513	82913	2400	.12	21.0	93	93	97	100	--	123	797
JUN													
11...	1330	80513	82913	4590	.12	23.6	66	68	75	100	--	140	1740

Date	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)	Sample source, code (72005)
NOV 2002									
14...	--	--	--	5	28	95	98	100	--
DEC									
11...	--	--	--	16	57	98	100	--	--
JAN 2003									
21...	--	--	--	11	40	98	100	--	--
FEB									
12...	99	100	--	.0	.0	8	72	98	--
MAR									
19...	--	--	--	.0	.0	30	96	100	--
APR									
10...	--	--	--	2	17	95	100	--	--
MAY									
22...	--	--	--	2	22	75	94	100	67.00
22...	93	94	100	1	2	17	56	88	68.00
JUN									
11...	--	--	--	6	47	97	100	--	--

ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT

LOCATION.--Lat 35°15'34", long 90°40'48", in W_{1/2} sec.4, T.7 N., R.4 E., Cross County, Hydrologic Unit 08020203, at bridge on U.S. Highway 64 at Riverfront, 7.0 mi west of Parkin.

DRAINAGE AREA.--Indeterminate. Total drainage area of St. Francis River and St. Francis Bay, 6,475 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1935 to September 1982, October 1984 to August 1992, December 1992 to September 1994, and October 1997 to current year. January 1935 to date in reports of Mississippi River Commission.

GAGE.--Nonrecording gage read once daily. Datum of gage is 171.25 ft above NGVD of 1929. Aug. 20, 1948 to Jan. 6, 1999, water-stage recorder at present site and datum. Prior to Aug. 20, 1948, nonrecording gage at present site and datum. Water-stage recorder from Clark Corner Cut-Off near Colt (07047904) 9.1 mi downstream at datum 154.87 ft above NGVD of 1929 was used as auxiliary gage for this station October 1, 1997 to September 30, 2000.

REMARKS.--Water-discharge records fair, except estimated daily discharges which are poor. Part of the flow at this station is diverted from the St. Francis River at lock and dam about 4.0 mi northwest of Marked Tree (see station 07047800). Some regulation by Wappapelo Lake (Missouri) since Apr. 1, 1941, capacity, 625,000 acre-ft. Stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2310	e330	e1080	9660	e3640	20100	3600	5520	e12100	5530	10600	1060
2	e1240	e190	e1150	10400	e3460	20200	2770	3660	e10100	7320	9600	998
3	e950	e300	e1020	11100	e3640	20000	3000	3210	e7920	8220	9230	1270
4	e790	e380	e1150	11900	e3950	19700	2950	3260	e7690	8410	8900	1980
5	e850	e755	e1380	12600	e3820	19000	2910	6530	e7460	8330	8150	5070
6	e850	e1600	e1380	13500	e3550	18000	3150	7890	e7460	7680	6320	7140
7	e520	e1080	e1380	14100	e3290	16700	3470	11000	e6710	5840	5130	7900
8	e435	e1040	e1380	14600	e3460	15300	3840	13600	e5630	4580	4850	7800
9	e279	e1240	e1290	15000	e3290	14100	4710	13300	e5170	3970	4790	7690
10	e1240	e1240	e1820	14900	e3120	13000	6860	13300	e4930	2660	3970	7540
11	e2660	e1040	e1380	14400	e3210	12000	7150	e15300	e5130	2050	2710	6990
12	e1980	e1040	e1510	13600	e3370	10700	5520	e16500	5210	2060	2170	5300
13	e2320	e1040	e2150	12600	3440	8660	2810	e16300	4610	2000	2010	3510
14	e2150	e1040	e2880	11600	6270	7710	2650	e16800	4710	1920	1800	3320
15	e1670	e1060	e2880	10300	11600	7520	3140	e18300	5820	1800	1510	3270
16	e690	e980	e2580	9240	13900	7230	3350	e20800	8970	1510	1300	2790
17	e490	e980	e2660	8180	14500	6720	3100	e23100	10300	1270	1200	2750
18	e350	e960	3770	6920	13400	6210	2750	e24900	10200	1270	1070	2690
19	e410	e1170	10800	6650	13600	6770	2940	e25500	11000	1290	1040	2630
20	e1030	e940	14600	6730	14800	6830	2900	e26000	10100	1460	969	2370
21	e880	e920	14400	6420	15500	6190	2710	e26000	8710	1240	904	2200
22	e490	e880	12700	6160	18100	6250	2530	e25900	7470	1450	909	2240
23	e280	e1060	12100	6110	20300	6280	2380	e25400	5620	1610	843	2240
24	e280	e1160	14300	5480	19800	5700	2460	e24300	4440	1400	1070	2260
25	e470	e1290	14900	4930	19000	5230	2770	e24300	3580	1160	998	2220
26	e410	e1980	14200	4450	18900	5230	3480	e23800	3590	964	1000	2040
27	e350	e1290	13800	e4600	19200	3930	3050	e21600	4420	839	944	1490
28	e340	e1020	13200	e4040	19600	4020	3480	e20600	4190	685	906	1340
29	e317	e930	12300	e3550	---	3320	4020	e19400	4190	718	815	976
30	e370	e1080	10900	e4040	---	3910	5640	e15900	4320	2190	839	643
31	e620	---	9150	e4260	---	4200	---	e16100	---	7100	962	---
TOTAL	28021	30015	200190	282020	283710	310710	106090	528070	201750	98526	97509	101717
MEAN	904	1000	6458	9097	10130	10020	3536	17030	6725	3178	3145	3391
MAX	2660	1980	14900	15000	20300	20200	7150	26000	12100	8410	10600	7900
MIN	279	190	1020	3550	3120	3320	2380	3210	3580	685	815	643
AC-FT	55580	59530	397100	559400	562700	616300	210400	1047000	400200	195400	193400	201800

ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

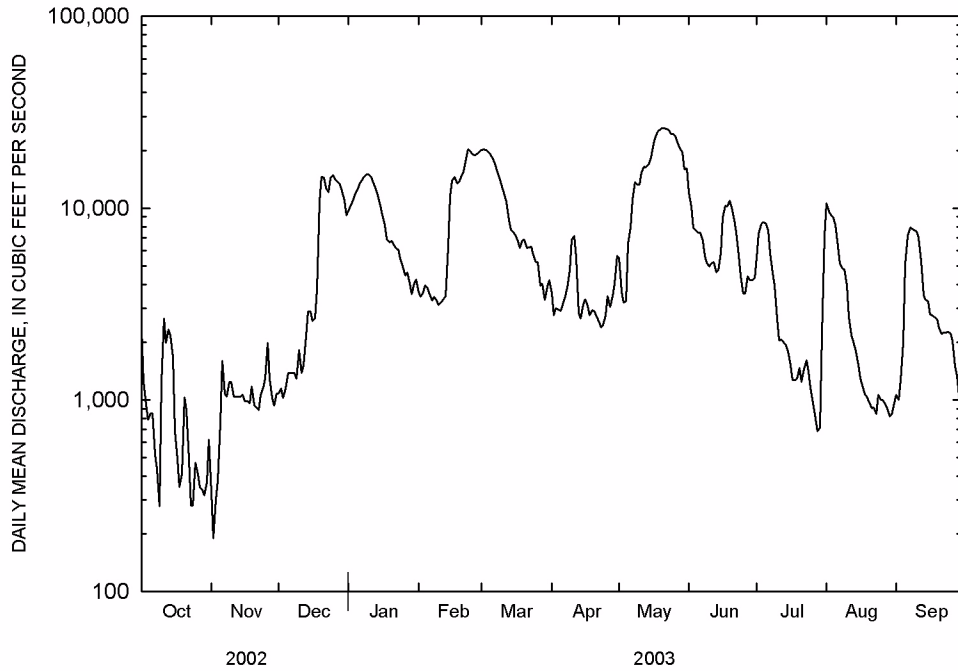
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935-82, 1985-94, 1998-03, BY WATER YEAR (WY)

MEAN	1176	2188	5457	7835	9454	10100	10210	8525	5155	2605	1543	1099
MAX	6413	16410	23870	30270	37420	27400	36220	33660	27120	14280	13240	3942
(WY)	1950	1958	1958	1950	1937	1979	1979	1973	1957	1957	1998	1965
MIN	36.8	24.7	89.0	103	336	465	625	292	78.3	70.0	61.0	48.0
(WY)	1940	1942	1941	1944	1936	1941	1941	1941	1941	1941	1936	1941

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1935-82, 1985-94, 1998-03	
ANNUAL TOTAL	2753476		2268328			
ANNUAL MEAN	7544		6215		5475	
HIGHEST ANNUAL MEAN					13580 1973	
LOWEST ANNUAL MEAN					344 1941	
HIGHEST DAILY MEAN	29900	Jan 1	26000	May 20	53000	Apr 8 1979
LOWEST DAILY MEAN	100	Sep 9	190	Nov 2	0.00	Nov 17 1941
ANNUAL SEVEN-DAY MINIMUM	350	Oct 23	350	Oct 23	0.00	Nov 17 1941
MAXIMUM PEAK FLOW			20400	Feb 23	54700	Apr 8 1979
MAXIMUM PEAK STAGE			26.50	Feb 23	¹ 39.03	May 3 1973
INSTANTANEOUS LOW FLOW					0.00	Nov 17 1941
ANNUAL RUNOFF (AC-FT)	5462000		4499000		3966000	
10 PERCENT EXCEEDS	17700		15300		15000	
50 PERCENT EXCEEDS	5430		3660		2650	
90 PERCENT EXCEEDS	674		908		222	

¹Backwater from Mississippi River

^eEstimated



ST. FRANCIS RIVER BASIN

07047900 ST. FRANCIS BAY AT RIVERFRONT--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf 25 degC (00095)	Temper-ature, water, deg C (00010)	Suspnd. sedi-ment, falldia dst wat percent <.063mm (70342)	Suspnd. sedi-ment, falldia dst wat percent <.125mm (70343)
OCT													
10...	1415	80513	82913	1200	.09	760	7.6	80	7.3	230	17.8	99	99
NOV													
14...	1030	80513	82913	1050	.18	764	9.2	85	7.2	303	12.1	99	99
DEC													
12...	0750	80513	82913	1400	.15	768	11.5	90	7.8	207	5.2	94	94
JAN													
21...	1555	80513	82913	6370	.09	764	11.3	85	7.3	189	3.5	82	84
FEB													
12...	1020	80513	82913	3360	.15	772	12.7	100	8.0	337	5.6	84	87
MAR													
20...	0900	80513	82913	6960	.21	750	7.9	82	7.3	157	16.4	31	31
APR													
10...	1130	80513	82913	7090	.09	776	9.0	80	7.7	231	11.1	91	95
MAY													
22...	1225	80513	82913	23600	.09	765	4.6	51	7.0	114	20.9	93	95
JUN													
11...	1445	80513	82913	4720	.09	755	7.8	93	7.1	290	23.8	68	84
JUL													
09...	1400	80513	82913	3800	.27	765	7.8	101	7.2	155	29.0	71	92
AUG													
13...	0850	80513	82913	2020	.21	765	7.7	96	7.5	170	26.9	92	94
SEP													
11...	0730	80513	82913	6840	.12	764	6.2	74	7.8	305	24.0	87	91

Date	Suspnd. sedi-ment, falldia dst wat percent <.25mm (70344)	Suspnd. sedi-ment, falldia dst wat percent <.5 mm (70345)	Suspnd. sedi-ment, falldia dst wat percent <1 mm (70346)	Sus-pended sedi-ment concn-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)	Bed sedi-ment, falldia dst wat percent <.063mm (80158)	Bed sedi-ment, falldia dst wat percent <.125mm (80159)	Bed sedi-ment, falldia dst wat percent <.25mm (80160)	Bed sedi-ment, falldia dst wat percent <.5 mm (80161)	Bed sedi-ment, falldia dst wat percent <1 mm (80162)	Bed sedi-ment, falldia dst wat percent <2 mm (80163)
OCT											
10...	100	--	--	445	1440	3	12	74	98	100	--
NOV											
14...	99	100	--	90	255	3	18	89	100	--	--
DEC											
12...	96	100	--	64	242	4	11	80	100	--	--
JAN											
21...	90	96	100	107	1840	3	21	96	100	--	--
FEB											
12...	95	100	--	73	662	.0	.0	34	95	100	--
MAR											
20...	70	100	--	338	6350	29	64	96	99	100	--
APR											
10...	99	100	--	381	7290	12	45	97	99	100	--
MAY											
22...	99	100	--	121	7710	10	42	82	97	99	100
JUN											
11...	99	100	--	177	2260	3	30	99	100	--	--
JUL											
09...	99	100	--	482	4950	17	31	62	92	100	--
AUG											
13...	98	100	--	77	420	27	59	97	100	--	--
SEP											
11...	99	100	--	109	2010	21	40	90	99	100	--

ST. FRANCIS RIVER BASIN

75

07047904 CLARK CORNER CUT-OFF NEAR COLT

LOCATION.--Lat 35°08'41", long 90°39'23", in NW1/4NE1/4 sec.15, T.6 N., R.4 E., St. Francis County, Hydrologic Unit 08020203, at bridge on Old Military Road 9.0 mi east of Colt.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)
NOV													
14...	1415	80513	82913	1180	.15	760	8.0	75	7.3	277	12.3	98	98
DEC													
11...	1100	80513	82913	1630	.18	768	11.0	86	7.7	227	5.2	87	87
JAN													
22...	0730	80513	82913	6950	.12	770	12.5	93	8.0	120	3.3	81	86
FEB													
12...	1215	80513	82913	3530	.15	772	13.1	103	8.1	331	5.8	87	91
MAR													
19...	1355	80513	82913	7400	.18	750	9.8	101	7.4	168	16.2	96	96
APR													
09...	1745	80513	82913	5190	.09	777	12.4	116	8.1	335	13.1	95	97
MAY													
21...	1525	80513	82913	27500	.09	765	6.8	77	6.5	98	21.8	96	97
JUN													
11...	1120	80513	82913	5340	.12	757	7.2	86	7.4	261	23.8	98	98

Date	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)
NOV										
14...	98	100	--	60	190	2	21	98	100	--
DEC										
11...	89	100	--	82	361	2	24	99	99	100
JAN										
22...	93	98	100	81	1520	5	24	77	93	100
FEB										
12...	94	100	--	89	848	1	5	75	98	100
MAR										
19...	98	100	--	142	2840	2	35	99	100	--
APR										
09...	99	100	--	149	2090	2	10	97	99	100
MAY										
21...	99	100	--	118	8760	5	32	79	95	100
JUN										
11...	98	100	--	120	1730	3	29	99	100	--

ST. FRANCIS RIVER BASIN

07047907 ST. FRANCIS RIVER AT MADISON

LOCATION.--Lat 35°00'38", long 90°43'05", in NE1/4SW1/4 sec.30, T.5 N., R.4 E., St. Francis County, Hydrologic Unit 08020203, at bridge on State Highway 50 at Madison.

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Suspnd. sediment, falldia dst wat percent <.063mm (70342)	Suspnd. sediment, falldia dst wat percent <.125mm (70343)
OCT													
10...	1645	80513	82913	748	.12	760	7.8	82	7.2	313	17.5	90	92
NOV													
14...	1300	80513	82913	1120	.15	762	8.1	76	7.2	281	12.3	98	98
DEC													
11...	1330	80513	82913	1710	.18	766	10.8	85	7.5	230	5.2	92	95
JAN													
22...	0905	80513	82913	6490	.12	770	12.8	94	8.0	128	3.0	94	94
FEB													
12...	1430	80513	82913	3350	.15	770	14.3	115	8.1	328	6.5	96	96
MAR													
20...	1225	80513	82913	7350	.18	750	7.8	80	7.5	180	16.0	88	89
APR													
10...	1615	80513	82913	6580	.09	773	12.6	115	7.8	235	12.1	97	99
MAY													
21...	1645	80513	82913	25700	.06	764	4.9	56	6.8	101	22.0	96	96
JUN													
12...	0600	80513	82913	5100	.12	758	7.1	85	7.5	211	23.8	99	99
JUL													
09...	1610	80513	82913	4240	.27	765	7.8	102	7.3	160	29.5	31	49
AUG													
13...	1030	80513	82913	2270	.18	766	5.8	73	7.4	192	27.1	98	98
SEP													
11...	1225	80513	82913	8060	.12	764	6.7	80	7.7	281	24.6	98	98

Date	Suspnd. sediment, falldia dst wat percent <.25mm (70344)	Suspnd. sediment, falldia dst wat percent <.5 mm (70345)	Suspnd. sediment, falldia dst wat percent <1 mm (70346)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	Bed sediment, falldia dst wat percent <.063mm (80158)	Bed sediment, falldia dst wat percent <.125mm (80159)	Bed sediment, falldia dst wat percent <.25mm (80160)	Bed sediment, falldia dst wat percent <.5 mm (80161)	Bed sediment, falldia dst wat percent <1 mm (80162)
OCT										
10...	92	100	--	176	355	2	8	95	100	--
NOV										
14...	100	--	--	203	614	5	16	93	99	100
DEC										
11...	96	100	--	133	614	2	25	99	100	--
JAN										
22...	97	100	--	93	1630	7	61	99	100	--
FEB										
12...	98	100	--	66	597	.0	1	14	84	100
MAR										
20...	94	100	--	135	2680	17	72	99	100	--
APR										
10...	99	100	--	389	6910	30	73	98	99	100
MAY										
21...	99	100	--	117	8120	11	41	81	95	100
JUN										
12...	99	100	--	118	1620	14	50	99	100	--
JUL										
09...	99	100	--	943	10800	12	47	96	99	100
AUG										
13...	98	99	100	77	472	.0	16	92	100	--
SEP										
11...	98	98	100	100	2180	1	5	90	100	--

ST. FRANCIS RIVER BASIN

77

07047942 L'ANGUILLE RIVER NEAR COLT

LOCATION.--Lat 35°08'40", long 90°52'40", in NE1/4NW1/4 sec.15, T.6 N.,R.2 E., St. Francis County, Hydrologic Unit 08020205, near center of span on downstream side of bridge on State Highway 306, 1.1 mi downstream from Lick Creek, 3.9 mi northwest of Colt, and at mile 52.8.

DRAINAGE AREA.--535 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 192.52 ft above NGVD of 1929. Auxiliary water-stage recorder 8.7 mi downstream.

REMARKS.--Water-discharge records good except estimated daily discharges and those below 50 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	719	e215	13	e1550	e158	1970	260	e150	1330	441	329	200
2	671	e189	15	e1630	e161	1860	222	e145	1210	413	504	202
3	620	e174	17	e1620	e166	1680	191	e140	1140	394	646	239
4	583	e170	133	e1510	e182	1510	166	e135	1060	382	720	276
5	527	e194	e410	e1380	182	1380	153	e130	992	364	772	303
6	475	e266	e356	e1250	192	1300	145	e120	927	340	859	336
7	442	e294	e360	e1180	243	1230	157	e410	867	311	910	351
8	400	e360	e372	e1130	241	1180	154	e1040	820	279	910	353
9	359	e400	e358	e1070	243	1120	151	e1450	761	239	883	349
10	430	e444	e332	e1020	249	1060	151	1530	703	201	846	338
11	474	e453	e299	e963	245	1010	149	1510	667	174	806	319
12	421	e460	e262	e908	234	957	135	1520	642	156	765	296
13	455	e463	e261	e850	223	926	114	1730	597	148	726	293
14	491	e456	e358	e813	619	879	93	1910	541	133	e680	314
15	484	e439	e353	e774	1220	832	75	1930	543	122	e640	275
16	460	e399	e410	e719	1790	795	61	1890	538	113	e605	255
17	433	e352	e454	e668	2260	736	54	4840	584	111	e560	239
18	404	e302	e470	e612	2240	692	49	6660	639	100	e515	217
19	425	e246	e1460	e559	2110	704	46	7620	717	102	e470	198
20	565	e198	e2110	e502	1990	672	49	7310	767	122	e425	179
21	531	161	e2720	e453	1900	627	53	6230	764	133	e390	161
22	559	117	e2720	e407	2820	591	57	4760	733	217	e355	157
23	591	78	e2560	e361	3330	551	45	3320	690	326	e318	148
24	e583	53	e3380	e342	3220	525	50	2880	646	358	e285	134
25	e531	30	e3220	e316	2910	491	70	2570	598	441	e265	125
26	e482	20	e3040	e231	2490	456	76	2280	567	465	e240	115
27	e433	21	e2650	e206	2200	418	121	2030	546	440	e220	103
28	e387	19	e2200	e188	2030	380	154	2170	507	394	e205	90
29	e340	17	e1890	e182	---	351	160	2110	480	340	e195	78
30	e294	14	e1670	e166	---	331	152	1790	456	309	192	67
31	e244	---	e1560	e159	---	294	---	1530	---	288	197	---
TOTAL	14813	7004	36413	23719	35848	27508	3513	73840	22032	8356	16433	6710
MEAN	478	233	1175	765	1280	887	117	2382	734	270	530	224
MAX	719	463	3380	1630	3330	1970	260	7620	1330	465	910	353
MIN	244	14	13	159	158	294	45	120	456	100	192	67
AC-FT	29380	13890	72230	47050	71100	54560	6970	146500	43700	16570	32590	13310
CFSM	0.89	0.44	2.20	1.43	2.39	1.66	0.22	4.45	1.37	0.50	0.99	0.42
IN.	1.03	0.49	2.53	1.65	2.49	1.91	0.24	5.13	1.53	0.58	1.14	0.47

ST. FRANCIS RIVER BASIN

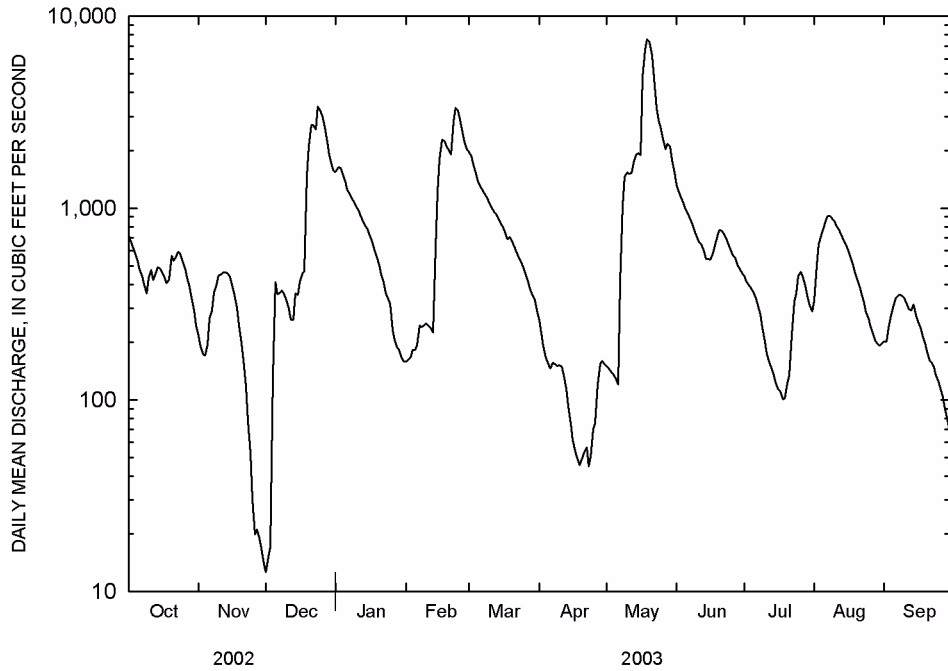
07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	315	623	1239	992	1131	1147	1046	771	494	259	274	428
MAX	1509	2807	3574	2857	4091	2977	3428	3033	2617	1507	800	2784
(WY)	1991	1989	2002	1991	1989	1975	1991	1983	1974	1994	1998	1978
MIN	5.10	9.91	11.9	43.2	151	222	117	39.6	25.3	23.8	63.8	65.1
(WY)	1995	1999	1990	1986	1972	1982	2003	1992	1988	1993	1980	1998

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	317528		276189			
ANNUAL MEAN	870		757		724	
HIGHEST ANNUAL MEAN					1321 1989	
LOWEST ANNUAL MEAN					271 1972	
HIGHEST DAILY MEAN	4080	Mar 20	7620	May 19	15000	Dec 29 1987
LOWEST DAILY MEAN	11	Jun 23	13	Dec 1	1.0	Oct 27 1971
ANNUAL SEVEN-DAY MINIMUM	14	Jun 22	17	Nov 27	1.0	Oct 9 1992
MAXIMUM PEAK FLOW			7790	May 19	16600	Apr 29 1991
MAXIMUM PEAK STAGE			15.76	May 19	¹ 17.34	Dec 30 1987
INSTANTANEOUS LOW FLOW					0.99	Jul 20 1980
ANNUAL RUNOFF (AC-FT)	629800		547800		524800	
ANNUAL RUNOFF (CFSM)	1.63		1.41		1.35	
ANNUAL RUNOFF (INCHES)	22.08		19.20		18.40	
10 PERCENT EXCEEDS	2050		1900		1890	
50 PERCENT EXCEEDS	570		425		361	
90 PERCENT EXCEEDS	84		121		31	

¹From floodmark
^eEstimated



ST. FRANCIS RIVER BASIN

79

07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
NOV													
06...	1315	80513	81213	E280	--	775	9.9	7.3	65	7.3	275	11.0	95
15...	0715	80513	82913	418	.12	760	--	8.1	75	7.2	261	11.8	--
DEC													
12...	0935	80513	82913	325	.15	768	--	10.2	80	7.5	218	5.4	--
JAN													
22...	1345	80513	81213	E420	--	770	2.2	9.0	67	7.9	188	3.9	71
22...	1420	80513	82913	434	.15	770	--	9.0	67	7.9	188	3.9	--
FEB													
05...	1345	80513	81213	191	--	772	1.8	9.7	84	7.6	262	9.8	95
13...	0830	80513	82913	246	.12	771	--	10.6	85	7.8	222	6.4	--
MAR													
19...	1630	80513	82913	732	.12	750	--	7.8	81	7.4	170	16.3	--
APR													
10...	1400	80513	82913	165	.09	773	--	8.3	76	7.8	203	11.9	--
28...	1315	80513	81213	174	--	772	8.9	5.2	57	7.1	180	20.3	66
MAY													
22...	1505	80513	82913	1200	.09	765	--	4.9	56	6.8	66	21.8	--
22...	1530	80513	82913	3900	.09	765	--	5.9	68	6.8	66	22.2	--
JUN													
24...	0820	80513	81213	656	--	774	7.4	4.0	48	7.2	170	24.9	64
12...	0915	80513	82913	552	.09	758	--	6.8	80	7.6	161	23.0	--
AUG													
25...	1440	80513	81213	E260	--	765	11	3.8	49	7.5	378	28.3	200

Date	Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Potassium water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Sulfate, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)
NOV													
06...	23.0	9.10	10.0	.4	9.9	17	102	16.0	7.50	140	.23	--	166
JAN													
22...	18.0	6.40	6.10	.4	6.8	16	81	9.90	7.40	104	.16	--	121
FEB													
05...	24.0	8.40	6.70	.5	11.0	19	38	14.0	9.40	98	.23	86.1	167
28...	17.0	5.80	6.30	.4	6.9	17	58	7.50	17.0	98	.16	55.9	119
JUN													
24...	16.0	5.90	4.10	.3	6.4	17	61	8.80	10.0	89	.15	193	109
AUG													
25...	49.0	20.0	3.70	.6	21.0	18	190	26.0	20.0	255	.42	--	309

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
NOV													
06...	1.5	.68	.53	--	--	.57	--	<.010	.97	.429	.14	.15	.30
JAN													
22...	.80	.08	.06	--	--	.16	--	<.010	.74	.123	.04	.05	.18
FEB													
05...	.90	.08	.06	1.37	.31	.32	.033	.010	.84	.123	.04	.02	.11
28...	1.1	.14	.11	1.59	.36	.39	.099	.030	.99	.368	.12	.13	.32
JUN													
24...	.70	.06	.05	1.42	.32	.33	.033	.010	.65	.184	.06	.06	.17
AUG													
25...	.60	.10	.08	1.06	.24	.25	.033	.010	.52	.276	.09	.08	.13

ST. FRANCIS RIVER BASIN

07047942 L'ANGUILLE RIVER NEAR COLT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coli-form, M-FC col/100 mL (31625)	Fecal streptococci KF col/100 mL (31673)	Suspnd. sedi-ment, falldia dst wat percent <.063mm (70342)	Suspnd. sedi-ment, falldia dst wat percent <.125mm (70343)	Suspnd. sedi-ment, falldia dst wat percent <.25mm (70344)	Suspnd. sedi-ment, falldia dst wat percent <.5 mm (70345)	Suspnd. sedi-ment, falldia dst wat percent <1 mm (70346)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concentration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)	Bed sedi-ment, dry svd percent <2 mm (80169)
NOV 06...	2.1	770	E1200	11000	--	--	--	--	--	98	65	--	--
NOV 15...	--	--	--	--	100	--	--	--	--	--	147	166	97
DEC 12...	--	--	--	--	100	--	--	--	--	--	58	51	--
JAN 22...	.96	48	74	E36	--	--	--	--	--	96	61	--	--
JAN 22...	--	--	--	--	100	--	--	--	--	--	63	74	--
FEB 05...	1.2	E90	E72	E50	--	--	--	--	--	97	54	28	--
FEB 13...	--	--	--	--	100	--	--	--	--	--	49	33	--
MAR 19...	--	--	--	--	99	100	--	--	--	--	64	126	--
APR 10...	--	--	--	--	100	--	--	--	--	--	65	29	--
APR 28...	1.5	160	170	410	--	--	--	--	--	95	137	64	--
MAY 22...	--	--	--	--	99	99	100	--	--	--	81	262	--
MAY 22...	--	--	--	--	99	99	99	99	100	--	69	727	18
JUN 24...	1.0	E67	70	84	--	--	--	--	--	94	57	101	--
JUN 12...	--	--	--	--	99	99	99	100	--	--	118	176	--
AUG 25...	.85	150	110	110	--	--	--	--	--	93	108	--	--

Date	Bed sedi-ment, dry svd sve dia percent <4 mm (80170)	Bed sedi-ment, dry svd sve dia percent <8 mm (80171)	Bed sedi-ment, dry svd sve dia percent <16 mm (80172)	Bed sedi-ment, falldia dst wat percent <.063mm (80158)	Bed sedi-ment, falldia dst wat percent <.125mm (80159)	Bed sedi-ment, falldia dst wat percent <.25mm (80160)	Bed sedi-ment, falldia dst wat percent <.5 mm (80161)	Bed sedi-ment, falldia dst wat percent <1 mm (80162)	Bed sedi-ment, falldia dst wat percent <2 mm (80163)	Sample source, code (72005)
NOV 15...	100	--	--	71	77	83	86	94	--	--
DEC 12...	--	--	--	98	99	100	--	--	--	--
JAN 22...	--	--	--	97	98	98	98	100	--	--
FEB 13...	--	--	--	93	96	97	97	98	100	--
MAR 19...	--	--	--	96	97	99	99	99	100	--
APR 10...	--	--	--	85	89	97	98	99	100	--
MAY 22...	--	--	--	96	98	100	--	--	--	67.00
MAY 22...	25	34	100	2	2	3	6	16	--	68.00
JUN 12...	--	--	--	96	97	98	99	100	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ST. FRANCIS RIVER BASIN

81

07047950 L'ANGUILLE RIVER AT PALESTINE

LOCATION.--Lat 34°58'20", long 90°53'10", in NW1/4 sec.10, T.4 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, at bridge on U.S. Highway 70 1.0 mi east of Palestine, and at mile 33.6.

DRAINAGE AREA.--786 mi².

PERIOD OF RECORD.--April 1949 to current year. October 1965 to September 1977 and October 1997 to current year in reports of the U.S. Geological Survey. April 1949 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 166.68 ft above NGVD of 1929. Prior to Nov. 1, 1949, nonrecording gage. Prior to Jan. 1, 1952, datum of gage was 0.32 ft below NGVD of 1929.

REMARKS.--Records fair, except those below 50 ft³/s and estimated daily discharges, which are poor. The stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1933, 39.7 ft Feb. 13, 1937, at present site and datum, from records of U.S. Army Corps of Engineers (backwater from Mississippi River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	253	7.6	3220	232	3640	359	e180	2370	488	369	346
2	1370	228	5.7	2880	219	3270	314	e180	e1910	442	370	338
3	1210	214	3.0	2730	212	2950	274	e170	e1760	393	415	386
4	1120	199	e110	2700	205	2620	240	e165	e1610	366	461	420
5	1010	217	e330	2650	230	2290	215	e140	e1460	344	521	432
6	897	295	e440	2510	278	2040	199	e130	e1370	320	576	439
7	871	348	e500	2320	332	1870	204	218	1270	291	634	447
8	770	391	e530	2120	365	1740	201	392	1220	266	682	446
9	645	420	e500	1980	390	1630	194	693	1170	244	716	427
10	646	417	e440	1850	382	1530	191	959	1110	216	738	403
11	669	392	e410	1690	365	1450	190	1090	1070	185	758	380
12	651	388	e370	1550	364	1370	185	1210	1050	158	778	355
13	619	393	341	1420	382	1300	175	1320	990	142	792	343
14	592	385	409	1310	663	1250	144	1480	913	158	804	346
15	560	377	506	1220	1160	1200	115	1690	864	145	807	338
16	487	364	622	1150	1470	1160	88	1920	930	123	806	320
17	430	343	713	1080	1820	1130	71	3240	995	117	808	301
18	399	313	774	1010	2160	1090	63	6220	1030	128	801	283
19	379	279	1670	935	2680	1070	58	8780	1090	142	781	261
20	386	244	2680	871	2980	1040	45	10700	1080	166	750	239
21	421	204	3600	812	3020	1010	40	11900	1010	208	716	220
22	519	164	4480	741	3590	986	41	12000	926	277	634	210
23	667	e134	5210	647	4890	951	44	11200	842	377	547	199
24	720	e105	6510	543	5630	901	58	9980	777	443	467	184
25	699	e78	7440	436	5570	835	68	8850	722	526	428	169
26	609	e43	7410	364	5240	826	75	7670	673	612	389	152
27	495	e29	6860	291	4760	779	93	6550	628	651	348	136
28	426	18	6150	243	4170	679	e140	5600	585	621	318	119
29	387	14	5330	227	---	553	e165	4810	560	525	294	100
30	343	9.9	4480	230	---	463	e170	e3920	530	448	276	86
31	297	---	3760	242	---	411	---	3050	---	406	328	---
TOTAL	20844	7258.9	72591.3	41972	53759	44034	4419	126407	32515	9928	18112	8825
MEAN	672	242	2342	1354	1920	1420	147	4078	1084	320	584	294
MAX	1550	420	7440	3220	5630	3640	359	12000	2370	651	808	447
MIN	297	9.9	3.0	227	205	411	40	130	530	117	276	86
AC-FT	41340	14400	144000	83250	106600	87340	8770	250700	64490	19690	35930	17500
CFSM	0.86	0.31	2.98	1.72	2.44	1.81	0.19	5.19	1.38	0.41	0.74	0.37
IN.	0.99	0.34	3.44	1.99	2.54	2.08	0.21	5.98	1.54	0.47	0.86	0.42

ST. FRANCIS RIVER BASIN

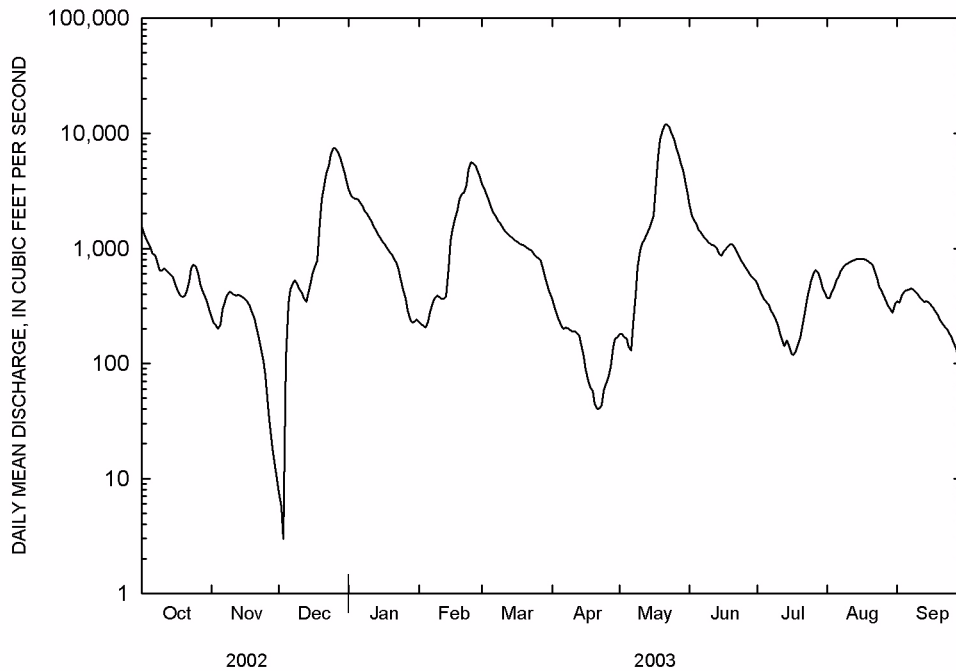
07047950 L'ANGUILLE RIVER AT PALESTINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

MEAN	349	628	1405	1552	2324	2121	1650	1541	636	417	427	567
MAX	1670	5578	7477	6531	7854	5720	4938	6587	3919	1636	1713	2130
(WY)	1950	1958	2002	1950	1950	1975	1973	1953	1974	1967	1966	1950
MIN	1.97	0.000	3.71	34.5	136	631	147	44.9	26.0	0.065	19.0	66.7
(WY)	1964	1955	1966	1963	1963	1972	2003	1959	1952	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1949 - 2003	
ANNUAL TOTAL	533068.2		440665.2			
ANNUAL MEAN	1460		1207		1128	
HIGHEST ANNUAL MEAN					2592 1950	
LOWEST ANNUAL MEAN					455 1963	
HIGHEST DAILY MEAN	10600	May 29	12000	May 22	22400	Dec 18 2001
LOWEST DAILY MEAN	3.0	Dec 3	3.0	Dec 3	0.00	Jun 27 1952
ANNUAL SEVEN-DAY MINIMUM	8.3	Jun 24	12	Nov 27	0.00	Jul 21 1952
MAXIMUM PEAK FLOW			12200	May 22	¹ 23000	Dec 19 2001
MAXIMUM PEAK STAGE			26.54	May 22	30.92	Feb 3 1950
INSTANTANEOUS LOW FLOW			2.4	Dec 3,4	0.00	at times
ANNUAL RUNOFF (AC-FT)	1057000		874100		817300	
ANNUAL RUNOFF (CFSM)	1.86		1.54		1.44	
ANNUAL RUNOFF (INCHES)	25.23		20.86		19.50	
10 PERCENT EXCEEDS	3840		3030		2890	
50 PERCENT EXCEEDS	808		506		476	
90 PERCENT EXCEEDS	103		142		35	

¹Backwater from Mississippi River
^eEstimated



WHITE RIVER BASIN

07048480 TOWN BRANCH AT B.R. 62 AT FAYETTEVILLE

LOCATION.--Lat 36°03'25", long 94°10'31", in SW₁/4SW₁/4 sec.16, T.16 N., R.30 W., Washington County, Hydrologic Unit 11110001, on upstream side of culvert at B.R. U.S. 62 at Fayetteville.

DRAINAGE AREA.--0.86 mi².

PERIOD OF RECORD.--September 1996 to current year.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.07	0.38	0.68	1.0	0.49	0.85	0.29	2.4	0.75	0.25	0.23	13
2	0.08	2.6	0.69	1.1	0.46	0.59	0.28	0.43	12	0.20	1.3	0.52
3	0.11	0.67	5.8	0.82	0.41	0.51	0.32	0.51	0.95	0.20	0.42	0.28
4	0.13	0.38	5.9	0.82	0.48	0.46	0.31	0.41	0.76	0.21	0.52	0.25
5	0.08	0.66	0.70	0.80	0.46	0.46	0.28	0.46	0.62	0.23	1.0	0.20
6	0.59	0.44	0.52	0.75	1.1	0.46	0.52	4.3	0.56	0.28	0.23	0.20
7	0.08	0.38	0.42	0.68	0.83	0.43	0.31	0.92	0.59	0.26	0.21	0.20
8	0.08	0.48	0.38	0.68	0.80	0.38	0.28	0.45	0.55	0.30	0.21	0.20
9	0.23	0.72	0.38	0.73	1.3	0.38	0.28	0.49	0.54	0.34	0.20	0.21
10	0.09	0.82	0.38	0.68	1.2	0.38	0.28	1.0	0.56	3.2	0.20	0.20
11	0.06	0.65	0.40	0.68	0.85	0.38	0.32	0.46	12	0.24	0.34	0.89
12	0.07	0.52	1.5	0.68	0.76	0.38	0.38	0.40	4.9	2.8	0.22	3.1
13	0.12	0.56	6.4	0.68	1.1	1.2	0.38	e7.6	0.54	3.8	0.20	0.69
14	0.12	0.62	0.64	0.68	1.1	0.46	0.40	e5.1	0.46	0.28	0.20	0.28
15	0.15	0.28	0.44	0.68	0.56	0.46	0.37	e0.61	0.44	0.32	0.13	0.28
16	0.10	0.28	0.43	0.73	0.56	0.44	0.41	e17	0.44	0.26	0.15	0.51
17	0.05	0.33	0.35	0.68	0.57	0.46	0.40	e11	1.5	2.3	0.23	0.81
18	0.05	0.44	0.44	0.66	0.78	1.4	0.38	e1.4	0.40	0.30	0.22	0.32
19	0.20	0.46	0.38	0.64	6.6	10	4.9	e1.2	0.38	0.64	0.22	0.33
20	0.39	0.46	0.41	0.62	1.0	2.7	0.67	e8.5	0.46	0.49	0.25	0.33
21	0.08	0.46	0.33	0.57	2.2	1.0	0.38	e1.2	0.35	0.28	0.32	e0.42
22	0.08	0.46	0.28	0.57	5.9	0.74	0.34	e1.1	0.27	5.3	0.28	0.35
23	0.13	0.52	5.0	0.56	1.2	0.58	3.9	e0.88	0.23	0.25	0.35	0.28
24	0.43	0.56	3.0	0.56	1.4	0.46	3.3	e3.0	0.27	0.22	0.41	0.27
25	0.36	0.56	0.93	0.56	0.82	0.46	0.53	e0.94	0.58	0.16	0.28	0.20
26	0.13	0.57	0.50	0.56	0.92	0.46	0.42	e0.79	2.0	0.17	0.26	0.20
27	0.51	0.59	0.76	0.68	1.9	0.44	0.38	e0.64	0.24	0.22	0.25	0.26
28	8.2	0.58	0.81	0.94	1.3	2.1	0.41	e0.70	0.19	0.19	0.20	0.28
29	1.0	0.70	0.45	0.59	---	0.59	0.38	e0.70	0.20	0.20	12	0.28
30	0.32	0.66	13	0.55	---	0.47	0.38	0.60	2.7	0.23	0.33	0.20
31	0.34	---	1.7	0.46	---	0.38	---	0.68	---	0.28	0.15	---
TOTAL	14.43	17.79	54.00	21.39	37.05	30.46	22.18	75.87	46.43	24.40	21.51	25.54
MEAN	0.47	0.59	1.74	0.69	1.32	0.98	0.74	2.45	1.55	0.79	0.69	0.85
MAX	8.2	2.6	13	1.1	6.6	10	4.9	17	12	5.3	12	13
MIN	0.05	0.28	0.28	0.46	0.41	0.38	0.28	0.40	0.19	0.16	0.13	0.20
AC-FT	29	35	107	42	73	60	44	150	92	48	43	51
CFSM	0.54	0.69	2.03	0.80	1.54	1.14	0.86	2.85	1.80	0.92	0.81	0.99
IN.	0.62	0.77	2.34	0.93	1.60	1.32	0.96	3.28	2.01	1.06	0.93	1.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	1.29	1.87	1.68	1.70	1.98	2.06	1.51	2.15	2.38	0.77	0.98	1.06
MAX	1.86	5.90	3.78	4.84	3.88	3.99	4.16	3.38	6.52	1.15	2.52	2.36
(WY)	1999	1997	2002	1998	2001	1998	2002	1999	2000	2000	2002	2001
MIN	0.47	0.38	1.01	0.18	1.04	0.98	0.50	0.90	0.86	0.45	0.28	0.21
(WY)	2003	2000	1999	1997	2002	2000	2000	1997	1998	2002	1998	2002

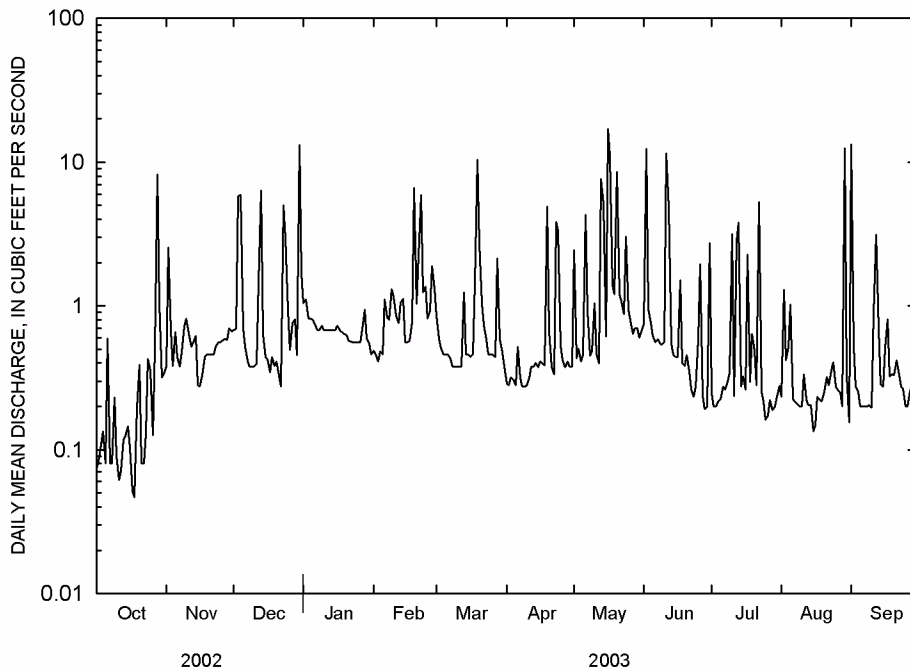
WHITE RIVER BASIN

07048480 TOWN BRANCH AT B.R. 62 AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	607.79		391.05			
ANNUAL MEAN	1.67		1.07		1.61	
HIGHEST ANNUAL MEAN					2.01 2002	
LOWEST ANNUAL MEAN					1.07 2003	
HIGHEST DAILY MEAN	47	Aug 13	17	May 16	77	Sep 26 1996
LOWEST DAILY MEAN	0.00	Sep 25	0.05	Oct 17	0.00	Jan 10 1997
ANNUAL SEVEN-DAY MINIMUM	0.03	Sep 22	0.09	Oct 12	0.00	Jan 10 1997
MAXIMUM PEAK FLOW			324	Apr 19	^a 1440	Jun 30 1999
MAXIMUM PEAK STAGE			4.61	Apr 19	9.11	Jun 30 1999
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	1210		776		1170	
ANNUAL RUNOFF (CFSM)	1.94		1.25		1.88	
ANNUAL RUNOFF (INCHES)	26.29		16.92		25.51	
10 PERCENT EXCEEDS	2.9		2.1		3.0	
50 PERCENT EXCEEDS	0.59		0.46		0.61	
90 PERCENT EXCEEDS	0.10		0.20		0.14	

^aFrom rating extended above 100 ft³/s on basis of culvert Type IV flow computations

^eEstimated



WHITE RIVER BASIN

07048490 TOWN BRANCH TRIBUTARY AT HWY 16 AT FAYETTEVILLE

LOCATION.--Lat 36°02'54", long 94°09'44", in SE1/4NE1/4 sec.21, T.16 N., R.30 W., Washington County, Hydrologic Unit 11110001, on upstream side of culvert at State Highway 16 at Fayetteville.

DRAINAGE AREA.--1.36 mi².

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	1.8	2.6	e2.0	e1.3	1.5	0.69	3.2	0.38	0.26	0.00	18
2	0.00	6.6	2.8	e2.2	e1.4	0.97	0.72	0.43	12	0.21	1.9	0.85
3	0.01	1.9	9.2	e1.8	e1.3	0.88	0.67	0.62	0.87	0.19	0.26	0.19
4	0.06	1.3	8.8	e1.8	e1.2	0.79	0.67	0.39	0.57	0.19	0.15	0.02
5	0.21	2.1	1.6	e1.7	e0.97	0.66	0.58	0.51	0.50	0.16	2.0	0.00
6	1.5	1.6	1.2	e1.6	e0.87	0.62	0.91	5.7	0.43	0.12	0.14	0.00
7	0.03	2.0	1.1	e1.5	0.55	0.60	0.56	1.9	0.38	0.19	0.08	0.00
8	0.00	2.9	1.1	e1.5	0.60	0.63	0.38	0.59	0.38	0.18	0.00	0.00
9	0.29	3.1	1.1	e1.5	1.5	0.57	0.38	0.57	0.39	0.10	0.02	0.00
10	0.00	3.3	1.1	e1.4	0.96	0.52	0.41	1.5	0.39	3.9	0.03	0.00
11	0.00	3.5	1.1	e1.4	0.63	0.54	0.41	0.61	14	0.02	0.14	1.4
12	0.00	3.9	2.9	e1.4	0.52	0.47	0.43	0.29	7.5	4.1	0.20	3.9
13	0.00	4.1	12	e1.3	1.2	1.9	0.46	10	1.1	5.1	0.19	0.57
14	0.00	4.6	1.7	e1.3	1.8	0.38	0.57	6.4	0.76	0.27	0.15	0.00
15	0.00	1.9	1.3	e1.3	1.1	0.38	1.5	1.1	0.69	0.12	0.17	0.00
16	0.02	1.7	1.4	e1.4	0.93	0.38	0.28	22	0.58	0.10	0.20	0.00
17	0.09	1.8	1.6	e1.3	0.86	0.38	0.46	15	3.6	0.09	0.25	0.00
18	0.26	2.5	2.2	e1.3	1.3	3.0	0.39	1.9	0.67	0.02	0.28	0.00
19	0.91	3.0	1.3	e1.4	9.9	13	6.2	1.3	0.46	0.11	0.31	0.00
20	1.2	2.7	e1.4	e1.3	1.2	5.0	1.3	10	0.42	0.02	0.31	0.00
21	0.00	2.6	e1.4	e1.3	3.4	2.0	0.40	1.9	0.41	0.02	0.36	0.07
22	0.00	2.2	e1.4	e1.3	8.8	1.4	0.35	1.2	0.38	5.6	0.34	0.00
23	0.24	2.3	e2.8	e1.3	2.8	1.2	5.1	0.87	0.39	0.03	0.32	0.00
24	1.0	2.3	e3.0	e1.3	2.5	1.1	4.5	3.8	0.39	0.00	0.42	0.00
25	1.4	2.2	e1.9	e1.3	1.4	0.99	0.69	1.0	0.81	0.01	0.38	0.00
26	0.05	2.3	e1.8	e1.2	1.3	0.84	0.84	0.72	3.4	0.00	0.38	0.01
27	1.0	2.2	e1.9	e1.3	1.9	0.79	0.98	0.57	0.32	0.00	0.41	0.10
28	12	2.3	e2.2	e1.4	1.9	4.4	0.42	0.64	0.22	0.00	0.12	0.08
29	3.1	2.3	e2.0	e1.3	---	0.89	0.38	0.50	0.21	0.00	19	0.17
30	1.4	2.6	e12	e1.3	---	0.75	0.38	0.38	2.5	0.02	0.22	0.07
31	1.8	---	e4.4	e1.3	---	0.69	---	0.39	---	0.02	0.00	---
TOTAL	26.57	79.6	92.3	44.7	54.09	48.22	32.01	95.98	55.10	21.15	28.73	25.43
MEAN	0.86	2.65	2.98	1.44	1.93	1.56	1.07	3.10	1.84	0.68	0.93	0.85
MAX	12	6.6	12	2.2	9.9	13	6.2	22	14	5.6	19	18
MIN	0.00	1.3	1.1	1.2	0.52	0.38	0.28	0.29	0.21	0.00	0.00	0.00
AC-FT	53	158	183	89	107	96	63	190	109	42	57	50
CFSM	0.63	1.95	2.19	1.06	1.42	1.14	0.78	2.28	1.35	0.50	0.68	0.62
IN.	0.73	2.18	2.52	1.22	1.48	1.32	0.88	2.63	1.51	0.58	0.79	0.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	1.65	2.64	2.18	2.46	2.93	2.79	1.98	2.69	2.96	1.07	1.27	1.51
MAX	2.63	7.69	4.82	7.60	4.84	5.97	5.49	5.09	7.40	1.75	2.63	2.99
(WY)	2002	1997	2002	1998	2001	1998	2002	1999	2000	1999	2002	2001
MIN	0.69	0.48	1.37	0.68	0.92	0.94	0.86	1.05	0.75	0.45	0.30	0.33
(WY)	2000	2000	1998	2000	2000	2001	2000	1997	1998	2002	2000	2002

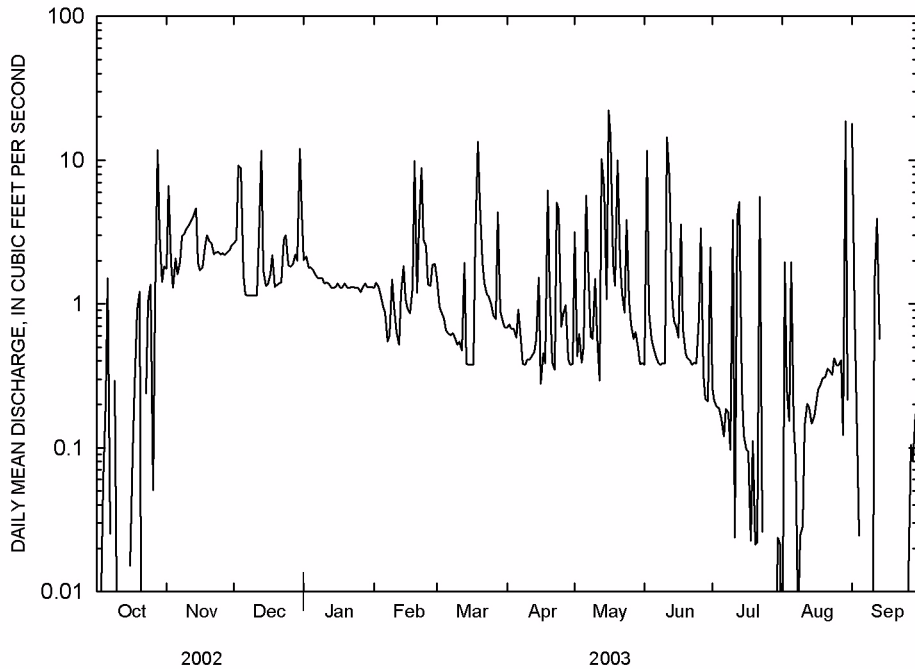
WHITE RIVER BASIN

07048490 TOWN BRANCH TRIBUTARY AT HWY 16 AT FAYETTEVILLE--CONTINUED

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	912.00		603.88			
ANNUAL MEAN	2.50		1.65		2.17	
HIGHEST ANNUAL MEAN					2.69	2002
LOWEST ANNUAL MEAN					1.57	2000
HIGHEST DAILY MEAN	51	Aug 13	22	May 16	85	Dec 16 2001
LOWEST DAILY MEAN	0.00	Jul 26	0.00	Oct 1	0.00	Oct 6 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 1	0.00	Sep 14	0.00	Sep 1 2002
MAXIMUM PEAK FLOW			466	May 16	¹ 1070	Jun 30 1999
MAXIMUM PEAK STAGE			5.53	May 16	7.58	Jun 30 1999
INSTANTANEOUS LOW FLOW			0.00	Jan 1	0.00	Aug 28 2001
ANNUAL RUNOFF (AC-FT)	1810		1200		1570	
ANNUAL RUNOFF (CFSM)	1.84		1.22		1.60	
ANNUAL RUNOFF (INCHES)	24.95		16.52		21.70	
10 PERCENT EXCEEDS	4.3		3.5		4.3	
50 PERCENT EXCEEDS	1.2		0.85		0.78	
90 PERCENT EXCEEDS	0.00		0.01		0.20	

¹From rating extended above 100 ft³/s on basis of culvert Type 1 flow computations

^eEstimated



WHITE RIVER BASIN

87

07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE

LOCATION.--Lat 36°03'14", long 94°04'59", in NE1/4NW1/4 sec.20, T.16 N., R.29 W., Washington County, Hydrologic Unit 11010001, at bridge on Mally Waggon Road, 6 mi east of Fayetteville, about 1.4 mi above the confluence with the White River.

DRAINAGE AREA.--123 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2001 to current year. Occasional discharge measurements, water years 1985-2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharge, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	5.1	5.7	212	12	200	59	73	46	17	1.3	e74
2	0.91	7.3	5.4	130	13	e167	55	59	723	16	2.1	e46
3	1.5	12	5.7	85	12	e119	50	45	417	15	6.5	e30
4	0.78	6.2	63	66	11	97	48	39	230	14	5.7	36
5	1.3	5.5	14	54	11	84	44	33	147	13	7.0	23
6	6.0	5.9	8.4	45	12	72	42	30	109	9.3	6.0	16
7	8.4	5.5	6.0	39	14	62	40	129	90	7.9	4.2	12
8	3.2	5.4	5.8	35	12	55	37	71	68	6.4	2.6	11
9	2.8	5.5	4.9	32	13	49	34	45	52	5.6	1.6	10
10	1.9	5.7	4.7	30	16	44	31	39	44	14	2.2	8.8
11	4.1	6.5	4.4	26	16	41	31	81	370	8.4	2.0	7.6
12	2.9	9.1	4.8	24	14	39	30	67	234	16	3.0	21
13	3.2	7.4	64	23	12	45	28	144	92	27	2.7	29
14	2.3	6.3	42	22	19	41	28	2070	70	13	3.1	43
15	2.1	7.4	21	20	18	37	27	808	239	8.0	2.1	32
16	3.0	7.2	15	20	24	36	25	2160	108	5.7	1.4	23
17	2.4	6.1	12	18	26	33	23	2320	107	5.7	2.7	16
18	2.4	6.8	14	17	25	31	23	747	72	5.6	7.3	14
19	2.3	5.5	12	16	244	622	22	477	59	5.1	3.4	11
20	8.8	4.3	9.4	17	181	580	83	1410	44	4.1	1.5	9.9
21	8.0	6.0	8.0	16	159	452	65	774	36	4.9	1.0	10
22	5.9	6.6	7.4	15	823	308	50	507	29	19	0.87	10
23	6.0	6.1	23	14	481	224	47	361	26	7.5	0.65	9.2
24	4.8	6.2	112	13	331	169	197	318	21	4.0	0.43	8.0
25	8.7	5.1	42	13	212	135	178	300	18	3.7	0.21	6.2
26	9.9	5.1	25	13	161	112	117	224	34	3.7	0.10	7.3
27	7.0	5.2	21	13	174	95	90	158	22	5.1	0.00	6.7
28	15	5.1	23	14	207	105	70	113	18	3.5	0.00	4.7
29	63	4.6	25	13	---	92	59	90	15	2.7	e20	5.9
30	8.9	5.3	232	13	---	e60	49	71	14	2.6	e9.4	6.2
31	6.3	---	598	13	---	e55	---	55	---	1.6	e12	---
MEAN	6.62	6.20	46.4	34.9	116	137	56.1	446	118	8.87	3.65	18.2
MAX	63	12	598	212	823	622	197	2320	723	27	20	74
MIN	0.78	4.3	4.4	13	11	31	22	30	14	1.6	0.00	4.7

WHITE RIVER BASIN

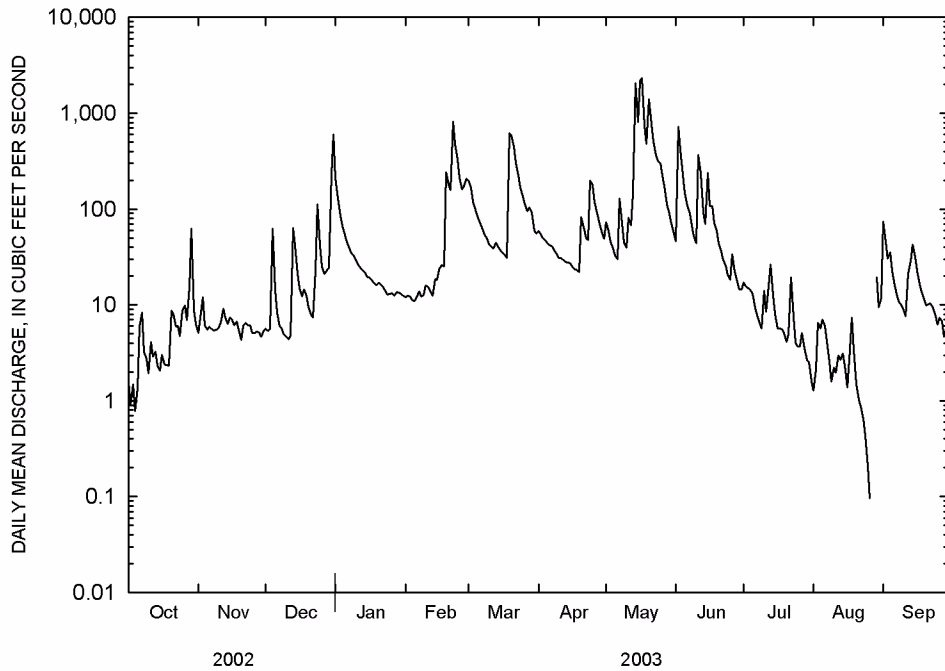
07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	71.3	85.6	241	106	185	300	264	270	93.7	10.1	31.7	12.6
MAX	136	165	437	178	254	462	473	446	118	11.3	59.7	18.2
(WY)	2002	2002	2002	2002	2002	2002	2002	2003	2003	2002	2002	2003
MIN	6.62	6.20	46.4	34.9	116	137	56.1	94.9	68.9	8.87	3.65	7.00
(WY)	2003	2003	2003	2003	2003	2003	2003	2002	2002	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	138		83.3		139	
HIGHEST ANNUAL MEAN					195	2002
LOWEST ANNUAL MEAN					83.3	2003
HIGHEST DAILY MEAN	4260	Apr 8	2320	May 17	4260	Apr 8 2002
LOWEST DAILY MEAN	0.78	Oct 4	0.00	Aug 27	0.00	Aug 27 2003
ANNUAL SEVEN-DAY MINIMUM	2.5	Oct 13	0.32	Aug 22	0.32	Aug 22 2003
MAXIMUM PEAK FLOW			4130	May 17	6000	Apr 8 2002
MAXIMUM PEAK STAGE			14.70	May 17	19.33	Apr 8 2002
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
10 PERCENT EXCEEDS	291		179		294	
50 PERCENT EXCEEDS	16		16		30	
90 PERCENT EXCEEDS	5.6		3.0		5.6	

^eEstimated



WHITE RIVER BASIN

89

07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1973 to September 1974, 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT													
25...	0930	80513	81213	6.5	731	6.6	68	7.7	343	14.6	140	45.0	6.30
JAN													
07...	1000	80513	81213	41	740	9.7	77	8.2	262	4.2	110	35.0	5.40
MAR													
06...	1015	80513	81213	76	748	10.5	85	7.8	223	5.4	87	28.0	4.20
APR													
30...	0900	80513	81213	42	725	6.4	75	7.8	164	20.7	65	21.0	3.00
MAY													
14...	1600	80513	81213	4110	739	8.0	86	6.7	86	17.3	34	11.0	1.70
14...	2015	80513	81213	2440	739	8.9	98	6.7	100	18.3	41	13.0	2.00
15...	0915	80513	81213	795	741	9.0	97	6.9	117	17.4	47	15.0	2.30
JUL													
01...	0900	80513	81213	18	732	5.8	73	7.8	233	24.3	93	30.0	4.40
AUG													
28...	0730	80513	81213	8.7	733	6.6	85	7.4	323	26.4	130	42.0	5.90

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT													
25...	3.50	.4	11.0	14	9.00	43.0	200	.30	.03	.02	--	--	.04
JAN													
07...	1.60	.3	8.3	14	10.0	41.0	152	.40	.03	.02	--	--	.98
MAR													
06...	1.30	.3	7.0	15	9.10	30.0	127	.20	--	<.01	--	--	.68
APR													
30...	1.40	.2	4.6	13	5.20	16.0	96	.20	.08	.06	--	--	.15
MAY													
14...	2.70	.1	1.8	9	1.90	6.20	70	3.3	.12	.09	1.90	.43	.44
14...	2.40	.2	2.4	11	2.50	9.20	91	1.5	.06	.05	1.95	.44	.45
15...	1.80	.2	3.0	12	2.90	11.0	83	.60	.05	.04	--	--	.50
JUL													
01...	1.90	.3	6.2	12	5.10	24.0	126	<.20	.03	.02	--	--	.16
AUG													
28...	3.40	.4	10.0	14	11.0	33.0	188	.40	.05	.04	--	--	.03

Date	Nitrite water, fltrd, mg/L (71856)	Nitrite water, mg/L (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT													
25...	--	<.010	.28	--	<.01	<.02	.02	.34	78	52	66	77	6
JAN													
07...	--	<.010	.38	--	<.01	<.02	<.02	1.4	300	520	97	100	3
MAR													
06...	--	<.010	--	--	<.01	<.02	<.02	.88	E3	E5	E12	95	7
APR													
30...	--	<.010	.14	--	<.01	<.02	.02	.35	52	44	140	92	23
MAY													
14...	.033	.010	3.2	.061	.02	<.02	.73	3.7	44000	E16000	E110000	94	1160
14...	.033	.010	1.4	.061	.02	<.02	.30	1.9	11000	24000	E110000	91	381
15...	--	<.010	.56	--	<.01	<.02	.09	1.1	E1800	22000	37000	92	105
JUL													
01...	--	<.010	--	--	<.01	<.02	<.02	--	56	100	170	90	44
AUG													
28...	--	<.010	.36	--	<.01	<.02	<.02	.43	E2500	E2100	E1500	85	55

WHITE RIVER BASIN

07048550 WEST FORK WHITE RIVER EAST OF FAYETTEVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspended sediment load, tons/d (80155)
OCT	
25...	.11
JAN	
07...	.33
MAR	
06...	1.4
APR	
30...	2.6
MAY	
14...	12800
14...	2510
15...	225
JUL	
01...	2.1
AUG	
28...	1.3

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

91

07048600 WHITE RIVER NEAR FAYETTEVILLE

LOCATION.--Lat 36°04'23", long 94°04'52", in NE1/4SW1/4 sec.8, T.16 N., R.29 W., Washington County, Hydrologic Unit 11010001, on left bank at downstream side of bridge on county road, 0.6 mi downstream from West Fork White River, 0.8 mi downstream from Lake Sequoyah Dam on White River, 4.3 mi east of Fayetteville and at mile 684.0.

DRAINAGE AREA.--400 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to December 1994, October 1998 to current year. Annual maximum, water years 1995-98.

REVISED RECORDS.--WDR Ark, 1973: Drainage area. WDR Ark. 1974: 1966(M), 1972(M). WDR Ark. 1985: 1966(M), 1968-69(M), 1971-73(M).

GAGE.--Water-stage recorder. Datum of gage is 1,138.25 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Some regulation at low flow by Lake Sequoyah Dam 0.8 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	8.1	7.8	1010	48	663	308	374	216	e77	5.3	174
2	5.0	10	7.4	703	47	585	281	370	1650	e74	5.0	93
3	5.2	26	9.8	552	42	507	259	309	1070	62	5.5	30
4	5.1	13	124	454	43	459	240	262	640	52	e4.9	e31
5	4.5	11	54	387	42	420	221	226	490	45	4.4	23
6	6.8	11	34	329	45	380	208	210	406	36	4.5	19
7	10	11	23	281	48	340	200	423	357	30	3.1	16
8	6.6	16	20	251	44	307	188	417	295	26	2.4	14
9	5.6	13	17	225	47	279	173	325	245	22	1.9	14
10	5.2	6.1	16	202	49	252	160	290	207	35	1.8	13
11	5.4	5.0	15	179	48	233	150	414	935	26	1.9	12
12	5.7	6.6	17	163	45	220	141	419	654	35	2.0	21
13	4.9	6.2	128	147	45	237	133	461	425	63	2.5	28
14	5.2	5.3	178	135	61	266	126	7020	e197	34	2.4	37
15	4.7	5.9	95	125	87	242	121	2500	e746	21	2.3	82
16	4.7	5.8	71	115	184	224	101	7110	e312	15	2.1	65
17	4.9	5.0	75	109	187	214	100	9180	e322	12	2.0	47
18	4.7	7.6	80	95	176	207	103	2650	e252	12	5.8	36
19	5.0	4.9	135	88	516	1430	100	1560	e223	11	3.1	30
20	7.4	4.8	127	87	654	1830	315	3680	209	6.6	2.1	27
21	9.1	5.1	101	83	613	1720	427	2190	e175	6.3	1.8	25
22	6.8	6.8	82	73	2290	1140	342	1400	146	23	1.8	23
23	7.5	6.0	110	69	1580	887	304	1020	127	12	1.9	21
24	7.3	7.2	325	59	1090	739	1320	853	106	6.0	1.9	19
25	7.8	8.6	244	57	805	638	1150	828	91	5.2	1.9	15
26	9.7	9.3	173	55	683	578	794	675	119	4.1	1.9	16
27	7.7	8.4	147	55	664	510	625	548	89	4.2	2.3	14
28	11	7.5	156	53	693	493	519	447	e84	3.5	2.7	11
29	65	7.8	182	53	---	e444	441	374	e76	3.8	51	11
30	16	6.5	492	51	---	e367	377	310	e73	5.7	15	11
31	10	---	2630	49	---	341	---	254	---	6.0	7.7	---
TOTAL	269.9	255.5	5876.0	6294	10876	17152	9927	47099	10937	774.4	154.9	978
MEAN	8.71	8.52	190	203	388	553	331	1519	365	25.0	5.00	32.6
MAX	65	26	2630	1010	2290	1830	1320	9180	1650	77	51	174
MIN	4.5	4.8	7.4	49	42	207	100	210	73	3.5	1.8	11
AC-FT	535	507	11660	12480	21570	34020	19690	93420	21690	1540	307	1940
CFSM	0.02	0.02	0.47	0.51	0.97	1.38	0.83	3.80	0.91	0.06	0.01	0.08
IN.	0.03	0.02	0.55	0.59	1.01	1.60	0.92	4.38	1.02	0.07	0.01	0.09

WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

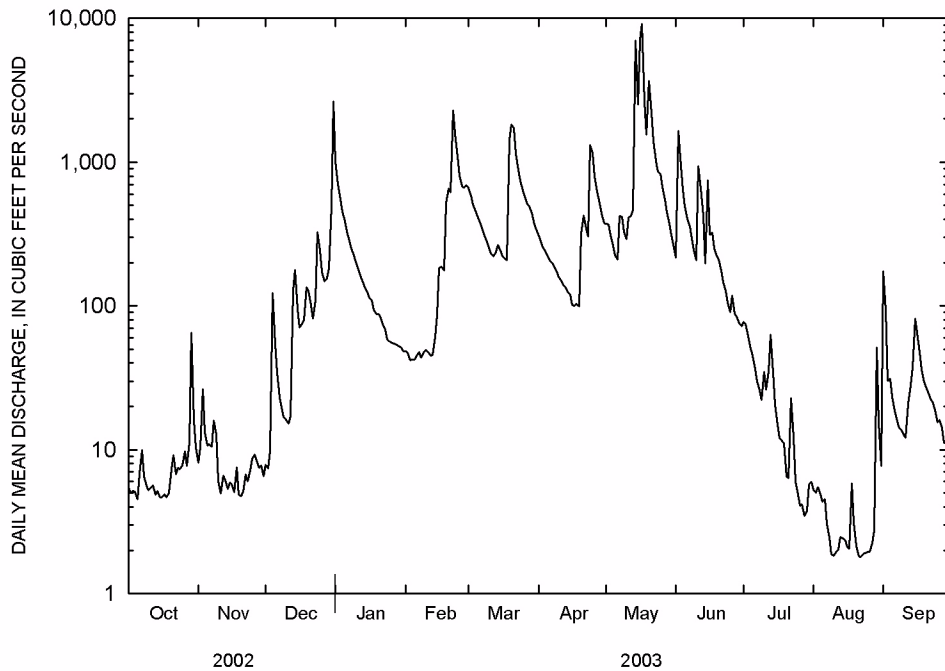
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964-94, 1999-03, BY WATER YEAR (WY)

MEAN	251	617	708	501	799	1079	1077	844	463	81.6	43.0	121
MAX	2353	2808	2365	1287	2438	2828	2745	3615	2383	335	330	1346
(WY)	1971	1986	1988	1991	1989	1973	1973	1990	2000	1979	1981	1974
MIN	1.86	2.13	2.75	5.14	7.23	97.2	219	40.3	18.6	3.75	3.02	2.80
(WY)	1990	1990	1990	1964	1964	1967	2001	1977	1977	1970	1969	1969

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964-94, 1999-03	
ANNUAL TOTAL	207346.3		110593.7			
ANNUAL MEAN	568		303		546	
HIGHEST ANNUAL MEAN					1043 1973	
LOWEST ANNUAL MEAN					158 1980	
HIGHEST DAILY MEAN	28000	Apr 8	9180	May 17	48000	Nov 19 1985
LOWEST DAILY MEAN	4.5	Oct 5	1.8	Aug 10	0.12	Oct 2 1982
ANNUAL SEVEN-DAY MINIMUM	4.9	Oct 13	1.9	Aug 20	0.28	Oct 18 1989
MAXIMUM PEAK FLOW			16000	May 17	¹ 81600	Nov 19 1985
MAXIMUM PEAK STAGE			18.00	May 17	30.45	Nov 19 1985
ANNUAL RUNOFF (AC-FT)	411300		219400		395500	
ANNUAL RUNOFF (CFSM)	1.42		0.76		1.36	
ANNUAL RUNOFF (INCHES)	19.28		10.29		18.54	
10 PERCENT EXCEEDS	935		663		1260	
50 PERCENT EXCEEDS	173		71		167	
90 PERCENT EXCEEDS	6.0		5.0		6.3	

¹From rating curve extended above 35,400 ft³/s

^eEstimated



WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1958 (Aug), October 1975 to September 1981, November 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
OCT													
08...	1130	80513	81213	4.2	2.1	748	3.2	7.2	76	7.7	265	16.8	110
29...	1545	80513	81213	24	27	741	2.4	10.5	105	7.9	298	14.0	120
NOV													
13...	1010	80513	81213	4.9	3.1	755	4.0	7.8	68	7.7	295	9.0	120
DEC													
11...	1445	80513	81213	16	4.3	741	3.8	12.0	100	7.5	205	6.4	80
18...	1230	80513	81213	95	11	728	4.5	10.0	97	7.3	179	12.1	71
JAN													
07...	1330	80513	81213	40	17	746	3.3	11.9	98	7.2	106	6.0	42
22...	1000	80513	81213	78	4.9	749	1.5	11.7	89	7.7	133	3.3	51
FEB													
12...	1130	80513	81213	45	3.9	757	1.3	13.0	104	7.8	176	5.5	66
MAR													
11...	1345	80513	81213	234	6.2	740	11	11.1	99	6.7	112	9.1	41
25...	1515	80513	81213	621	14	736	4.5	9.5	97	7.0	80	14.6	31
APR													
08...	1450	80513	81213	182	7.7	755	1.2	10.1	97	7.7	103	13.0	38
MAY													
05...	1530	80513	81213	229	9.3	756	3.5	8.6	101	7.1	76	23.1	29
JUN													
03...	0030	80513	81213	1700	74	741	1.1	7.6	86	7.8	102	19.6	37
05...	1445	80513	81213	468	18	747	.9	9.0	102	7.9	109	20.2	44
JUL													
29...	1615	80513	81213	47	9.6	760	2.8	5.0	66	7.7	149	29.1	62
AUG													
20...	1300	80513	81213	9.8	2.8	738	6.2	6.9	94	7.5	260	29.7	110
SEP													
09...	1330	80513	81213	15	7.0	745	1.5	8.9	112	8.0	255	25.5	100

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	ANC, wat unflxed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)
OCT													
08...	35.0	4.90	92	5.60	.2	33.0	152	.40	.06	.05	.10	<.010	.35
29...	39.0	5.40	98	6.70	.2	45.0	183	.40	.03	.02	.28	<.010	.38
NOV													
13...	41.0	5.30	95	6.60	.2	38.0	166	.60	.04	.03	.11	<.010	.57
DEC													
11...	26.0	3.70	62	6.60	<.1	26.0	114	.40	.05	.04	.10	<.010	.36
18...	23.0	3.30	52	5.60	<.1	22.0	101	.50	.03	.02	.16	<.010	.48
JAN													
07...	13.0	2.20	25	2.10	<.1	11.0	63	<.20	.04	.03	.99	<.010	--
22...	16.0	2.70	36	5.00	<.1	15.0	76	.20	.04	.03	.83	<.010	.17
FEB													
12...	21.0	3.30	45	8.00	<.1	22.0	101	.30	.03	.02	.58	<.010	.28
MAR													
11...	13.0	2.10	30	4.50	<.1	12.0	63	<.20	--	<.01	.67	<.010	--
25...	9.60	1.70	26	3.20	<.1	7.80	54	<.20	.04	.03	.50	<.010	--
APR													
08...	12.0	2.00	32	3.70	<.1	9.80	59	<.20	.04	.03	.30	<.010	--
MAY													
05...	8.90	1.60	21	2.50	<.1	6.40	44	<.20	.03	.02	.20	<.010	--
JUN													
03...	12.0	1.80	37	2.40	<.1	6.40	67	.70	.06	.05	.37	<.010	.65
05...	14.0	2.20	36	2.70	<.1	8.80	66	.30	.01	.01	.33	<.010	.29
JUL													
29...	20.0	2.90	68	3.90	<.1	4.70	90	.30	.03	.02	.03	<.010	.28
AUG													
20...	36.0	4.70	93	9.10	.2	23.0	147	.30	.05	.04	.17	<.010	.26
SEP													
09...	34.0	4.70	78	6.30	.1	33.0	155	.30	.05	.04	.41	<.010	.26

WHITE RIVER BASIN

07048600 WHITE RIVER NEAR FAYETTEVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	Fecal coliform, M-FC col/100 mL (31625)	Iron, water, unfltrd recover-able, ug/L (01045)	Manganese, water, unfltrd recover-able, ug/L (01055)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Suspended sedi-ment concentration, mg/L (80154)	Suspended sedi-ment load, tons/d (80155)
OCT 08...	--	<.01	<.02	<.02	.50	3.2	2.9	21	113	235	64	2	.02
29...	.061	.02	<.02	.06	.68	4.0	3.3	E170	639	196	97	52	3.4
NOV 13...	--	<.01	<.02	<.02	.71	3.2	2.9	23	211	207	68	3	.04
DEC 11...	--	<.01	<.02	<.02	.50	2.4	2.4	E4	389	209	96	4	.17
18...	.092	.03	<.02	.03	.66	2.5	2.9	E60	437	175	86	12	3.1
JAN 07...	--	<.01	<.02	.03	--	1.5	1.7	E71	564	92	92	10	1.1
22...	--	<.01	<.02	.02	1.0	1.1	1.2	11	396	137	91	6	1.3
FEB 12...	--	<.01	<.02	<.02	.88	2.3	2.6	E4	414	168	97	19	2.3
MAR 11...	--	<.01	<.02	<.02	--	1.0	1.0	E7	486	90	95	11	6.9
25...	--	<.01	<.02	.02	--	1.2	1.1	44	637	85	90	14	23
APR 08...	--	<.01	<.02	.03	--	1.2	1.1	25	433	98	100	23	11
MAY 05...	--	<.01	<.02	.02	--	1.0	.9	E67	493	102	91	29	18
JUN 03...	.123	.04	.05	.15	1.1	4.8	4.3	4600	1590	253	98	84	386
05...	.031	.01	<.02	.06	.63	2.6	2.6	200	750	162	88	35	44
JUL 29...	--	<.01	<.02	<.02	.33	1.7	1.5	103	789	2140	82	27	3.4
AUG 20...	--	<.01	<.02	<.02	.47	2.8	2.7	E14	195	196	93	24	.64
SEP 09...	--	<.01	<.02	.02	.71	2.8	2.9	22	330	225	92	28	1.1

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

07048700 WHITE RIVER NEAR GOSHEN

LOCATION.--Lat 36°06'21", long 94°00'41", in NE1/4NW1/4 sec.31, T.17 N., R.28 W., Washington County, Hydrologic Unit 11010001, at bridge on State Highway 45, 0.2 mi upstream from Richland Creek, and 1.2 mi west of Goshen.

DRAINAGE AREA.--412 mi².

PERIOD OF RECORD.--1963, 1969-1995, April 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT												
08...	1029	80513	80513	8.0	.00	--	750	7.0	77	7.5	625	18.5
08...	1030	80513	80513	8.0	2.00	--	750	6.9	75	7.4	627	18.4
08...	1031	80513	81213	8.0	4.00	--	750	7.0	76	7.4	628	18.4
08...	1032	80513	80513	8.0	6.10	--	750	7.0	76	7.4	636	18.3
08...	1033	80513	80513	8.0	7.60	--	750	7.0	76	7.4	636	18.3
28...	1538	80513	80513	6.0	.60	--	743	12.0	119	8.2	530	13.9
28...	1539	80513	80513	6.0	1.00	--	743	11.9	119	8.2	531	13.9
28...	1540	80513	80513	6.0	2.00	--	743	11.6	115	8.1	533	13.8
28...	1541	80513	81213	6.0	3.00	.30	743	10.8	107	7.8	539	13.7
28...	1542	80513	80513	6.0	4.00	--	743	10.0	99	7.7	544	13.6
28...	1543	80513	80513	6.0	5.00	--	743	9.9	98	7.7	548	13.5
28...	1544	80513	80513	6.0	6.00	--	743	9.7	95	7.7	549	13.5
NOV												
13...	0924	80513	80513	4.0	.20	--	755	8.4	75	7.4	411	10.1
13...	0925	80513	80513	4.0	.30	--	755	8.4	76	7.4	411	10.1
13...	0926	80513	81213	4.0	2.00	.55	755	8.4	75	7.4	411	10.1
13...	0927	80513	80513	4.0	3.80	--	755	8.4	75	7.4	411	10.1
24...	1100	80513	81213	--	--	--	750	6.8	61	8.2	517	10.2
DEC												
11...	1355	80513	80513	4.0	.50	--	741	11.4	94	7.6	272	6.1
11...	1356	80513	80513	4.0	1.00	--	741	11.4	94	7.5	272	6.0
11...	1357	80513	81213	4.0	2.00	.76	741	11.3	93	7.5	272	6.0
11...	1358	80513	80513	4.0	3.00	--	741	11.3	93	7.5	272	6.0
11...	1359	80513	80513	4.0	4.00	--	741	11.2	92	7.5	272	6.0
JAN												
07...	1230	80513	81213	--	--	--	737	10.5	87	8.0	120	5.7
08...	0730	80513	80513	4.0	.40	--	740	11.9	96	7.1	124	5.0
08...	0731	80513	80513	4.0	.90	--	740	11.8	95	7.1	124	5.0
08...	0732	80513	81213	4.0	2.10	.30	740	11.8	95	7.2	124	5.0
08...	0733	80513	80513	4.0	3.00	--	740	11.7	95	7.2	124	5.0
08...	0734	80513	80513	4.0	3.60	--	740	11.8	95	7.2	124	5.0
FEB												
12...	1021	80513	80513	4.0	.40	--	755	13.2	106	8.4	253	5.7
12...	1022	80513	80513	4.0	1.00	--	755	13.2	107	8.4	253	5.7
12...	1023	80513	81213	4.0	2.00	.46	755	13.2	106	8.4	253	5.7
12...	1024	80513	80513	4.0	3.00	--	755	13.2	107	8.4	253	5.7
12...	1025	80513	80513	4.0	4.00	--	755	13.2	106	8.4	253	5.7
MAR												
06...	0910	80513	81213	--	--	--	749	11.4	92	7.7	138	5.4
12...	0718	80513	80513	3.0	.80	--	740	10.7	95	7.2	140	8.8
12...	0719	80513	80513	3.0	1.00	--	740	10.6	94	7.3	140	8.8
12...	0720	80513	81213	3.0	2.00	.76	740	10.7	95	7.3	140	8.8
12...	0721	80513	80513	3.0	3.00	--	740	10.6	94	7.4	140	8.8
APR												
30...	1130	80513	81213	--	--	--	728	7.6	91	7.8	68	21.4
MAY												
07...	1402	80513	80513	4.0	1.30	--	735	7.9	98	7.4	135	23.9
07...	1403	80513	81213	4.0	2.00	.46	735	7.9	97	7.4	135	23.9
07...	1404	80513	80513	4.0	3.20	--	735	7.8	96	7.4	135	23.9
07...	1405	80513	80513	4.0	4.00	--	735	7.8	96	7.4	135	23.9
14...	1800	80513	81213	--	--	--	740	9.1	98	6.5	76	17.4
15...	0745	80513	81213	--	--	--	740	8.8	95	6.8	78	17.6
17...	1115	80513	81213	--	--	--	744	9.7	--	7.0	--	16.7
JUL												
01...	1000	80513	81213	--	--	--	733	6.7	87	8.2	200	26.6
30...	0742	80513	80513	4.0	2.00	--	745	6.4	84	7.9	195	28.4
30...	0743	80513	80513	4.0	1.10	--	745	6.3	83	8.0	194	28.4
30...	0744	80513	81213	4.0	3.10	.30	745	6.2	82	7.8	194	28.3
30...	0745	80513	80513	4.0	4.00	--	745	6.2	82	7.7	194	28.3
AUG												
28...	0930	80513	81213	--	--	--	733	7.0	93	7.4	265	27.6
SEP												
10...	1359	80513	80513	3.0	.80	--	745	8.4	107	8.1	370	26.4
10...	1401	80513	80513	3.0	1.00	--	745	8.4	108	8.1	371	26.4
10...	1402	80513	81213	3.0	2.00	.61	745	8.4	107	8.1	371	26.3
10...	1403	80513	80513	3.0	3.20	--	745	8.5	106	7.9	369	25.5

WHITE RIVER BASIN

07048700 WHITE RIVER NEAR GOSHEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)
OCT 08...	1031	--	21	110	37.0	3.50	--	--	--	--	46.0	.8	110
28...	1541	--	8.1	100	36.0	3.30	--	--	--	--	36.0	.7	94.0
NOV 13...	0926	--	8.6	120	40.0	4.20	--	--	--	--	22.0	.4	63.0
24...	1100	14	--	120	43.0	4.20	7.70	2	56.0	48	34.0	--	91.0
DEC 11...	1357	--	6.5	90	30.0	3.60	--	--	--	--	13.0	.2	38.0
JAN 07...	1230	--	--	47	15.0	2.30	1.50	.3	5.3	19	5.50	--	15.0
08...	0732	--	12	44	14.0	2.30	--	--	--	--	5.70	<.1	15.0
FEB 12...	1023	--	4.3	76	25.0	3.30	--	--	--	--	13.0	.2	37.0
MAR 06...	0910	362	--	47	15.0	2.30	1.30	.4	6.1	21	6.20	--	17.0
12...	0720	--	11	49	16.0	2.30	--	--	--	--	7.00	<.1	17.0
APR 30...	1130	376	--	25	7.90	1.40	1.10	.2	2.4	16	2.50	--	6.00
MAY 07...	1403	--	17	44	14.0	2.10	--	--	--	--	5.80	.1	15.0
14...	1800	12000	--	29	9.30	1.50	2.80	.1	1.7	10	1.70	--	5.20
15...	0745	3540	--	29	9.20	1.50	2.00	.2	2.0	12	2.00	--	6.60
17...	1115	12100	--	26	8.30	1.40	2.10	.2	1.8	12	1.80	--	5.60
JUL 01...	1000	1500	--	64	21.0	2.70	2.40	.5	10.0	25	7.00	--	20.0
30...	0744	98	12	82	27.0	3.60	--	--	--	--	5.00	.1	14.0
AUG 28...	0930	19	--	81	27.0	3.20	3.60	.9	19.0	33	14.0	--	30.0
SEP 10...	1402	--	11	110	35.0	4.30	--	--	--	--	17.0	.4	55.0

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
OCT 08...	371	1.1	.13	.10	16.6	3.76	3.80	.131	.040	1.0	--	<.01	<.02
28...	327	1.0	.06	.05	13.6	3.08	3.10	.066	.020	.95	--	<.01	<.02
NOV 13...	242	.50	--	<.01	--	--	2.60	--	<.010	--	--	<.01	<.02
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	341	.70	.01	.01	--	--	4.30	--	<.010	.69	--	<.01	<.02
DEC 11...	162	.50	--	<.01	--	--	1.40	--	<.010	--	--	<.01	.02
JAN 07...	70	.20	.03	.02	--	--	1.20	--	<.010	.18	--	<.01	<.02
08...	73	.30	.03	.02	--	--	1.20	--	<.010	.28	.031	.01	<.02
FEB 12...	153	.30	.01	.01	6.99	1.58	1.60	.066	.020	.29	--	<.01	<.02
MAR 06...	82	.20	--	<.01	--	--	.98	--	<.010	--	--	<.01	.02
12...	84	<.20	--	<.01	--	--	.93	--	<.010	--	--	<.01	<.02
APR 30...	47	<.20	.03	.02	--	--	.27	--	<.010	--	--	<.01	<.02
MAY 07...	81	.20	.03	.02	2.52	.57	.58	.033	.010	.18	.061	.02	<.02
14...	81	3.0	.14	.11	2.12	.48	.49	.033	.010	2.9	.123	.04	.04
15...	57	.90	.06	.05	2.26	.51	.52	.033	.010	.85	.093	.03	.02
17...	57	.90	.05	.04	--	--	.38	--	<.010	.86	.153	.05	.05
JUL 01...	109	<.20	--	<.01	3.59	.81	.82	.033	.010	--	--	<.01	<.02
30...	119	.40	.01	.01	--	--	<.02	--	<.010	.39	--	<.01	<.02
AUG 28...	155	.50	.06	.05	--	--	<.02	--	<.010	.45	--	<.01	<.02
SEP 10...	212	.70	.01	.01	6.99	1.58	1.60	.066	.020	.69	--	<.01	<.02

Date	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coli-form, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Chlorophyll a phyto-plankton, fluoro, recover ug/L (70953)	Iron, water, unfltrd ug/L (01045)	Manganese, water, unfltrd recover ug/L (01055)	Suspnd. sedi-ment, sieve percent diametr <.063mm (70331)	Suspended sedi-ment concentration mg/L (80154)	Suspended sedi-ment load, tons/d (80155)
OCT 08...	.04	4.9	4.6	4.5	--	33	--	25.0	806	741	--	--	--
28...	.04	4.1	4.2	4.1	--	44	--	6.9	266	185	--	--	--
NOV 13...	<.02	3.1	3.6	3.4	--	E10	--	5.6	362	215	--	--	--
24...	.04	5.0	--	--	9	E7	18	--	--	--	96	59	2.3
DEC 11...	.06	1.9	3.1	3.1	--	E20	--	5.5	319	94	--	--	--
JAN 07...	.03	1.4	--	--	74	100	60	--	--	--	100	9	--
08...	.03	1.5	2.0	2.3	--	E89	--	<.1	622	76	--	--	--

WHITE RIVER BASIN

07048700 WHITE RIVER NEAR GOSHEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Fecal strep- tococci KF MF, col/ 100 mL (31673)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Iron, water, unfltrd recover ug/L (01045)	Mangan- ese, water, unfltrd recover ug/L (01055)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
FEB													
12...	.02	1.9	1.4	1.8	--	E4	--	2.7	345	102	--	--	--
MAR													
06...	.02	1.2	--	--	E11	E13	E9	--	--	--	94	11	11
12...	.02	--	1.3	1.4	--	42	--	4.8	571	76	--	--	--
APR													
30...	.02	--	--	--	52	56	140	--	--	--	94	15	15
MAY													
07...	.06	.78	1.6	1.5	--	--	--	7.6	614	84	--	--	--
14...	.69	3.5	--	--	53000	E18000	E130000	--	--	--	79	1150	37200
15...	.18	1.4	--	--	E3500	E2800	E28000	--	--	--	77	185	1770
17...	.24	1.3	--	--	7800	5100	22000	--	--	--	72	270	8820
JUL													
01...	.03	--	--	--	99	120	92	--	--	--	90	45	182
30...	.03	--	2.7	2.8	--	110	--	11.0	434	249	--	--	--
AUG													
28...	.04	--	--	--	E12	E19	150	--	--	--	93	49	2.5
SEP													
10...	.04	2.3	3.4	3.7	--	E170	--	24.0	590	227	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN

LOCATION.--Lat 36°06'15", long 94°00'28", in NW_{1/4}NW_{1/4} sec.31, T.17 N., R.28 W., Washington County, Hydrologic Unit 11110001, on upstream left end of bridge on Ark. Hwy. 45, 0.9 mi west of Goshen, 0.2 mi upstream from Mill Branch, 0.5 mi upstream from White River.

DRAINAGE AREA.--138 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year. Occasional low-flow measurements water years 1954, 1956-63 and 1987-89.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.7	e4.5	e7.3	274	10	252	73	68	51	18	2.0	71
2	2.4	e6.8	e8.0	171	9.9	198	65	68	394	16	2.6	39
3	2.6	e13	e10	128	9.1	159	60	67	327	15	2.3	21
4	2.6	e7.7	e64	96	8.9	138	56	60	162	14	2.1	13
5	2.7	e7.2	e16	78	8.0	118	52	54	110	13	2.7	9.4
6	2.8	e7.5	e8.5	63	9.2	98	50	52	86	12	2.2	6.7
7	e5.5	e7.1	e6.9	54	e10.1	83	47	55	75	11	1.7	5.2
8	e3.8	e9.1	e6.9	48	8.0	72	44	66	65	11	1.5	4.4
9	e3.4	e7.9	e8.5	42	8.8	63	41	60	57	9.4	1.4	3.4
10	e3.3	e3.7	e8.5	37	8.1	57	38	53	53	11	1.3	3.0
11	e3.5	e3.6	8.5	33	8.5	53	36	52	248	8.2	1.2	3.5
12	e3.5	e5.1	8.2	30	8.7	50	35	58	196	11	1.4	7.8
13	e3.4	e4.1	15	27	8.7	51	33	93	120	9.3	1.2	25
14	e3.4	e4.1	24	25	10	53	31	1100	80	7.7	1.3	46
15	e2.5	e4.4	22	23	12	52	30	392	65	6.7	1.1	40
16	e2.6	e4.5	22	22	13	49	29	1870	55	6.3	0.98	30
17	e2.5	e3.8	23	21	14	46	28	2090	50	5.8	0.87	25
18	e2.5	e4.9	34	20	15	43	27	776	68	5.2	0.78	23
19	e2.6	e3.9	31	19	49	396	28	517	58	4.7	0.66	21
20	e4.1	e3.9	42	19	137	599	49	1010	50	4.4	0.67	18
21	e4.7	e4.1	37	18	113	560	92	673	43	3.8	0.59	14
22	e3.7	e5.6	33	17	585	379	66	457	37	6.2	0.73	12
23	e3.7	e5.0	34	16	472	272	56	317	35	4.2	0.78	9.6
24	e4.0	e6.1	51	15	304	212	217	235	30	3.5	0.71	7.6
25	e4.2	e6.3	58	14	206	176	230	273	28	3.2	0.70	6.1
26	e5.5	e7.0	55	14	169	154	155	202	28	2.8	0.67	5.7
27	e3.7	e7.0	50	13	164	135	124	151	25	2.7	0.91	5.2
28	e7.6	e7.3	50	12	240	124	97	112	24	2.5	0.85	4.3
29	e58	e7.0	58	12	---	114	81	85	22	2.4	3.7	4.0
30	e11	e7.5	132	11	---	95	72	69	20	2.4	2.5	3.9
31	e8.6	---	626	11	---	82	---	57	---	2.3	1.6	---
TOTAL	177.1	179.7	1558.3	1383	2619.0	4933	2042	11192	2662	235.7	43.70	487.8
MEAN	5.71	5.99	50.3	44.6	93.5	159	68.1	361	88.7	7.60	1.41	16.3
MAX	58	13	626	274	585	599	230	2090	394	18	3.7	71
MIN	2.4	3.6	6.9	11	8.0	43	27	52	20	2.3	0.59	3.0
AC-FT	351	356	3090	2740	5190	9780	4050	22200	5280	468	87	968
CFSM	0.04	0.04	0.36	0.32	0.68	1.15	0.49	2.62	0.64	0.06	0.01	0.12
IN.	0.05	0.05	0.42	0.37	0.71	1.33	0.55	3.02	0.72	0.06	0.01	0.13

WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN--CONTINUED

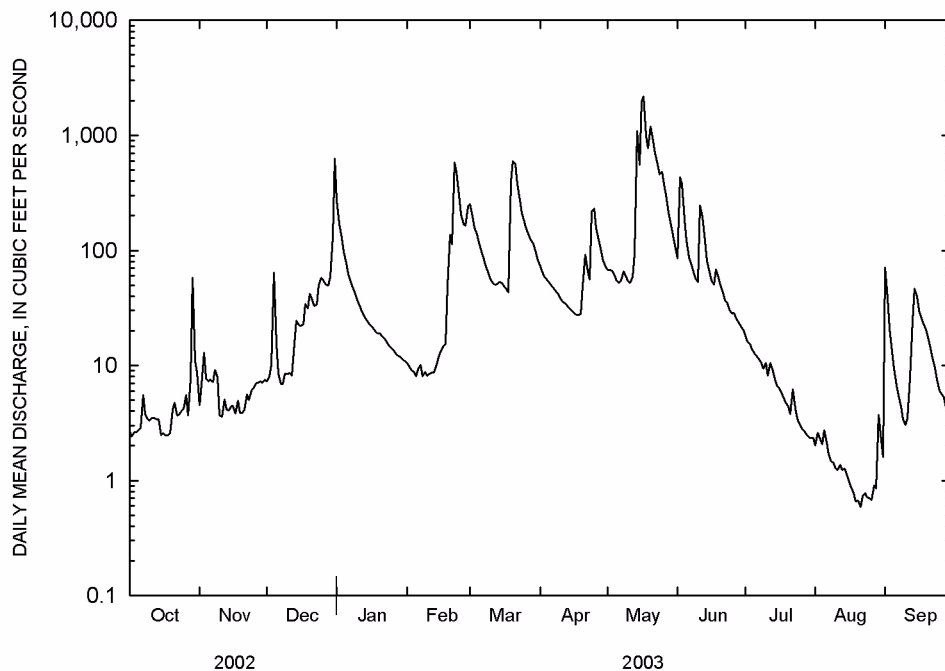
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	22.6	35.7	141	101	248	222	249	272	259	53.5	9.77	12.7
MAX	52.2	112	364	155	539	450	614	566	728	114	40.8	32.3
(WY)	1999	2001	2002	2002	2001	2002	2002	1999	2000	1999	2002	2001
MIN	1.35	1.19	50.3	18.8	22.8	86.8	31.9	39.8	48.4	7.60	1.17	1.35
(WY)	2000	2000	2003	2000	2000	2000	2001	2001	2001	2003	2001	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	60925.4		27513.30			
ANNUAL MEAN	167		75.4		135	
HIGHEST ANNUAL MEAN					203 1999	
LOWEST ANNUAL MEAN					75.4 2003	
HIGHEST DAILY MEAN	7960	Apr 8	2090	May 17	7960	Apr 8 2002
LOWEST DAILY MEAN	2.4	Oct 2	0.59	Aug 21	0.43	Sep 7 2001
ANNUAL SEVEN-DAY MINIMUM	2.8	Oct 13	0.69	Aug 19	0.48	Sep 1 2001
MAXIMUM PEAK FLOW			3680	May 16	¹ 8630	Jun 30 1999
MAXIMUM PEAK STAGE			8.80	May 16	16.41	Jun 30 1999
INSTANTANEOUS LOW FLOW			0.58	at times	0.36	Sep 8 2001
ANNUAL RUNOFF (AC-FT)	120800		54570		97500	
ANNUAL RUNOFF (CFSM)	1.21		0.55		0.98	
ANNUAL RUNOFF (INCHES)	16.42		7.42		13.25	
10 PERCENT EXCEEDS	305		170		303	
50 PERCENT EXCEEDS	49		18		36	
90 PERCENT EXCEEDS	4.8		2.6		1.5	

¹From rating curve extended above 5,200 ft³/s

^eEstimated



WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963, 1980, 1984-85, April 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
OCT													
08...	0930	80513	81213	--	3.7	750	4.6	6.2	64	7.7	252	15.6	110
28...	1500	80513	81213	--	2.1	743	2.5	11.9	119	7.9	250	14.3	110
NOV													
13...	0900	80513	81213	--	1.9	755	4.9	7.5	63	7.6	277	7.7	130
DEC													
11...	1300	80513	81213	8.0	1.2	741	1.9	14.4	122	8.1	293	7.1	140
18...	1400	80513	81213	40	11	728	5.0	10.0	100	7.6	113	13.1	140
JAN													
08...	0830	80513	81213	49	2.2	742	5.2	10.4	88	7.3	174	7.0	73
22...	1110	80513	81213	18	3.1	749	1.9	11.3	91	7.8	202	5.6	89
FEB													
12...	0940	80513	81213	9.2	.53	756	1.3	12.4	99	8.0	228	5.4	99
MAR													
12...	0745	80513	81213	51	1.2	740	4.2	10.0	90	7.4	168	9.3	70
25...	1415	80513	81213	175	3.8	737	1.1	10.2	104	7.9	120	14.5	50
APR													
08...	1345	80513	81213	45	2.0	755	2.1	11.3	104	7.8	151	11.2	64
MAY													
05...	1430	80513	81213	53	3.8	753	2.7	9.9	115	7.5	136	22.1	56
JUN													
02...	2300	80513	81213	645	48	741	1.2	8.0	88	7.7	114	18.6	46
05...	1345	80513	81213	119	5.7	747	.9	10.4	115	8.1	155	19.2	64
JUL													
29...	1540	80513	81213	2.4	1.1	760	.4	11.4	161	8.6	198	33.5	89
AUG													
20...	1120	80513	81213	.70	2.8	738	7.9	8.0	106	7.4	219	28.2	99
SEP													
09...	1235	80513	81213	4.6	2.4	746	.2	8.2	107	8.9	239	27.5	110
Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT													
08...	40.0	3.00	112	5.10	<.1	8.10	136	<.20	.03	.02	--	--	.14
28...	40.0	3.00	111	5.00	<.1	8.20	131	<.20	--	<.01	--	--	.10
NOV													
13...	47.0	3.50	110	5.30	<.1	11.0	146	<.20	--	<.01	--	--	.11
DEC													
11...	49.0	3.80	112	6.30	<.1	18.0	172	<.20	--	<.01	--	--	.89
18...	50.0	4.10	106	8.10	<.1	33.0	181	.20	.01	.01	--	--	1.30
JAN													
08...	25.0	2.50	52	6.30	<.1	13.0	98	<.20	.01	.01	--	--	1.70
22...	31.0	2.70	66	6.60	<.1	14.0	116	<.20	.01	.01	--	--	1.50
FEB													
12...	35.0	2.90	74	7.10	<.1	16.0	131	<.20	.01	.01	4.82	1.09	1.10
MAR													
12...	24.0	2.40	60	6.10	<.1	12.0	93	<.20	--	<.01	--	--	1.20
25...	17.0	1.90	43	4.80	<.1	9.60	75	<.20	.03	.02	--	--	.84
APR													
08...	22.0	2.20	66	5.10	<.1	10.0	87	<.20	.04	.03	--	--	.72
MAY													
05...	19.0	2.00	49	4.00	<.1	8.50	85	<.20	.03	.02	--	--	.40
JUN													
02...	15.0	2.00	33	3.60	<.1	8.10	79	.70	.03	.02	--	--	.63
05...	22.0	2.30	56	4.10	<.1	9.60	89	<.20	--	<.01	--	--	.64
JUL													
29...	31.0	2.90	91	5.40	<.1	9.40	134	.60	.26	.20	--	--	.09
AUG													
20...	35.0	2.90	94	5.60	<.1	8.90	121	.30	.06	.05	--	--	<.02
SEP													
09...	38.0	3.30	87	5.90	<.1	16.0	131	.30	.06	.05	--	--	.56

WHITE RIVER BASIN

07048800 RICHLAND CREEK AT GOSHEN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, unfltrd recoverable, ug/L (01055)
OCT 08...	--	<.010	--	--	<.01	<.02	<.02	--	1.2	.9	E150	208	122
OCT 28...	--	<.010	--	--	<.01	<.02	<.02	--	1.5	1.1	E63	142	86
NOV 13...	--	<.010	--	--	<.01	<.02	<.02	--	1.5	1.2	21	154	98
DEC 11...	--	<.010	--	--	<.01	<.02	.03	--	1.1	1.0	110	101	38
DEC 18...	--	<.010	.19	--	<.01	<.02	<.02	1.5	2.0	2.0	E140	286	65
JAN 08...	--	<.010	--	.061	.02	<.02	<.02	--	1.9	2.0	53	157	26
JAN 22...	--	<.010	--	--	<.01	<.02	<.02	--	.8	1.0	E13	181	33
FEB 12...	.033	.010	--	--	<.01	<.02	<.02	--	1.8	3.5	E9	69	26
MAR 12...	--	<.010	--	--	<.01	<.02	<.02	--	1.0	1.3	22	109	35
MAR 25...	--	<.010	--	--	<.01	<.02	<.02	--	1.2	1.1	54	218	18
APR 08...	--	<.010	--	--	<.01	<.02	<.02	--	1.0	.9	150	103	21
MAY 05...	--	<.010	--	--	<.01	<.02	<.02	--	.9	.7	140	214	37
JUN 02...	--	<.010	.68	.061	.02	.03	.09	1.3	4.7	4.5	E7100	999	58
JUN 05...	--	<.010	--	.031	.01	<.02	<.02	--	1.4	1.3	160	219	20
JUL 29...	--	<.010	.40	--	<.01	<.02	.05	.69	2.5	2.5	43	89	50
AUG 20...	--	<.010	.25	--	<.01	<.02	<.02	--	1.6	1.4	E13	125	76
SEP													

Date	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 08...	48	5	--
OCT 28...	58	3	--
NOV 13...	81	3	--
DEC 11...	84	4	.09
DEC 18...	94	11	1.2
JAN 08...	75	6	.79
JAN 22...	94	5	.24
FEB 12...	100	1	.02
MAR 12...	83	4	.55
MAR 25...	69	8	3.8
APR 08...	99	19	2.3
MAY 05...	83	30	4.3
JUN 02...	93	60	104
JUN 05...	94	24	7.7
JUL 29...	78	28	.18
AUG 20...	94	19	.04
SEP 09...	96	23	.29

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

07048910 BEAVER LAKE AT HIGHWAY 412 BRIDGE NEAR SONORA

LOCATION.--Lat 36°10'00" long 94°00'26", in SE1/4SE1/4, sec.1, T. 17 N., R.29 W., Washington County, Hydrologic Unit 11010001, at bridge on State Highway 68, 0.8 mi east of Sonora.

DRAINAGE AREA.--621 mi².

PERIOD OF RECORD.--May 1984 to September 1995, and April 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Reser- voir depth, feet (72025)	Sam- pling depth, feet (00003)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved percent of sat- uration (00301)	pH, water, unfltrd std units (00400)	Specif. conduc- tance, wat un f us/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
OCT												
08...	1334	80513	80513	36.0	.00	--	750	4.2	49	7.2	172	22.0
08...	1335	80513	81213	36.0	6.00	.98	720	4.2	51	7.2	172	22.1
08...	1336	80513	80513	36.0	10.1	--	750	4.2	49	7.2	172	22.1
08...	1338	80513	81213	36.0	12.0	--	750	4.2	49	7.2	172	22.1
08...	1339	80513	80513	36.0	20.0	--	750	4.1	48	7.1	172	22.0
08...	1341	80513	81213	36.0	30.1	--	750	4.3	50	7.2	171	21.9
08...	1343	80513	80513	36.0	34.0	--	750	3.8	44	7.1	180	21.6
08...	1344	80513	80513	36.0	35.0	--	750	1.5	17	6.9	265	19.9
08...	1346	80513	80513	36.0	38.4	--	750	.5	6	7.0	334	18.0
08...	1350	80513	80513	36.0	33.1	--	750	3.2	37	7.1	175	21.8
08...	1351	80513	80513	36.0	34.1	--	750	2.4	28	7.0	185	21.6
08...	1352	80513	80513	36.0	35.0	--	750	1.2	14	6.9	259	20.1
08...	1353	80513	80513	36.0	35.8	--	750	.7	8	6.9	269	19.8
30...	1043	80513	80513	36.0	.50	--	750	6.5	66	7.2	182	15.7
30...	1044	80513	81213	36.0	6.00	.91	750	6.0	61	7.2	182	15.7
30...	1045	80513	80513	36.0	10.0	--	750	5.9	60	7.1	183	15.6
30...	1046	80513	81213	36.0	12.0	--	750	5.9	61	7.1	183	15.6
30...	1047	80513	80513	36.0	20.0	--	750	6.0	62	7.1	182	15.6
30...	1049	80513	81213	36.0	30.0	--	750	5.8	59	7.1	190	15.4
30...	1050	80513	80513	36.0	36.3	--	750	5.3	54	7.1	201	15.2
NOV												
14...	1320	80513	80513	33.0	.20	--	745	8.8	85	7.5	182	12.6
14...	1321	80513	81213	33.0	6.10	.91	745	8.6	83	7.5	182	12.6
14...	1322	80513	80513	33.0	10.0	--	745	8.5	82	7.5	182	12.6
14...	1323	80513	81213	33.0	12.1	--	745	8.3	80	7.5	182	12.6
14...	1324	80513	80513	33.0	20.1	--	745	8.3	80	7.4	182	12.6
14...	1326	80513	81213	33.0	27.3	--	745	8.0	77	7.4	183	12.5
14...	1327	80513	80513	33.0	30.2	--	745	7.9	76	7.4	183	12.5
14...	1330	80513	80513	33.0	33.0	--	745	7.8	75	7.4	184	12.5
DEC												
10...	1417	80513	80513	36.0	.60	--	741	10.7	90	7.8	198	6.7
10...	1418	80513	81213	36.0	6.00	.91	741	10.7	89	7.8	198	6.5
10...	1419	80513	80513	36.0	10.0	--	741	10.1	84	7.7	198	6.2
10...	1420	80513	81213	36.0	12.0	--	741	10.0	83	7.7	200	6.2
10...	1421	80513	80513	36.0	20.1	--	741	9.9	83	7.6	238	6.3
10...	1422	80513	81213	36.0	30.0	--	741	9.2	77	7.5	306	6.3
10...	1423	80513	80513	36.0	36.0	--	741	9.0	75	7.5	307	6.3
JAN												
07...	1224	80513	80513	36.0	.20	--	748	10.2	84	6.2	124	6.3
07...	1225	80513	81213	36.0	6.00	.36	748	9.8	80	6.2	124	6.2
07...	1226	80513	80513	36.0	10.0	--	748	9.5	79	6.1	125	6.3
07...	1227	80513	80513	36.0	20.0	--	748	9.4	78	6.1	128	6.3
07...	1228	80513	80513	36.0	30.0	--	748	9.1	76	6.1	139	6.4
07...	1229	80513	80513	36.0	36.3	--	748	8.6	71	6.1	153	6.5
FEB												
10...	1535	80513	80513	35.0	.20	--	744	12.0	96	7.5	174	4.8
10...	1537	80513	81213	35.0	6.00	.85	744	11.9	95	7.5	175	4.7
10...	1538	80513	80513	35.0	10.3	--	744	13.0	103	7.6	176	4.5
10...	1539	80513	80513	35.0	20.0	--	744	14.0	111	7.5	176	4.5
10...	1540	80513	80513	35.0	30.1	--	744	11.8	93	7.5	178	4.5
10...	1541	80513	80513	35.0	35.0	--	744	11.4	91	7.5	178	4.5
MAR												
12...	0916	80513	80513	25.0	.10	--	742	10.5	91	7.5	147	8.1
12...	0917	80513	81213	25.0	6.00	.76	742	10.3	90	7.5	148	8.0
12...	0918	80513	80513	25.0	10.0	--	742	11.4	99	7.5	149	7.9
12...	0919	80513	80513	25.0	20.0	--	742	10.4	88	7.4	147	6.9
12...	0920	80513	80513	25.0	25.0	--	742	10.2	86	7.3	147	6.8
MAY												
07...	1211	80513	80513	36.0	.40	--	735	8.5	105	7.7	107	24.1
07...	1212	80513	81213	36.0	6.00	1.20	735	8.8	103	7.7	106	21.1
07...	1213	80513	80513	36.0	10.0	--	735	7.6	87	7.2	106	20.1
07...	1214	80513	81213	36.0	12.0	--	735	6.9	78	7.1	113	19.5
07...	1215	80513	80513	36.0	15.0	--	735	5.6	62	7.0	123	18.2
07...	1216	80513	80513	36.0	16.0	--	735	4.5	48	6.9	140	16.6
07...	1217	80513	80513	36.0	18.0	--	735	3.5	36	6.8	153	15.1
07...	1218	80513	80513	36.0	20.0	--	735	2.8	29	6.8	159	14.3
07...	1219	80513	80513	36.0	22.0	--	735	2.5	25	6.8	161	14.0
07...	1220	80513	81213	36.0	30.0	--	735	1.9	19	6.8	165	13.4
07...	1221	80513	80513	36.0	36.1	--	735	1.2	12	6.8	170	12.7
JUL												
31...	1403	80513	80513	36.0	.60	--	750	6.7	92	--	156	31.3
31...	1404	80513	81213	36.0	6.10	1.10	750	6.5	87	--	155	29.4
31...	1405	80513	80513	36.0	10.2	--	750	4.3	57	--	160	29.0
31...	1406	80513	81213	36.0	12.1	--	750	3.8	51	--	162	29.0
31...	1407	80513	80513	36.0	20.0	--	750	.3	4	--	181	27.9
31...	1408	80513	80513	36.0	23.0	--	750	.2	2	--	192	27.0
31...	1409	80513	80513	36.0	24.1	--	750	.2	2	--	199	25.9
31...	1410	80513	80513	36.0	25.2	--	750	.1	2	--	203	25.4
31...	1411	80513	80513	36.0	26.1	--	750	.1	1	--	214	23.8
31...	1412	80513	80513	36.0	27.0	--	750	.1	2	--	223	22.4
31...	1413	80513	80513	36.0	28.0	--	750	.1	1	--	230	21.5
31...	1414	80513	80513	36.0	29.0	--	750	.1	1	--	234	21.0
31...	1415	80513	81213	36.0	30.1	--	750	.1	1	--	198	20.4
31...	1417	80513	80513	36.0	33.1	--	750	.1	.0	--	241	19.8
31...	1418	80513	80513	36.0	36.1	--	750	.1	.0	--	244	19.3

WHITE RIVER BASIN

07048910 BEAVER LAKE AT HIGHWAY 412 BRIDGE NEAR SONORA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)		
SEP														
08...	1419	80513	80513	32.0	.60	--	745	9.0	118	8.2	175	28.0		
08...	1421	80513	80513	32.0	6.00	.76	745	6.8	87	7.6	176	26.6		
08...	1422	80513	80513	32.0	10.0	--	745	5.4	69	7.2	177	26.4		
08...	1424	80513	80513	32.0	12.1	--	745	5.0	63	7.2	179	26.3		
08...	1425	80513	80513	32.0	15.1	--	745	4.2	53	7.1	194	26.0		
08...	1427	80513	80513	32.0	20.0	--	745	3.1	39	6.9	204	25.5		
08...	1431	80513	80513	32.0	26.2	--	745	.1	1	6.8	220	25.0		
08...	1432	80513	80513	32.0	28.0	--	745	.1	1	6.8	250	24.1		
08...	1433	80513	80513	32.0	29.8	--	745	.1	1	6.8	276	22.9		
08...	1434	80513	80513	32.0	32.0	--	745	.1	1	6.8	298	22.0		
Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	
OCT														
08...	1335	6.8	71	25.0	2.20	4.40	<.1	7.80	95	.50	.12	.09	--	
08...	1338	7.1	74	26.0	2.30	4.40	<.1	7.80	96	.60	.12	.09	--	
08...	1341	6.7	74	26.0	2.30	4.60	<.1	7.80	96	.60	.12	.09	--	
30...	1044	5.7	76	27.0	2.20	4.60	<.1	8.50	98	.60	.18	.14	--	
30...	1046	6.2	76	27.0	2.20	4.60	<.1	8.50	101	.50	.18	.14	--	
30...	1049	10	76	27.0	2.20	4.80	<.1	8.50	107	.60	.18	.14	--	
NOV														
14...	1321	7.2	82	29.0	2.30	4.80	<.1	8.80	108	.50	.19	.15	.753	
14...	1323	7.0	79	28.0	2.30	4.80	<.1	8.90	109	.60	.18	.14	.753	
14...	1326	8.7	79	28.0	2.30	4.80	<.1	8.90	114	.60	.19	.15	.753	
DEC														
10...	1418	3.9	87	31.0	2.40	5.80	<.1	11.0	126	.90	.09	.07	--	
10...	1420	4.1	87	31.0	2.40	5.80	<.1	11.0	119	.50	.09	.07	--	
10...	1422	7.9	100	35.0	3.00	13.0	.2	32.0	175	.90	.15	.12	3.45	
JAN														
07...	1225	44	51	17.0	2.10	5.10	<.1	12.0	79	.60	.08	.06	--	
FEB														
10...	1537	6.5	70	24.0	2.50	7.40	<.1	16.0	107	.30	.03	.02	--	
MAR														
12...	0917	15	59	20.0	2.30	6.30	<.1	15.0	91	<.20	--	<.01	--	
MAY														
07...	1212	4.1	42	14.0	1.70	3.80	<.1	8.80	59	.40	.01	.01	--	
07...	1214	5.8	42	14.0	1.70	4.00	<.1	9.10	65	.40	.04	.03	--	
07...	1220	9.9	64	22.0	2.20	6.40	<.1	13.0	101	.30	.22	.17	--	
Date	Time	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC col/100 mL (31625)	Chlorophyll a phyton, plankton, fluoro, ug/L (70953)
OCT														
08...	--	<.02	--	<.010	.41	<.01	<.02	<.02	--	2.8	2.8	E8	13.0	
08...	--	<.02	--	<.010	.51	<.01	<.02	.04	--	2.9	3.0	--	--	
08...	--	<.02	--	<.010	.51	<.01	<.02	.02	--	3.0	2.8	--	--	
30...	--	.10	--	<.010	.46	<.01	<.02	<.02	.70	2.6	2.6	E17	5.4	
30...	--	.10	--	<.010	.36	<.01	<.02	<.02	.60	2.6	2.6	--	--	
30...	--	.12	--	<.010	.46	<.01	<.02	<.02	.72	2.6	2.7	--	--	
NOV														
14...	.17	.18	.033	.010	.35	<.01	<.02	<.02	.68	2.7	2.4	E5	14.0	
14...	.17	.18	.033	.010	.46	<.01	<.02	<.02	.78	2.5	2.5	--	--	
14...	.17	.18	.033	.010	.45	<.01	<.02	<.02	.78	2.5	2.5	--	--	
DEC														
10...	--	.30	--	<.010	.83	<.01	<.02	<.02	1.2	2.5	2.6	<1	17.0	
10...	--	.30	--	<.010	.43	<.01	<.02	<.02	.80	2.5	2.6	--	--	
10...	.78	.80	.066	.020	.78	<.01	<.02	.03	1.7	E2.9	3.0	--	--	
JAN														
07...	--	1.20	--	<.010	.54	<.01	<.02	.06	1.8	3.3	3.8	E210	3.6	
FEB														
10...	--	1.30	--	<.010	.28	<.01	<.02	<.02	1.6	1.4	1.6	E1	9.7	
MAR														
12...	--	1.20	--	<.010	--	<.01	<.02	.03	--	1.3	1.5	E2	3.6	
MAY														
07...	--	.36	--	<.010	.39	<.01	<.02	<.02	.76	1.3	1.2	E3	7.2	
07...	--	.39	--	<.010	.37	<.01	<.02	<.02	.79	1.3	1.3	--	--	
07...	--	.67	--	<.010	.13	<.01	<.02	<.02	.97	1.5	1.4	--	--	

WHITE RIVER BASIN

07048910 BEAVER LAKE AT HIGHWAY 412 BRIDGE NEAR SONORA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date		Iron, water, unfltrd recover- able, ug/L (01045)	Mangan- ese, water, unfltrd recover- able, ug/L (01055)										
OCT													
08...		237	181										
08...		233	176										
08...		228	176										
30...		270	131										
30...		282	134										
30...		411	184										
NOV													
14...		311	139										
14...		311	139										
14...		365	158										
DEC													
10...		170	92										
10...		173	102										
10...		290	166										
JAN													
07...		1040	167										
FEB													
10...		8	138										
MAR													
12...		667	148										
MAY													
07...		163	27										
07...		217	45										
07...		396	152										
Date	Time	Tur- bidity, NTU (00076)	Hard- ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
JUL													
31...	1404	3.3	67	23.0	2.30	4.80	<.1	10.0	112	.50	--	<.01	<.02
31...	1406	4.7	64	22.0	2.30	4.90	<.1	10.0	101	.60	--	<.01	<.02
31...	1415	42	90	31.0	3.00	4.60	<.1	6.20	103	1.9	1.80	1.40	<.02
SEP													
08...	1421	6.6	75	26.0	2.40	5.40	<.1	10.0	109	.50	.01	.01	<.02
08...	1424	5.9	78	27.0	2.50	5.80	.1	11.0	116	.50	.05	.04	.02
08...	1431	17	99	35.0	2.80	6.00	.1	8.80	128	1.6	1.29	1.00	<.02
Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro- gen, water, unfltrd mg/L (00605)	Ortho- phos- phate, water, fltrd, mg/L (00660)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coli- form, M-FC col/ 100 mL (31625)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Iron, water, unfltrd recover- able, ug/L (01045)	Mangan- ese, water, unfltrd recover- able, ug/L (01055)
JUL													
31...	<.010	--	--	<.01	<.02	.03	--	2.6	2.7	24	29.0	131	59
31...	<.010	--	--	<.01	<.02	.04	--	2.5	2.6	--	--	194	89
31...	<.010	.50	.123	.04	.06	.16	--	3.7	3.6	--	--	4550	4200
SEP													
08...	<.010	.49	--	<.01	<.02	.03	--	2.5	3.4	<1	27.0	216	90
08...	<.010	.46	--	<.01	<.02	.03	.52	3.1	3.1	--	--	237	120
08...	<.010	.60	--	<.01	<.02	.04	--	3.0	3.0	--	--	484	4000

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

105

07049000 WAR EAGLE CREEK NEAR HINDSVILLE

LOCATION.--Lat 36°12'00", long 93°51'18", in SE1/4NE1/4 sec.28, T.18 N., R.27 W., Madison County, Hydrologic Unit 11010001, on left bank about 800 ft above bridge on State Highway 45, 3.9 mi north of Hindsville, and at mile 22.4.

DRAINAGE AREA.--263 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to September 1970, October 1998 to current year. Annual maximum, water years 1971-77 and 1985-98.

GAGE.--Water-stage recorder. Datum of gage is 1,168.06 ft above NGVD of 1929. Prior to Oct. 1, 1964, at datum 2.00 ft higher. Prior to Jan. 1, 1965, at same site on right bank.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 10, 1943, reached a stage of 30.1 ft, present datum, from information by local resident (discharge, about 50,000 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e35	e25	614	17	402	162	157	124	36	16	82
2	14	34	20	371	16	370	150	151	269	42	16	121
3	14	35	21	273	16	308	138	142	703	39	15	e81
4	15	37	52	210	16	268	130	123	366	33	15	e59
5	15	34	72	171	15	240	121	108	262	29	16	e43
6	15	31	57	142	16	210	113	99	212	28	15	e31
7	15	29	49	118	16	184	108	110	186	24	15	e24
8	15	30	44	101	16	165	106	152	164	24	14	e19
9	16	29	41	89	16	146	101	125	140	26	13	16
10	17	28	37	80	16	131	94	103	124	28	12	15
11	18	28	30	70	16	119	89	103	123	27	12	14
12	17	26	28	61	16	112	84	125	135	31	13	24
13	17	26	35	55	16	156	79	128	129	36	14	122
14	16	27	43	50	19	208	74	567	110	36	15	124
15	17	28	49	45	23	174	70	614	98	31	15	84
16	18	29	49	43	30	148	66	2100	87	27	14	60
17	19	27	40	41	e45	132	63	3450	83	24	14	44
18	20	25	50	36	e47	121	59	1620	133	21	13	35
19	21	23	79	32	e100	450	58	866	117	19	13	29
20	21	26	142	31	275	941	83	2230	92	19	13	24
21	22	25	107	31	271	1110	276	1620	77	19	13	20
22	23	26	e71	29	625	683	190	879	66	36	13	18
23	24	25	e96	26	884	503	150	604	59	70	12	17
24	26	25	e187	23	544	407	829	461	53	75	13	16
25	32	24	e151	21	388	343	763	450	48	49	13	15
26	e31	28	e109	20	320	303	434	379	48	35	13	15
27	e30	24	e95	19	291	273	320	299	44	28	13	15
28	e32	21	e94	19	323	251	255	235	40	23	13	15
29	e51	21	e106	19	---	228	210	194	36	19	21	14
30	e41	21	e134	19	---	e200	176	167	33	18	22	14
31	e47	---	1310	18	---	176	---	144	---	18	36	---
TOTAL	693	827	3423	2877	4393	9462	5551	18505	4161	970	465	1210
MEAN	22.4	27.6	110	92.8	157	305	185	597	139	31.3	15.0	40.3
MAX	51	37	1310	614	884	1110	829	3450	703	75	36	124
MIN	14	21	20	18	15	112	58	99	33	18	12	14
AC-FT	1370	1640	6790	5710	8710	18770	11010	36700	8250	1920	922	2400

WHITE RIVER BASIN

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

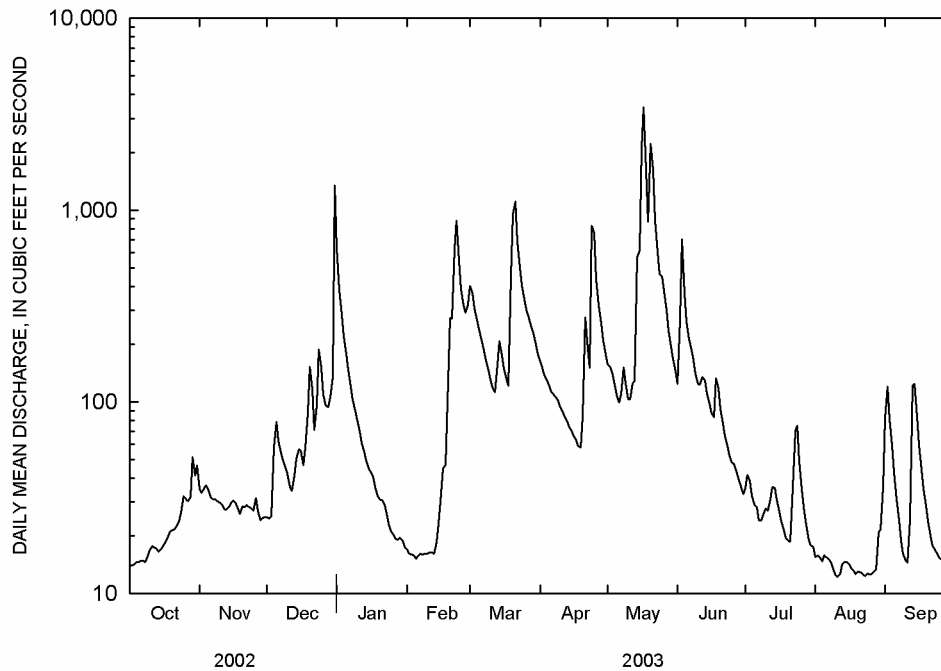
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952-70, 1999-03, BY WATER YEAR (WY)

MEAN	112	161	248	210	370	496	613	646	238	131	63.8	49.6
MAX	849	820	1026	640	1208	1228	2254	2582	1274	795	524	344
(WY)	1968	1969	1969	1969	2001	1968	1957	1957	2000	1960	1958	1970
MIN	3.72	7.21	8.03	7.81	15.9	62.0	92.4	75.5	23.3	2.63	1.49	2.29
(WY)	1957	1964	1964	1964	1964	1967	2001	2001	1954	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952-70, 1999-03	
ANNUAL TOTAL	135846		52537			
ANNUAL MEAN	372		144		278	
HIGHEST ANNUAL MEAN					641 1957	
LOWEST ANNUAL MEAN					47.7 1954	
HIGHEST DAILY MEAN	16900	Apr 8	3450	May 17	19000	May 23 1957
LOWEST DAILY MEAN	14	Sep 30	12	Aug 10	0.20	Aug 18 1954
ANNUAL SEVEN-DAY MINIMUM	14	Sep 27	13	Aug 18	0.33	Aug 13 1954
MAXIMUM PEAK FLOW			4420	May 16	49000	Nov 19 1985
MAXIMUM PEAK STAGE			8.41	May 16	28.49	Nov 19 1985
INSTANTANEOUS LOW FLOW			12	at times	0.20	¹ Aug 18 1954
ANNUAL RUNOFF (AC-FT)	269500		104200		201500	
10 PERCENT EXCEEDS	695		320		577	
50 PERCENT EXCEEDS	95		43		74	
90 PERCENT EXCEEDS	19		15		9.8	

¹Also August 19, 1954

^eEstimated



WHITE RIVER BASIN

107

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-55, 1994-95, and April 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)
OCT													
08...	0830	80513	81213	15	3.4	750	6.7	6.6	69	7.5	326	16.4	130
28...	1350	80513	81213	37	1.6	743	3.0	9.5	93	7.9	367	13.1	140
NOV													
13...	0800	80513	81213	26	1.5	754	7.5	9.1	80	7.5	374	9.1	140
DEC													
09...	1445	80513	81213	47	1.4	744	5.4	12.9	105	7.6	387	5.5	150
19...	0845	80513	81213	68	5.0	730	3.7	9.2	85	7.7	339	9.9	130
JAN													
07...	1045	80513	81213	123	5.2	752	10	11.9	92	7.0	177	4.0	75
22...	1245	80513	81213	29	1.1	748	1.7	12.1	96	7.9	235	4.6	94
FEB													
12...	0830	80513	81213	16	1.4	755	1.0	12.0	94	8.2	281	4.9	110
MAR													
11...	1220	80513	81213	120	2.1	742	2.7	11.9	102	7.6	179	7.8	72
25...	1245	80513	81213	343	9.7	735	1.4	10.9	131	7.9	127	22.4	54
APR													
09...	0730	80513	81213	101	3.3	745	2.0	9.5	86	7.8	177	10.1	75
MAY													
05...	1300	80513	81213	108	6.8	753	5.1	8.8	100	7.3	162	20.6	62
JUN													
03...	0745	80513	81213	751	32	743	1.5	7.5	84	7.8	129	19.5	58
05...	1215	80513	81213	261	12	748	1.7	8.6	93	7.8	151	18.4	59
JUL													
29...	1445	80513	81213	18	1.2	760	1.9	8.2	107	8.0	353	28.5	120
AUG													
20...	1025	80513	81213	13	.95	738	12	8.1	105	7.2	312	27.1	110
SEP													
09...	1130	80513	81213	16	1.8	746	2.3	7.8	93	7.9	363	22.5	130

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	ANC, wat unfltrd, fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT													
08...	50.0	2.20	121	23.0	<.1	4.60	192	<.20	.03	.02	--	--	1.40
28...	52.0	2.20	122	31.0	<.1	4.70	215	<.20	.01	.01	--	--	1.60
NOV													
13...	54.0	2.20	125	31.0	<.1	5.60	219	<.20	--	<.01	--	--	1.60
DEC													
09...	57.0	2.30	116	35.0	<.1	6.90	222	.30	.01	.01	--	--	1.80
19...	49.0	2.40	102	29.0	<.1	9.10	202	.40	.01	.01	--	--	2.10
JAN													
07...	27.0	1.90	55	10.0	<.1	7.30	103	<.20	--	<.01	--	--	1.60
22...	34.0	2.10	73	15.0	<.1	7.60	133	<.20	--	<.01	--	--	1.50
FEB													
12...	39.0	2.10	87	21.0	<.1	7.90	160	.20	.01	.01	5.71	1.29	1.30
MAR													
11...	26.0	1.80	60	9.40	<.1	7.20	98	<.20	--	<.01	--	--	1.30
25...	19.0	1.60	55	6.30	<.1	5.80	78	<.20	.01	.01	--	--	1.00
APR													
09...	27.0	1.90	75	9.00	<.1	6.40	103	<.20	.03	.02	--	--	.98
MAY													
05...	22.0	1.70	51	9.10	<.1	5.10	95	<.20	--	<.01	--	--	.51
JUN													
03...	20.0	1.90	51	4.70	<.1	5.90	78	.30	.03	.02	--	--	.61
05...	21.0	1.70	55	5.60	<.1	5.20	88	<.20	--	<.01	--	--	.88
JUL													
29...	44.0	2.40	104	35.0	<.1	6.50	214	.20	.04	.03	--	--	.94
AUG													
20...	42.0	2.20	105	26.0	<.1	4.90	165	.20	.04	.03	--	--	.54
SEP													
09...	47.0	2.20	106	32.0	<.1	6.00	213	.20	.06	.05	7.04	1.59	1.60

WHITE RIVER BASIN

07049000 WAR EAGLE CREEK NEAR HINDSVILLE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC col/100 mL (31625)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, unfltrd recoverable, ug/L (01055)
OCT 08...	--	<.010	--	--	<.01	<.02	<.02	--	1.2	1.1	56	103	48
28...	--	<.010	--	--	<.01	<.02	<.02	--	1.4	1.2	50	76	37
NOV 13...	--	<.010	--	.092	.03	.03	.04	--	1.4	1.4	12	83	36
DEC 09...	--	<.010	.29	.123	.04	.04	.06	2.1	1.3	1.5	E18	88	19
19...	--	<.010	.39	.583	.19	.18	.21	2.5	2.1	2.7	E190	146	33
JAN 07...	--	<.010	--	.092	.03	.04	.05	--	1.3	1.5	58	217	27
22...	--	<.010	--	.245	.08	.09	.11	--	1.6	1.7	E7	133	36
FEB 12...	.033	.010	.19	.123	.04	.04	.05	1.5	1.8	2.9	E5	146	38
MAR 11...	--	<.010	--	--	<.01	<.02	<.02	--	1.0	1.0	21	187	31
25...	--	<.010	--	.061	.02	.03	.05	--	1.2	1.1	83	400	41
APR 09...	--	<.010	--	.061	.02	.03	.05	--	1.3	1.1	E330	219	33
MAY 05...	--	<.010	--	.061	.02	<.02	.04	--	1.1	1.0	E60	335	56
JUN 03...	--	<.010	.28	.031	.01	<.02	.07	.91	2.0	1.9	E2500	938	93
05...	--	<.010	--	.092	.03	.03	.05	--	2.0	2.2	140	476	37
JUL 29...	--	<.010	.17	.092	.03	.03	.04	1.1	1.6	1.3	110	71	40
AUG 20...	--	<.010	.17	--	<.01	<.02	<.02	.74	1.8	1.5	52	78	48
SEP 09...	.033	.010	.15	.061	.02	.03	.03	1.8	1.6	1.6	E3400	95	44

Date	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
OCT 08...	71	4	.16
28...	83	1	.10
NOV 13...	60	3	.21
DEC 09...	67	.0	.00
19...	74	7	1.3
JAN 07...	93	5	1.7
22...	87	2	.16
FEB 12...	84	3	.13
MAR 11...	85	6	1.9
25...	89	13	12
APR 09...	95	25	6.8
MAY 05...	89	35	10
JUN 03...	94	66	134
05...	89	32	23
JUL 29...	84	37	1.8
AUG 20...	96	27	.95
SEP 09...	100	27	1.2

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	
JUL													
31...	0950	80513	80513	72.0	42.0	--	752	.1	1	--	168	17.6	
31...	0951	80513	80513	72.0	45.0	--	752	.1	.0	--	168	16.4	
31...	0952	80513	80513	72.0	47.1	--	752	.1	.0	--	168	15.6	
31...	0953	80513	80513	72.0	50.0	--	752	.1	.0	--	170	14.6	
31...	0954	80513	80513	72.0	54.1	--	752	.1	.0	--	174	13.4	
31...	0955	80513	80513	72.0	57.1	--	752	.1	.0	--	181	12.4	
31...	0956	80513	80513	72.0	60.0	--	752	.1	.0	--	188	11.6	
31...	0957	80513	80513	72.0	64.0	--	752	.1	.0	--	197	10.8	
31...	0958	80513	81213	72.0	65.0	--	752	.1	.0	--	198	10.6	
31...	0959	80513	80513	72.0	70.0	--	752	.1	.0	--	200	10.4	
31...	1000	80513	80513	72.0	71.6	--	752	.1	1	--	202	10.3	
SEP													
10...	0808	80513	80513	71.0	.70	--	747	6.3	81	7.8	158	27.1	
10...	0810	80513	80513	71.0	6.20	1.80	747	6.0	78	7.8	158	27.1	
10...	0811	80513	80513	71.0	10.0	--	747	5.8	74	7.7	158	27.1	
10...	0812	80513	80513	71.0	20.1	--	747	3.6	46	7.3	159	27.0	
10...	0813	80513	80513	71.0	23.8	--	747	3.8	48	7.3	158	26.9	
10...	0815	80513	80513	71.0	30.1	--	747	.7	9	7.0	164	26.2	
10...	0816	80513	80513	71.0	32.0	--	747	.1	2	7.0	179	25.8	
10...	0818	80513	80513	71.0	33.9	--	747	.1	1	7.0	204	24.6	
10...	0819	80513	80513	71.0	36.2	--	747	.1	2	7.0	203	22.6	
10...	0820	80513	80513	71.0	37.1	--	747	.1	1	7.0	198	21.5	
10...	0821	80513	80513	71.0	38.1	--	747	.1	1	6.9	195	20.2	
10...	0822	80513	80513	71.0	39.1	--	747	.1	1	6.9	192	19.6	
10...	0823	80513	80513	71.0	40.0	--	747	.1	1	6.9	192	19.2	
10...	0824	80513	80513	71.0	43.1	--	747	.1	1	6.9	188	17.9	
10...	0825	80513	80513	71.0	46.1	--	747	.1	1	6.9	190	16.9	
10...	0826	80513	80513	71.0	50.0	--	747	.1	1	6.9	192	15.8	
10...	0827	80513	80513	71.0	54.0	--	747	.1	1	6.9	195	14.7	
10...	0829	80513	80513	71.0	58.1	--	747	.1	1	6.9	203	13.6	
10...	0830	80513	80513	71.0	60.1	--	747	.1	.0	6.9	207	13.1	
10...	0832	80513	80513	71.0	65.0	--	747	.1	.0	6.9	214	12.2	
10...	0833	80513	80513	71.0	70.9	--	747	.1	.0	6.9	226	11.6	
Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT													
07...	1548	1.9	71	25.0	2.00	4.20	<.1	6.40	85	.30	.05	.04	<.02
07...	1551	1.9	71	25.0	2.00	4.20	<.1	6.40	90	.20	.05	.04	<.02
07...	1610	31	66	23.0	2.10	3.40	<.1	2.60	97	1.2	1.11	.86	<.02
30...	0812	3.5	71	25.0	2.00	4.40	<.1	6.20	91	.30	.12	.09	.05
30...	0815	3.6	71	25.0	2.00	4.40	<.1	6.20	89	.30	.12	.09	.05
30...	0825	74	71	25.0	2.20	3.60	<.1	1.00	110	1.6	1.42	1.10	<.02
NOV													
14...	0858	6.3	73	26.0	2.00	4.30	<.1	6.20	93	.30	--	<.01	.21
14...	0901	7.3	73	26.0	2.00	4.30	<.1	6.30	98	.40	--	<.01	.21
14...	0908	84	74	26.0	2.20	3.60	<.1	1.80	110	2.2	1.80	1.40	<.02
DEC													
11...	0828	4.8	76	27.0	2.00	4.40	<.1	6.40	111	.20	--	<.01	.29
11...	0831	4.7	76	27.0	2.00	4.40	<.1	6.40	99	.30	--	<.01	.30
11...	0837	19	79	28.0	2.10	4.90	<.1	6.80	99	.40	.05	.04	.25
JAN													
08...	1236	2.8	79	28.0	2.10	5.10	<.1	7.10	97	.40	.01	.01	.30
FEB													
11...	1352	1.9	81	29.0	2.20	6.20	<.1	10.0	116	.40	.01	.01	.36
MAR													
12...	1106	4.3	72	25.0	2.40	8.20	<.1	15.0	110	.40	.01	.01	.94
Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)
MAY													
07...	0848	1.7	61	21.0	2.00	6.20	<.1	11.0	90	<.20	--	<.01	2.43
07...	0855	1.2	69	24.0	2.10	5.80	<.1	10.0	101	<.20	.03	.02	--
07...	0904	5.6	77	27.0	2.30	6.50	<.1	11.0	107	<.20	.03	.02	--
JUL													
31...	0928	.76	63	22.0	2.00	4.90	<.1	8.80	89	.30	--	<.01	--
31...	0932	.83	63	22.0	2.00	4.80	<.1	8.60	101	.30	.01	.01	--
31...	0958	9.1	80	28.0	2.40	6.00	<.1	8.60	128	.80	.68	.53	--
SEP													
10...	0810	1.3	65	23.0	1.90	5.10	<.1	8.60	95	.20	--	<.01	--
10...	0813	4.8	66	23.0	2.00	5.30	<.1	8.40	97	.30	.04	.03	--
10...	0832	29	82	29.0	2.40	5.90	<.1	3.80	127	1.7	1.80	1.40	--

WHITE RIVER BASIN

07049200 BEAVER LAKE NEAR LOWELL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, as P mg/L (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, unfltrd recoverable, ug/L (01055)
OCT 01...	--	--	--	--	--	--	--	--	--	--	3.5	--	--
OCT 01...	--	--	--	--	--	--	--	--	--	--	3.6	--	--
OCT 07...	<.010	.26	--	<.01	<.02	<.02	--	2.4	2.5	E1	2.5	35	103
OCT 07...	<.010	.16	--	<.01	<.02	<.02	--	2.5	2.5	--	--	64	114
OCT 07...	<.010	.34	.276	.09	.07	.11	--	3.8	3.5	--	--	3940	2830
OCT 30...	<.010	.21	--	<.01	<.02	<.02	.35	2.2	2.3	E4	2.4	126	94
OCT 30...	<.010	.21	--	<.01	<.02	<.02	.35	2.2	2.2	--	--	128	97
OCT 30...	<.010	.50	.245	.08	.07	.15	--	4.1	3.6	--	--	5350	5170
NOV 14...	<.010	--	--	<.01	<.02	<.02	.51	2.2	2.2	E1	3.1	218	179
NOV 14...	<.010	--	--	<.01	<.02	<.02	.61	2.2	2.2	--	--	231	214
NOV 14...	<.010	.80	.092	.03	<.02	.12	--	4.5	3.8	--	--	3250	7290
DEC 11...	<.010	--	--	<.01	<.02	<.02	.49	2.1	2.2	<1	3.2	172	53
DEC 11...	<.010	--	--	<.01	<.02	<.02	.60	2.2	2.2	--	--	173	66
DEC 11...	<.010	.36	--	<.01	<.02	.03	.65	2.3	2.3	--	--	592	197
JAN 08...	<.010	.39	.031	.01	<.02	<.02	.70	2.8	2.9	E3	9.0	126	45
FEB 11...	<.010	.39	--	<.01	<.02	<.02	.76	3.0	3.0	<1	4.5	65	32
MAR 12...	<.010	.39	--	<.01	<.02	<.02	1.3	2.1	2.0	E2	5.8	130	54

Date	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, as N mg/L (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, as P mg/L (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)
MAY 07...	.55	.56	.033	.010	--	--	<.01	<.02	<.02	1.6	1.6	--	4.4
MAY 07...	--	.51	--	<.010	--	--	<.01	<.02	<.02	1.8	1.8	--	--
MAY 07...	--	.68	--	<.010	--	--	<.01	<.02	<.02	1.9	1.8	--	--
JUL 31...	--	<.02	--	<.010	--	--	<.01	<.02	<.02	2.5	2.4	E1	4.1
JUL 31...	--	<.02	--	<.010	.29	--	<.01	<.02	<.02	2.3	2.1	--	--
JUL 31...	--	<.02	--	<.010	.27	.061	.02	.03	.06	2.9	2.7	--	--
SEP 10...	--	<.02	--	<.010	--	--	<.01	<.02	<.02	2.3	2.4	E2	6.7
SEP 10...	--	<.02	--	<.010	.27	--	<.01	<.02	<.02	2.2	2.4	--	--
SEP 10...	--	<.02	--	<.010	.30	.399	.13	.13	.19	3.6	3.8	--	--

Date	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, unfltrd recoverable, ug/L (01055)
MAY 07...	55	14
MAY 07...	44	18
MAY 07...	191	179
JUL 31...	24	14
JUL 31...	38	53
JUL 31...	1130	2490
SEP 10...	46	38
SEP 10...	174	120
SEP 10...	4120	3450

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

113

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS

LOCATION.--Lat 36°19'56", long 94°01'08", in SE1/4NW1/4 sec.12, T.19 N., R.29 W., Benton County, Hydrologic Unit 11010001, at bridge on State Highway 12, 5.1 mi east of Rogers.

DRAINAGE AREA.--1,020 mi².

PERIOD OF RECORD.--Water years 1950, 1952, 1954, 1959-60, 1963, December 1975 to August 1995, April 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfiltered field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT												
09...	1226	80513	80513	107	.20	--	751	5.9	68	7.4	146	22.1
09...	1227	80513	81213	107	6.00	3.00	751	5.6	65	7.4	146	22.2
09...	1228	80513	80513	107	10.1	--	751	5.6	65	7.4	146	22.2
09...	1229	80513	80513	107	20.2	--	751	5.6	65	7.4	146	22.2
09...	1230	80513	81213	107	30.3	--	751	5.6	65	7.3	146	22.2
09...	1232	80513	80513	107	40.2	--	751	5.4	63	7.2	147	21.9
09...	1233	80513	80513	107	41.1	--	751	1.9	21	6.7	164	19.9
09...	1235	80513	80513	107	42.2	--	751	1.1	12	6.7	160	18.6
09...	1236	80513	80513	107	43.1	--	751	.8	9	6.6	156	17.9
09...	1237	80513	80513	107	45.1	--	751	.7	7	6.6	156	17.4
09...	1238	80513	80513	107	47.1	--	751	.6	6	6.6	152	16.6
09...	1239	80513	80513	107	50.1	--	751	.5	5	6.6	148	15.7
09...	1240	80513	80513	107	52.2	--	751	.4	4	6.6	143	15.0
09...	1241	80513	80513	107	55.1	--	751	.4	4	6.6	139	13.9
09...	1242	80513	80513	107	58.1	--	751	.4	3	6.5	132	12.9
09...	1243	80513	80513	107	60.2	--	751	.4	3	6.5	130	12.5
09...	1244	80513	80513	107	64.2	--	751	.3	3	6.5	127	11.5
09...	1245	80513	80513	107	70.2	--	751	.3	3	6.5	125	10.8
09...	1246	80513	81213	107	77.1	--	751	.3	3	6.5	127	10.1
09...	1247	80513	80513	107	80.3	--	751	.3	2	6.5	129	9.9
09...	1248	80513	80513	107	90.2	--	751	.3	2	6.5	135	9.4
09...	1249	80513	80513	107	100	--	751	.2	2	6.5	138	9.3
09...	1251	80513	80513	107	101	--	751	.2	2	6.6	139	9.2
09...	1252	80513	80513	107	107	--	751	.2	1	6.6	140	9.2
29...	1246	80513	80513	104	.70	--	742	7.2	77	7.4	143	17.0
29...	1247	80513	81213	104	6.00	2.70	742	7.0	75	7.4	142	17.0
29...	1248	80513	80513	104	10.0	--	742	7.1	75	7.3	142	17.0
29...	1249	80513	80513	104	20.0	--	742	7.0	74	7.3	143	17.0
29...	1250	80513	81213	104	30.0	--	742	6.9	73	7.3	143	17.0
29...	1251	80513	80513	104	40.0	--	742	7.0	74	7.3	143	17.0
29...	1252	80513	80513	104	50.0	--	742	6.9	73	7.3	143	17.0
29...	1254	80513	80513	104	56.0	--	742	3.0	31	6.8	146	16.2
29...	1255	80513	80513	104	57.0	--	742	.6	6	6.7	152	14.9
29...	1256	80513	80513	104	60.0	--	742	.4	4	6.7	150	14.2
29...	1257	80513	80513	104	65.0	--	742	.3	3	6.6	139	13.0
29...	1258	80513	80513	104	69.0	--	742	.4	4	6.6	138	11.9
29...	1259	80513	80513	104	70.0	--	742	.3	3	6.6	138	11.8
29...	1300	80513	80513	104	74.0	--	742	.3	3	6.6	136	10.8
29...	1301	80513	80513	104	80.2	--	742	.3	3	6.6	138	10.4
29...	1303	80513	80513	104	90.0	--	742	.3	3	6.7	144	9.9
29...	1304	80513	81213	104	98.0	--	742	.3	3	6.7	148	9.7
29...	1305	80513	80513	104	100	--	742	.3	3	6.8	149	9.7
29...	1306	80513	80513	104	104	--	742	.3	3	6.8	150	9.7
NOV												
14...	1025	80513	80513	106	.00	--	752	8.2	81	7.4	145	14.1
14...	1026	80513	81213	106	6.10	1.80	752	8.0	78	7.3	145	14.1
14...	1027	80513	80513	106	10.1	--	752	7.8	77	7.3	145	14.1
14...	1028	80513	80513	106	20.1	--	752	7.9	78	7.3	145	14.1
14...	1029	80513	81213	106	30.1	--	752	7.9	78	7.3	146	14.1
14...	1030	80513	80513	106	40.0	--	752	7.9	78	7.3	146	14.1
14...	1032	80513	80513	106	50.1	--	752	7.8	77	7.3	145	14.1
14...	1033	80513	80513	106	60.1	--	752	7.7	75	7.3	145	14.1
14...	1034	80513	80513	106	63.0	--	752	5.3	51	7.0	140	13.5
14...	1035	80513	80513	106	64.1	--	752	1.2	11	6.7	133	12.7
14...	1036	80513	80513	106	66.1	--	752	.4	4	6.6	131	11.6
14...	1037	80513	80513	106	70.1	--	752	.3	3	6.6	132	10.9
14...	1038	80513	80513	106	80.2	--	752	.3	3	6.7	138	10.1
14...	1039	80513	80513	106	90.1	--	752	.3	3	6.7	143	9.8
14...	1040	80513	81213	106	100	--	752	.2	2	6.7	146	9.7
14...	1041	80513	80513	106	106	--	752	.3	2	6.8	147	9.7
DEC												
10...	1128	80513	80513	100	.40	--	743	8.1	73	7.4	144	9.6
10...	1129	80513	81213	100	6.00	1.60	743	8.0	72	7.3	144	9.6
10...	1130	80513	80513	100	10.0	--	743	7.9	71	7.3	144	9.6
10...	1131	80513	80513	100	20.0	--	743	7.8	71	7.3	144	9.5
10...	1132	80513	81213	100	30.0	--	743	7.9	71	7.3	144	9.5
10...	1133	80513	80513	100	40.1	--	743	7.8	70	7.3	144	9.6
10...	1134	80513	80513	100	50.0	--	743	7.8	70	7.3	144	9.6
10...	1135	80513	80513	100	60.0	--	743	7.8	70	7.3	144	9.5
10...	1136	80513	80513	100	70.0	--	743	7.8	70	7.3	143	9.5
10...	1137	80513	80513	100	80.0	--	743	8.2	73	7.4	141	9.4
10...	1138	80513	80513	100	90.0	--	743	8.2	73	7.4	142	9.3
10...	1139	80513	81213	100	97.0	--	743	8.2	73	7.4	142	9.3
10...	1140	80513	80513	100	100	--	743	8.1	72	7.4	142	9.2

WHITE RIVER BASIN

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
SEP												
10...	0954	80513	80513	103	.60	--	747	6.1	79	8.0	157	27.0
10...	0955	80513	80513	103	6.10	2.60	747	5.9	76	8.0	157	27.0
10...	0956	80513	80513	103	10.2	--	747	6.0	77	8.0	157	27.0
10...	0957	80513	80513	103	20.1	--	747	5.9	75	7.9	157	26.9
10...	0958	80513	80513	103	30.1	--	747	5.4	69	7.8	157	26.8
10...	1000	80513	80513	103	33.0	--	747	.4	5	6.9	163	25.8
10...	1001	80513	80513	103	34.1	--	747	.1	2	6.9	175	24.1
10...	1002	80513	80513	103	35.1	--	747	.1	1	6.8	169	22.7
10...	1003	80513	80513	103	36.0	--	747	.1	.0	6.8	166	21.7
10...	1004	80513	80513	103	38.0	--	747	.1	.0	6.8	161	20.6
10...	1005	80513	80513	103	40.0	--	747	.1	.0	6.7	157	19.2
10...	1006	80513	80513	103	42.0	--	747	.1	.0	6.7	150	18.2
10...	1007	80513	80513	103	45.1	--	747	.1	.0	6.7	146	17.1
10...	1008	80513	80513	103	48.1	--	747	.1	1	6.7	147	16.2
10...	1009	80513	80513	103	50.2	--	747	.1	.0	6.7	150	15.7
10...	1010	80513	80513	103	54.0	--	747	.1	.0	6.7	156	14.5
10...	1011	80513	80513	103	60.1	--	747	.1	.0	6.7	166	13.2
10...	1012	80513	80513	103	65.0	--	747	.1	.0	6.7	174	12.2
10...	1013	80513	80513	103	70.1	--	747	.1	.0	6.8	180	11.5
10...	1014	80513	80513	103	80.1	--	747	.1	.0	6.8	192	10.3
10...	1015	80513	80513	103	90.1	--	747	.1	.0	6.9	200	9.5
10...	1018	80513	80513	103	97.2	--	747	.1	.0	6.9	202	9.2
10...	1019	80513	80513	103	100	--	747	.1	.0	6.9	203	9.1
10...	1020	80513	80513	103	103	--	747	.1	.0	7.0	206	9.1

Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap., 180degC, mg/L (70300)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)
OCT													
09...	1227	1.4	64	22.5	1.90	3.75	.1	6.52	81	<.20	.03	.02	--
09...	1230	1.5	65	23.0	1.90	3.70	<.1	6.50	81	<.20	.03	.02	--
09...	1246	20	57	19.8	1.87	3.59	.1	6.13	86	.70	.57	.44	.885
29...	1247	1.2	62	22.0	1.80	3.70	<.1	6.40	90	.20	.03	.02	--
29...	1250	1.3	62	22.0	1.80	3.80	<.1	6.40	85	.20	.04	.03	--
29...	1304	62	57	20.0	1.80	3.40	<.1	5.30	93	1.2	.75	.58	--

Date	Time	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (71856)	Organic nitrogen, water, unfltrd, mg/L (00605)	Orthophosphate, water, fltrd, mg/L as P (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV													
14...	1026	2.2	65	23.0	1.90	3.70	<.1	6.40	82	.30	.01	.01	--
14...	1029	2.5	65	23.0	1.90	3.80	<.1	6.50	88	<.20	.03	.02	--
14...	1040	37	57	20.0	1.80	3.40	<.1	5.70	83	.90	.67	.52	--

Date	Time	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (71856)	Organic nitrogen, water, unfltrd, mg/L (00605)	Orthophosphate, water, fltrd, mg/L as P (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT													
09...	--	<.02	--	<.010	--	--	<.01	.03	.03	--	2.3	2.2	<1
09...	--	<.02	--	<.010	--	--	<.01	<.02	<.02	--	2.3	2.3	--
09...	.20	.24	.131	.040	.26	--	<.01	<.02	.05	.94	2.8	2.8	--
29...	--	<.02	--	<.010	.18	--	<.01	<.02	<.02	--	2.1	2.0	E5
29...	--	<.02	--	<.010	.17	--	<.01	<.02	<.02	--	2.0	2.0	--
29...	--	<.02	--	<.010	.62	.092	.03	<.02	1.00	--	2.9	2.7	--
NOV													
14...	--	.07	--	<.010	.29	--	<.01	<.02	<.02	.37	1.9	1.9	E2
14...	--	.06	--	<.010	--	--	<.01	<.02	<.02	--	2.0	2.0	--
14...	--	<.02	--	<.010	.38	--	<.01	.05	.07	--	2.6	3.0	--

Date	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, recoverable, ug/L (01045)	Manganese, water, recoverable, ug/L (01055)
OCT			
09...	2.1	11	92
09...	--	12	91
09...	--	1050	2580
29...	2.2	32	70
29...	--	30	71
29...	--	2240	4540
NOV			
14...	2.5	63	103
14...	--	72	129
14...	--	1380	4050

WHITE RIVER BASIN

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
DEC													
10...	1129	4.0	68	24.0	1.90	3.80	<.1	6.40	87	.30	--	<.01	.14
10...	1132	4.3	68	24.0	1.90	3.80	<.1	6.40	85	.20	--	<.01	.14
10...	1139	6.6	68	24.0	1.90	3.80	<.1	6.60	82	.40	.04	.03	.08
JAN													
06...	1326	3.4	68	24.0	1.90	3.80	<.1	6.50	86	.40	--	<.01	.14
FEB													
11...	1131	1.9	68	24.0	1.90	4.00	<.1	6.60	91	.20	--	<.01	.16
MAR													
11...	0802	1.4	71	25.0	2.00	4.40	<.1	6.90	94	<.20	--	<.01	.21

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC col/100 mL (31625)	Chlorophyll a, phytoplankton, fluoro, ug/L (70953)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, unfltrd recoverable, ug/L (01055)
DEC												
10...	<.010	--	<.01	<.02	<.02	.44	2.0	2.0	<1	2.4	110	204
10...	<.010	--	<.01	<.02	<.02	.34	2.1	2.0	--	--	114	233
10...	<.010	.37	<.01	<.02	<.02	.48	2.0	2.0	--	--	207	244
JAN												
06...	<.010	--	<.01	<.02	<.02	.54	2.2	2.3	E4	5.1	92	47
FEB												
11...	<.010	--	<.01	<.02	<.02	.36	3.2	3.1	<1	4.5	64	39
MAR												
11...	<.010	--	<.01	<.02	<.02	--	2.1	2.2	<1	2.7	53	36

Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)
MAY													
07...	0711	.90	69	24.0	2.10	5.30	<.1	9.40	91	<.20	--	<.01	--
07...	0715	.81	68	24.0	2.00	5.10	<.1	9.20	99	<.20	--	<.01	--
07...	0726	1.7	71	25.0	2.10	4.80	<.1	8.40	92	.30	--	<.01	--
JUL													
31...	0724	.63	66	23.0	2.10	4.90	<.1	8.60	92	.30	.01	.01	--
31...	0737	5.0	66	23.0	2.00	4.70	<.1	8.20	92	.30	.04	.03	--
31...	0758	3.0	79	28.0	2.30	5.50	<.1	9.20	113	.40	.24	.19	1.68

Date	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (71856)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC col/100 mL (31625)	Chlorophyll a, phytoplankton, fluoro, ug/L (70953)
MAY													
07...	--	.35	--	<.010	--	<.01	<.02	<.02	--	1.9	1.8	--	6.3
07...	--	.34	--	<.010	--	<.01	<.02	<.02	--	1.9	1.8	--	--
07...	--	.39	--	<.010	--	<.01	<.02	<.02	.69	1.9	1.9	--	--
JUL													
31...	--	<.02	--	<.010	.29	<.01	<.02	<.02	--	2.2	2.3	<1	3.0
31...	--	<.02	--	<.010	.27	<.01	<.02	<.02	--	2.3	2.3	--	--
31...	.38	.41	.099	.030	.21	<.01	<.02	<.02	.81	2.1	2.1	--	--

Date	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, unfltrd recoverable, ug/L (01055)
MAY		
07...	23	11
07...	21	12
07...	44	152
JUL		
31...	17	15
31...	44	456
31...	71	1400

WHITE RIVER BASIN

117

07049500 BEAVER LAKE AT HIGHWAY 12 BRIDGE NEAR ROGERS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, NTU (00076)	Hard- ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
SEP													
10...	0955	.80	66	23.0	2.00	4.80	<.1	8.40	85	<.20	.01	.01	<.02
10...	0958	1.4	66	23.0	2.00	4.80	<.1	8.30	87	<.20	--	<.01	<.02
10...	1018	3.1	82	29.0	2.30	5.90	<.1	7.70	105	.90	.90	.70	<.02

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro- gen, water, unfltrd mg/L (00605)	Ortho- phos- phate, water, fltrd, mg/L as P (00660)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Iron, water, unfltrd recover -able, ug/L (01045)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)
SEP												
10...	<.010	--	--	<.01	<.02	<.02	2.0	2.2	E1	2.8	18	31
10...	<.010	--	--	<.01	<.02	<.02	2.2	2.0	--	--	45	88
10...	<.010	.20	.123	.04	.06	.07	3.1	3.0	--	--	1690	3440

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS

LOCATION.--Lat 36°25'15", long 93°50'50", in NW1/4NW1/4 sec.10, T.20 N., R.27 W., Carroll County, Hydrologic Unit 11010001, at dam on White River, 6.0 mi west of Eureka Springs, and at mile 609.0.

PERIOD RECORD.--December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Table with columns: Date, Time, Agency collecting sample, Agency analyzing sample, Reservoir depth, Sampling depth, Transparency Secchi disc, Barometric pressure, Dissolved oxygen, pH, Specific conductance, Temperature. Rows include data for months OCT, 24, and 29.

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
MAR												
18...	1536	80513	80513	178	80.0	--	736	9.7	80	7.5	140	5.7
18...	1537	80513	80513	178	90.0	--	736	9.7	80	7.5	140	5.6
18...	1538	80513	80513	178	100	--	736	9.7	80	7.4	140	5.6
18...	1539	80513	80513	178	110	--	736	9.6	79	7.4	140	5.6
18...	1540	80513	80513	178	120	--	736	9.6	79	7.5	141	5.5
18...	1541	80513	80513	178	130	--	736	9.4	77	7.4	141	5.5
18...	1542	80513	80513	178	140	--	736	9.3	77	7.4	141	5.5
18...	1543	80513	80513	178	150	--	736	9.3	77	7.4	142	5.5
18...	1544	80513	80513	178	160	--	736	9.2	76	7.4	142	5.5
18...	1545	80513	80513	178	170	--	736	9.2	76	7.4	142	5.5
18...	1546	80513	80513	178	178	--	736	8.9	73	7.4	142	5.5
MAY												
06...	1140	80513	80513	179	3.70	--	730	9.6	112	8.2	147	21.0
06...	1145	80513	81213	179	5.90	5.20	730	10.1	113	8.4	144	18.5
06...	1146	80513	80513	179	10.0	--	730	10.3	114	8.4	144	18.1
06...	1147	80513	80513	179	20.1	--	730	10.1	110	8.3	144	17.4
06...	1148	80513	80513	179	24.0	--	730	10.6	110	8.3	143	15.4
06...	1149	80513	81213	179	30.0	--	730	10.8	109	8.2	143	14.2
06...	1150	80513	80513	179	35.1	--	730	11.0	107	8.1	143	12.1
06...	1151	80513	80513	179	39.9	--	730	10.9	104	8.0	143	11.4
06...	1152	80513	80513	179	45.1	--	730	10.8	102	8.0	143	10.7
06...	1153	80513	80513	179	50.0	--	730	10.7	99	8.0	143	10.2
06...	1154	80513	80513	179	59.7	--	730	10.4	94	7.8	143	8.8
06...	1155	80513	80513	179	70.8	--	730	10.4	89	7.7	142	6.8
06...	1156	80513	80513	179	80.0	--	730	10.3	87	7.7	142	6.5
06...	1157	80513	80513	179	89.7	--	730	10.2	87	7.7	142	6.3
06...	1158	80513	80513	179	100	--	730	10.3	86	7.7	142	6.1
06...	1159	80513	80513	179	110	--	730	10.1	85	7.7	142	6.1
06...	1200	80513	80513	179	120	--	730	10.0	84	7.7	142	6.0
06...	1201	80513	80513	179	130	--	730	10.1	85	7.8	142	5.9
06...	1202	80513	80513	179	140	--	730	10.1	84	7.8	143	5.8
06...	1203	80513	80513	179	150	--	730	10.1	84	7.8	143	5.8
06...	1204	80513	80513	179	160	--	730	10.0	84	7.8	143	5.7
06...	1205	80513	80513	179	170	--	730	10.0	83	7.8	143	5.7
06...	1206	80513	80513	179	180	--	730	9.7	81	7.8	144	5.7
06...	1215	80513	81213	179	179	--	730	10.7	89	7.8	143	5.7
JUL												
30...	1032	80513	80513	177	.10	--	751	7.4	97	8.6	149	28.8
30...	1033	80513	81213	177	6.10	4.90	751	7.4	97	8.5	149	28.8
30...	1034	80513	80513	177	10.1	--	751	7.3	96	8.4	149	28.8
30...	1035	80513	80513	177	20.0	--	751	7.3	96	8.3	149	28.8
30...	1036	80513	80513	177	21.1	--	751	7.5	99	8.2	149	28.5
30...	1037	80513	80513	177	22.0	--	751	8.4	107	8.2	148	27.1
30...	1038	80513	80513	177	23.1	--	751	9.4	118	8.2	148	26.4
30...	1039	80513	80513	177	24.1	--	751	9.7	121	8.2	147	25.9
30...	1040	80513	80513	177	25.1	--	751	10.2	126	8.2	147	25.3
30...	1041	80513	80513	177	26.1	--	751	10.7	129	8.2	147	24.1
30...	1042	80513	80513	177	27.1	--	751	11.0	129	8.2	146	22.6
30...	1043	80513	80513	177	28.0	--	751	11.0	128	8.1	146	22.1
30...	1044	80513	80513	177	29.1	--	751	11.0	127	8.2	145	21.5
30...	1045	80513	81213	177	30.1	--	751	10.8	123	8.2	145	21.0
30...	1046	80513	80513	177	31.0	--	751	10.7	121	8.2	145	20.7
30...	1047	80513	80513	177	32.0	--	751	10.4	117	8.2	145	20.4
30...	1048	80513	80513	177	34.1	--	751	10.5	117	8.2	145	19.8
30...	1049	80513	80513	177	35.1	--	751	10.2	111	8.2	145	18.9
30...	1050	80513	80513	177	36.1	--	751	10.0	108	8.2	144	18.2
30...	1051	80513	80513	177	37.0	--	751	10.0	106	8.2	144	17.7
30...	1052	80513	80513	177	38.0	--	751	9.6	102	8.1	144	17.3
30...	1053	80513	80513	177	39.0	--	751	9.5	100	8.1	144	17.0
30...	1054	80513	80513	177	40.1	--	751	9.5	99	8.2	144	16.6
30...	1055	80513	80513	177	42.0	--	751	9.2	94	8.0	144	16.0
30...	1056	80513	80513	177	45.1	--	751	8.7	88	7.9	144	15.0
30...	1057	80513	80513	177	50.1	--	751	8.3	81	7.7	144	14.0
30...	1058	80513	80513	177	54.0	--	751	7.6	73	7.7	143	12.9
30...	1059	80513	80513	177	58.1	--	751	7.5	71	7.7	142	12.0
30...	1100	80513	80513	177	60.1	--	751	7.4	69	7.8	142	11.6
30...	1101	80513	80513	177	66.0	--	751	7.1	65	7.8	142	10.6
30...	1102	80513	80513	177	70.1	--	751	6.9	63	7.9	142	10.2
30...	1103	80513	80513	177	78.0	--	751	6.9	61	7.9	141	9.2
30...	1104	80513	80513	177	80.1	--	751	6.7	58	8.0	141	8.8
30...	1105	80513	80513	177	90.1	--	751	6.7	57	8.1	140	7.9
30...	1106	80513	80513	177	100	--	751	6.7	57	8.2	140	7.6
30...	1107	80513	80513	177	110	--	751	6.7	56	8.2	140	7.1
30...	1108	80513	80513	177	120	--	751	6.6	55	8.3	140	6.8
30...	1109	80513	80513	177	130	--	751	6.5	54	8.4	140	6.6
30...	1110	80513	80513	177	140	--	751	--	--	8.4	139	6.5
30...	1111	80513	80513	177	150	--	751	6.2	51	8.5	139	6.4
30...	1112	80513	80513	177	160	--	751	6.0	49	8.5	140	6.4
30...	1113	80513	80513	177	170	--	751	5.8	47	8.6	140	6.4
30...	1116	80513	81213	177	171	--	751	5.7	46	8.7	140	6.4
30...	1117	80513	80513	177	177	--	751	5.6	46	8.8	140	6.4

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00027)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG												
13...	0731	80513	80513	183	.40	6.40	748	7.4	97	8.4	154	27.8
13...	0732	80513	80513	183	10.1	--	748	7.5	97	8.4	154	27.8
13...	0733	80513	80513	183	20.0	--	748	7.5	97	8.4	154	27.8
13...	0735	80513	80513	183	24.1	--	748	9.8	125	8.6	152	26.7
13...	0736	80513	80513	183	25.0	--	748	10.5	131	8.6	151	25.6
13...	0737	80513	80513	183	26.2	--	748	10.9	134	8.6	151	24.8
13...	0738	80513	80513	183	28.0	--	748	11.2	134	8.6	150	23.1
13...	0739	80513	80513	183	29.9	--	748	10.9	128	8.5	150	22.2
13...	0740	80513	80513	183	32.0	--	748	10.7	122	8.4	150	21.1
13...	0741	80513	80513	183	34.1	--	748	10.5	118	8.2	150	20.3
13...	0742	80513	80513	183	36.0	--	748	9.7	107	7.9	150	18.9
13...	0743	80513	80513	183	38.0	--	748	9.2	99	7.7	150	17.7
13...	0744	80513	80513	183	40.1	--	748	8.9	94	7.5	150	17.3
13...	0745	80513	80513	183	45.0	--	748	8.6	89	7.3	149	16.0
13...	0746	80513	80513	183	50.0	--	748	7.8	78	7.1	149	14.8
13...	0747	80513	80513	183	60.2	--	748	6.6	63	6.8	148	12.0
13...	0748	80513	80513	183	70.1	--	748	6.2	57	6.7	147	10.6
13...	0749	80513	80513	183	80.1	--	748	6.0	54	6.6	146	9.5
13...	0750	80513	80513	183	90.0	--	748	6.1	53	6.6	146	8.5
13...	0751	80513	80513	183	100	--	748	6.2	53	6.5	146	7.8
13...	0752	80513	80513	183	110	--	748	6.1	52	6.5	146	7.5
13...	0753	80513	80513	183	120	--	748	6.1	51	6.5	145	7.0
13...	0754	80513	80513	183	130	--	748	5.8	49	6.5	145	6.8
13...	0755	80513	80513	183	140	--	748	5.7	47	6.5	144	6.7
13...	0756	80513	80513	183	150	--	748	5.5	46	6.5	145	6.6
13...	0757	80513	80513	183	160	--	748	5.1	43	6.5	145	6.5
13...	0758	80513	80513	183	170	--	748	5.0	42	6.5	145	6.5
13...	0759	80513	80513	183	180	--	748	4.8	40	6.5	145	6.5
13...	0800	80513	80513	183	183	--	748	4.8	40	6.5	145	6.5
SEP												
09...	0829	80513	80513	180	.50	--	747	8.4	106	8.6	154	26.3
09...	0830	80513	80513	180	6.10	5.30	747	8.2	104	8.6	154	26.4
09...	0831	80513	80513	180	10.2	--	747	8.4	107	8.6	153	26.4
09...	0833	80513	80513	180	20.1	--	747	8.3	106	8.6	153	26.5
09...	0835	80513	80513	180	30.0	--	747	8.5	107	8.6	153	26.4
09...	0836	80513	80513	180	32.0	--	747	9.4	117	8.5	152	25.3
09...	0837	80513	80513	180	33.0	--	747	10.5	128	8.5	150	24.1
09...	0838	80513	80513	180	34.2	--	747	10.6	125	8.4	149	22.6
09...	0839	80513	80513	180	35.1	--	747	10.3	119	8.2	149	21.7
09...	0840	80513	80513	180	36.1	--	747	10.2	117	8.1	149	21.2
09...	0841	80513	80513	180	37.1	--	747	9.8	112	8.0	149	20.7
09...	0842	80513	80513	180	38.1	--	747	9.2	104	7.9	149	20.2
09...	0843	80513	80513	180	40.1	--	747	8.7	96	7.6	150	19.1
09...	0844	80513	80513	180	42.0	--	747	8.1	88	7.5	150	18.3
09...	0845	80513	80513	180	44.0	--	747	8.0	85	7.4	149	17.6
09...	0846	80513	80513	180	47.0	--	747	7.7	81	7.3	148	16.6
09...	0847	80513	80513	180	50.1	--	747	7.2	74	7.2	147	15.8
09...	0848	80513	80513	180	54.1	--	747	6.5	65	7.1	147	14.9
09...	0849	80513	80513	180	58.2	--	747	5.9	58	7.0	147	13.8
09...	0850	80513	80513	180	60.1	--	747	5.7	55	7.0	147	13.4
09...	0851	80513	80513	180	65.0	--	747	5.3	50	6.9	146	12.3
09...	0852	80513	80513	180	70.1	--	747	5.3	49	6.9	145	11.5
09...	0853	80513	80513	180	75.0	--	747	5.2	48	6.9	145	10.8
09...	0854	80513	80513	180	80.1	--	747	5.4	49	6.9	145	10.1
09...	0855	80513	80513	180	90.3	--	747	5.5	49	6.9	145	9.1
09...	0856	80513	80513	180	100	--	747	5.5	48	6.9	146	8.4
09...	0857	80513	80513	180	110	--	747	5.3	46	6.8	146	7.8
09...	0858	80513	80513	180	120	--	747	5.1	43	6.8	145	7.4
09...	0859	80513	80513	180	130	--	747	4.9	42	6.8	144	7.1
09...	0900	80513	80513	180	140	--	747	4.6	39	6.8	144	6.9
09...	0901	80513	80513	180	150	--	747	4.3	36	6.8	144	6.8
09...	0902	80513	80513	180	160	--	747	3.9	32	6.7	144	6.8
09...	0903	80513	80513	180	170	--	747	3.6	30	6.7	144	6.8
09...	0906	80513	80513	180	174	--	747	3.6	30	6.8	144	6.8
09...	0907	80513	80513	180	180	--	747	3.4	28	6.7	144	6.8

Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT									
09...	0915	.73	69	24.0	2.30	3.90	<.1	7.60	77
09...	0922	.99	69	23.6	2.35	3.84	.1	7.50	87
09...	0952	1.7	69	24.0	2.30	4.50	<.1	8.60	86
29...	0852	.36	67	23.0	2.20	4.00	<.1	7.60	86
29...	0855	.50	67	23.0	2.20	4.00	<.1	7.60	80
29...	0916	4.2	67	23.0	2.20	4.50	<.1	8.40	95
NOV									
13...	1420	.49	67	23.0	2.20	3.90	<.1	7.70	89
13...	1423	.53	67	23.0	2.30	3.90	<.1	7.60	86
13...	1444	4.4	67	23.0	2.20	4.30	<.1	8.40	90
DEC									
10...	0832	.63	69	24.0	2.30	4.00	<.1	7.80	85
10...	0835	.72	69	24.0	2.30	4.00	<.1	7.80	87
10...	0850	3.7	72	25.0	2.30	4.40	<.1	8.00	101

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Turbidity, NTU (00076)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)
JAN									
07...	0825	1.0	67	23.0	2.30	4.00	<.1	7.90	82
FEB									
11...	0923	.53	67	23.0	2.20	4.00	<.1	7.80	88
MAR									
11...	1016	.60	64	22.0	2.20	4.00	<.1	7.60	82
MAY									
06...	1145	.66	64	22.0	2.20	3.70	<.1	7.30	89
06...	1149	.62	64	22.0	2.20	3.70	<.1	7.30	86
06...	1215	.53	67	23.0	2.30	3.90	<.1	7.60	92
JUL									
30...	1033	2.2	67	23.0	2.40	3.80	<.1	7.70	88
30...	1045	1.5	67	23.0	2.30	3.69	.1	7.72	105
30...	1116	1.3	64	22.0	2.30	3.70	<.1	7.60	93
SEP									
09...	0830	.71	67	23.0	2.30	3.90	<.1	7.80	92
09...	0835	.53	67	23.0	2.20	3.90	<.1	7.80	94
09...	0906	1.3	66	23.0	2.10	3.70	<.1	7.30	96

Date	Time	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L (71856)	Nitrite, water, fltrd, mg/L as N (00613)
OCT									
09...	0915	.20	.03	.02	--	--	.07	--	<.010
09...	0922	<.20	.03	.02	--	--	.07	--	<.010
09...	0952	<.20	.05	.04	--	--	.58	--	<.010
29...	0852	.30	--	<.01	--	--	.18	--	<.010
29...	0855	.30	--	<.01	--	--	.17	--	<.010
29...	0916	.30	.09	.07	2.12	.48	.50	.066	.020
NOV									
13...	1420	.30	.01	.01	--	--	.23	--	<.010
13...	1423	.20	.03	.02	--	--	.24	--	<.010
13...	1444	.30	.08	.06	2.43	.55	.56	.033	.010
DEC									
10...	0832	.20	--	<.01	--	--	.34	--	<.010
10...	0835	.20	--	<.01	--	--	.34	--	<.010
10...	0850	.50	.26	.20	1.51	.34	.36	.066	.020
JAN									
07...	0825	.40	.03	.02	--	--	.34	--	<.010
FEB									
11...	0923	<.20	--	<.01	--	--	.35	--	<.010
MAR									
11...	1016	<.20	--	<.01	--	--	.34	--	<.010
MAY									
06...	1145	<.20	--	<.01	--	--	.24	--	<.010
06...	1149	.20	--	<.01	--	--	.24	--	<.010
06...	1215	<.20	--	<.01	--	--	.37	--	<.010
JUL									
30...	1033	.20	--	<.01	--	--	.03	--	<.010
30...	1045	.20	--	<.01	--	--	.12	--	<.010
30...	1116	<.20	--	<.01	--	--	.35	--	<.010
SEP									
09...	0830	<.20	.01	.01	--	--	<.02	--	<.010
09...	0835	.20	.01	.01	--	--	.06	--	<.010
09...	0906	<.20	.01	.01	--	--	.34	--	<.010

Date	Time	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT									
09...	0915	.18	<.01	.03	.03	.27	2.5	2.7	<1
09...	0922	--	<.01	.03	.03	--	2.6	2.6	--
09...	0952	--	<.01	.03	.03	--	2.1	2.0	--
29...	0852	--	<.01	<.02	<.02	.48	2.2	2.1	<1
29...	0855	--	<.01	<.02	<.02	.47	2.4	2.3	--
29...	0916	.23	<.01	<.02	<.02	.80	1.9	1.9	--
NOV									
13...	1420	.29	<.01	<.02	<.02	.53	2.1	2.2	<1
13...	1423	.18	<.01	<.02	<.02	.44	2.1	2.1	--
13...	1444	.24	<.01	<.02	.02	.86	1.8	1.8	--
DEC									
10...	0832	--	<.01	<.02	<.02	.54	2.1	2.2	<1
10...	0835	--	<.01	<.02	<.02	.54	2.0	2.0	--
10...	0850	.30	<.01	<.02	<.02	.86	1.9	1.9	--
JAN									
07...	0825	.38	<.01	<.02	<.02	.74	2.2	2.1	<1
FEB									
11...	0923	--	<.01	<.02	<.02	--	2.8	3.4	E1

WHITE RIVER BASIN

07049690 BEAVER LAKE NEAR EUREKA SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Organic nitro- gen, water, unfltrd mg/L (00605)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)
MAR									
11...	1016	--	<.01	<.02	<.02	--	2.1	2.1	<1
MAY									
06...	1145	--	<.01	<.02	<.02	--	1.8	1.8	E3
06...	1149	--	<.01	<.02	<.02	.44	1.8	1.8	--
06...	1215	--	<.01	<.02	<.02	--	1.8	1.7	--
JUL									
30...	1033	--	<.01	<.02	<.02	.23	2.3	2.5	<1
30...	1045	--	<.01	<.02	<.02	.32	2.4	2.5	--
30...	1116	--	<.01	<.02	<.02	--	1.9	1.9	--
SEP									
09...	0830	--	<.01	<.02	<.02	--	2.5	2.5	E1
09...	0835	.19	<.01	<.02	<.02	.26	2.3	2.5	--
09...	0906	--	<.01	<.02	<.02	--	2.0	1.9	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

07049691 WHITE RIVER AT BEAVER DAM NEAR EUREKA SPRINGS--CONTINUED

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.7	9.0	9.9	12.5	10.4	11.4	9.7	7.9	8.5	8.3	6.4	7.2
2	10.6	9.0	9.8	12.9	10.1	11.1	9.7	8.0	9.0	---	---	---
3	11.1	9.2	9.9	12.4	10.3	11.0	9.8	8.2	9.1	---	---	---
4	11.0	9.2	9.9	13.0	10.2	11.2	10.0	7.3	8.2	8.2	6.6	7.4
5	11.0	9.2	10.2	12.6	10.1	11.2	9.4	7.3	7.8	8.2	6.0	7.4
6	11.1	9.4	10.2	12.7	10.2	11.3	10.7	7.2	7.9	8.2	6.6	7.4
7	11.2	9.4	10.4	12.2	9.8	10.6	9.5	7.2	8.0	8.1	6.6	7.2
8	11.4	9.5	10.6	11.8	9.8	10.3	10.3	7.2	8.0	8.2	6.4	7.2
9	11.1	9.9	10.5	---	---	---	10.1	7.4	8.7	---	---	---
10	11.1	9.5	10.4	---	---	---	9.7	8.0	8.9	---	---	---
11	11.2	9.4	10.1	---	---	---	9.5	7.8	8.7	---	---	---
12	10.4	9.5	9.7	---	---	---	9.8	6.9	8.2	---	---	---
13	11.1	9.4	10	---	---	---	9.7	7.5	8.5	---	---	---
14	11.6	9.8	10.8	---	---	---	9.7	7.8	8.8	---	---	---
15	11.7	9.9	10.8	---	---	---	9.7	7.1	8.4	---	---	---
16	12.1	9.9	10.7	---	---	---	9.7	7.1	8.4	---	---	---
17	11.6	9.9	10.7	---	---	---	10.1	7.0	8.3	7.7	6.3	7.1
18	11.1	9.8	10.4	---	---	---	9.8	6.4	7.6	7.8	6.5	7.1
19	11.4	9.6	10.5	---	---	---	8.4	6.3	6.7	8.2	6.3	7.2
20	11.4	9.7	10.7	---	---	---	8.6	6.3	6.7	8.1	6.3	7.3
21	11.7	9.9	10.8	---	---	---	9.1	6.1	6.8	8.2	6.3	7.1
22	11.8	9.9	10.8	---	---	---	8.4	6.0	6.8	8.0	6.2	7.0
23	11.5	10.0	10.6	---	---	---	9.5	5.9	6.7	7.8	6.5	7.1
24	12.6	10.1	10.9	---	---	---	8.9	5.7	6.5	8.3	6.3	7.1
25	12.4	10.0	10.9	---	---	---	8.2	5.9	6.6	8.9	7.2	8.0
26	11.9	10.2	11.1	---	---	---	8.8	5.9	7.2	8.3	7.3	7.8
27	11.9	10.2	11.1	---	---	---	8.5	5.7	6.9	8.9	6.9	7.8
28	12.1	10.3	11.2	---	---	---	8.0	5.6	6.7	9.3	7.0	8.2
29	12.5	10.4	11.3	---	---	---	7.8	5.8	7.0	8.5	7.0	8.0
30	13.1	10.5	11.2	---	---	---	8.2	6.5	7.4	8.4	7.2	7.7
31	---	---	---	10.0	7.7	8.4	8.0	6.2	7.1	---	---	---
MONTH	13.1	9.0	10.5	---	---	---	10.7	5.6	7.7	---	---	---

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.4	9.1	9.3	9.9	8.4	9.3	10.1	7.5	8.3	---	---	---
2	9.4	9.1	9.3	9.6	8.6	9.1	10.1	7.9	9.3	---	---	---
3	9.4	9.2	9.4	9.2	8.6	8.9	9.7	8.1	9.2	---	---	---
4	9.5	9.2	9.3	10.8	8.1	9.4	9.5	7.9	8.8	---	---	---
5	11.3	8.5	9.5	9.8	8.9	9.5	9.7	7.6	9.0	---	---	---
6	10.3	8.6	9.3	11.4	8.0	9.3	9.6	7.5	9.0	---	---	---
7	11.5	8.2	9.4	10.6	7.8	8.9	10.0	7.9	8.7	---	---	---
8	9.9	8.3	9.1	10.6	8.4	9.2	9.7	8.1	8.8	---	---	---
9	10.0	9.0	9.3	10.4	9.3	9.6	9.4	8.4	9.1	---	---	---
10	10.1	9.0	9.4	11.2	8.5	9.6	9.9	8.2	9.2	---	---	---
11	9.9	8.9	9.2	11.9	7.9	9.2	9.6	8.3	9.1	---	---	---
12	10.0	8.8	9.2	11.4	7.7	9.4	9.8	8.6	9.2	---	---	---
13	9.6	7.9	8.9	10.4	7.9	9.5	9.4	8.6	9.0	---	---	---
14	10.2	7.5	9.0	10.1	8.7	9.6	9.7	8.2	8.7	---	---	---
15	13.2	7.9	9.6	9.9	8.6	9.2	10.0	8.2	8.8	---	---	---
16	9.7	8.8	9.3	10.2	7.7	8.6	9.9	8.2	9.1	---	---	---
17	10.5	8.5	9.4	10.7	7.7	8.8	9.9	8.9	9.4	---	---	---
18	9.9	8.8	9.4	10.4	8.0	9.5	10.1	9.3	9.7	---	---	---
19	9.6	9.1	9.3	11.0	7.9	9.1	9.8	8.8	9.2	---	---	---
20	10.1	8.9	9.4	11.6	7.9	9.2	9.3	8.0	8.5	---	---	---
21	10.1	8.8	9.3	11.2	8.0	9.2	9.6	8.0	8.7	---	---	---
22	9.6	8.9	9.4	11.0	7.9	9.5	9.8	8.3	8.8	---	---	---
23	9.6	9.1	9.4	10.6	7.8	8.9	9.2	7.1	8.6	---	---	---
24	9.6	8.9	9.4	10.3	8.0	8.9	8.7	7.4	8.1	---	---	---
25	---	---	---	9.8	7.7	8.8	8.9	7.4	7.9	---	---	---
26	---	---	---	10.2	8.1	9.0	9.0	7.4	8.1	---	---	---
27	9.3	8.0	8.8	10.3	7.5	8.3	9.0	7.7	8.0	---	---	---
28	9.6	8.8	9.3	10.2	7.5	8.3	9.4	7.2	8.2	---	---	---
29	10.3	9.1	9.5	9.8	8.0	8.7	9.5	7.7	8.5	---	---	---
30	9.9	9.2	9.5	10.4	7.7	8.5	9.6	9.0	9.4	---	---	---
31	9.7	8.6	9.4	---	---	---	9.0	7.6	8.4	---	---	---
MONTH	---	---	---	11.9	7.5	9.1	10.1	7.1	8.8	---	---	---

WHITE RIVER BASIN

07049691 WHITE RIVER AT BEAVER DAM NEAR EUREKA SPRINGS--CONTINUED

DAY	TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.5	6.5	7.2	9.3	6.8	7.6	9.2	7.4	7.8	9.7	8.0	8.7
2	7.4	6.6	6.9	8.9	6.8	7.3	9.2	7.4	7.9	9.8	8.0	8.5
3	7.1	6.6	6.9	8.4	6.8	7.2	10.4	7.4	8.2	9.5	7.9	8.5
4	7.2	6.6	6.9	9.0	6.9	7.4	9.3	7.4	7.9	10.8	7.6	8.5
5	7.9	6.6	7.0	9.1	6.9	7.4	8.9	7.7	7.9	---	---	---
6	7.7	6.7	7.0	9.1	7.1	7.5	9.8	7.6	8.0	10.6	7.4	8.5
7	9.2	6.6	7.4	9.1	7.2	7.5	9.9	7.4	7.9	10.4	7.4	8.5
8	9.6	6.7	7.7	9.2	7.2	7.5	10.0	7.3	7.9	10.2	7.6	8.4
9	8.4	6.5	7.2	9.6	7.3	7.7	9.6	7.4	8.1	10.5	7.7	8.5
10	8.3	6.7	7.2	---	---	---	11.0	7.3	8.2	10.0	7.7	8.5
11	7.6	6.7	7.0	---	---	---	10.3	7.3	8.2	9.6	7.8	8.3
12	7.2	6.7	7.0	---	---	---	10.3	7.3	7.9	8.6	7.9	8.2
13	7.3	6.7	7.0	---	---	---	9.0	7.4	7.8	9.9	8.0	8.5
14	8.6	6.8	7.4	---	---	---	10.0	7.6	8.0	10.3	7.9	8.9
15	8.8	6.7	7.4	---	---	---	10.0	7.5	8.0	10.5	7.2	8.4
16	8.7	6.7	7.2	8.6	7.2	7.5	9.8	7.5	8.0	9.8	7.4	8.2
17	8.0	6.6	7.1	8.2	7.2	7.5	9.4	7.5	7.9	10.1	7.7	8.4
18	7.9	6.7	7.0	8.4	7.2	7.5	9.5	7.5	8.0	10.3	7.6	8.5
19	8.6	6.7	7.3	9.5	7.3	7.9	8.3	7.6	8.0	10.5	7.9	8.6
20	8.9	6.6	7.5	9.6	7.2	7.8	8.4	7.8	8.1	10.2	7.2	8.3
21	8.8	6.6	7.3	9.0	7.5	7.8	9.2	7.8	8.2	9.6	7.7	8.3
22	9.0	6.7	7.4	9.4	7.3	7.9	9.0	7.8	8.2	10.5	7.8	8.5
23	8.6	6.7	7.2	10.5	7.1	8.1	9.2	7.8	8.2	9.6	7.6	8.3
24	8.2	6.8	7.2	10.2	7.0	8.0	8.9	7.8	8.2	10.2	7.7	8.5
25	8.4	6.9	7.3	9.2	7.2	7.6	9.2	7.8	8.2	10.8	7.8	8.7
26	9.3	6.9	7.6	9.3	7.3	7.7	9.1	7.9	8.3	10.8	7.7	8.8
27	9.3	6.7	7.6	9.4	7.3	7.7	9.2	8.0	8.4	11.1	7.9	8.7
28	8.7	6.7	7.5	9.2	7.3	7.8	8.9	8.0	8.3	12.6	7.1	8.9
29	8.8	6.7	7.5	8.3	7.4	7.7	8.8	8.0	8.3	11.0	7.2	8.5
30	8.4	6.8	7.2	8.9	7.4	7.8	9.6	7.9	8.4	9.2	8.0	8.3
31	---	---	---	9.9	7.4	7.9	9.2	7.9	8.4	---	---	---
MONTH	9.6	6.5	7.2	---	---	---	11.0	7.3	8.1	---	---	---

WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE

LOCATION.--Lat 36°25'38", long 93°37'15", in SE1/4NE1/4 sec.3, T.20 N., R.25 W., Carroll County, Hydrologic Unit 11010001, on right bank at downstream side of bridge on State Highway 143, 1.5 mi downstream from Bee Creek, 2.5 mi upstream from Clabber Creek, 5.3 mi northwest of Berryville, and at mile 35.1.

DRAINAGE AREA.--527 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1939 to September 1975, October 1992 to September 1995, October 1998 to current year. Annual maximum, water years 1976-92, and 1996-98. Monthly discharge only for April 1939, published in WSP 1311.

REVISED RECORDS.--WDR Ark. 1995: 1991 (M), 1992 (M), 1993 (M), 1994 (M).

GAGE.--Water-stage recorder. Datum of gage is 963.10 ft above NGVD of 1929. Apr. 4 to July 11, 1939, nonrecording gage and July 12, 1939 to Sept. 30, 1951 water-stage recorder at site 5.0 mi upstream at datum 27.71 ft higher. Oct. 1, 1951 to Oct. 22, 1952 and July 18, 1975 to Sept. 30, 1975 nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 4, 1927, reached a stage of about 38.0 ft, present site and datum, from information by local residents, discharge 62,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e18	62	28	1070	65	533	305	e294	308	126	39	99
2	e18	55	27	657	62	597	285	e266	411	95	35	284
3	e17	55	30	495	60	572	270	e240	969	81	31	180
4	e16	52	47	397	59	513	258	e221	757	74	27	104
5	e15	53	52	327	58	460	244	e207	547	67	27	78
6	e15	51	59	282	62	413	236	e198	451	59	25	59
7	e15	47	60	249	64	370	226	192	387	53	22	48
8	e15	43	58	223	62	333	212	193	343	51	19	40
9	e16	41	59	202	61	300	207	201	302	48	17	35
10	e17	39	62	182	61	277	201	192	266	50	14	31
11	e17	35	62	165	66	258	191	174	292	47	12	28
12	e18	34	61	149	67	242	182	162	541	69	11	38
13	e19	35	75	137	69	341	173	178	637	77	e19	87
14	e18	35	95	128	107	340	165	369	440	76	e19	101
15	e19	35	103	120	142	320	159	1040	350	61	e19	81
16	e19	35	105	116	139	309	152	2200	292	52	e19	65
17	e20	35	103	e111	135	290	145	9100	254	46	e18	53
18	e21	34	122	e98	134	273	140	3460	239	41	e17	43
19	e24	34	127	e90	217	570	138	1850	268	37	e16	36
20	e26	34	112	94	353	1750	151	3340	255	34	e16	31
21	e26	34	133	92	445	1780	175	4590	213	33	e15	28
22	e24	33	153	87	699	1290	244	1910	184	89	e15	25
23	26	33	147	83	1170	890	243	1160	159	116	e15	23
24	26	32	153	78	925	705	291	1180	141	141	14	22
25	28	31	136	78	678	599	992	1550	125	128	14	21
26	28	30	124	75	555	527	724	1030	117	109	14	20
27	27	31	120	70	496	479	546	747	109	91	14	21
28	29	31	134	71	480	448	452	592	102	73	14	20
29	74	31	176	72	---	412	387	489	93	61	15	18
30	65	28	324	69	---	367	333	415	89	50	17	16
31	71	---	821	68	---	331	---	357	---	44	22	---
TOTAL	787	1158	3868	6135	7491	16889	8427	38097	9641	2179	591	1735
MEAN	25.4	38.6	125	198	268	545	281	1229	321	70.3	19.1	57.8
MAX	74	62	821	1070	1170	1780	992	9100	969	141	39	284
MIN	15	28	27	68	58	242	138	162	89	33	11	16
AC-FT	1560	2300	7670	12170	14860	33500	16710	75570	19120	4320	1170	3440
CFSM	0.05	0.07	0.24	0.38	0.51	1.03	0.53	2.33	0.61	0.13	0.04	0.11
IN.	0.06	0.08	0.27	0.43	0.53	1.19	0.59	2.69	0.68	0.15	0.04	0.12

WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-75, 1993-95, 1999-03, BY WATER YEAR (WY)

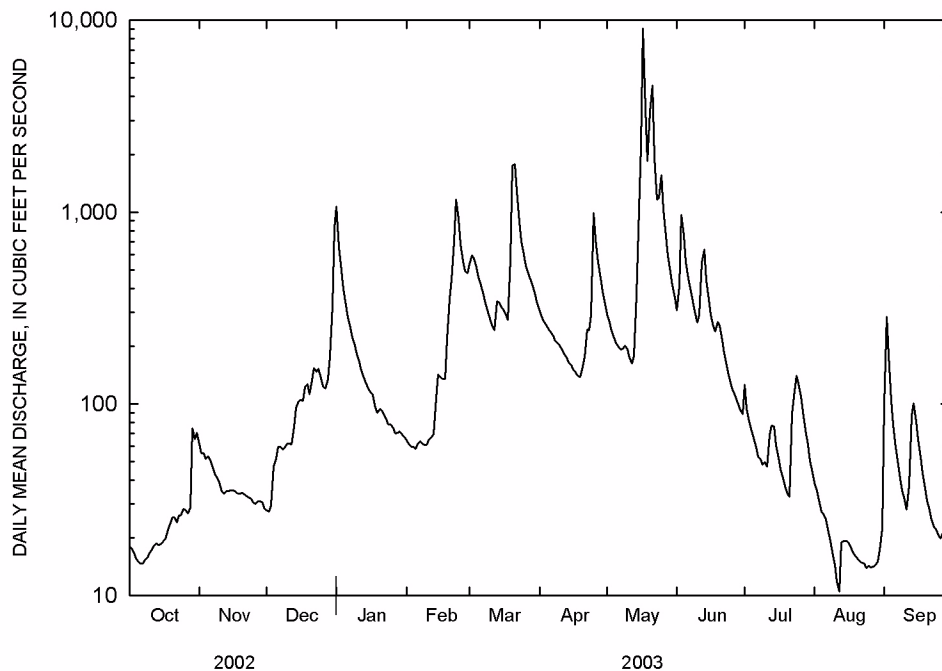
MEAN	183	570	500	593	835	1000	1189	1210	527	215	106	117
MAX	1471	2820	2100	2119	2792	3472	5184	4570	2494	1252	923	789
(WY)	1971	1997	1969	1950	1951	1945	1945	1961	1957	1960	1950	1970
MIN	1.49	6.14	14.0	12.9	35.7	94.3	128	127	38.2	9.21	1.08	4.25
(WY)	1964	1964	1964	1964	1964	1972	1963	2001	1972	1954	1954	1953

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939-75, 1999-03	
ANNUAL TOTAL	238512.4		96998			
ANNUAL MEAN	653		266		578	
HIGHEST ANNUAL MEAN					1251 1945	
LOWEST ANNUAL MEAN					88.3 1954	
HIGHEST DAILY MEAN	20900	Apr 8	9100	May 17	37300	Apr 15 1945
LOWEST DAILY MEAN	5.3	Sep 15	11	Aug 12	0.20	Aug 17 1954
ANNUAL SEVEN-DAY MINIMUM	5.7	Sep 12	14	Aug 22	0.40	Aug 13 1954
MAXIMUM PEAK FLOW			11300	May 17	¹ 66000	Nov 19 1985
MAXIMUM PEAK STAGE			15.10	May 17	38.91	Nov 19 1985
INSTANTANEOUS LOW FLOW			5.8	Aug 21	0.10	² Aug 27 1954
ANNUAL RUNOFF (AC-FT)	473100		192400		419000	
ANNUAL RUNOFF (CFSM)	1.24		0.50		1.10	
ANNUAL RUNOFF (INCHES)	16.84		6.85		14.91	
10 PERCENT EXCEEDS	1420		550		1320	
50 PERCENT EXCEEDS	153		94		174	
90 PERCENT EXCEEDS	17		19		20	

¹Occurred during period of computation of annual maximum only, water years 1976-92

²Also August 28, 1954

^eEstimated



WHITE RIVER BASIN

07050500 KINGS RIVER NEAR BERRYVILLE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1953 to September 1960, October 1971 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, unfltrd mg/L as CaCO3 (00900)	Calcium, unfltrd mg/L (00915)	Magnesium, unfltrd mg/L (00925)
MAY													
16...	2045	80513	81213	5240	742	9.5	103	7.6	179	17.8	88	26.0	5.60
17...	1515	80513	81213	9640	749	8.7	90	7.3	63	16.6	47	15.0	2.20
18...	0745	80513	81213	3680	750	9.0	93	7.6	85	16.1	64	20.0	3.30

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)
MAY													
16...	2.50	.1	2.0	5	2.80	5.20	116	4.4	.10	.08	.68	<.010	4.3
17...	1.70	.1	1.2	5	1.70	3.70	84	1.0	.03	.02	.45	<.010	.98
18...	1.50	.1	1.6	5	2.30	4.40	86	.40	.03	.02	.66	<.010	.38

Date	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Suspnd. sediment, sieve percent diametr <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
MAY											
16...	.276	.09	.09	.70	5.1	7800	7600	56000	77	768	10900
17...	.061	.02	<.02	.18	1.4	5400	3600	9800	90	256	6660
18...	.061	.02	<.02	.07	1.1	E1600	E1300	2300	80	91	904

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

131

07053207 LONG CREEK AT DENVER

LOCATION.--Lat 36°23'23", long 93°19'01", in NW1/4NE1/4SE1/4 sec.16, T.20 N., R.22 W., Carroll County, Hydrologic Unit 11010001, on left bank, at the downstream side of county road, 0.2 mi southwest of Denver and 0.4 mi upstream from Dry Creek.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--October 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records fair except estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7.6	40	43	356	e51	e140	e67	53	60	15	3.9	9.0
2	e8.8	37	43	253	e50	e147	e65	47	167	21	15	8.6
3	e8.6	38	44	187	e51	e135	64	41	249	15	14	8.9
4	e8.5	37	e47	150	e50	e123	60	36	133	11	8.2	8.0
5	e8.8	37	e48	131	e50	e111	56	32	97	10	6.1	7.1
6	e9.9	39	e47	118	e50	e100	53	29	79	8.4	4.9	7.1
7	e9.7	39	e47	105	e50	e92	49	28	68	7.4	4.3	7.9
8	e8.6	39	e47	96	e50	e85	45	24	59	6.9	4.0	9.5
9	e7.7	38	e50	e87	e50	e79	41	22	51	6.5	3.8	9.9
10	e7.4	37	e51	e77	e50	e73	38	21	44	6.3	3.7	11
11	7.4	44	e52	e72	e52	e71	37	21	41	6.0	3.3	12
12	7.1	44	e52	e69	e52	e68	34	25	54	8.0	3.2	16
13	7.5	43	e80	e65	e53	e73	32	24	64	7.3	3.5	23
14	7.2	42	e115	e62	e69	e74	30	55	56	6.7	5.7	25
15	7.1	43	e91	e60	e86	e72	28	139	46	6.0	6.8	25
16	7.4	44	e70	e60	e83	e68	27	761	38	5.5	7.5	24
17	7.5	43	e68	e59	e75	e66	26	1370	33	5.1	7.8	24
18	7.6	44	e74	e58	e68	e64	25	522	72	4.9	8.2	23
19	9.6	46	90	e57	e117	e105	25	286	87	4.6	9.5	22
20	9.3	46	113	e57	e154	e138	32	789	60	4.3	11	24
21	9.2	44	109	e56	e140	e132	51	453	45	4.0	10	26
22	8.7	43	98	e55	e211	e121	40	227	37	7.4	7.4	29
23	8.7	43	86	e55	e241	e111	33	151	30	11	7.1	32
24	8.9	43	84	e54	e189	e100	137	160	25	11	7.3	34
25	9.9	43	79	e54	e150	e93	201	627	21	7.0	7.1	37
26	10	43	78	e54	e127	e87	131	294	19	5.3	7.2	40
27	11	43	74	e54	e118	e80	94	191	16	4.7	7.5	47
28	13	44	74	e54	e116	e77	74	140	14	4.2	7.7	46
29	52	43	92	e54	---	e73	62	108	12	3.9	8.1	48
30	51	43	176	e52	---	e68	54	89	12	3.8	8.6	48
31	46	---	514	e51	---	e68	---	71	---	4.0	8.8	---
TOTAL	391.7	1252	2736	2772	2603	2894	1711	6836	1789	232.2	221.2	692.0
MEAN	12.6	41.7	88.3	89.4	93.0	93.4	57.0	221	59.6	7.49	7.14	23.1
MAX	52	46	514	356	241	147	201	1370	249	21	15	48
MIN	7.1	37	43	51	50	64	25	21	12	3.8	3.2	7.1
AC-FT	777	2480	5430	5500	5160	5740	3390	13560	3550	461	439	1370
CFSM	0.12	0.40	0.85	0.86	0.89	0.90	0.55	2.12	0.57	0.07	0.07	0.22
IN.	0.14	0.45	0.98	0.99	0.93	1.04	0.61	2.45	0.64	0.08	0.08	0.25

WHITE RIVER BASIN

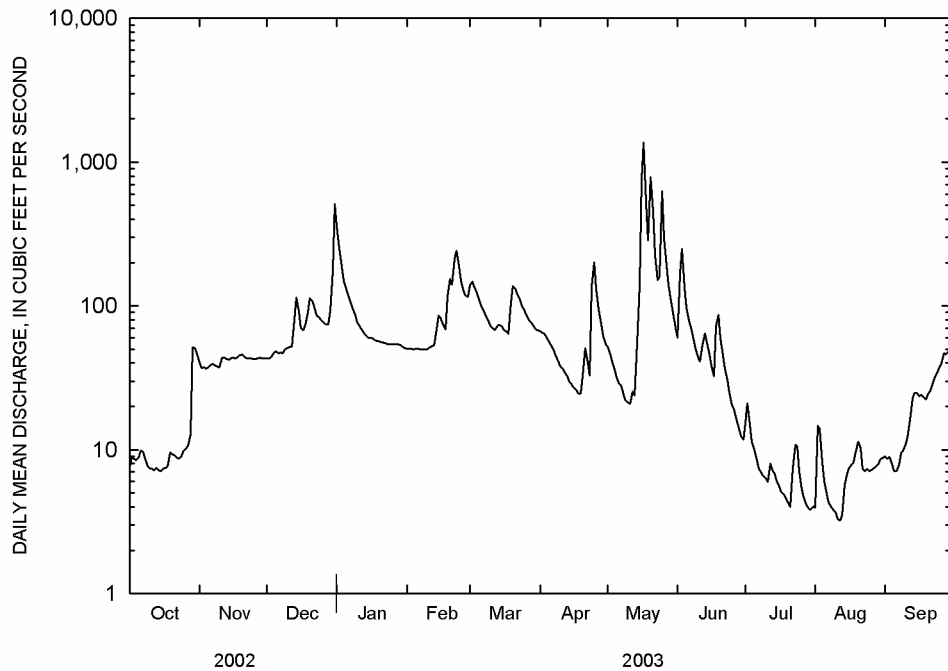
07053207 LONG CREEK AT DENVER--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	15.5	27.8	178	93.2	137	115	110	278	225	15.7	13.7	15.8
MAX	18.3	41.7	268	96.9	182	137	163	336	391	23.9	20.3	23.1
(WY)	2002	2003	2002	2002	2002	2002	2002	2002	2002	2002	2002	2003
MIN	12.6	13.9	88.3	89.4	93.0	93.4	57.0	221	59.6	7.49	7.14	8.52
(WY)	2003	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	45391.5		24130.1			
ANNUAL MEAN	124		66.1		102	
HIGHEST ANNUAL MEAN					138 2002	
LOWEST ANNUAL MEAN					66.1 2003	
HIGHEST DAILY MEAN	4220	Jun 10	1370	May 17	4220	Jun 10 2002
LOWEST DAILY MEAN	6.0	Sep 13	3.2	Aug 12	3.2	Aug 12 2003
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 8	3.7	Aug 7	3.7	Aug 7 2003
MAXIMUM PEAK FLOW			2790	May 17	1	
MAXIMUM PEAK STAGE			7.62	May 17	17.89	Jun 10 2002
INSTANTANEOUS LOW FLOW			3.1	Aug 11-12	3.1	Aug 11 2003
ANNUAL RUNOFF (AC-FT)	90030		47860		73860	
ANNUAL RUNOFF (CFSM)	1.20		0.64		0.98	
ANNUAL RUNOFF (INCHES)	16.24		8.63		13.32	
10 PERCENT EXCEEDS	273		131		201	
50 PERCENT EXCEEDS	51		44		46	
90 PERCENT EXCEEDS	8.4		7.1		7.4	

¹Not determined
^eEstimated



WHITE RIVER BASIN

133

07053250 YOCUM CREEK NEAR OAK GROVE

LOCATION.--Lat 36°27'17", long 93°21'21", in SW1/4NE1/4 sec.30, T.21 N., R.22 W., Carroll County, Hydrologic Unit 11010001, on right bank 50 ft upstream from County Road 86, 0.4 mi upstream from Spring Creek, 1.2 mi downstream from Stillhouse Creek, and 4.7 mi east of Oak Grove.

DRAINAGE AREA.--52.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1993 to current year. Occasional low-flow measurements 1964-67, 1987-88.

GAGE.-Water-stage recorder.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	11	11	61	9.4	66	30	17	21	8.2	5.5	12
2	6.5	10	11	50	11	69	28	17	57	7.7	9.4	12
3	6.7	12	9.4	37	11	64	26	16	71	7.0	8.7	10
4	6.8	12	11	29	9.5	60	25	17	55	6.8	8.0	9.3
5	6.7	10	10	24	8.8	56	24	17	43	7.0	7.1	8.8
6	8.2	9.6	9.8	21	9.3	48	26	16	33	7.1	6.1	8.2
7	8.5	9.2	10	19	9.0	42	23	17	27	7.3	5.6	7.8
8	6.9	9.3	12	18	8.7	38	21	15	23	6.5	6.4	7.5
9	7.0	9.4	13	16	11	34	20	15	20	5.9	9.0	7.3
10	7.2	11	12	15	11	30	19	14	18	6.1	12	6.8
11	7.1	11	12	14	10	27	18	15	19	5.9	15	7.0
12	6.9	11	11	14	9.9	25	18	14	32	10	15	8.1
13	8.0	9.5	14	14	9.6	46	19	14	30	8.9	15	9.1
14	8.0	9.0	16	12	14	59	18	19	23	8.4	16	8.2
15	7.0	9.2	18	12	21	56	16	21	21	7.0	15	8.4
16	6.8	8.7	16	12	21	53	16	52	19	6.2	15	7.9
17	6.8	10	14	11	19	49	16	71	15	5.9	19	7.7
18	6.7	11	e13	11	17	44	15	59	14	6.2	26	7.5
19	9.3	9.4	13	12	22	69	16	51	13	8.6	26	7.2
20	9.5	8.4	12	12	42	83	19	41	12	11	23	7.0
21	9.2	8.2	12	11	42	92	17	34	12	12	21	7.3
22	7.3	8.7	12	10	73	83	15	30	12	15	20	7.5
23	6.9	8.5	13	10	89	75	14	26	11	11	19	7.4
24	7.2	10	13	9.7	73	68	26	43	9.8	9.2	18	7.5
25	8.0	10	12	9.8	63	62	29	110	9.6	8.5	17	7.7
26	8.1	9.0	12	11	58	56	23	73	10	7.6	15	7.8
27	9.3	8.3	11	11	55	51	22	58	8.8	8.1	14	8.5
28	11	8.1	11	10	55	46	21	44	8.4	8.5	13	8.2
29	17	9.7	15	9.9	---	e38	18	33	8.9	7.1	11	8.5
30	14	10	30	9.4	---	e35	16	27	8.9	5.9	12	8.9
31	12	---	72	9.7	---	33	---	23	---	5.7	12	---
TOTAL	257.2	291.2	461.2	525.5	792.2	1657	614	1019	665.4	246.3	434.8	247.1
MEAN	8.30	9.71	14.9	17.0	28.3	53.5	20.5	32.9	22.2	7.95	14.0	8.24
MAX	17	12	72	61	89	92	30	110	71	15	26	12
MIN	6.5	8.1	9.4	9.4	8.7	25	14	14	8.4	5.7	5.5	6.8
AC-FT	510	578	915	1040	1570	3290	1220	2020	1320	489	862	490
CFSM	0.16	0.18	0.28	0.32	0.54	1.01	0.39	0.62	0.42	0.15	0.27	0.16
IN.	0.18	0.21	0.32	0.37	0.56	1.17	0.43	0.72	0.47	0.17	0.31	0.17

WHITE RIVER BASIN

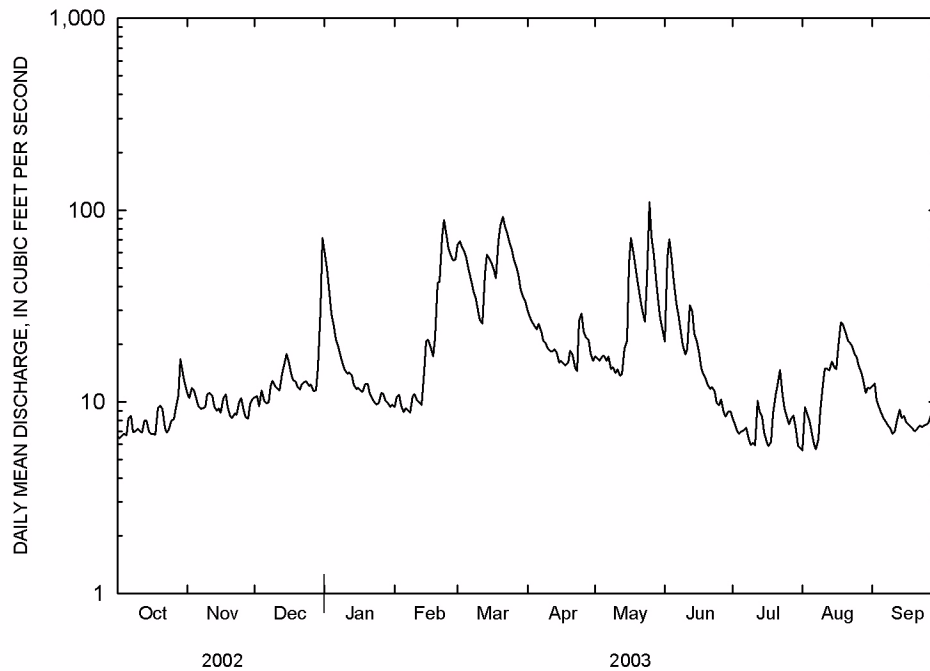
07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

MEAN	12.2	47.6	39.0	58.3	67.5	85.0	72.6	58.7	49.0	27.0	18.9	16.4
MAX	21.3	233	98.8	208	134	175	148	152	137	63.2	39.4	45.0
(WY)	1994	1997	2002	1998	1998	1998	2002	2002	2000	1993	2000	1996
MIN	7.71	6.80	14.2	17.0	26.7	27.1	15.2	12.9	9.64	7.95	7.70	6.69
(WY)	1995	2000	1999	2003	2000	2000	2000	2001	2001	2003	2001	2001

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1993 - 2003	
ANNUAL TOTAL	19589.2		7210.9			
ANNUAL MEAN	53.7		19.8		45.2	
HIGHEST ANNUAL MEAN					63.0 1994	
LOWEST ANNUAL MEAN					19.8 2003	
HIGHEST DAILY MEAN	1150	Apr 8	110	May 25	1940	Jan 5 1998
LOWEST DAILY MEAN	6.5	Oct 2	5.5	Aug 1	2.5	Feb 9 1998
ANNUAL SEVEN-DAY MINIMUM	7.1	Oct 1	6.5	Jul 5	3.0	Feb 4 1998
MAXIMUM PEAK FLOW			200	May 24	3740	Jan 5 1998
MAXIMUM PEAK STAGE			4.99	May 24	11.50	Apr 8 2002
INSTANTANEOUS LOW FLOW			5.2	Aug 1	2.3	Feb 9 1998
ANNUAL RUNOFF (AC-FT)	38860		14300		32770	
ANNUAL RUNOFF (CFSM)	1.02		0.37		0.86	
ANNUAL RUNOFF (INCHES)	13.80		5.08		11.64	
10 PERCENT EXCEEDS	126		50		102	
50 PERCENT EXCEEDS	20		12		20	
90 PERCENT EXCEEDS	9.1		7.1		8.2	

Estimated



WHITE RIVER BASIN

135

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
NOV 26...	1430	80513	80020	9.1	761	11.3	102	8.2	379	10.8	151	182	1
DEC 10...	1540	80513	80020	12	754	13.0	114	8.1	373	9.1	148	178	1
JAN 15...	0730	80513	80020	12	765	12.1	94	8.0	379	4.7	149	181	1
FEB 19...	1500	80513	80020	21	757	14.1	123	8.7	360	9.2	136	161	2
MAR 11...	1345	80513	80020	27	751	13.4	121	8.9	348	10.1	131	150	4
APR 22...	0900	80513	80020	15	755	8.1	77	7.9	382	12.6	154	188	.0
MAY 21...	0745	80513	80020	35	759	8.5	85	7.8	382	15.5	155	188	1
JUN 11...	0730	80513	80020	20	747	7.0	76	7.8	377	18.5	153	185	1
JUL 08...	1545	80513	80020	6.0	753	9.0	112	8.0	378	25.8	155	186	1
SEP 03...	0910	80513	80020	9.7	754	5.5	64	7.8	382	22.3	164	198	1
SEP 08...	1300	80513	80020	--	--	--	--	--	--	--	--	--	--

Date	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
NOV 26...	10.3	4.7	<.10	<.04	--	--	3.44	--	<.008	.117	.04	.046	--
DEC 10...	10.1	5.2	<.10	<.04	--	--	3.43	--	<.008	.110	.04	.046	--
JAN 15...	11.7	6.4	E.07	<.04	--	--	4.91	--	<.008	.074	.02	.024	--
FEB 19...	11.0	6.6	.10	<.04	--	--	4.08	--	E.007	.058	.02	.030	4.2
MAR 11...	10.8	6.5	.14	<.04	24.2	5.47	5.47	.030	.009	.064	.02	.034	5.6
APR 22...	10.1	5.8	.13	<.04	--	--	4.26	--	E.004	.123	.04	.051	4.4
MAY 21...	9.99	6.0	.18	<.04	--	--	3.96	--	E.005	.144	.05	.062	4.1
JUN 11...	9.56	5.6	.11	<.04	--	--	4.06	--	E.006	.144	.05	.061	4.2
JUL 08...	10.8	5.0	.17	<.04	--	--	3.34	--	E.007	.138	.04	.059	3.5
SEP 03...	10.6	4.6	.13	<.04	--	--	2.26	--	<.008	.126	.04	.054	2.4

Date	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)
NOV 26...	--	--	--	--	E22	37	63	--	--	--	--	--	--
DEC 10...	--	--	--	--	78	91	110	--	--	--	--	--	--
JAN 15...	--	--	--	--	57	74	32	--	<.006	<.006	<.006	<.004	<.005
FEB 19...	--	--	--	--	E7	E28	E21	--	--	--	--	--	--
MAR 11...	--	--	--	--	28	E19	21	--	<.006	<.006	<.006	<.004	<.005
APR 22...	--	--	--	--	46	53	32	--	<.006	<.006	<.006	<.004	<.005
MAY 21...	--	--	--	--	210	160	130	--	<.006	<.006	<.006	<.004	<.005
JUN 11...	--	--	--	--	380	410	640	--	<.006	<.006	<.006	<.004	<.005
JUL 08...	--	--	--	--	76	165	105	--	<.006	<.006	<.006	<.004	<.005
SEP 03...	--	--	--	--	140	120	370	--	<.006	<.006	<.006	<.004	<.005
SEP 08...	49.8	450	495.5	36	--	--	--	87.0	--	--	--	--	--

WHITE RIVER BASIN

07053250 YOCUM CREEK NEAR OAK GROVE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Atra-zine, water, fltrd, ug/L (39632)	Azin-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, ate, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-pyrifos, water, fltrd, ug/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Desulf-inyl, fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
JAN 15...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
MAR 11...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
APR 22...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
MAY 21...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
JUN 11...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
JUL 08...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
SEP 03...	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005
Date	Disul-foton, water, fltrd, 0.7u GF ug/L (82677)	EP7C, water, fltrd, 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd, 0.7u GF ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF ug/L (82672)	Desulf-inyl-fipro-nil amide, wat flt, ug/L (62169)	Fipro-nil sulfide, water, fltrd, ug/L (62167)	Fipro-nil sulfone, water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos, water, fltrd, ug/L (04095)	Lindane, water, fltrd, ug/L (39341)	Linuron, water, fltrd, 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd, 0.7u GF ug/L (82667)
JAN 15...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
MAR 11...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
APR 22...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
MAY 21...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
JUN 11...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
JUL 08...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
SEP 03...	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
Date	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd, 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd, 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd, 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd, 0.7u GF ug/L (82683)	Phorate, water, fltrd, 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd, 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd, 0.7u GF ug/L (82679)
JAN 15...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011
MAR 11...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011
APR 22...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011
MAY 21...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011
JUN 11...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011
JUL 08...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011
SEP 03...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011
Date	Propar-gite, water, fltrd, 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron, water, fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd, 0.7u GF ug/L (82675)	Thio-bencarb, water, fltrd, 0.7u GF ug/L (82681)	Tri-allate, water, fltrd, 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd, ug/L (82661)	Suspnd. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)		
NOV 26...	--	--	--	--	--	--	--	--	48	3	.07		
DEC 10...	--	--	--	--	--	--	--	--	36	27	.87		
JAN 15...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	41	6	.19		
FEB 19...	--	--	--	--	--	--	--	--	56	3	.17		
MAR 11...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	62	1	.07		
APR 22...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	76	48	1.9		
MAY 21...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	82	29	2.7		
JUN 11...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	89	31	1.7		
JUL 08...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	62	29	.47		
SEP 03...	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	58	19	.50		

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

137

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI

LOCATION.--Lat 36°35'46", long 93°18'35", in NW1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010001, at dam on White River, 3.0 mi upstream from Fall Creek, and 6.1 mi southwest of Branson, Missouri.

DRAINAGE AREA.--4,020 mi².

PERIOD OF RECORD.--December 1973 to current year.

COOPERATION.--Records prior to October 1978 are available from U.S. Army Corps of Engineers, Little Rock, Arkansas.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT												
24...	1240	80513	80513	194	.30	2.40	760	6.7	71	7.9	240	18.0
24...	1241	80513	80513	194	10.0	--	760	6.5	69	7.8	240	17.8
24...	1242	80513	80513	194	20.1	--	760	6.4	68	7.8	240	17.8
24...	1243	80513	80513	194	29.8	--	760	6.4	67	7.8	240	17.8
24...	1244	80513	80513	194	39.9	--	760	6.3	67	7.8	240	17.7
24...	1246	80513	80513	194	47.1	--	760	.5	5	7.2	262	17.1
24...	1247	80513	80513	194	50.1	--	760	.3	3	7.2	264	16.4
24...	1249	80513	80513	194	60.2	--	760	.3	3	7.2	264	15.8
24...	1250	80513	80513	194	70.1	--	760	.3	3	7.1	258	15.2
24...	1251	80513	80513	194	80.1	--	760	.3	3	7.1	246	14.7
24...	1252	80513	80513	194	90.1	--	760	.3	3	7.0	230	13.9
24...	1253	80513	80513	194	100	--	760	.7	6	7.0	218	13.5
24...	1254	80513	80513	194	110	--	760	1.1	10	7.0	212	13.0
24...	1255	80513	80513	194	120	--	760	1.4	13	7.0	212	12.4
24...	1256	80513	80513	194	130	--	760	1.5	14	7.0	205	11.7
24...	1257	80513	80513	194	140	--	760	.8	7	6.9	210	11.1
24...	1258	80513	80513	194	150	--	760	.3	3	7.0	219	10.6
24...	1259	80513	80513	194	160	--	760	.3	2	6.9	228	10.2
24...	1300	80513	80513	170	170	--	760	.2	2	6.9	236	9.8
24...	1301	80513	80513	194	180	--	760	.2	2	6.9	244	9.5
24...	1302	80513	80513	194	190	--	760	.2	2	7.0	254	9.2
24...	1303	80513	80513	194	194	--	760	.2	2	6.9	256	9.1
NOV												
05...	1419	80513	80513	193	.40	3.60	749	5.7	58	7.5	242	15.2
05...	1420	80513	80513	193	9.90	--	749	5.6	57	7.5	242	15.2
05...	1421	80513	80513	193	20.1	--	749	5.5	56	7.5	242	15.2
05...	1422	80513	80513	193	30.4	--	749	5.2	53	7.5	242	15.2
05...	1423	80513	80513	193	39.7	--	749	5.2	53	7.5	242	15.2
05...	1424	80513	80513	193	50.2	--	749	5.4	55	7.5	242	15.2
05...	1425	80513	80513	193	60.0	--	749	5.3	54	7.5	242	15.2
05...	1426	80513	80513	193	70.4	--	749	5.2	53	7.5	242	15.2
05...	1427	80513	80513	193	80.1	--	749	5.1	51	7.5	243	15.2
05...	1428	80513	80513	193	89.9	--	749	.5	5	7.1	240	14.5
05...	1429	80513	80513	193	100	--	749	.4	4	7.0	223	13.7
05...	1430	80513	80513	193	110	--	749	.6	6	7.0	212	13.1
05...	1431	80513	80513	193	120	--	749	1.0	10	7.0	204	12.5
05...	1432	80513	80513	193	130	--	749	1.0	9	7.0	202	11.9
05...	1433	80513	80513	193	140	--	749	.6	6	6.9	204	11.4
05...	1434	80513	80513	193	150	--	749	.4	3	7.0	223	10.5
05...	1435	80513	80513	193	160	--	749	.3	3	7.0	227	10.1
05...	1436	80513	80513	193	170	--	749	.3	3	7.0	237	9.8
05...	1437	80513	80513	193	180	--	749	.3	3	7.0	241	9.4
05...	1438	80513	80513	193	190	--	749	.3	3	7.0	252	9.0
05...	1439	80513	80513	193	193	--	749	.3	3	7.0	261	9.0
DEC												
05...	1354	80513	80513	190	.30	4.00	756	7.3	68	7.6	235	11.7
05...	1355	80513	80513	190	10.3	--	756	7.1	66	7.5	235	11.7
05...	1356	80513	80513	190	19.7	--	756	7.0	65	7.6	235	11.7
05...	1357	80513	80513	190	30.3	--	756	6.9	64	7.6	235	11.7
05...	1358	80513	80513	190	40.2	--	756	6.6	61	7.5	235	11.7
05...	1359	80513	80513	190	50.1	--	756	6.6	61	7.5	235	11.7
05...	1400	80513	80513	190	60.1	--	756	6.5	60	7.5	235	11.7
05...	1401	80513	80513	190	70.1	--	756	6.5	60	7.5	235	11.7
05...	1402	80513	80513	190	80.0	--	756	6.5	60	7.5	235	11.7
05...	1403	80513	80513	190	90.3	--	756	6.6	61	7.5	235	11.7
05...	1404	80513	80513	190	100	--	756	6.6	61	7.5	235	11.7
05...	1405	80513	80513	190	110	--	756	6.5	60	7.5	235	11.7
05...	1406	80513	80513	190	120	--	756	6.5	60	7.5	235	11.7
05...	1407	80513	80513	190	130	--	756	6.4	60	7.6	235	11.7
05...	1408	80513	80513	190	140	--	756	6.4	59	7.5	235	11.6
05...	1409	80513	80513	190	150	--	756	5.1	47	7.4	233	11.4
05...	1410	80513	80513	190	160	--	756	.7	6	7.1	227	10.8
05...	1411	80513	80513	190	170	--	756	.4	4	7.1	238	10.0
05...	1412	80513	80513	190	180	--	756	.3	3	7.1	241	9.8
05...	1413	80513	80513	190	190	--	756	.3	3	7.1	255	9.2

WHITE RIVER BASIN

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Reser- voir depth, feet (72025)	Sam- pling depth, feet (00003)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
MAR												
19...	0820	80513	80513	206	.20	6.40	733	11.1	99	8.1	225	8.5
19...	0821	80513	80513	206	10.1	--	733	11.3	99	8.1	225	8.2
19...	0822	80513	80513	206	19.9	--	733	11.2	99	8.1	225	8.0
19...	0823	80513	80513	206	30.0	--	733	11.2	99	8.1	225	7.9
19...	0824	80513	80513	206	40.0	--	733	11.1	97	8.1	224	7.7
19...	0825	80513	80513	206	50.0	--	733	11.1	97	8.1	224	7.7
19...	0826	80513	80513	206	60.0	--	733	11.2	97	8.1	224	7.5
19...	0827	80513	80513	206	70.0	--	733	11.2	94	8.0	224	6.2
19...	0828	80513	80513	206	80.0	--	733	10.8	90	7.9	221	5.9
19...	0829	80513	80513	206	90.0	--	733	10.8	90	7.9	224	5.9
19...	0830	80513	80513	206	100	--	733	10.7	89	7.9	224	5.8
19...	0831	80513	80513	206	110	--	733	10.7	89	7.9	224	5.8
19...	0832	80513	80513	206	120	--	733	10.6	88	7.9	225	5.8
19...	0833	80513	80513	206	130	--	733	10.6	88	7.9	226	5.8
19...	0834	80513	80513	206	140	--	733	10.7	89	7.9	226	5.8
19...	0835	80513	80513	206	150	--	733	10.7	89	7.9	226	5.8
19...	0836	80513	80513	206	160	--	733	10.6	88	7.9	227	5.8
19...	0837	80513	80513	206	170	--	733	10.5	87	7.9	226	5.7
19...	0838	80513	80513	206	180	--	733	10.5	87	8.0	228	5.7
19...	0839	80513	80513	206	190	--	733	10.4	86	7.9	228	5.7
19...	0840	80513	80513	206	200	--	733	10.4	86	7.9	228	5.7
19...	0841	80513	80513	206	206	--	733	10.2	85	7.9	229	5.7
JUN												
19...	0759	80513	80513	176	.20	5.20	748	8.4	105	8.9	224	25.4
19...	0800	80513	80513	176	10.2	--	748	8.2	102	8.9	224	25.4
19...	0801	80513	80513	176	15.0	--	748	8.3	103	8.8	225	25.4
19...	0802	80513	80513	176	16.0	--	748	8.7	107	8.7	226	25.0
19...	0803	80513	80513	176	17.0	--	748	9.0	109	8.7	224	23.9
19...	0804	80513	80513	176	18.1	--	748	9.2	109	8.6	224	23.1
19...	0805	80513	80513	176	19.0	--	748	9.1	108	8.5	225	22.8
19...	0806	80513	80513	176	20.0	--	748	9.2	109	8.4	225	22.5
19...	0807	80513	80513	176	24.0	--	748	9.1	106	8.3	226	21.7
19...	0808	80513	80513	176	27.0	--	748	7.8	89	8.0	228	20.5
19...	0809	80513	80513	176	28.0	--	748	7.5	83	7.8	230	19.5
19...	0810	80513	80513	176	30.0	--	748	7.6	82	7.7	231	18.5
19...	0811	80513	80513	176	33.0	--	748	7.8	83	7.7	232	17.2
19...	0812	80513	80513	176	35.0	--	748	8.0	83	7.7	232	16.6
19...	0813	80513	80513	176	37.9	--	748	7.7	78	7.6	232	15.4
19...	0814	80513	80513	176	40.0	--	748	8.0	80	7.6	231	14.4
19...	0815	80513	80513	176	45.1	--	748	8.3	81	7.7	229	13.2
19...	0816	80513	80513	176	50.1	--	748	8.0	77	7.6	228	12.4
19...	0817	80513	80513	176	55.0	--	748	7.8	73	7.6	229	11.6
19...	0818	80513	80513	176	60.0	--	748	7.5	69	7.7	231	11.0
19...	0819	80513	80513	176	70.1	--	748	7.3	66	7.7	231	9.9
19...	0820	80513	80513	176	80.1	--	748	7.2	64	7.7	231	8.8
19...	0821	80513	80513	176	90.1	--	748	7.3	63	7.8	231	7.9
19...	0822	80513	80513	176	99.9	--	748	7.3	62	7.9	233	7.4
19...	0823	80513	80513	176	110	--	748	7.1	60	8.0	239	6.9
19...	0824	80513	80513	176	120	--	748	7.2	60	8.1	239	6.6
19...	0825	80513	80513	176	130	--	748	7.3	60	8.2	241	6.3
19...	0826	80513	80513	176	140	--	748	7.5	62	8.2	246	6.1
19...	0827	80513	80513	176	150	--	748	7.2	59	8.3	252	6.0
19...	0828	80513	80513	176	160	--	748	6.8	56	8.3	254	6.0
19...	0829	80513	80513	176	170	--	748	6.6	54	8.4	254	6.0
19...	0830	80513	80513	176	176	--	748	6.4	52	8.4	255	5.9
JUL												
03...	0903	80513	80513	176	.10	5.80	748	8.4	108	--	225	27.2
03...	0904	80513	80513	176	10.1	--	748	8.3	106	--	225	27.1
03...	0905	80513	80513	176	16.9	--	748	8.8	111	--	225	26.0
03...	0906	80513	80513	176	20.0	--	748	9.8	121	--	224	25.0
03...	0907	80513	80513	176	21.9	--	748	10.8	130	--	226	23.6
03...	0908	80513	80513	176	24.0	--	748	10.9	127	--	229	22.1
03...	0909	80513	80513	176	26.1	--	748	10.4	118	--	231	20.9
03...	0910	80513	80513	176	28.0	--	748	9.1	102	--	235	20.1
03...	0911	80513	80513	176	30.0	--	748	9.1	101	--	233	19.4
03...	0912	80513	80513	176	32.1	--	748	9.2	100	--	234	18.4
03...	0913	80513	80513	176	33.9	--	748	9.1	97	--	234	17.7
03...	0914	80513	80513	176	36.1	--	748	8.8	92	--	235	16.9
03...	0915	80513	80513	176	37.9	--	748	8.6	89	--	234	16.0
03...	0916	80513	80513	176	39.9	--	748	8.5	87	--	234	15.5
03...	0917	80513	80513	176	42.9	--	748	8.4	84	--	233	14.9
03...	0918	80513	80513	176	44.9	--	748	8.2	81	--	233	13.8
03...	0919	80513	80513	176	47.9	--	748	8.0	78	--	232	13.2
03...	0920	80513	80513	176	49.9	--	748	7.8	74	--	232	12.6
03...	0921	80513	80513	176	55.0	--	748	7.6	72	--	232	12.0
03...	0922	80513	80513	176	60.1	--	748	7.4	69	--	232	11.4
03...	0924	80513	80513	176	68.1	--	748	7.0	63	--	234	10.4
03...	0925	80513	80513	176	70.0	--	748	6.9	62	--	234	10.3
03...	0926	80513	80513	176	79.9	--	748	6.8	60	--	234	9.3
03...	0928	80513	80513	176	90.0	--	748	6.6	57	--	239	8.2
03...	0929	80513	80513	176	100	--	748	7.0	59	--	234	7.6
03...	0931	80513	80513	176	110	--	748	7.1	60	--	237	7.0
03...	0933	80513	80513	176	120	--	748	7.3	60	--	240	6.6
03...	0934	80513	80513	176	130	--	748	7.3	60	--	244	6.5
03...	0935	80513	80513	176	140	--	748	7.2	59	--	249	6.3
03...	0936	80513	80513	176	150	--	748	6.9	57	--	253	6.2
03...	0937	80513	80513	176	160	--	748	6.7	55	--	256	6.1
03...	0939	80513	80513	176	170	--	748	6.4	52	--	258	6.1
03...	0940	80513	80513	176	176	--	748	6.2	51	--	258	6.0

WHITE RIVER BASIN

07053400 TABLE ROCK LAKE NEAR BRANSON, MISSOURI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm (00095)	Temperature, water, deg C (00010)
AUG												
12...	1319	80513	80513	179	.40	4.00	752	7.6	100	8.3	230	28.9
12...	1320	80513	80513	179	10.3	--	752	7.6	100	8.4	230	28.8
12...	1322	80513	80513	179	20.0	--	752	7.6	100	8.4	230	28.5
12...	1323	80513	80513	179	24.3	--	752	7.6	99	8.4	231	28.2
12...	1324	80513	80513	179	25.1	--	752	8.2	103	8.3	236	26.2
12...	1325	80513	80513	179	26.3	--	752	8.2	102	8.3	235	25.5
12...	1326	80513	80513	179	27.3	--	752	8.0	98	8.2	238	24.8
12...	1327	80513	80513	179	28.1	--	752	7.9	96	8.1	238	24.1
12...	1328	80513	80513	179	30.1	--	752	8.1	95	8.0	240	22.6
12...	1330	80513	80513	179	29.5	--	752	8.1	97	8.1	239	23.8
12...	1341	80513	80513	179	31.3	--	752	7.8	89	7.8	241	21.1
12...	1342	80513	80513	179	33.0	--	752	7.8	87	7.8	241	20.3
12...	1343	80513	80513	179	36.1	--	752	7.6	83	7.8	241	19.3
12...	1344	80513	80513	179	39.8	--	752	7.1	76	7.5	241	17.7
12...	1345	80513	80513	179	43.0	--	752	6.7	70	7.4	241	16.6
12...	1346	80513	80513	179	45.1	--	752	6.5	66	7.3	240	16.1
12...	1347	80513	80513	179	49.5	--	752	6.0	60	7.2	240	15.2
12...	1348	80513	80513	179	55.2	--	752	5.6	55	7.1	240	14.2
12...	1350	80513	80513	179	60.2	--	752	5.4	53	7.0	240	13.4
12...	1351	80513	80513	179	66.0	--	752	5.4	51	7.0	239	12.5
12...	1352	80513	80513	179	69.6	--	752	5.1	48	7.0	238	12.0
12...	1353	80513	80513	179	80.3	--	752	4.8	44	6.9	236	11.0
12...	1354	80513	80513	179	90.2	--	752	5.0	45	6.8	238	10.2
12...	1355	80513	80513	179	100	--	752	5.0	44	6.9	246	9.4
12...	1356	80513	80513	179	110	--	752	5.0	43	6.8	247	8.7
12...	1357	80513	80513	179	120	--	752	5.0	43	6.8	243	8.1
12...	1358	80513	80513	179	130	--	752	4.9	41	6.8	249	7.5
12...	1359	80513	80513	179	140	--	752	4.5	38	6.7	252	7.0
12...	1400	80513	80513	179	150	--	752	3.9	33	6.7	260	6.8
12...	1401	80513	80513	179	160	--	752	3.5	29	6.6	264	6.5
12...	1402	80513	80513	179	170	--	752	3.5	29	6.6	263	6.5
12...	1403	80513	80513	179	179	--	752	.8	6	6.8	280	6.5
SEP												
08...	1424	80513	80513	171	.00	4.90	755	7.9	100	8.4	228	27.3
08...	1425	80513	80513	171	9.90	--	755	8.1	102	8.5	227	26.5
08...	1426	80513	80513	171	20.0	--	755	8.0	101	8.5	227	26.3
08...	1427	80513	80513	171	30.0	--	755	7.9	99	8.5	227	26.2
08...	1429	80513	80513	171	31.0	--	755	6.7	81	8.0	237	24.0
08...	1430	80513	80513	171	31.9	--	755	6.1	72	7.8	239	22.6
08...	1431	80513	80513	171	33.1	--	755	5.7	65	7.7	238	21.7
08...	1432	80513	80513	171	35.0	--	755	5.4	61	7.6	239	20.6
08...	1433	80513	80513	171	37.0	--	755	5.0	55	7.5	239	19.6
08...	1434	80513	80513	171	40.1	--	755	4.6	50	7.4	239	18.6
08...	1435	80513	80513	171	45.2	--	755	2.5	26	7.2	235	16.9
08...	1436	80513	80513	171	50.3	--	755	1.9	20	7.2	231	16.0
08...	1437	80513	80513	171	55.1	--	755	2.3	23	7.1	232	15.1
08...	1438	80513	80513	171	60.0	--	755	2.4	24	7.1	230	14.5
08...	1439	80513	80513	171	70.1	--	755	3.3	32	7.1	234	13.4
08...	1440	80513	80513	171	80.0	--	755	3.3	31	7.1	231	12.3
08...	1441	80513	80513	171	89.9	--	755	3.3	31	7.0	227	11.2
08...	1442	80513	80513	171	100	--	755	3.9	35	7.0	239	10.4
08...	1443	80513	80513	171	110	--	755	3.7	33	7.0	233	9.6
08...	1444	80513	80513	171	120	--	755	3.6	32	6.9	235	8.8
08...	1445	80513	80513	171	130	--	755	3.1	27	6.9	243	8.1
08...	1446	80513	80513	171	140	--	755	2.4	20	6.9	250	7.6
08...	1447	80513	80513	171	150	--	755	1.5	13	6.8	256	7.3
08...	1448	80513	80513	171	160	--	755	1.2	10	6.8	259	7.1
08...	1449	80513	80513	171	170	--	755	.8	6	6.8	260	7.0
08...	1450	80513	80513	171	171	--	755	.7	6	6.8	260	6.9

WHITE RIVER BASIN

07053450 WHITE RIVER BELOW TABLE ROCK DAM NEAR BRANSON, MISSOURI

LOCATION.--Lat 36°35'40", long 93°18'33", in NW1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010001, at dam on White River, 3.0 mi upstream from Fall Creek and 6.1 mi southwest of Branson, Missouri.

DRAINAGE AREA.--4,020 mi².

PERIOD OF RECORD.--October 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
OCT									
24...	1335	80513	80513	760	8.4	83	7.2	239	14.7
NOV									
05...	1346	80513	80513	753	7.1	67	7.2	215	12.1
DEC									
05...	1327	80513	80513	761	8.6	81	7.5	259	12.2
MAR									
19...	0917	80513	80513	738	11.2	97	7.8	232	7.5
JUN									
19...	0900	80513	80513	753	9.9	89	8.1	264	10.0
JUL									
03...	0833	80513	80513	752	9.6	87	7.3	270	10.5
AUG									
12...	1240	80513	80513	756	8.8	77	6.7	251	8.7
SEP									
08...	1353	80513	80513	759	8.0	75	7.1	250	12.1

WHITE RIVER BASIN

141

07054410 BEAR CREEK NEAR OMAHA

LOCATION.--Lat 36°26'50", long 92°56'00", in NE1/4NE1/4NW1/4 sec.26, T.21 N., R.20 W., Boone County, Hydrologic Unit 11010003, attached to downstream end of bridge pier near right bank on State Highway 14, 6.5 mi east of Omaha.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--October 2001 to current year. Annual maximum 1995-2001.

GAGE.-Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	23	17	362	15	201	41	42	41	11	3.6	27
2	e12	20	16	208	15	212	39	41	186	11	311	23
3	e12	22	17	141	15	181	37	35	275	12	103	24
4	e12	23	23	105	14	157	35	31	160	10	39	25
5	e12	24	25	83	14	133	33	28	105	9.1	25	20
6	e14	26	23	66	15	111	e35	26	80	8.0	17	17
7	e15	25	22	54	15	95	e32	25	67	7.2	13	15
8	e12	24	23	47	14	82	27	22	51	6.7	9.9	14
9	e12	23	27	43	15	70	26	20	41	6.2	7.7	14
10	e12	22	33	38	16	60	25	20	34	6.1	6.3	14
11	e11	22	33	33	18	54	24	25	33	5.7	5.6	17
12	e10	21	33	30	20	50	23	24	48	6.9	4.9	22
13	e12	21	101	28	21	62	22	22	56	7.4	4.3	26
14	e11	20	171	26	57	62	22	32	40	6.8	4.2	27
15	e8.6	21	101	25	94	56	20	46	32	6.1	3.6	27
16	e9.1	21	63	24	77	50	19	167	28	5.4	2.9	24
17	e9.1	20	45	22	60	46	19	637	25	4.9	2.1	22
18	e9.1	19	44	21	49	44	19	329	24	4.7	1.6	21
19	e12	19	58	20	170	141	19	211	27	4.4	1.7	20
20	e12	18	66	21	232	202	27	e183	23	3.8	1.5	19
21	e12	18	53	21	187	e177	31	162	19	3.5	1.3	20
22	e10	17	42	19	368	e153	28	121	17	7.2	2.1	22
23	e9.7	17	37	18	404	134	24	96	16	8.4	3.7	21
24	9.1	17	42	17	275	113	246	104	15	8.3	5.3	21
25	11	17	44	16	199	100	221	317	13	6.6	6.2	20
26	11	17	40	16	165	87	134	218	14	5.3	6.9	21
27	11	16	38	16	148	74	95	150	13	4.4	7.7	21
28	14	16	48	16	148	68	68	104	12	3.9	10	21
29	50	16	79	16	---	59	53	77	11	3.8	12	22
30	44	18	366	16	---	e50	44	62	10	3.8	15	22
31	31	---	853	15	---	44	---	49	---	3.8	24	---
TOTAL	441.7	603	2583	1583	2840	3128	1488	3426	1516	202.4	662.1	629
MEAN	14.2	20.1	83.3	51.1	101	101	49.6	111	50.5	6.53	21.4	21.0
MAX	50	26	853	362	404	212	246	637	275	12	311	27
MIN	8.6	16	16	15	14	44	19	20	10	3.5	1.3	14
MED	12	20	42	24	53	82	29	49	30	6.2	6.2	21
AC-FT	876	1200	5120	3140	5630	6200	2950	6800	3010	401	1310	1250
CFSM	0.11	0.15	0.63	0.38	0.76	0.76	0.37	0.83	0.38	0.05	0.16	0.16
IN.	0.12	0.17	0.72	0.44	0.79	0.87	0.42	0.96	0.42	0.06	0.19	0.18

WHITE RIVER BASIN

07054410 BEAR CREEK NEAR OMAHA--CONTINUED

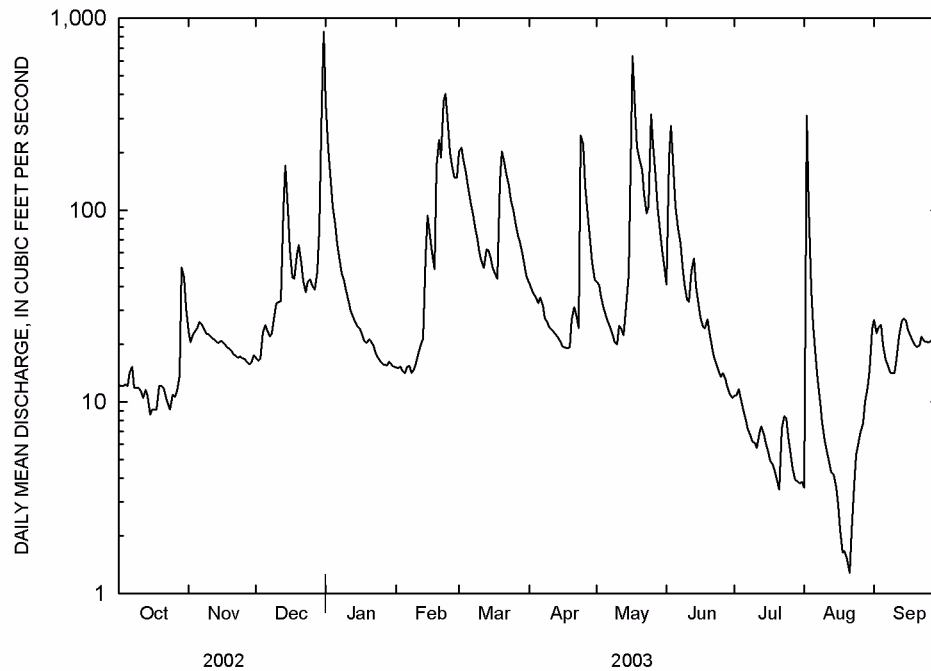
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	13.6	33.3	236	79.6	134	257	254	179	210	10.4	25.5	16.3
MAX	14.2	46.5	389	108	167	412	458	247	370	14.4	29.7	21.0
(WY)	2003	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2003
MIN	13.0	20.1	83.3	51.1	101	101	49.6	111	50.5	6.53	21.4	11.7
(WY)	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	58654.5		19102.2			
ANNUAL MEAN	161		52.3		121	
HIGHEST ANNUAL MEAN					189 2002	
LOWEST ANNUAL MEAN					52.3 2003	
HIGHEST DAILY MEAN	6270	Apr 8	853	Dec 31	6270	Apr 8 2002
LOWEST DAILY MEAN	6.7	Sep 28	1.3	Aug 21	1.3	Aug 21 2003
ANNUAL SEVEN-DAY MINIMUM	7.3	Aug 4	1.9	Aug 16	1.9	Aug 16 2003
MAXIMUM PEAK FLOW			1440	Dec 30	15900	Jun 10 2002
MAXIMUM PEAK STAGE			3.90	Dec 30	11.38	Jun 10 2002
INSTANTANEOUS LOW FLOW			1.0	Aug 21-22	1.0	¹ Aug 21 2003
ANNUAL RUNOFF (AC-FT)	116300		37890		87330	
ANNUAL RUNOFF (CFSM)	1.21		0.39		0.91	
ANNUAL RUNOFF (INCHES)	16.41		5.34		12.31	
10 PERCENT EXCEEDS	341		148		232	
50 PERCENT EXCEEDS	39		22		28	
90 PERCENT EXCEEDS	9.9		6.9		7.4	

¹Also August 22, 2003

^eEstimated



WHITE RIVER BASIN

143

07054500 BULL SHOALS LAKE NEAR FLIPPIN

LOCATION.--Lat 36°21'56", long 92°34'29", in NW1/4 sec.21, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, at dam on White River, 6.3 mi northeast of Flippin, 12.5 mi downstream from Little North Fork, and at mile 418.6.

DRAINAGE AREA.--6,051 mi².

PERIOD OF RECORD.--Water years 1954-60, 1972, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT												
23...	1530	80513	80513	173	.60	3.70	775	6.9	74	7.8	280	19.8
23...	1531	80513	80513	173	10.1	--	775	6.7	72	7.9	280	19.8
23...	1532	80513	80513	173	19.9	--	775	6.6	71	7.8	280	19.7
23...	1533	80513	80513	173	30.3	--	775	6.3	68	7.8	280	19.6
23...	1534	80513	80513	173	39.9	--	775	6.3	68	7.8	280	19.6
23...	1535	80513	80513	173	50.0	--	775	5.8	63	7.7	280	19.5
23...	1536	80513	80513	173	54.0	--	775	.6	6	7.1	279	18.6
23...	1538	80513	80513	173	58.1	--	775	.3	3	7.1	277	17.9
23...	1539	80513	80513	173	60.1	--	775	.3	3	7.1	275	17.6
23...	1540	80513	80513	173	66.1	--	775	.3	3	7.0	274	17.1
23...	1541	80513	80513	173	70.0	--	775	.2	3	7.0	273	16.8
23...	1542	80513	80513	173	80.1	--	775	.8	8	7.0	268	15.9
23...	1543	80513	80513	173	90.0	--	775	1.4	13	7.0	265	15.4
23...	1544	80513	80513	173	100	--	775	1.4	14	7.0	266	14.9
23...	1545	80513	80513	173	110	--	775	1.3	13	7.0	268	14.4
23...	1546	80513	80513	173	120	--	775	1.1	11	7.0	271	13.8
23...	1547	80513	80513	173	130	--	775	.4	3	7.0	274	13.0
23...	1548	80513	80513	173	140	--	775	.2	2	7.0	276	12.2
23...	1549	80513	80513	173	150	--	775	.2	2	7.0	280	11.0
23...	1551	80513	80513	173	160	--	775	.2	2	7.0	280	10.0
23...	1552	80513	80513	173	170	--	775	.2	2	7.0	282	9.3
23...	1553	80513	80513	173	173	--	775	.2	2	7.0	285	9.0
NOV												
06...	0925	80513	80513	169	.30	4.40	768	6.2	63	7.4	275	16.6
06...	0926	80513	80513	169	10.1	--	768	6.0	61	7.5	276	16.6
06...	0927	80513	80513	169	20.0	--	768	5.9	60	7.5	276	16.6
06...	0928	80513	80513	169	30.0	--	768	6.1	62	7.5	276	16.6
06...	0930	80513	80513	169	40.0	--	768	5.9	60	7.5	276	16.6
06...	0931	80513	80513	169	50.0	--	768	5.9	60	7.5	276	16.6
06...	0932	80513	80513	169	59.9	--	768	5.9	60	7.5	276	16.6
06...	0933	80513	80513	169	70.1	--	768	5.8	59	7.5	276	16.6
06...	0934	80513	80513	169	79.9	--	768	5.9	60	7.4	276	16.6
06...	0935	80513	80513	169	89.9	--	768	1.2	12	7.0	268	16.0
06...	0936	80513	80513	169	100	--	768	1.1	11	6.9	265	15.5
06...	0937	80513	80513	169	110	--	768	1.1	11	6.9	265	15.0
06...	0938	80513	80513	169	120	--	768	1.1	10	6.9	266	14.4
06...	0939	80513	80513	169	130	--	768	.4	3	6.9	272	13.6
06...	0940	80513	80513	169	140	--	768	.3	3	6.9	275	12.4
06...	0941	80513	80513	169	150	--	768	.3	3	6.9	280	11.1
06...	0942	80513	80513	169	160	--	768	.4	3	6.9	280	10.1
06...	0943	80513	80513	169	169	--	768	.4	3	7.0	283	9.3
DEC												
04...	1454	80513	80513	170	.10	4.00	758	7.2	69	7.6	275	12.9
04...	1455	80513	80513	170	10.0	--	758	7.1	67	7.6	275	13.0
04...	1456	80513	80513	170	20.0	--	758	6.9	66	7.6	275	13.0
04...	1457	80513	80513	170	30.1	--	758	6.8	65	7.6	275	13.0
04...	1458	80513	80513	170	40.1	--	758	6.9	66	7.6	275	13.0
04...	1459	80513	80513	170	49.9	--	758	6.8	65	7.6	275	13.0
04...	1500	80513	80513	170	60.1	--	758	6.8	65	7.6	275	13.0
04...	1501	80513	80513	170	70.0	--	758	6.7	64	7.6	275	13.0
04...	1502	80513	80513	170	80.0	--	758	6.8	65	7.6	275	13.0
04...	1503	80513	80513	170	89.9	--	758	6.7	64	7.6	275	13.0
04...	1504	80513	80513	170	100	--	758	6.7	64	7.6	275	13.0
04...	1505	80513	80513	170	110	--	758	6.7	64	7.6	275	13.0
04...	1506	80513	80513	170	120	--	758	6.7	64	7.6	275	13.0
04...	1507	80513	80513	170	130	--	758	3.6	34	7.3	277	12.7
04...	1508	80513	80513	170	140	--	758	.5	5	7.2	283	11.7
04...	1509	80513	80513	170	150	--	758	.4	4	7.2	283	10.6
04...	1510	80513	80513	170	160	--	758	.3	3	7.2	283	10.0
04...	1511	80513	80513	170	170	--	758	.3	2	7.2	285	9.2

WHITE RIVER BASIN

07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std, units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
MAR												
19...	1359	80513	80513	170	.20	6.40	742	11.5	101	8.2	270	8.7
19...	1400	80513	80513	170	10.1	--	742	11.5	99	8.2	270	7.5
19...	1402	80513	80513	170	19.9	--	742	11.4	96	8.1	270	6.8
19...	1403	80513	80513	170	30.1	--	742	10.9	92	8.1	270	6.6
19...	1404	80513	80513	170	39.9	--	742	10.6	89	8.0	271	6.4
19...	1405	80513	80513	170	50.0	--	742	10.4	87	7.9	271	6.3
19...	1406	80513	80513	170	60.0	--	742	10.4	86	8.0	271	6.3
19...	1407	80513	80513	170	70.0	--	742	10.3	85	7.9	271	6.2
19...	1408	80513	80513	170	80.6	--	742	10.3	85	7.9	271	6.2
19...	1409	80513	80513	170	90.0	--	742	10.2	84	7.9	271	6.1
19...	1410	80513	80513	170	100	--	742	10.3	85	7.9	271	6.1
19...	1411	80513	80513	170	110	--	742	10.1	84	7.9	272	6.1
19...	1412	80513	80513	170	120	--	742	10.2	84	7.9	271	6.1
19...	1413	80513	80513	170	130	--	742	10.1	84	7.9	272	6.1
19...	1414	80513	80513	170	140	--	742	10.2	84	7.9	271	6.1
19...	1415	80513	80513	170	150	--	742	10.0	83	7.9	271	6.1
19...	1416	80513	80513	170	160	--	742	10.1	83	8.0	271	6.0
19...	1417	80513	80513	170	170	--	742	10.1	83	7.9	271	6.0
JUN												
18...	0717	80513	80513	176	.00	5.40	755	8.3	103	--	268	26.0
18...	0718	80513	80513	176	10.1	--	755	8.8	108	--	266	25.2
18...	0719	80513	80513	176	15.0	--	755	9.2	111	--	266	24.4
18...	0720	80513	80513	176	20.1	--	755	9.2	108	--	266	23.0
18...	0721	80513	80513	176	23.1	--	755	9.1	105	--	268	21.9
18...	0722	80513	80513	176	27.0	--	755	8.5	95	--	273	20.0
18...	0723	80513	80513	176	28.0	--	755	8.4	92	--	274	19.2
18...	0724	80513	80513	176	29.0	--	755	8.4	91	--	275	18.6
18...	0725	80513	80513	176	30.0	--	755	8.3	88	--	276	17.7
18...	0726	80513	80513	176	32.0	--	755	8.5	88	--	276	16.6
18...	0727	80513	80513	176	35.1	--	755	8.7	88	--	276	15.6
18...	0728	80513	80513	176	38.1	--	755	8.8	88	--	276	14.7
18...	0729	80513	80513	176	40.0	--	755	8.8	87	--	275	14.3
18...	0730	80513	80513	176	45.0	--	755	8.9	86	--	275	13.2
18...	0731	80513	80513	176	50.1	--	755	8.8	83	--	275	12.5
18...	0732	80513	80513	176	60.0	--	755	8.3	76	--	275	11.1
18...	0733	80513	80513	176	69.8	--	755	8.0	71	--	275	9.8
18...	0734	80513	80513	176	75.1	--	755	7.9	69	--	275	8.9
18...	0735	80513	80513	176	80.0	--	755	7.8	68	--	275	8.4
18...	0736	80513	80513	176	90.0	--	755	8.0	67	--	274	7.5
18...	0737	80513	80513	176	100	--	755	7.9	66	--	275	6.9
18...	0738	80513	80513	176	110	--	755	8.1	67	--	274	6.6
18...	0740	80513	80513	176	120	--	755	8.0	66	--	274	6.4
18...	0741	80513	80513	176	130	--	755	8.0	65	--	274	6.3
18...	0742	80513	80513	176	140	--	755	7.9	65	--	274	6.3
18...	0743	80513	80513	176	150	--	755	7.6	62	--	275	6.2
18...	0744	80513	80513	176	160	--	755	7.5	61	--	276	6.2
18...	0745	80513	80513	176	170	--	755	7.3	59	--	276	6.2
18...	0746	80513	80513	176	176	--	755	7.2	59	--	276	6.2
JUL												
02...	0850	80513	80513	174	.30	5.80	755	7.9	101	--	275	27.1
02...	0851	80513	80513	174	10.1	--	755	8.3	104	--	271	26.7
02...	0852	80513	80513	174	15.0	--	755	8.8	109	--	273	25.6
02...	0854	80513	80513	174	17.0	--	755	9.4	115	--	272	24.7
02...	0855	80513	80513	174	19.0	--	755	9.6	115	--	273	24.1
02...	0856	80513	80513	174	20.0	--	755	9.6	115	--	273	23.6
02...	0857	80513	80513	174	23.0	--	755	9.7	114	--	275	22.7
02...	0858	80513	80513	174	26.0	--	755	9.3	107	--	278	21.4
02...	0859	80513	80513	174	28.0	--	755	8.9	99	--	280	20.4
02...	0900	80513	80513	174	30.1	--	755	8.7	95	--	282	19.4
02...	0901	80513	80513	174	31.9	--	755	8.4	90	--	284	18.2
02...	0902	80513	80513	174	34.9	--	755	8.2	87	--	283	17.4
02...	0904	80513	80513	174	36.9	--	755	8.3	85	--	285	16.3
02...	0905	80513	80513	174	40.1	--	755	8.2	83	--	283	15.5
02...	0906	80513	80513	174	44.1	--	755	8.3	82	--	282	14.4
02...	0907	80513	80513	174	47.1	--	755	8.2	80	--	282	13.7
02...	0908	80513	80513	174	50.0	--	755	8.1	78	--	283	13.3
02...	0909	80513	80513	174	57.0	--	755	7.9	75	--	282	12.3
02...	0910	80513	80513	174	60.0	--	755	7.7	72	--	282	11.8
02...	0911	80513	80513	174	64.1	--	755	7.3	67	--	284	10.8
02...	0912	80513	80513	174	70.1	--	755	7.2	64	--	282	10.0
02...	0913	80513	80513	174	75.1	--	755	7.1	63	--	282	9.4
02...	0914	80513	80513	174	80.0	--	755	7.1	62	--	282	9.0
02...	0915	80513	80513	174	89.9	--	755	7.3	62	--	281	7.9
02...	0916	80513	80513	174	100	--	755	7.4	62	--	281	7.2
02...	0917	80513	80513	174	110	--	755	7.6	63	--	281	6.8
02...	0918	80513	80513	174	120	--	755	7.6	63	--	280	6.6
02...	0919	80513	80513	174	130	--	755	7.5	61	--	281	6.4
02...	0920	80513	80513	174	140	--	755	7.4	60	--	281	6.3
02...	0921	80513	80513	174	150	--	755	7.2	59	--	282	6.2
02...	0922	80513	80513	174	160	--	755	7.0	58	--	283	6.2
02...	0923	80513	80513	174	170	--	755	6.7	55	--	284	6.2
02...	0924	80513	80513	174	174	--	755	6.4	52	--	285	6.2

WHITE RIVER BASIN

145

07054500 BULL SHOALS LAKE NEAR FLIPPIN--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG												
13...	1340	80513	80513	173	1.20	4.90	761	7.0	91	8.4	270	28.9
13...	1341	80513	80513	173	10.0	--	761	7.0	91	8.4	271	28.9
13...	1342	80513	80513	173	20.1	--	761	6.9	90	8.4	271	28.8
13...	1343	80513	80513	173	24.1	--	761	7.1	92	8.3	271	28.7
13...	1344	80513	80513	173	25.1	--	761	10.1	125	8.3	276	26.0
13...	1345	80513	80513	173	26.1	--	761	10.4	126	8.3	277	25.1
13...	1346	80513	80513	173	27.0	--	761	10.4	124	8.3	278	24.1
13...	1347	80513	80513	173	28.0	--	761	10.3	121	8.2	278	23.4
13...	1348	80513	80513	173	30.1	--	761	10.2	117	8.2	281	22.0
13...	1349	80513	80513	173	32.0	--	761	10.0	114	8.2	282	21.4
13...	1350	80513	80513	173	35.1	--	761	9.4	104	8.1	285	20.1
13...	1351	80513	80513	173	39.0	--	761	8.1	87	7.9	288	18.8
13...	1352	80513	80513	173	40.0	--	761	7.8	83	7.8	289	18.4
13...	1353	80513	80513	173	45.0	--	761	7.4	77	7.7	288	17.3
13...	1354	80513	80513	173	49.9	--	761	6.5	67	7.5	289	16.4
13...	1355	80513	80513	173	55.1	--	761	6.6	67	7.5	288	15.8
13...	1356	80513	80513	173	60.0	--	761	6.3	63	7.5	288	15.1
13...	1357	80513	80513	173	70.3	--	761	5.0	48	7.2	288	13.3
13...	1358	80513	80513	173	80.1	--	761	4.8	44	7.1	288	11.7
13...	1359	80513	80513	173	90.2	--	761	4.8	43	7.0	287	10.4
13...	1400	80513	80513	173	100	--	761	5.1	44	7.0	286	8.8
13...	1401	80513	80513	173	110	--	761	5.4	45	7.0	286	7.9
13...	1402	80513	80513	173	120	--	761	5.4	45	6.9	285	7.3
13...	1403	80513	80513	173	130	--	761	5.4	44	6.9	284	6.8
13...	1404	80513	80513	173	140	--	761	5.3	44	6.9	284	6.7
13...	1405	80513	80513	173	150	--	761	5.2	42	6.9	284	6.6
13...	1406	80513	80513	173	160	--	761	5.0	41	6.9	284	6.5
13...	1407	80513	80513	173	170	--	761	4.9	40	6.9	285	6.5
13...	1408	80513	80513	173	173	--	761	4.7	39	6.9	285	6.5
SEP												
09...	1248	80513	80513	170	.20	6.80	764	7.9	100	8.3	266	27.6
09...	1249	80513	80513	170	10.0	--	764	7.9	99	8.3	266	27.2
09...	1250	80513	80513	170	20.0	--	764	8.0	100	8.3	266	27.1
09...	1251	80513	80513	170	27.0	--	764	9.6	118	8.3	271	26.1
09...	1252	80513	80513	170	28.0	--	764	10.2	125	8.2	274	25.5
09...	1253	80513	80513	170	29.0	--	764	10.7	129	8.2	273	24.7
09...	1254	80513	80513	170	30.0	--	764	11.0	129	8.2	274	23.6
09...	1255	80513	80513	170	32.0	--	764	10.8	124	8.2	276	22.4
09...	1256	80513	80513	170	34.0	--	764	9.9	110	8.1	280	20.8
09...	1257	80513	80513	170	40.0	--	764	7.4	79	7.7	285	18.6
09...	1258	80513	80513	170	38.1	--	764	7.7	83	7.8	284	19.0
09...	1300	80513	80513	170	45.0	--	764	6.1	64	7.5	286	17.6
09...	1301	80513	80513	170	50.1	--	764	5.2	54	7.4	285	17.0
09...	1302	80513	80513	170	55.0	--	764	4.4	45	7.3	286	16.4
09...	1303	80513	80513	170	60.0	--	764	3.5	35	7.2	286	15.9
09...	1304	80513	80513	170	69.9	--	764	3.2	32	7.2	287	14.9
09...	1305	80513	80513	170	80.1	--	764	3.1	30	7.1	288	13.8
09...	1306	80513	80513	170	90.0	--	764	3.3	31	7.1	287	12.7
09...	1307	80513	80513	170	100	--	764	3.5	31	7.0	286	11.1
09...	1308	80513	80513	170	110	--	764	3.5	31	7.0	286	9.7
09...	1309	80513	80513	170	120	--	764	3.4	29	6.9	284	8.5
09...	1310	80513	80513	170	130	--	764	3.6	31	6.9	283	7.7
09...	1311	80513	80513	170	140	--	764	3.8	31	6.9	282	7.2
09...	1312	80513	80513	170	150	--	764	3.7	30	6.9	281	7.0
09...	1313	80513	80513	170	160	--	764	3.7	30	6.8	281	6.8
09...	1314	80513	80513	170	170	--	764	1.4	12	6.8	287	6.8

WHITE RIVER BASIN

07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN

LOCATION.--Lat 36°21'56", long 92°34'29", in NW1/4 sec.21, T.20 N., R.15 W., Marion County, Hydrologic Unit 11010003, at dam on White River, 11.9 mi upstream from gaging station, 6.3 mi northwest of Flippin, 12.5 mi downstream from Little North Fork, and at mile 418.6.

DRAINAGE AREA.--6,051 mi².

PERIOD OF RECORD.--July 1954 to September 1968, October 1970 to September 1971, December 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1954 to September 1964, May 1991 to current year.

DISSOLVED OXYGEN: May 1991 to current year.

REMARKS.--Dissolved oxygen and water temperature collected continuously June through December. Dissolved oxygen records good, except those for June 18, which are poor. Satellite telemeter at station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm wat unfiltered (00095)	Temperature, deg C (00010)
OCT 23...	1507	80513	80513	775	8.5	83	7.5	281	15.1
NOV 06...	1015	80513	80513	774	7.6	74	7.1	274	14.8
DEC 04...	1535	80513	80513	762	8.1	76	7.5	276	12.8
MAR 19...	1337	80513	80513	747	13.0	114	8.3	290	8.7
JUN 17...	0618	80513	80513	760	11.1	92	9.0	275	7.2
JUN 18...	0933	80513	80513	760	11.1	92	9.0	275	7.2
AUG 13...	1409	80513	80513	761	6.7	58	7.1	284	9.4
SEP 09...	1400	80513	80513	768	7.2	65	7.1	285	10.8

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.6	3.5	4.9	11.6	3.9	6.6	8.7	5.4	7.4	---	---	---
2	7.7	3.3	5.2	9.6	4.2	6.4	9.3	5.0	7.1	---	---	---
3	7.8	3.1	4.8	6.2	3.8	4.8	9.5	4.9	6.9	---	---	---
4	7.2	3.2	4.0	5.3	3.6	4.5	8.8	6.8	7.6	---	---	---
5	6.0	3.3	4.2	4.4	3.1	3.7	9.3	6.1	7.5	---	---	---
6	7.2	3.0	4.7	8.7	2.9	4.9	9.2	6.5	7.4	---	---	---
7	7.1	3.6	5.1	8.6	2.4	6.0	8.3	6.8	7.7	---	---	---
8	8.0	2.2	5.3	7.7	3.1	5.7	9.7	6.8	8.4	---	---	---
9	8.6	2.9	6.2	6.2	2.3	3.6	8.2	5.9	6.9	---	---	---
10	7.7	3.7	5.6	7.3	2.3	3.8	8.1	5.0	6.5	---	---	---
11	---	---	---	8.7	2.3	5.2	9.6	6.2	7.3	---	---	---
12	---	---	---	8.1	3.1	5.7	9.0	6.2	7.3	---	---	---
13	---	---	---	9.5	2.4	6.4	9.8	6.0	7.5	---	---	---
14	---	---	---	9.0	2.7	6.3	9.3	6.6	7.7	---	---	---
15	---	---	---	9.2	2.6	5.3	8.8	5.8	7.2	---	---	---
16	7.6	2.4	4.6	9.2	3.0	6.1	10.1	5.8	7.2	---	---	---
17	8.2	3.5	6.2	9.7	2.8	5.7	8.2	5.3	6.8	---	---	---
18	8.8	3.6	5.7	9.0	4.9	6.3	8.7	4.5	6.5	---	---	---
19	8.5	4.0	6.5	9.1	2.5	6.5	9.5	5.7	6.9	---	---	---
20	8.9	5.0	7.0	9.1	2.5	5.6	9.3	6.5	7.8	---	---	---
21	9.6	3.2	6.5	9.6	2.3	5.7	9.8	7.4	8.2	---	---	---
22	10.0	2.6	5.9	8.9	5.3	7.0	8.8	6.3	7.4	---	---	---
23	9.2	4.0	6.9	7.3	2.6	4.6	9.0	7.2	8.0	---	---	---
24	10.5	3.5	6.7	6.0	2.5	3.7	9.7	7.6	8.3	---	---	---
25	9.6	3.5	6.5	8.8	2.9	5.7	9.1	7.0	7.8	---	---	---
26	9.0	3.0	6.0	8.0	3.8	6.3	10.2	6.9	8.1	---	---	---
27	7.2	2.5	4.0	9.8	5.2	7.6	9.3	6.5	7.6	---	---	---
28	9.2	4.1	6.7	9.8	4.8	7.1	8.7	5.8	6.9	---	---	---
29	10.3	3.7	6.6	9.7	3.7	7.3	8.6	5.7	6.8	---	---	---
30	9.2	3.1	5.9	9.3	5.2	7.2	9.6	6.2	7.3	---	---	---
31	9.2	3.8	6.6	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	11.6	2.3	5.7	---	---	---	---	---	---

WHITE RIVER BASIN

07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN--CONTINUED

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	11.2	8.9	10	12.7	9.7	11.4	8.4	6.2	7.0	8.2	5.0	6.9
2	11.3	8.9	9.7	12.3	9.6	10.3	8.4	6.4	7.0	8.4	4.6	6.3
3	11.0	9.0	9.7	12.0	9.4	10.3	8.1	6.0	7.0	9.4	5.5	7.2
4	11.0	9.0	9.9	11.4	9.3	10.2	7.6	5.9	6.7	9.0	4.6	6.3
5	10.8	9.5	10.0	11.9	9.2	10.3	8.0	5.8	6.9	9.8	4.9	6.5
6	11.4	8.8	10.3	12.6	9.1	10.3	---	---	---	8.8	5.0	6.3
7	10.3	8.6	9.5	11.8	9.2	10.4	---	---	---	9.1	5.2	6.7
8	10.8	8.7	9.6	11.9	8.9	10.1	---	---	---	9.8	5.5	7.8
9	11.0	8.7	9.8	12.4	9.1	10.4	9.4	7.2	8.2	9.2	5.6	7.2
10	10.8	8.6	9.5	11.1	8.8	9.6	9.2	7.0	8.1	9.5	5.2	6.9
11	11.1	8.5	9.8	11.4	8.8	9.9	9.3	7.0	7.6	10.1	5.1	7.4
12	11.1	9.4	10.1	10.6	8.6	9.5	9.2	6.9	7.7	9.7	5.1	7.0
13	10.9	9.2	9.8	10.6	8.4	9.4	9.0	6.2	7.2	9.7	5.0	7.0
14	10.3	8.4	9.3	11.2	8.4	9.3	8.2	6.0	6.9	8.4	5.0	6.2
15	10.9	8.3	9.3	11.0	8.3	9.1	8.5	6.1	6.9	11.4	5.0	6.4
16	10.3	8.3	9.0	10.3	7.8	8.7	8.0	6.1	6.7	8.7	5.0	6.6
17	10.4	8.6	9.5	10.3	8.0	9.0	7.8	6.2	6.8	9.1	4.8	6.2
18	11.3	9.2	10.1	9.5	8.0	8.6	9.0	6.0	6.6	10.2	4.9	7.4
19	10.8	9.1	9.9	9.4	7.9	8.5	9.0	6.1	6.6	8.7	5.0	6.3
20	12.3	9.1	10.4	9.5	7.5	8.3	8.6	6.1	6.8	7.8	4.8	6.0
21	11.8	9.2	10.3	---	---	---	8.9	5.7	6.3	9.9	4.5	6.2
22	11.3	9.2	10.3	---	---	---	8.9	5.7	6.5	8.3	4.4	5.7
23	12.1	9.3	10.3	---	---	---	8.6	5.9	7.1	7.4	4.4	5.6
24	12.1	9.3	10.4	---	---	---	8.3	5.7	6.7	9.2	4.2	6.2
25	12.3	9.3	10.5	---	---	---	8.7	5.6	6.7	9.1	4.4	6.4
26	12.0	9.4	10.7	---	---	---	9.1	5.4	6.4	9.0	4.4	6.0
27	12.7	9.5	10.9	---	---	---	7.6	5.1	6.0	7.6	4.3	5.7
28	12.0	9.6	10.8	---	---	---	8.3	5.0	6.2	8.2	4.5	6.2
29	12.2	9.6	11.0	9.7	6.9	7.8	8.9	4.8	6.2	9.1	4.5	6.2
30	12.7	10.3	11.2	8.3	6.5	7.1	9.1	4.8	6.7	9.0	4.4	6.1
31	---	---	---	8.2	6.7	7.0	8.6	4.8	6.3	---	---	---
MONTH	12.7	8.3	10.1	---	---	---	---	---	---	11.4	4.2	6.5

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.3	13.9	14.1	15.0	12.9	14.2	13.4	12.0	12.6	---	---	---
2	14.4	14.0	14.2	14.5	12.9	13.5	13.6	12.3	13.0	---	---	---
3	14.4	14.0	14.2	14.3	12.8	13.3	13.2	11.4	12.8	---	---	---
4	15.4	13.5	14.4	14.6	12.9	14.0	---	---	---	---	---	---
5	14.7	12.8	14.0	14.7	12.9	13.9	12.8	11.5	12.4	---	---	---
6	15.1	13.0	14.0	15.1	12.8	14.6	12.8	11.3	12.4	---	---	---
7	14.5	13.5	14.3	15.0	13.1	14.4	12.5	11.9	12.4	---	---	---
8	14.3	13.2	14.2	14.7	13.0	14.1	12.2	11.8	12.1	---	---	---
9	14.4	14.1	14.2	14.5	13.4	13.8	12.1	11.3	11.8	---	---	---
10	14.5	13.6	14.3	14.8	13.2	13.8	12.0	11.0	11.7	---	---	---
11	15.0	13.9	14.4	14.9	12.9	14.0	12.0	11.0	11.6	---	---	---
12	15.6	13.4	14.2	14.9	12.8	14.2	12.0	11.3	11.7	---	---	---
13	14.7	12.8	13.7	14.7	12.9	14.2	11.7	11.0	11.4	---	---	---
14	14.9	12.6	14.0	14.6	12.9	14.1	11.9	10.8	11.1	---	---	---
15	14.5	12.9	14.1	14.7	13.1	13.9	12.0	10.7	11.1	---	---	---
16	14.7	12.7	14.1	14.6	12.6	13.5	12.1	10.7	11.3	---	---	---
17	14.7	12.8	14.0	14.6	12.9	13.9	11.5	11.2	11.3	---	---	---
18	14.6	13.1	14.1	14.3	14.0	14.2	11.4	11.0	11.3	---	---	---
19	14.5	13.5	14.0	14.6	13.0	14.0	11.4	10.8	11.2	---	---	---
20	14.5	14.3	14.4	14.4	12.6	13.8	11.4	10.4	11.0	---	---	---
21	14.8	14.0	14.4	14.6	12.8	13.8	11.7	10.2	10.8	---	---	---
22	15.0	13.5	14.3	14.5	13.5	14.1	11.2	9.8	10.4	---	---	---
23	14.8	14.3	14.4	14.7	12.9	13.4	11.2	9.4	10.6	---	---	---
24	14.8	14.2	14.5	14.6	12.7	13.3	10.6	9.0	9.9	---	---	---
25	14.7	13.5	14.3	14.1	12.7	13.6	10.6	9.2	9.6	---	---	---
26	14.7	13.4	14.2	14.0	12.9	13.6	10.9	9.6	10.3	---	---	---
27	14.5	14.2	14.4	13.9	12.6	13.5	10.7	9.6	10.1	---	---	---
28	14.7	14.3	14.5	14.0	12.3	13.1	10.9	9.4	9.9	---	---	---
29	14.9	13.7	14.4	13.8	12.3	13.3	10.9	9.4	10.0	---	---	---
30	14.8	13.4	14.2	13.1	12.0	12.4	10.7	10.1	10.4	---	---	---
31	14.9	13.1	14.0	---	---	---	10.4	9.7	10.0	---	---	---
MONTH	15.6	12.6	14.2	15.1	12.0	13.8	---	---	---	---	---	---

WHITE RIVER BASIN

07054501 WHITE RIVER AT BULL SHOALS DAM NEAR FLIPPIN--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.9	6.3	7.3	7.7	6.8	7.4	9.1	7.4	8.3	10.6	9.2	10.3
2	7.5	6.5	6.9	8.0	6.8	7.2	9.9	8.0	8.9	12.2	9.0	10.2
3	7.2	6.7	7.0	10.1	6.8	7.6	8.9	7.6	8.3	10.8	9.4	10.4
4	7.2	6.4	6.8	9.0	6.9	7.5	9.2	7.5	8.4	10.8	8.7	9.7
5	7.2	6.7	7.0	7.7	6.9	7.4	9.3	7.7	8.7	12.0	8.6	9.8
6	8.5	6.7	7.2	7.8	6.8	7.3	---	---	---	10.9	8.6	9.7
7	7.3	6.7	7.0	9.8	6.9	7.7	---	---	---	11.2	8.7	9.8
8	10.0	6.7	7.3	7.9	7.0	7.5	---	---	---	11.4	8.6	9.9
9	8.0	6.3	6.9	8.1	6.9	7.6	11.5	7.6	8.6	10.8	8.7	10.0
10	7.2	6.6	6.9	8.1	7.0	7.7	11.0	7.6	8.6	10.8	8.7	9.8
11	7.6	6.7	7.0	8.0	6.9	7.6	9.3	7.5	8.4	11.0	9.0	10.2
12	7.4	6.9	7.1	10.4	7.1	7.9	9.3	7.6	8.6	11.2	9.1	10.2
13	7.4	6.9	7.2	9.0	7.0	7.7	9.3	7.9	8.8	11.4	9.3	10.2
14	9.3	6.8	7.3	7.9	7.0	7.6	9.6	8.0	8.9	11.5	9.0	10.0
15	7.6	6.7	7.0	8.9	7.0	7.7	9.8	8.0	9.2	12.5	8.8	9.9
16	7.4	6.7	7.1	8.3	7.2	7.8	9.6	8.1	9.1	11.1	8.4	9.7
17	7.3	6.8	7.1	8.4	7.6	8.0	9.8	8.7	9.4	11.2	8.9	10.1
18	7.4	6.8	7.1	8.3	7.6	7.9	9.9	8.0	9.0	11.8	8.8	10.4
19	7.4	6.8	7.1	8.5	7.6	8.0	10.0	8.2	9.4	11.8	8.8	10.2
20	7.5	6.7	7.1	9.1	7.1	8.0	10.1	9.3	9.8	11.6	8.4	9.5
21	10.2	6.5	7.4	---	---	---	10.3	8.2	9.6	11.2	8.8	9.6
22	9.9	6.5	7.3	---	---	---	10.4	8.5	9.6	12.4	9.1	10.3
23	7.6	6.6	7.2	---	---	---	10.3	9.6	9.9	11.5	8.9	9.8
24	8.1	6.8	7.3	---	---	---	10.4	9.6	9.9	11.8	8.6	10.2
25	7.4	6.9	7.2	---	---	---	10.5	9.7	10.2	12.2	9.1	10.4
26	7.8	6.8	7.4	---	---	---	10.8	8.7	10.1	11.1	9.0	9.9
27	7.8	6.7	7.2	---	---	---	10.7	8.6	9.8	12.1	8.9	10.0
28	9.6	6.5	7.3	---	---	---	10.6	8.6	10.0	11.7	8.8	10.0
29	10.5	6.6	7.7	8.9	7.7	8.4	10.6	8.7	10.0	11.3	8.6	9.9
30	7.7	7.2	7.4	8.6	7.5	8.2	10.9	9.0	9.9	11.1	9.0	9.9
31	---	---	---	9.1	7.8	8.8	10.4	8.8	9.7	---	---	---
MONTH	10.9	6.3	7.2	---	---	---	---	---	---	12.5	8.4	10.0

WHITE RIVER BASIN

07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS--CONTINUED

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	1	15.2	7.6	10.7	13.2	9.8	11.6	13.1	7.1	8.6	7.8	5.2
2	10.9	6.7	8.8	15.0	9.5	10.6	9.3	7.7	8.3	11.0	4.5	6.7
3	10.5	7.7	9.4	15.8	8.9	10.7	10.7	6.5	8.3	10.2	5.7	7.5
4	11.0	8.1	9.9	14.3	8.5	10	13.5	6.4	8.4	10.6	6.1	7.7
5	11.6	10.0	10.6	12.1	8.7	10.3	12.1	6.5	8.2	13.3	6.1	8.0
6	13.6	8.9	11.4	13.2	8.8	10.6	12.0	5.9	7.9	14.1	5.8	7.2
7	11.1	7.6	9.7	14.6	8.9	10.5	12.6	6.1	7.9	14.8	5.7	8.1
8	14.4	7.2	9.9	---	---	---	12.2	5.7	7.6	15.7	5.9	8.8
9	12.4	7.5	10	---	---	---	13.0	5.6	8.2	9.2	6.0	7.7
10	11.2	6.8	9.4	10.3	7.8	9.1	12.8	5.6	8.0	14.4	5.9	8.4
11	12.2	7.7	10.1	11.4	8.3	9.7	10.2	5.7	7.2	11.2	6.0	7.9
12	10.9	9.6	10.1	14.0	8.4	10.0	8.4	5.6	7.0	10.3	5.0	6.8
13	10.5	9.4	10.0	15.2	8.3	10.2	7.8	5.9	7.0	14.2	4.8	8.1
14	14.0	8.0	10.2	10.8	8.8	9.7	11.7	6.0	7.3	15.0	4.8	7.9
15	12.0	8.0	9.8	13.4	8.0	9.4	8.2	6.2	7.2	12.5	5.8	7.8
16	11.5	7.9	9.3	12.1	8.0	9.2	8.6	6.0	7.0	15.2	6.1	8.1
17	10.7	8.8	9.8	11.1	8.8	10.0	8.3	6.5	7.2	9.1	5.0	6.4
18	12.2	9.1	10.2	10.6	9.0	9.9	8.6	5.0	6.4	10.4	4.7	7.3
19	11.5	8.6	10.1	10.7	8.6	9.6	7.8	5.8	6.6	15.3	5.6	7.9
20	11.7	8.6	10.5	13.7	8.2	9.7	8.5	6.2	7.1	15.4	6.1	9.0
21	15.4	9.3	11.3	11.1	8.8	9.6	7.8	6.2	6.6	12.6	5.3	8.3
22	15.6	9.0	11.1	11.1	8.8	9.8	8.1	5.6	6.7	15.2	4.7	7.8
23	14.2	9.1	10.6	12.7	8.2	10.1	8.4	5.8	7.2	15.3	5.0	8.1
24	15.1	9.2	10.9	10.6	8.3	9.3	7.8	5.8	6.8	14.4	5.9	8.1
25	12.0	8.0	10.5	10.6	8.2	9.3	8.6	5.7	7.0	14.2	6.0	8.9
26	12.2	7.6	10.5	9.8	7.6	8.9	7.6	5.5	6.2	13.5	5.4	7.8
27	13.0	8.3	11.1	10.4	7.3	8.9	7.3	5.4	5.9	14.6	6.0	8.2
28	16.1	9.6	11.9	10.0	7.7	8.9	8.4	5.2	6.1	14.8	6.2	9.2
29	17.0	10.0	12.4	11.6	8.3	9.4	9.0	5.1	6.5	13.5	6.3	8.4
30	12.7	10.7	11.6	10.3	7.0	8.8	12.0	5.1	7.5	13.9	5.7	8.1
31	---	---	---	9.7	7.8	8.4	9.6	5.0	6.5	---	---	---
MONTH	17.0	6.7	10.4	---	---	---	13.5	5.0	7.2	15.7	4.5	7.9

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	1	14.6	14.0	14.3	15.6	12.2	14.3	13.8	8.8	11.0	9.6	8.7
2	14.8	14.2	14.3	14.0	11.8	13.0	14.6	9.9	12.5	10.1	8.2	9.2
3	14.6	14.2	14.4	14.3	11.9	12.8	13.0	10.0	12.2	11.1	6.6	9.4
4	18.6	14.4	15.2	14.7	11.9	13.7	12.8	7.6	11.6	10.2	7.5	9.4
5	17.3	13.7	14.6	14.9	12.0	13.9	12.8	9.1	11.8	10.5	8.6	9.7
6	17.4	13.8	14.8	---	---	---	12.6	9.0	11.8	9.8	9.2	9.7
7	15.3	13.5	14.5	---	---	---	12.7	10.6	12.1	---	---	---
8	14.7	13.6	14.2	---	---	---	12.6	11.4	12.0	---	---	---
9	14.5	14.2	14.3	---	---	---	12.0	10.0	11.6	---	---	---
10	14.7	14.2	14.4	---	---	---	11.8	9.6	11.3	---	---	---
11	16.8	14.4	14.9	---	---	---	11.8	9.6	11.3	---	---	---
12	18.8	14.0	15.2	---	---	---	12.3	10.5	11.5	---	---	---
13	15.8	12.7	14.2	15.4	11.7	14.1	11.7	10.2	11.1	---	---	---
14	16.3	11.8	14.1	14.6	11.9	13.9	13.7	9.1	10.8	---	---	---
15	15.2	12.8	14.3	14.6	12.6	13.7	14.3	8.8	10.8	---	---	---
16	15.1	12.0	14.2	14.7	10.9	12.9	12.9	9.2	11.0	---	---	---
17	18.4	12.7	14.8	16.3	11.5	13.8	12.2	10.8	11.4	---	---	---
18	14.6	13.5	14.3	14.5	13.3	13.9	12.2	11.0	11.5	---	---	---
19	15.0	14.1	14.5	16.6	11.8	14.2	11.7	10.2	11.0	---	---	---
20	14.6	14.3	14.5	16.2	11.1	13.8	12.4	8.9	10.9	---	---	---
21	18.1	14.4	15.2	15.8	11.0	13.7	12.4	7.7	9.9	---	---	---
22	16.6	14.3	14.8	15.5	11.8	13.9	12.7	7.8	9.7	---	---	---
23	18.1	14.2	15.2	16.4	10.6	13.0	10.9	7.4	9.6	---	---	---
24	17.4	14.1	15.1	16.1	10.7	13.0	10.2	5.6	7.6	---	---	---
25	15.9	14.3	14.8	14.0	11.2	13.2	10.4	5.9	7.4	---	---	---
26	15.4	14.0	14.6	14.7	11.1	13.3	10.8	6.6	9.1	---	---	---
27	14.9	14.2	14.5	14.0	10.3	13.1	12.4	7.5	9.5	---	---	---
28	14.8	14.2	14.6	15.3	9.9	12.7	11.2	7.3	8.7	---	---	---
29	15.2	14.4	14.7	14.2	10.4	12.9	12.2	7.2	9.4	---	---	---
30	15.5	13.4	14.5	13.8	10.0	11.5	11.9	10.2	11.0	---	---	---
31	15.0	12.9	14.2	---	---	---	10.6	8.9	9.6	---	---	---
MONTH	18.8	11.8	14.6	---	---	---	14.6	5.6	10.7	---	---	---

WHITE RIVER BASIN

07054502 WHITE RIVER BELOW BULL SHOALS DAM AT BULL SHOALS--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.6	8.0	10.6	9.8	7.9	8.7	14.1	8.9	10.0	11.8	10.7	11.1
2	10.8	7.7	9.5	13.8	7.9	9.3	17.0	9.1	10.8	16.4	10.5	12.2
3	10.9	7.3	8.5	14.6	7.8	9.5	11.7	9.2	10.2	12.7	10.9	11.4
4	10.2	7.3	8.2	12.6	8.2	9.3	15.1	9.2	10.6	11.9	10.9	11.3
5	7.8	7.1	7.4	10.2	8.3	9.3	13.1	9.2	10.1	15.8	10.6	11.6
6	12.6	7.1	9.3	10.6	8.7	9.6	13.2	9.0	10.5	14.4	10.5	11.3
7	9.7	7.4	8.7	15.8	7.8	9.2	14.3	9.1	10.4	15.5	10.6	11.8
8	13.7	7.4	9.4	---	---	---	14.3	9.1	10.5	16.3	10.6	11.6
9	10.6	7.7	8.5	---	---	---	16.8	9.6	11.4	11.7	10.6	11.1
10	11.7	7.5	9.1	10.5	8.1	8.8	16.2	9.2	11.1	16.2	10.9	11.7
11	10.8	7.4	9.1	10.7	8.0	8.6	12.1	9.1	10.0	12.4	10.5	11.4
12	7.8	7.4	7.6	15.6	8.3	10.3	11.0	9.1	10	12.8	11.1	11.7
13	7.8	7.3	7.6	14.4	8.2	9.9	11.5	9.1	9.9	16.0	11.2	12.9
14	13.7	7.5	9.2	9.4	7.9	8.5	13.2	9.2	10.2	16.6	11.9	13.0
15	10.2	8.2	9.2	12.3	8.2	9.0	10.8	9.4	9.9	14.1	10.7	11.8
16	10.3	7.4	8.6	11.1	8.3	9.0	11.2	9.6	10.3	15.0	10.0	11.5
17	8.9	7.4	7.8	8.8	8.1	8.4	10.5	9.4	9.7	17.1	10.8	11.7
18	9.0	7.6	8.0	8.8	8.0	8.3	12.4	9.6	10.4	14.1	10.6	12.1
19	9.4	7.9	8.7	10.1	8.2	8.8	11.0	9.6	10.1	16.8	11.2	12.5
20	9.6	7.6	8.6	12.6	8.5	9.2	10.3	9.7	10	16.2	9.6	11.8
21	15.4	7.8	9.6	9.7	8.3	8.7	11.3	9.9	10.3	13.3	11.0	11.9
22	14.8	7.8	9.6	10.3	8.5	9.1	11.3	10.0	10.5	17.7	11.9	13.0
23	11.4	7.7	8.6	9.6	7.4	8.5	11.6	9.8	10.3	16.6	11.1	12.6
24	13.8	7.6	8.9	10.1	8.1	8.6	11.2	9.9	10.3	18.1	10.1	12.2
25	9.5	7.6	8.4	9.4	8.4	8.8	11.6	10.2	10.6	17.6	10.7	13.3
26	10.5	7.7	8.5	9.8	8.7	9.2	11.4	10.2	10.7	14.6	11.2	12.6
27	9.4	7.9	8.4	10.0	8.4	9.2	12.1	10.3	10.9	17.1	11.5	12.8
28	13.3	7.6	9.3	10.1	8.6	9.0	11.7	10.3	10.8	16.7	10.1	12.5
29	16.2	7.6	9.8	10.7	8.6	9.1	12.2	10.6	11.1	13.2	9.4	11.1
30	8.5	7.6	7.9	11.0	8.6	9.2	15.2	10.6	12.4	12.4	10.9	11.3
31	---	---	---	9.7	8.6	9.1	12.8	10.5	11.5	---	---	---
MONTH	16.6	7.1	8.8	---	---	---	17.0	8.9	10.5	18.1	9.4	12.0

WHITE RIVER BASIN

07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW

LOCATION.--Lat 36°20'37", long 92°34'27", in SW1/4SE1/4SE1/4 sec.3, T.19 N., R.3 W., Marion County, Hydrologic Unit 11010003, 2.0 mi downstream from Bull Shoals Dam, and 4.0 mi east of Fairview.

PERIOD OF RECORD.--June 1992 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1992 to current year.

DISSOLVED OXYGEN: June 1992 to current year.

REMARKS.--Dissolved oxygen and water temperature collected continuously June through December. Dissolved oxygen records good except those from June 1 through July 29, which are poor. Satellite telemeter at station.

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.3	4.5	6.0	12.4	5.6	7.8	15.0	8.4	11.2	14.0	9.9	11.3
2	8.4	4.4	6.2	11.6	7.7	9.5	11.8	7.6	9.1	13.7	9.4	10.7
3	7.6	4.2	5.7	12.8	6.8	9.4	9.1	7.2	8.4	13.2	9.6	10.9
4	11.8	4.4	6.0	12.2	6.1	8.8	10.4	7.7	8.8	11.2	10.0	10.5
5	12.1	4.4	6.4	12.0	6.0	8.6	10.3	7.4	8.8	12.5	10.5	11.2
6	12.2	5.4	8.1	12.0	5.8	7.7	10.8	7.9	8.9	11.2	9.9	10.4
7	8.9	4.9	6.6	12.8	6.4	8.4	9.3	7.6	8.6	---	---	---
8	9.1	5.0	7.0	13.2	6.8	9.0	10.7	8.1	9.4	---	---	---
9	8.7	5.5	7.2	13.1	7.5	9.6	9.6	7.6	8.6	---	---	---
10	8.1	4.6	6.9	13.3	6.6	9.3	11.5	7.4	9.0	---	---	---
11	9.0	3.8	5.8	11.4	6.6	8.2	13.7	8.5	10.0	---	---	---
12	13.2	6.0	8.7	10.5	6.1	8.0	13.4	8.4	10.0	---	---	---
13	12.3	6.2	8.3	10.8	6.3	7.9	12.6	8.4	9.9	---	---	---
14	10.3	4.2	7.0	9.3	6.6	8.0	14.5	8.9	11.7	---	---	---
15	8.9	4.7	6.7	13.6	6.9	9.3	14.4	10.1	11.6	---	---	---
16	7.6	4.8	6.4	14.4	8.2	10.6	13.0	8.2	10.1	---	---	---
17	13.7	4.6	8.2	13.2	6.6	9.7	10.7	7.5	8.9	---	---	---
18	8.3	4.4	6.5	7.8	5.8	6.8	9.9	7.5	8.7	---	---	---
19	11.3	6.8	8.6	12.9	6.4	8.8	12.6	8.0	9.5	---	---	---
20	10.0	5.9	7.8	12.8	6.5	8.5	13.2	8.8	10.2	---	---	---
21	12.1	4.7	7.9	13.1	6.9	8.9	14.4	9.8	11.9	---	---	---
22	11.2	4.5	7.0	13.6	7.0	9.2	14.8	10.2	11.9	---	---	---
23	12.5	4.3	7.4	14.2	8.1	10.4	11.8	9.2	10.4	---	---	---
24	13.3	4.2	7.8	13.8	7.5	9.9	15.2	9.6	12.2	---	---	---
25	12.2	4.3	7.6	10.9	7.2	8.2	15.3	11.6	12.8	---	---	---
26	12.0	5.5	8.5	13.5	7.4	9.1	13.1	9.5	11.0	---	---	---
27	7.8	4.8	5.7	10.9	7.7	9.1	14.4	9.2	11.4	---	---	---
28	8.7	4.8	6.5	13.0	8.3	10.0	15.0	10.6	12.1	---	---	---
29	11.0	4.9	7.4	13.8	8.4	10.7	14.4	9.7	11.6	---	---	---
30	12.5	4.8	7.6	14.9	8.0	10.9	11.4	8.9	10.1	---	---	---
31	12.8	5.5	8.3	---	---	---	14.0	10.1	11.4	---	---	---
MONTH	13.7	3.8	7.2	14.9	5.6	9.0	15.3	7.2	10.3	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.7	7.4	9.8	13.2	9.8	11.6	12.5	7.7	9.0	10.6	7.6	8.5
2	10.1	7.5	8.6	15.5	9.3	11.1	9.7	8.0	8.7	15.2	6.7	9.8
3	9.4	6.9	8.4	16.5	8.9	11.5	11.7	7.8	9.1	13.7	7.7	9.0
4	10.9	8.2	9.1	15.5	9.5	11.3	13.0	7.4	9.1	12.6	7.0	8.7
5	9.4	8.5	8.9	13.6	8.6	10.9	12.4	7.9	8.9	12.9	7.2	9.2
6	11.5	8.5	9.8	14.0	8.7	10.9	13.1	7.5	8.7	13.6	6.8	8.7
7	9.7	6.9	8.5	15.2	9.1	10.8	13.0	7.3	8.7	15.0	6.8	9.5
8	12.0	7.4	8.9	12.6	8.9	10.6	12.7	7.3	8.8	14.8	7.5	9.9
9	11.1	7.4	8.7	13.0	9.8	10.7	13.4	6.9	9.1	11.2	7.4	8.3
10	9.8	7.1	8.4	11.6	8.8	10.0	12.9	6.7	9.0	13.6	6.8	8.9
11	10.0	6.8	8.3	12.2	9.2	10.1	11.5	7.2	8.4	11.7	6.6	8.2
12	8.9	8.3	8.6	13.9	8.6	10.2	10.1	7.1	8.2	12.2	7.2	8.5
13	8.8	7.9	8.3	14.3	7.9	10.1	10.0	7.2	8.0	13.6	7.4	9.5
14	11.3	7.1	8.6	10.6	8.1	9.5	12.3	7.2	8.2	14.1	6.3	9.0
15	9.6	6.8	8.0	12.9	8.3	9.7	9.2	7.2	7.8	11.8	6.5	8.3
16	9.1	6.2	7.4	11.4	7.9	9.2	9.3	7.0	7.9	13.5	6.8	9.0
17	8.4	7.2	7.7	10.8	8.9	9.7	9.0	7.1	7.6	10.9	6.8	8.1
18	10.5	6.8	8.4	9.8	8.8	9.3	11.1	6.8	7.6	11.6	7.2	9.2
19	10.3	7.5	9.1	10.1	8.4	9.1	7.9	6.7	7.4	14.0	7.1	9.0
20	10.4	7.6	9.3	12.8	8.4	9.4	8.5	6.7	7.4	13.6	7.2	9.5
21	13.9	8.6	10.5	10.0	8.2	8.7	8.0	6.6	7.2	11.8	6.6	9.1
22	14.0	8.1	10.5	10.4	8.0	9.0	9.1	6.5	7.4	13.8	6.4	9.0
23	12.8	8.5	10.0	11.7	7.7	8.9	9.2	6.5	7.8	13.8	6.5	9.4
24	13.9	8.9	10.5	10.2	7.6	8.6	9.1	6.4	7.5	14.6	6.9	9.1
25	11.4	9.0	10.5	9.3	7.9	8.4	8.4	6.2	7.4	14.0	8.1	10.4
26	11.6	8.9	10.5	9.5	7.3	8.4	8.8	6.1	7.0	13.6	7.1	9.6
27	12.3	9.2	10.7	8.9	7.6	8.2	---	---	---	14.3	7.2	9.9
28	15.0	9.6	11.9	8.6	7.3	7.8	---	---	---	14.7	7.8	10.6
29	16.0	10.0	12.5	11.8	7.2	8.7	11.1	7.2	8.5	14.2	7.3	9.8
30	12.3	11.0	11.4	9.9	7.5	8.6	14.1	7.1	9.9	13.8	7.5	9.8
31	---	---	---	9.3	8.1	8.4	12.4	6.5	8.8	---	---	---
MONTH	16.0	6.2	9.4	16.5	7.2	9.7	---	---	---	15.2	6.3	9.2

WHITE RIVER BASIN

07054527 WHITE RIVER BELOW BULL SHOALS DAM NEAR FAIRVIEW--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.8	14.3	14.5	15.8	13.6	14.7	13.1	9.3	11.2	9.7	9.1	9.4
2	15.1	14.3	14.5	14.8	13.3	13.9	14.5	10.9	12.8	10.0	8.6	9.5
3	15.2	14.4	14.7	14.4	13.0	13.6	13.1	11.0	12.5	10.7	7.4	9.5
4	20.0	14.6	15.6	15.2	12.8	14.3	12.9	8.3	11.9	10.3	8.1	9.5
5	18.2	14.3	15.0	15.3	13.4	14.5	12.9	9.9	12.1	10.7	8.8	9.8
6	18.1	14.5	15.6	16.4	13.2	14.9	13.0	9.9	12.0	9.9	9.5	9.7
7	15.7	14.5	14.9	16.9	13.6	15.0	12.7	11.4	12.1	---	---	---
8	15.4	14.4	14.8	17.1	13.0	14.9	12.6	11.7	12.1	---	---	---
9	15.1	14.6	14.8	16.4	14.2	15.1	12.1	10.7	11.7	---	---	---
10	15.4	14.6	14.9	17.2	14.2	15.4	12.1	10.2	11.5	---	---	---
11	16.4	14.7	15.2	16.2	12.5	14.4	12.0	10.2	11.5	---	---	---
12	20.1	15.0	16.4	15.7	12.3	14.3	12.2	10.9	11.6	---	---	---
13	16.4	14.1	15.2	15.9	12.9	14.5	11.6	10.7	11.3	---	---	---
14	16.4	13.4	14.7	14.7	12.8	14.2	12.7	9.9	11.1	---	---	---
15	15.5	13.7	14.6	14.9	13.5	14.2	13.2	9.3	10.9	---	---	---
16	15.3	13.3	14.5	14.4	12.3	13.4	12.6	9.6	11.1	---	---	---
17	18.4	13.8	15.3	16.1	12.3	14.1	12.3	11.1	11.5	---	---	---
18	15.0	14.4	14.7	14.7	13.4	14.0	12.2	11.1	11.6	---	---	---
19	15.6	14.7	15.2	16.4	12.7	14.4	11.6	10.5	11.1	---	---	---
20	15.3	14.7	15.0	16.1	12.0	14.1	12.0	9.4	11.0	---	---	---
21	17.4	14.6	15.3	15.7	12.0	13.9	11.5	8.6	10.2	---	---	---
22	16.4	14.5	15.1	15.6	12.5	14.1	11.5	8.3	9.7	---	---	---
23	17.4	14.6	15.3	15.8	11.6	13.6	11.0	8.2	9.9	---	---	---
24	17.1	14.6	15.3	15.6	11.5	13.5	10.8	7.1	8.5	---	---	---
25	16.1	14.6	15.1	14.1	11.5	13.4	9.9	6.3	7.8	---	---	---
26	15.8	14.6	15.1	14.6	12.0	13.6	10.8	7.3	9.2	---	---	---
27	15.5	14.7	14.9	14.1	11.3	13.2	12.1	8.4	10	---	---	---
28	15.0	14.7	14.8	14.9	11.1	13.0	10.6	7.8	9.0	---	---	---
29	15.2	14.6	14.9	14.5	11.0	13.1	11.4	7.8	9.7	---	---	---
30	15.7	14.5	14.9	13.3	10.4	11.7	11.6	10.3	11.1	---	---	---
31	15.0	13.9	14.7	---	---	---	10.3	9.4	9.8	---	---	---
MONTH	20.1	13.3	15.0	17.2	10.4	14.0	14.5	6.3	10.9	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	10.9	8.3	9.6	15.5	9.1	10.8	12.9	11.3	12.0
2	12.1	8.5	10.3	14.7	8.0	9.9	13.1	9.4	10.6	18.3	12.2	14.0
3	11.5	7.4	8.9	17.6	7.9	10.6	14.6	9.6	10.8	14.2	11.5	12.5
4	11.2	7.6	8.4	15.6	8.4	10.1	17.1	9.5	11.1	15.3	11.2	12.5
5	8.4	7.4	7.7	12.6	8.6	10.3	14.4	9.6	10.7	17.1	11.2	12.9
6	12.3	7.4	9.5	12.8	8.7	10.5	16.5	9.3	11.2	17.3	11.2	12.5
7	12.3	8.5	10.6	15.6	8.2	10.1	17.3	9.3	11.3	19.3	11.4	13.6
8	16.2	8.4	10.6	12.0	8.1	9.7	17.5	9.4	11.3	19.2	11.5	13.4
9	13.0	8.3	9.4	11.4	8.3	9.5	19.7	10.0	12.6	13.9	11.3	12.1
10	11.7	7.6	9.1	11.6	8.3	9.5	19.1	9.5	12.5	17.6	11.3	13.1
11	11.3	7.8	9.8	12.3	8.2	9.4	14.4	9.3	10.9	14.2	11.1	12.5
12	8.3	7.6	7.9	18.3	8.5	11.3	13.6	9.3	10.8	15.4	11.6	12.8
13	8.6	7.4	7.9	16.3	8.6	11.0	12.7	9.4	10.7	18.3	11.7	14.2
14	16.5	7.7	10.1	11.5	8.0	9.5	16.3	9.6	11.1	19.1	12.8	14.7
15	12.2	8.0	9.8	15.6	8.3	9.9	12.3	9.9	10.6	16.2	11.9	13.2
16	12.7	7.5	9.1	13.2	8.5	9.8	13.1	10.0	11.1	18.4	11.5	13.3
17	9.5	7.7	8.3	10.2	8.3	9.2	11.9	9.8	10.4	15.0	11.4	12.6
18	10.1	7.8	8.7	9.4	8.5	9.0	14.9	10.0	11.1	15.0	11.8	13.3
19	11.9	8.1	9.5	11.6	8.4	9.7	12.5	9.9	10.7	18.9	11.6	13.9
20	10.6	7.7	9.0	15.9	8.7	10.3	11.1	9.9	10.4	18.2	11.8	13.5
21	17.7	8.1	10.7	10.3	8.8	9.4	12.6	10.2	10.9	14.6	12.3	13.3
22	17.2	7.9	10.7	11.6	8.8	9.6	13.2	10.3	11.2	19.6	13.2	15.0
23	14.0	7.8	9.2	11.3	8.5	9.2	12.7	10.2	11.0	18.2	13.2	14.5
24	15.2	7.6	9.4	11.8	8.5	9.5	13.0	10.2	11.2	19.1	11.4	13.5
25	11.1	7.7	8.9	10.2	8.6	9.2	12.2	10.5	11.2	17.6	11.9	14.5
26	10.7	8.0	8.8	11.9	8.8	10	12.9	10.7	11.4	18.0	13.0	14.6
27	11.3	8.1	9.4	11.3	9.1	9.8	---	---	---	18.3	12.9	14.5
28	16.6	7.9	10.7	12.0	8.9	9.6	---	---	---	17.5	12.3	14.1
29	18.5	7.9	11.4	12.0	9.0	9.7	13.8	11.0	11.9	16.3	11.5	12.8
30	9.1	7.9	8.5	12.2	8.9	9.8	16.8	11.3	13.5	14.4	11.4	12.6
31	---	---	---	10.2	9.0	9.4	15.8	11.0	13.2	---	---	---
MONTH	---	---	---	18.3	7.9	9.8	---	---	---	19.6	11.1	13.4

WHITE RIVER BASIN

07055608 CROOKED CREEK AT YELLVILLE

LOCATION.--Lat 36°13'23", long 92°40'47", in NW₁/4NE₁/4 sec.9, T.18 N., R.16 W., Marion County, Hydrologic Unit 11010003, on left bank at bridge on State Highway 14 at Yellville.

DRAINAGE AREA.--406 mi².

PERIOD OF RECORD.--July 1988 to September 1994, October 2001 to current year. Annual maximum 1985-88, 1995-2001. Occasional measurements 1978-88.

GAGE.--Water-stage recorder. Datum of gage is 541.605 ft above NGVD of 1929. 1939 to 1984, non-recording gage at present site and location.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.2	170	0.00	471	18	361	118	58	44	40	0.04	0.00
2	e7.5	85	0.00	347	17	368	109	54	72	18	7.3	0.00
3	e7.8	52	0.00	222	17	367	101	47	215	13	28	0.00
4	e7.8	46	0.42	152	15	351	97	41	159	11	9.9	0.82
5	e7.8	65	16	114	14	334	91	38	98	8.9	5.8	0.04
6	e9.7	108	15	84	16	312	88	34	66	7.4	4.3	0.00
7	e11	78	9.8	63	18	290	90	34	51	6.0	2.5	0.00
8	e7.1	38	3.4	53	e16	261	78	30	40	5.1	1.3	0.00
9	e7.1	14	1.4	48	16	224	71	27	33	4.1	0.34	0.00
10	6.8	5.3	3.3	44	17	188	65	26	28	3.4	0.00	0.00
11	7.7	3.9	10	40	17	169	61	27	26	2.8	0.00	0.00
12	7.4	3.0	12	38	17	159	55	24	49	3.1	0.00	0.00
13	6.9	2.3	19	36	17	e150	49	24	102	2.9	0.00	1.4
14	5.7	1.8	41	34	20	150	43	30	59	2.1	0.00	5.3
15	5.6	1.9	58	33	23	139	39	57	37	1.5	0.00	3.2
16	5.6	1.4	51	32	26	127	35	715	29	0.70	0.00	1.1
17	6.0	0.83	41	31	30	117	33	1480	54	0.06	0.00	0.00
18	6.4	0.31	37	e29	34	110	32	980	216	0.00	0.00	0.00
19	11	0.00	34	e28	51	151	31	650	118	0.00	0.00	0.00
20	13	0.00	44	e27	118	229	70	457	66	0.00	0.00	0.00
21	13	0.00	44	e28	201	286	75	527	42	0.00	0.00	0.00
22	12	0.00	40	e27	447	270	62	364	33	0.00	0.00	0.00
23	10	0.00	37	e26	683	245	50	253	27	0.73	0.00	0.00
24	8.9	0.00	42	e24	625	225	99	195	24	1.0	0.00	0.00
25	11	0.00	43	e24	501	208	257	269	20	0.01	0.00	0.00
26	12	0.00	40	e22	431	197	198	260	17	0.00	0.00	0.00
27	11	0.00	37	e21	393	182	157	194	16	0.00	0.00	0.00
28	12	0.00	36	e21	371	168	122	142	14	0.00	0.00	0.00
29	29	0.00	36	21	---	158	94	105	12	0.00	0.00	0.00
30	254	0.00	45	20	---	142	72	77	13	0.00	0.00	0.00
31	259	---	344	19	---	128	---	56	---	1.1	0.00	---
TOTAL	788.0	676.74	1140.32	2179	4169	6766	2542	7275	1780	132.90	59.48	11.86
MEAN	25.4	22.6	36.8	70.3	149	218	84.7	235	59.3	4.29	1.92	0.40
MAX	259	170	344	471	683	368	257	1480	216	40	28	5.3
MIN	5.6	0.00	0.00	19	14	110	31	24	12	0.00	0.00	0.00
AC-FT	1560	1340	2260	4320	8270	13420	5040	14430	3530	264	118	24
CFSM	0.06	0.06	0.09	0.17	0.37	0.54	0.21	0.58	0.15	0.01	0.00	0.00
IN.	0.07	0.06	0.10	0.20	0.38	0.62	0.23	0.67	0.16	0.01	0.01	0.00

WHITE RIVER BASIN

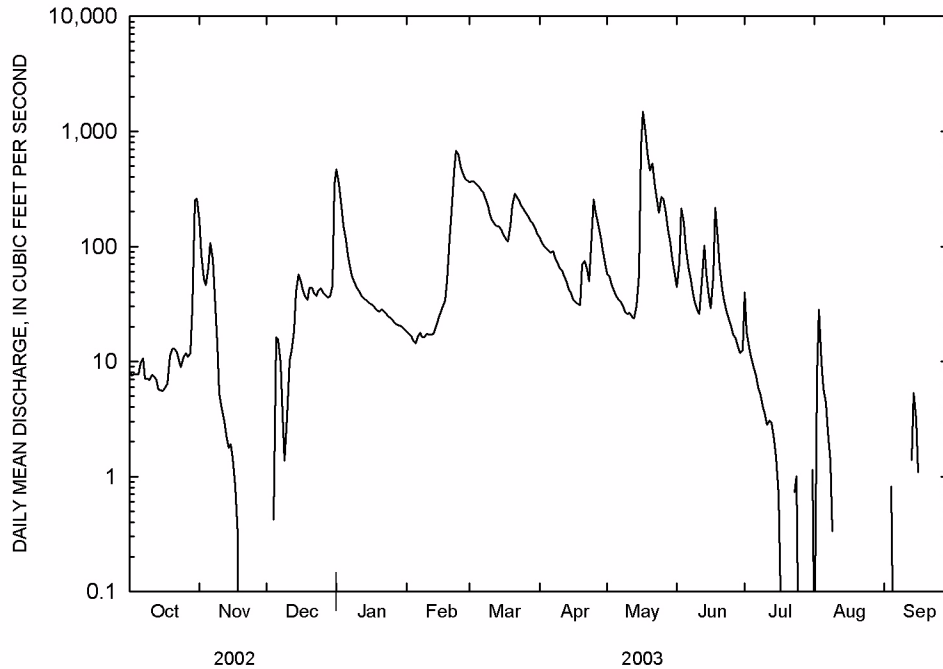
07055608 CROOKED CREEK AT YELLEVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988-94, 2002-03, BY WATER YEAR (WY)

MEAN	97.2	303	373	378	529	704	632	711	306	64.6	32.2	46.4
MAX	432	1050	915	1041	1586	1736	1200	2592	586	151	143	225
(WY)	1992	1992	2002	1993	1989	2002	2002	1990	1990	1992	1992	1992
MIN	0.065	0.30	0.000	70.3	149	147	84.7	135	59.3	4.29	1.92	0.40
(WY)	1990	1990	1990	2003	2003	1992	2003	1992	2003	2003	2003	2003

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1988-94, 2002-03	
ANNUAL TOTAL	158234.86		27520.30			
ANNUAL MEAN	434		75.4		348	
HIGHEST ANNUAL MEAN					518 2002	
LOWEST ANNUAL MEAN					75.4 2003	
HIGHEST DAILY MEAN	11200	Mar 20	1480	May 17	22100	May 3 1990
LOWEST DAILY MEAN	0.00	Nov 19	0.00	Nov 19	0.00	Aug 17 1988
ANNUAL SEVEN-DAY MINIMUM	0.00	Nov 19	0.00	Nov 19	0.00	Oct 3 1989
MAXIMUM PEAK FLOW			1870	May 17	38700	May 3 1990
MAXIMUM PEAK STAGE			6.83	May 17	25.20	May 3 1990
ANNUAL RUNOFF (AC-FT)	313900		54590		252000	
ANNUAL RUNOFF (CFSM)	1.07		0.19		0.86	
ANNUAL RUNOFF (INCHES)	14.50		2.52		11.64	
10 PERCENT EXCEEDS	1040		224		911	
50 PERCENT EXCEEDS	128		24		130	
90 PERCENT EXCEEDS	2.7		0.00		0.71	

^eEstimated



WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY

LOCATION.--Lat 35°56'43", long 93°59'42", in SW₁/₄SE₁/₄ sec.22, T.15 N., R.23 W., Newton County, Hydrologic Unit 11010005, on right bank 1.8 mi upstream from Highway 43 bridge, .8 mi upstream from Smith Creek, 2.6 mi south of Boxley, and at mi 108.

DRAINAGE AREA.--57 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1993 to July 1996, October 1998 to current year. Annual maximum water years 1996-98.

REVISED RECORDS.--WDR Ark. 1999: 1993 (M), 1994 (M), 1995 (M).

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	0.73	1.2	62	4.6	70	75	56	30	5.8	2.5	1.0
2	1.1	1.0	1.2	34	4.7	69	67	59	159	6.6	2.9	1.1
3	0.98	1.2	1.4	23	4.9	64	61	48	169	46	3.8	0.96
4	0.85	1.2	1.8	17	5.0	60	56	42	98	29	5.3	0.85
5	0.70	1.5	1.5	13	5.2	56	49	40	71	19	4.9	0.89
6	0.67	1.5	1.5	12	5.3	50	45	37	62	15	4.1	0.96
7	0.55	1.6	1.7	9.3	5.4	46	46	61	55	11	3.5	1.00
8	0.49	1.7	1.8	8.2	5.6	42	40	50	44	9.1	3.1	0.99
9	0.54	1.9	1.8	7.7	5.6	38	36	43	35	7.5	2.8	0.92
10	0.47	2.0	1.9	7.0	5.6	34	33	39	29	6.6	2.7	0.85
11	0.44	2.0	1.9	6.4	5.7	32	31	54	26	5.6	2.6	0.87
12	0.39	2.0	2.0	6.0	5.8	31	30	50	45	5.7	2.5	1.1
13	0.32	2.0	2.2	5.8	6.1	39	29	45	35	5.7	2.5	1.2
14	0.28	2.2	3.2	5.5	7.6	58	27	122	25	5.3	2.4	0.98
15	0.26	2.2	5.5	5.2	29	54	26	119	21	5.3	2.4	1.1
16	0.25	2.2	5.0	5.0	38	51	25	2240	18	4.9	2.3	1.2
17	0.25	2.2	4.9	4.9	32	50	24	1680	25	4.6	2.3	1.3
18	0.23	2.2	5.2	4.6	28	48	23	797	24	4.3	2.3	1.5
19	0.26	2.3	5.3	4.5	56	767	23	442	23	4.1	2.2	1.6
20	0.31	2.2	5.2	4.6	93	597	80	1430	19	3.9	2.1	1.7
21	0.27	2.2	5.2	4.5	81	465	77	746	16	3.8	2.1	1.8
22	0.24	2.1	5.0	4.6	247	301	60	410	13	4.9	2.1	1.8
23	0.23	2.0	5.1	4.5	213	217	52	244	11	7.1	2.0	1.8
24	0.23	1.8	5.6	4.3	128	166	129	175	9.2	6.0	1.9	1.8
25	0.29	1.7	5.8	4.2	92	156	139	169	7.9	4.7	1.9	1.7
26	0.28	1.6	5.5	4.2	75	277	112	123	7.6	4.0	1.8	1.6
27	0.26	1.4	5.3	4.1	65	198	92	90	6.7	3.6	1.7	1.5
28	0.34	1.3	5.1	4.2	64	158	78	68	5.8	3.3	1.4	1.3
29	0.62	1.3	5.2	4.2	---	122	68	55	5.0	3.2	1.3	1.2
30	0.56	1.2	8.5	4.3	---	99	59	44	4.6	3.0	1.3	1.1
31	0.60	---	238	4.6	---	85	---	36	---	2.7	1.2	---
TOTAL	14.46	52.43	350.5	293.4	1318.1	4500	1692	9614	1099.8	251.3	77.9	37.67
MEAN	0.47	1.75	11.3	9.46	47.1	145	56.4	310	36.7	8.11	2.51	1.26
MAX	1.2	2.3	238	62	247	767	139	2240	169	46	5.3	1.8
MIN	0.23	0.73	1.2	4.1	4.6	31	23	36	4.6	2.7	1.2	0.85
AC-FT	29	104	695	582	2610	8930	3360	19070	2180	498	155	75
CFSM	0.01	0.03	0.20	0.16	0.82	2.53	0.98	5.40	0.64	0.14	0.04	0.02
IN.	0.01	0.03	0.23	0.19	0.85	2.92	1.10	6.23	0.71	0.16	0.05	0.02

WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993-96, 1999-03, BY WATER YEAR (WY)

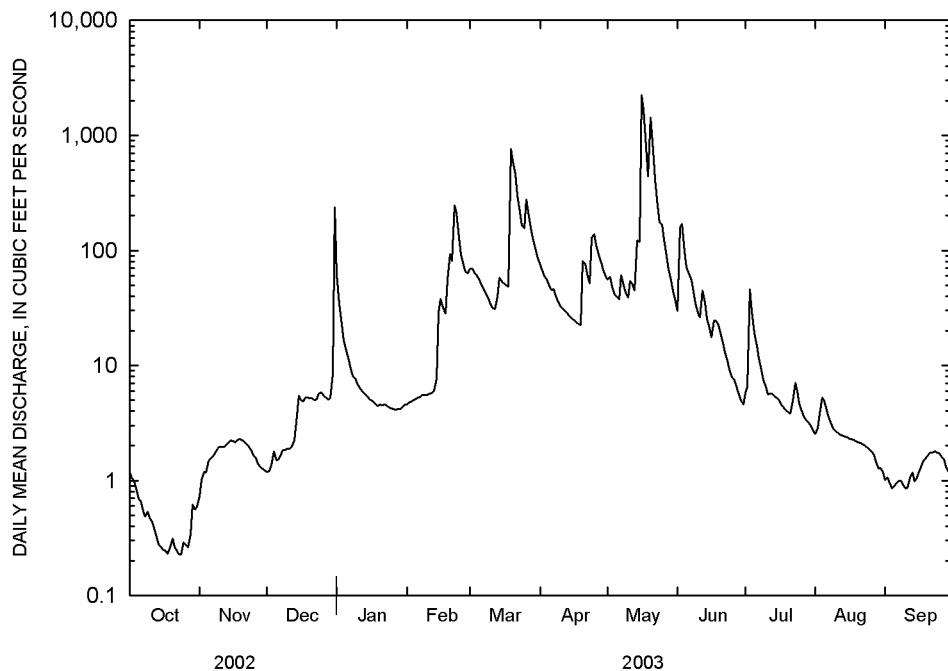
MEAN	20.8	108	116	103	156	217	207	176	78.6	13.0	4.42	3.74
MAX	93.3	360	326	188	530	748	487	310	318	46.8	12.4	13.3
(WY)	1999	1995	2002	1995	2001	2002	2002	2003	2000	1999	1994	1993
MIN	0.096	1.71	11.3	9.46	23.8	75.2	50.0	24.4	4.27	3.05	0.57	0.027
(WY)	2000	2000	2003	2003	1996	2001	2001	2001	1994	1993	1993	2000

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1993-96, 1999-03

ANNUAL TOTAL	55365.37	19301.56	
ANNUAL MEAN	152	52.9	108
HIGHEST ANNUAL MEAN			186 2002
LOWEST ANNUAL MEAN			52.9 2003
HIGHEST DAILY MEAN	4690 Apr 8	2240 May 16	5260 May 27 2000
LOWEST DAILY MEAN	0.23 Oct 18	0.23 Oct 18	0.00 Sep 4 2000
ANNUAL SEVEN-DAY MINIMUM	0.25 Oct 18	0.25 Oct 18	0.00 Sep 4 2000
MAXIMUM PEAK FLOW		6620 May 16	¹ 29000 Sep 26 1996
MAXIMUM PEAK STAGE		8.86 May 16	² 14.79 Sep 26 1996
INSTANTANEOUS LOW FLOW		0.21 Oct 23,24	0.00 at times
ANNUAL RUNOFF (AC-FT)	109800	38280	77930
ANNUAL RUNOFF (CFSM)	2.64	0.92	1.87
ANNUAL RUNOFF (INCHES)	35.88	12.51	25.46
10 PERCENT EXCEEDS	339	92	234
50 PERCENT EXCEEDS	12	5.3	26
90 PERCENT EXCEEDS	1.2	0.97	1.1

¹On basis of contracted-opening measurement of peak flow

²From floodmarks



WHITE RIVER BASIN

07055646 BUFFALO RIVER NEAR BOXLEY--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
NOV 26...	1215	80513	80020	1.6	753	11.4	96	8.1	182	7.4	83	101	.0
DEC 10...	1150	80513	80020	1.9	751	11.4	96	7.5	177	7.3	78	95	.0
JAN 14...	1500	80513	80020	5.6	755	11.4	96	8.0	89	7.7	38	46	.0
FEB 19...	1215	80513	80020	40	752	11.3	95	7.6	82	7.3	32	39	.0
MAR 11...	1130	80020	80020	32	749	12.5	105	7.5	62	7.2	24	29	.0
MAY 20...	1300	80513	80020	2600	756	9.5	96	7.4	39	15.7	14	17	.0
JUL 08...	1300	80513	80020	9.1	750	8.0	98	7.6	89	24.4	46	56	.0
SEP 03...	1230	80513	80020	.97	750	5.3	64	7.5	167	23.9	79	96	.0
10...	0945	80513	80020	--	--	--	--	--	--	--	--	--	--

Date	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)	Biomass periphyton, ashfree drymass, g/m2 (49954)	Periphyton biomass, weight, g/m2 (00572)	Periphyton biomass, dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	E coli, m-TEC MF, water, col/100 mL (31633)
NOV 26...	1.21	5.4	<.10	<.04	E.05	<.008	<.02	.005	--	--	--	--	E2
DEC 10...	1.23	6.3	E.05	<.04	.09	<.008	<.02	.005	--	--	--	--	E5
JAN 14...	1.43	3.3	<.10	<.04	<.06	<.008	<.02	.005	--	--	--	--	E2
FEB 19...	1.26	4.0	E.06	<.04	E.04	<.008	<.02	.012	--	--	--	--	E36
MAR 11...	1.21	2.9	<.10	<.04	<.06	<.008	<.02	E.004	--	--	--	--	E2
MAY 20...	.90	2.0	.66	<.04	E.06	<.008	E.01	.164	--	--	--	--	5800
JUL 08...	1.02	2.3	E.08	<.04	<.06	<.008	<.02	.004	--	--	--	--	E13
SEP 03...	1.02	2.9	E.07	<.04	<.06	<.008	<.02	.007	--	--	--	--	34
10...	--	--	--	--	--	--	--	--	29.7	370	398.3	13	--

Date	Fecal coliform, M-FC, col/100 mL (31625)	Fecal streptococci, KF, col/100 mL (31673)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Suspnd. sediment, sieve percent <.063mm (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 26...	E1	E10	--	37	1	.00
DEC 10...	E4	20	--	100	1	.01
JAN 14...	<1	E1	--	100	1	.02
FEB 19...	E60	145	--	92	4	.43
MAR 11...	E4	<1	--	89	1	.09
MAY 20...	4600	3100	--	79	141	990
JUL 08...	E14	24	--	78	9	.22
SEP 03...	34	42	--	92	9	.02
10...	--	--	42.2	--	--	--

Remark codes used in this report:

< -- Less than

E -- Estimated value

WHITE RIVER BASIN

159

07055875 RICHLAND CREEK NEAR WITTS SPRING

LOCATION.--Lat 35°47'49", long 92°55'43", in SE1/4SW1/4SW1/4 sec.5, T.13 N., R.18 W., Searcy County, Hydrologic Unit 11010005, 50 ft upstream from bridge on county road, 1,800 ft downstream from Falling Water Creek and 3.9 mi northwest of Witts Spring.

DRAINAGE AREA.--67.4 mi².

PERIOD OF RECORD.--May 1995 to current year.

REVISIONS.--WRD Ark. 1999: 1996(M), 1997(M).

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage 14.76 ft November 8, 1994; discharge 24,700 ft³/s on basis of slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.92	7.6	5.9	249	4.9	68	e42	40	46	18	1.6	1.1
2	0.83	7.4	5.6	e172	4.7	63	36	45	289	15	2.3	1.2
3	0.74	8.3	5.9	e129	4.7	57	33	35	285	18	13	1.4
4	0.66	8.5	13	e94	4.4	53	30	30	174	12	13	1.6
5	0.66	14	14	e63	4.1	48	27	28	122	9.5	8.1	1.6
6	0.68	17	11	e54	5.0	42	27	26	105	7.6	6.0	1.4
7	0.84	15	11	e43	4.4	37	39	115	90	6.4	4.6	1.3
8	0.94	14	12	e33	3.7	33	33	356	71	5.6	3.5	1.1
9	1.1	12	13	e27	4.2	30	29	246	57	4.8	2.8	1.0
10	1.1	13	13	e22	4.4	26	28	300	47	4.6	2.4	0.94
11	1.2	12	11	e21	5.4	24	26	707	44	3.8	2.3	0.99
12	1.2	11	10	e18	6.8	23	25	306	85	4.8	2.8	1.2
13	1.3	11	18	e15	8.2	28	23	214	81	5.6	2.5	8.5
14	1.3	10	25	14	142	30	21	242	96	4.2	2.9	8.5
15	1.3	11	22	13	173	27	19	201	115	3.5	2.6	5.4
16	1.3	11	19	12	112	25	e18	1150	117	2.8	2.1	3.4
17	1.4	11	17	10	84	25	e17	2570	181	2.4	1.8	2.5
18	1.4	9.7	15	9.0	68	e24	e16	860	197	2.1	1.5	1.9
19	1.6	9.1	15	8.5	67	e96	16	474	129	2.3	1.4	1.6
20	1.8	8.6	14	8.2	63	114	26	1580	91	3.1	1.3	1.4
21	2.1	8.4	13	8.1	68	125	27	774	69	2.4	1.2	1.3
22	2.3	8.1	12	7.2	315	101	23	457	54	11	1.1	1.2
23	2.8	7.6	12	6.0	263	84	20	300	44	12	1.1	1.1
24	3.0	7.4	24	5.2	163	70	137	242	37	6.3	0.98	1.1
25	3.6	7.1	23	5.1	113	e63	129	262	30	4.5	0.91	1.1
26	4.0	7.0	19	4.8	94	e81	90	196	26	3.4	0.95	0.96
27	4.4	6.6	17	4.4	79	e76	68	144	22	2.8	1.00	0.90
28	4.9	6.4	17	4.6	74	e100	55	106	19	2.4	0.92	1.0
29	7.4	6.2	19	6.0	---	e63	45	85	16	2.1	0.88	1.0
30	9.5	6.1	428	5.4	---	e41	37	68	19	1.8	0.96	1.1
31	8.4	---	917	5.1	---	e83	---	55	---	1.8	1.0	---
TOTAL	74.67	292.1	1771.4	1076.6	1942.9	1760	1162	12214	2758	186.6	89.50	58.79
MEAN	2.41	9.74	57.1	34.7	69.4	56.8	38.7	394	91.9	6.02	2.89	1.96
MAX	9.5	17	917	249	315	125	137	2570	289	18	13	8.5
MIN	0.66	6.1	5.6	4.4	3.7	23	16	26	16	1.8	0.88	0.90
AC-FT	148	579	3510	2140	3850	3490	2300	24230	5470	370	178	117
CFSM	0.04	0.15	0.85	0.52	1.04	0.85	0.58	5.88	1.37	0.09	0.04	0.03
IN.	0.04	0.16	0.98	0.60	1.08	0.98	0.65	6.78	1.53	0.10	0.05	0.03

WHITE RIVER BASIN

07055875 RICHLAND CREEK NEAR WITTS SPRING--CONTINUED

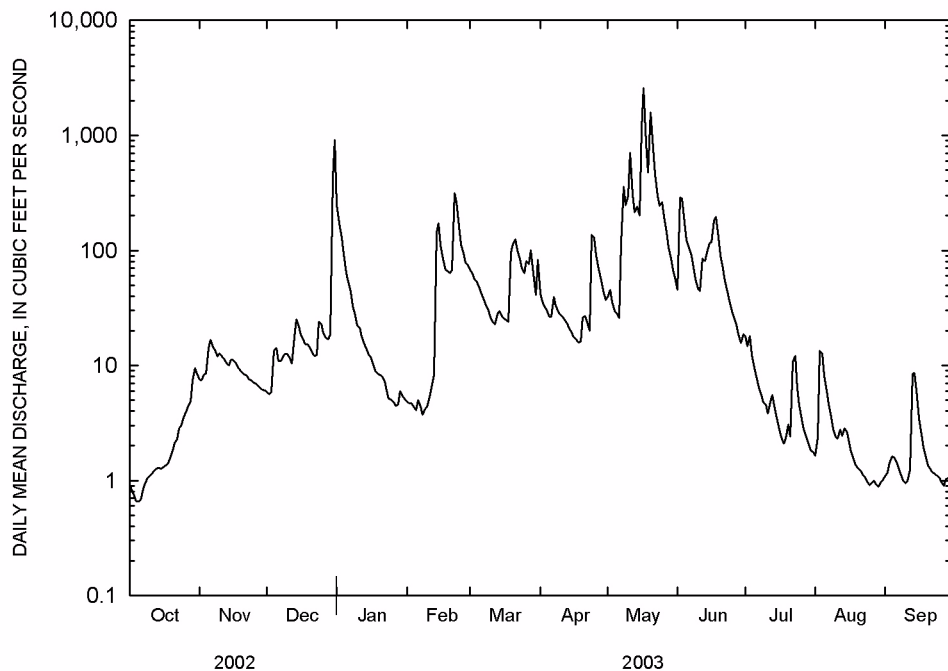
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	19.4	114	124	139	201	236	169	130	78.2	14.9	2.87	16.7
MAX	64.5	658	330	313	451	665	280	394	403	66.7	17.7	139
(WY)	1999	1997	2002	1998	2001	2002	2002	2003	2000	2002	2002	1996
MIN	0.000	1.19	30.9	25.1	37.8	56.8	38.7	27.8	6.35	0.26	0.11	0.000
(WY)	2000	2000	2001	2000	1996	2003	2003	1997	1998	1998	1998	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	51633.95		23386.56			
ANNUAL MEAN	141		64.1		103	
HIGHEST ANNUAL MEAN					170 2002	
LOWEST ANNUAL MEAN					64.1 2003	
HIGHEST DAILY MEAN	3930	Mar 19	2570	May 17	4970	Nov 7 1996
LOWEST DAILY MEAN	0.49	Sep 17	0.66	Oct 4	0.00	Aug 22 1995
ANNUAL SEVEN-DAY MINIMUM	0.57	Sep 12	0.76	Oct 1	0.00	Aug 22 1995
MAXIMUM PEAK FLOW			5190	May 17	¹ 14900	Jan 31 2002
MAXIMUM PEAK STAGE			7.48	May 17	11.69	Jan 31 2002
INSTANTANEOUS LOW FLOW			0.55	Oct 4,5	0.00	Jul 25 1995
ANNUAL RUNOFF (AC-FT)	102400		46390		74930	
ANNUAL RUNOFF (CFSM)	2.11		0.96		1.54	
ANNUAL RUNOFF (INCHES)	28.67		12.98		20.97	
10 PERCENT EXCEEDS	280		129		222	
50 PERCENT EXCEEDS	27		13		27	
90 PERCENT EXCEEDS	1.4		1.2		0.29	

¹From rating curve extended above 5300 ft³/s on basis of slope-area measurement of peak flow

^eEstimated



WHITE RIVER BASIN

161

07055893 CALF CREEK NEAR SILVER HILL

LOCATION.--Lat 35°58'04", long 92°46'32", in SW1/4SE1/4 sec.3, T.15 N., R.17 W., Searcy County, Hydrologic Unit 11010005, 400 ft upstream from ford on county road, 1.4 mi upstream from Buffalo River, and 1.7 mi west of Silver Hill.

DRAINAGE AREA.--Undetermined

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 2001 to September 2003. Occasional low-flow measurements 1969.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.8	2.0	176	4.7	50	34	13	19	5.2	2.6	2.0
2	1.6	2.0	2.0	105	4.7	48	31	14	205	5.5	2.9	2.1
3	1.6	2.0	2.1	72	4.8	44	28	13	135	5.2	2.9	2.2
4	1.7	2.2	2.8	53	5.1	41	26	12	74	5.1	2.8	2.2
5	1.8	2.4	3.2	42	4.7	38	24	13	51	4.7	2.7	2.1
6	1.8	2.6	3.5	37	4.8	34	23	12	43	4.6	2.6	2.1
7	1.7	2.9	3.5	32	4.7	31	25	13	37	4.3	2.6	2.1
8	1.7	3.0	3.5	27	4.7	28	28	14	29	4.2	2.6	2.1
9	1.8	2.9	3.4	23	4.7	25	24	13	23	3.9	2.7	2.3
10	1.8	2.9	3.2	19	4.8	22	22	13	19	3.9	2.8	2.7
11	1.6	2.9	3.2	16	4.7	21	20	45	16	4.0	2.8	3.1
12	1.7	2.9	3.0	13	4.7	19	19	39	18	4.2	2.8	4.5
13	1.8	2.9	3.3	12	4.8	20	17	33	17	3.9	2.7	6.0
14	1.6	2.7	3.4	10	5.2	21	15	38	16	3.9	2.6	7.5
15	1.6	2.6	3.5	9.8	11	20	14	51	15	3.8	2.6	6.8
16	1.7	2.6	3.5	9.0	25	18	13	405	15	3.6	2.4	5.6
17	1.6	2.6	3.6	8.1	26	18	12	650	27	3.5	2.3	4.9
18	1.7	2.5	3.9	7.4	25	16	11	314	37	3.5	2.2	4.3
19	1.8	2.3	4.3	6.9	25	63	11	180	26	3.4	2.2	3.5
20	1.9	2.2	4.4	6.6	34	69	11	331	18	3.2	2.1	3.2
21	1.8	2.2	4.7	6.4	37	62	11	220	13	3.0	2.0	2.2
22	1.8	2.3	4.7	6.0	236	51	11	142	11	3.3	2.0	1.9
23	1.8	2.2	4.9	5.8	151	45	10	98	9.1	3.0	1.9	1.7
24	1.8	2.2	5.1	5.5	104	41	19	83	8.2	2.9	1.8	1.9
25	1.8	2.2	5.6	5.5	75	78	37	102	7.2	2.9	1.7	1.5
26	2.0	2.2	12	5.4	64	122	32	67	6.5	2.9	1.7	1.3
27	1.9	2.0	10	5.1	56	78	26	50	6.0	2.9	1.8	1.3
28	1.9	2.0	8.3	5.1	53	61	21	41	5.5	2.8	1.8	1.2
29	2.2	2.0	8.0	5.1	---	51	17	34	5.5	2.8	1.8	1.1
30	2.4	2.0	171	4.9	---	44	14	28	5.4	2.8	1.8	0.77
31	2.0	---	427	4.7	---	38	---	23	---	2.7	1.9	---
TOTAL	55.5	72.2	726.6	744.3	989.1	1317	606	3104	917.4	115.6	72.1	86.17
MEAN	1.79	2.41	23.4	24.0	35.3	42.5	20.2	100	30.6	3.73	2.33	2.87
MAX	2.4	3.0	427	176	236	122	37	650	205	5.5	2.9	7.5
MIN	1.6	1.8	2.0	4.7	4.7	16	10	12	5.4	2.7	1.7	0.77
AC-FT	110	143	1440	1480	1960	2610	1200	6160	1820	229	143	171

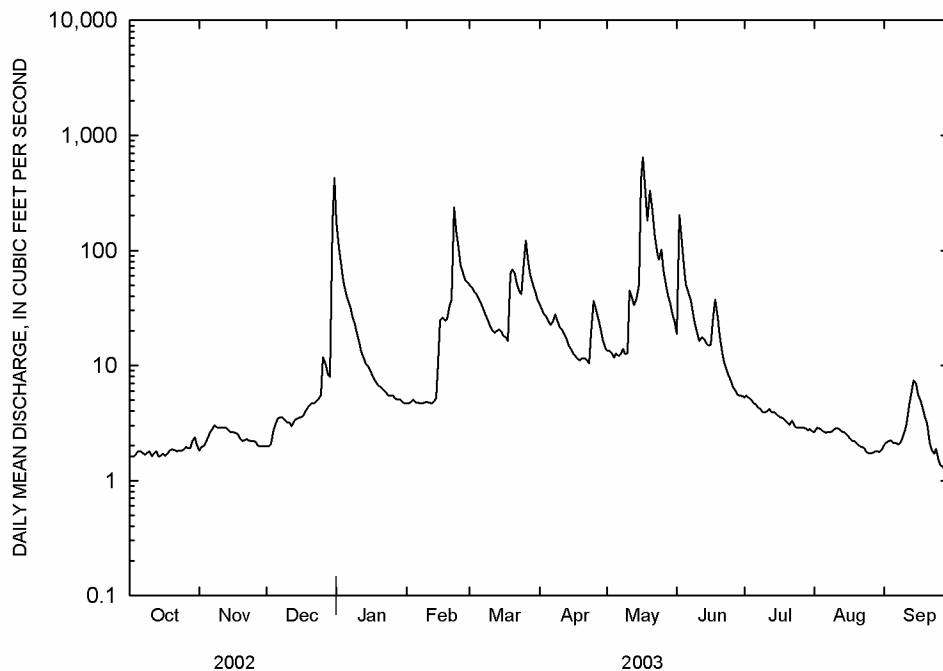
WHITE RIVER BASIN

07055893 CALF CREEK NEAR SILVER HILL--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	2.72	12.3	86.4	55.8	105	180	68.4	57.3	17.0	7.85	3.61	3.86
MAX	3.66	22.2	149	87.6	181	456	163	100	30.6	17.0	5.29	7.08
(WY)	2002	2002	2002	2002	2001	2002	2002	2003	2003	2002	2002	2001
MIN	1.79	2.41	23.4	24.0	35.3	42.3	20.2	8.34	4.69	2.78	2.33	1.62
(WY)	2003	2003	2003	2003	2003	2001	2003	2001	2001	2001	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	28559.0		8805.97			
ANNUAL MEAN	78.2		24.1		57.4	
HIGHEST ANNUAL MEAN					90.7 2002	
LOWEST ANNUAL MEAN					24.1 2003	
HIGHEST DAILY MEAN	2970	Mar 20	650	May 17	2970	Mar 20 2002
LOWEST DAILY MEAN	1.2	Sep 11	0.77	Sep 30	0.77	Sep 30 2003
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 8	1.3	Sep 24	1.2	Sep 8 2002
MAXIMUM PEAK FLOW			1210	May 16	4910	Mar 9 2002
MAXIMUM PEAK STAGE			5.96	May 16	10.06	Mar 9 2002
INSTANTANEOUS LOW FLOW			0.63	Sep 29-30	0.63	Sep 29 2003
ANNUAL RUNOFF (AC-FT)	56650		17470		41610	
10 PERCENT EXCEEDS	149		51		114	
50 PERCENT EXCEEDS	8.4		5.1		8.4	
90 PERCENT EXCEEDS	1.8		1.8		1.9	



WHITE RIVER BASIN

163

07055893 CALF CREEK NEAR SILVER HILL--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd std (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	ANC, wat unfltrd end pt, mg/L as CaCO3 (00410)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 24...	0900	80513	80020	1.8	776	5.0	7.0	69	7.8	344	15.4	165	189
NOV 06...	0830	80513	80020	2.6	755	8.2	9.6	92	7.6	361	12.8	165	199
DEC 17...	1130	80513	80020	3.5	754	2.8	12.1	122	8.0	327	15.2	145	200
JAN 14...	0930	80513	80020	12	763	4.9	10.4	88	7.7	270	7.9	114	154
MAR 12...	1145	80513	80020	21	760	.5	11.4	107	8.6	246	12.2	104	138
MAR 25...	1015	80513	80020	39	760	1.6	13.4	130	8.1	231	14.0	98	131

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)
OCT 24...	E.05	E.06	<.04	.32	<.008	.086	.03	.030	.034	--	--	.7	61
NOV 06...	E.06	E.07	<.04	.44	<.008	.071	.02	.027	.033	--	--	.7	48
DEC 17...	E.08	E.06	<.04	.82	<.008	.064	.02	.028	.030	--	--	.6	27
JAN 14...	E.08	E.06	<.04	.71	<.008	.064	.02	.026	.028	--	--	.9	22
MAR 12...	.12	.11	<.04	.20	<.008	--	E.01	.018	.021	.32	.31	1.0	E3
MAR 25...	E.09	1.1	<.04	.16	<.008	--	E.01	.017	.020	--	1.3	1.1	E11

Date	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 24...	E170	190	26	36	.17
NOV 06...	59	80	49	55	.39
DEC 17...	E18	45	61	3	.03
JAN 14...	28	E21	50	1	.03
MAR 12...	E5	E3	38	2	.11
MAR 25...	E12	E17	80	2	.21

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE

LOCATION.--Lat 35°59'00", long 92°44'47", in SW₁/4SW₁/4 sec.36, T.16 N., R.17 W., Searcy County, Hydrologic Unit 11010005, near right bank on downstream side of bridge on U.S. Highway 65, 1.2 mi downstream from Mill Creek, 4.0 mi upstream from Bear Creek, 4.5 mi southeast of St. Joe, and at mile 58.3.

DRAINAGE AREA.--829 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1211: 1945(M), 1949(M). WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 560.35 ft above NGVD of 1929. Prior to Mar. 1, 1940, nonrecording gage at present site and datum. Prior to Nov. 6, 1990, at site 300 ft downstream at same datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 50.5 ft in August 1915, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	35	33	3010	200	1110	867	754	646	178	83	55
2	26	37	33	1840	196	1120	803	725	1200	182	100	58
3	26	39	34	1350	194	e1090	749	704	2760	190	87	60
4	25	38	53	1080	188	e1030	710	655	1840	211	88	54
5	24	45	44	903	187	e940	675	611	1340	207	87	51
6	24	40	44	779	192	e880	637	571	1090	192	82	51
7	24	39	48	683	192	e840	631	572	955	201	74	50
8	23	40	55	615	187	e780	649	730	858	178	70	49
9	23	41	58	560	188	e710	615	1070	725	155	67	47
10	23	40	58	514	183	e650	576	839	634	144	73	45
11	23	40	57	471	182	e600	547	1370	528	137	65	43
12	24	38	56	439	185	570	524	1270	518	135	60	46
13	24	36	70	403	188	559	510	996	821	123	57	53
14	24	36	69	379	208	567	491	996	768	123	57	48
15	24	37	76	360	465	592	458	1110	647	120	56	49
16	24	35	112	342	633	607	427	4270	583	110	60	50
17	24	36	129	326	613	581	407	15800	570	102	59	50
18	24	37	126	309	614	557	405	8810	707	100	58	49
19	26	37	124	291	666	706	395	4690	698	93	55	47
20	27	36	127	279	934	2370	934	7150	574	83	52	45
21	27	36	124	270	1180	2360	1490	9800	487	78	49	43
22	28	35	136	259	1990	2050	1110	4550	415	97	54	42
23	e27	33	141	248	3160	1680	907	3070	366	76	47	39
24	27	34	151	244	2380	1440	944	2330	332	76	45	38
25	29	33	162	240	1810	1310	1770	2280	297	80	44	37
26	27	34	178	233	1480	1560	e1520	1970	263	92	43	37
27	27	34	184	226	1290	1600	1260	1590	239	92	45	36
28	29	35	176	221	1170	1400	1080	1310	207	86	44	34
29	35	35	173	218	---	1230	945	1080	190	81	44	33
30	32	33	288	209	---	1060	836	914	179	82	44	33
31	34	---	3250	206	---	951	---	785	---	88	54	---
TOTAL	811	1104	6369	17507	21055	33500	23872	83372	21437	3892	1903	1372
MEAN	26.2	36.8	205	565	752	1081	796	2689	715	126	61.4	45.7
MAX	35	45	3250	3010	3160	2370	1770	15800	2760	211	100	60
MIN	23	33	33	206	182	557	395	571	179	76	43	33
AC-FT	1610	2190	12630	34730	41760	66450	47350	165400	42520	7720	3770	2720
CFSM	0.03	0.04	0.25	0.68	0.91	1.30	0.96	3.24	0.86	0.15	0.07	0.06
IN.	0.04	0.05	0.29	0.79	0.94	1.50	1.07	3.74	0.96	0.17	0.09	0.06

WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

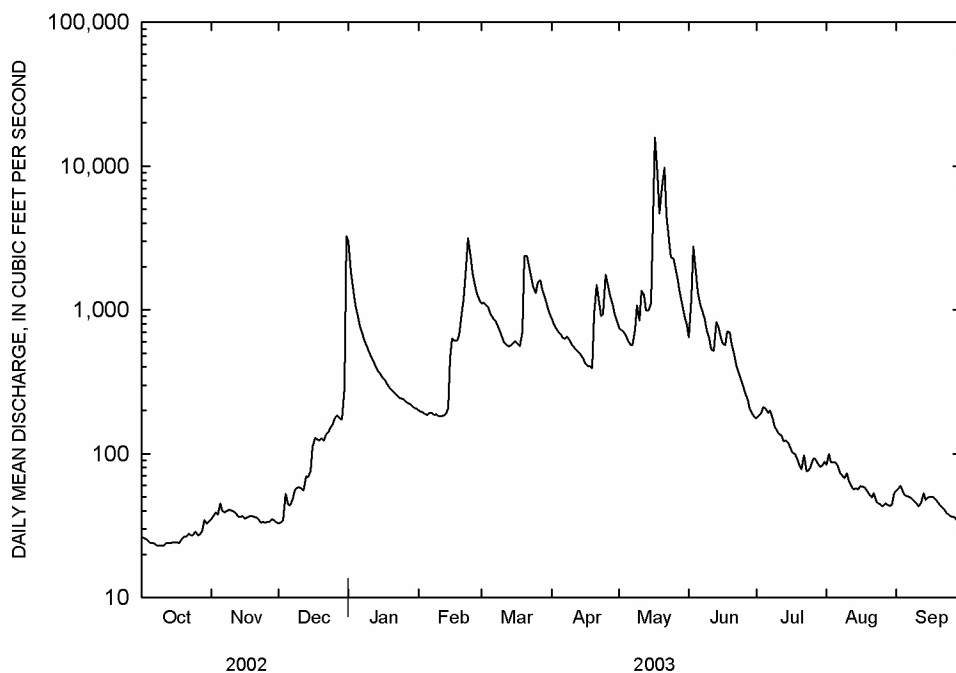
MEAN	302	979	1202	1158	1602	2021	2138	1840	797	233	161	169
MAX	3357	6549	8516	6934	5455	8897	9584	6975	5468	1134	1569	2025
(WY)	1942	1997	1983	1949	1989	1945	1945	1990	1945	1950	1950	1996
MIN	14.2	19.7	30.4	32.4	114	236	237	201	67.6	29.6	15.0	10.2
(WY)	1964	1964	1990	1964	1963	1972	1963	2001	1977	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	496227		216194			
ANNUAL MEAN	1360		592		1046	
HIGHEST ANNUAL MEAN					2619 1945	
LOWEST ANNUAL MEAN					316 1963	
HIGHEST DAILY MEAN	45800	Mar 20	15800	May 17	124000	Dec 3 1982
LOWEST DAILY MEAN	23	Oct 8	23	Oct 8	7.0	Sep 17 1954
ANNUAL SEVEN-DAY MINIMUM	23	Oct 5	23	Oct 5	7.4	Sep 11 1954
MAXIMUM PEAK FLOW			17400	May 17	¹ 158000	Dec 3 1982
MAXIMUM PEAK STAGE			17.82	May 17	53.75	Dec 3 1982
INSTANTANEOUS LOW FLOW			22	Oct 9-11	6.6	² Sep 16 1954
ANNUAL RUNOFF (AC-FT)	984300		428800		758100	
ANNUAL RUNOFF (CFSM)	1.64		0.71		1.26	
ANNUAL RUNOFF (INCHES)	22.27		9.70		17.15	
10 PERCENT EXCEEDS	2560		1320		2300	
50 PERCENT EXCEEDS	271		187		315	
90 PERCENT EXCEEDS	32		34		44	

¹From rating curve extended above 91,000 ft³/s

²Also Sept. 17, 20, 1954

^eEstimated



WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-57, April 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	ANC, wat unfltrd end pt, field, mg/L as CaCO3 (00410)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
24...	0805	80513	80020	27	766	3.5	7.7	77	7.9	264	15.7	131	142
NOV													
05...	1215	80513	80020	48	745	5.3	11.4	110	7.7	260	12.7	129	152
DEC													
17...	1210	80513	80020	127	756	1.4	10.2	95	8.2	256	11.5	121	149
JAN													
14...	1015	80513	80020	379	765	3.0	10.9	87	7.7	207	6.2	84	121
MAR													
12...	1410	80513	80020	561	760	.5	10.9	102	8.5	176	12.1	79	90
25...	1200	80513	80020	1260	762	1.5	10.7	107	7.9	149	15.1	66	86
APR													
21...	1315	80513	80020	1480	767	2.4	8.4	89	7.8	186	18.1	86	106
MAY													
15...	1115	80513	80020	1110	758	1.0	8.8	97	8.1	130	19.8	69	88
17...	1845	80513	80020	15100	757	7.7	9.7	101	7.2	62	16.7	56	69
JUN													
10...	1430	80513	80020	616	760	.9	9.2	110	8.3	195	24.2	92	121
JUL													
23...	0720	80513	80020	75	765	2.6	6.6	81	8.0	205	26.3	120	122
AUG													
19...	1130	80513	80020	57	760	1.6	6.7	88	8.1	219	29.1	102	134
SEP													
01...	1400	80513	80020	55	753	2.8	8.7	111	7.9	227	27.5	106	135

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)
OCT													
24...	<.10	E.06	<.04	E.05	<.008	<.02	.006	.011	--	--	.7	3	E13
NOV													
05...	E.07	E.09	<.04	E.06	<.008	<.02	.004	.009	--	--	.7	E20	E15
DEC													
17...	E.06	E.07	<.04	.13	<.008	<.02	E.003	.005	--	--	.6	E8	E8
JAN													
14...	E.07	E.07	<.04	.20	<.008	<.02	<.004	.007	--	--	1.0	E5	E9
MAR													
12...	E.08	E.08	<.04	E.04	<.008	<.02	<.004	.008	--	--	1.1	<1	E1
25...	E.07	.11	<.04	E.03	<.008	<.02	E.004	.010	--	--	1.1	E2	E11
APR													
21...	.27	.54	<.04	.26	<.008	<.02	.011	.090	.53	.80	4.7	E740	E350
MAY													
15...	E.06	.14	<.04	.07	<.008	<.02	.006	.014	--	.21	1.4	<5	E21
17...	.20	.62	<.04	.15	<.008	E.01	.019	.140	.34	.77	4.6	6900	4700
JUN													
10...	E.07	.11	<.04	.06	<.008	<.02	E.004	.008	--	.17	1.0	E5	E4
JUL													
23...	.13	E.09	<.04	.08	<.008	<.02	.006	.011	.21	--	1.1	E14	E17
AUG													
19...	.10	E.10	<.04	E.05	<.008	<.02	.008	.015	--	--	.9	34	28
SEP													
01...	E.09	.33	<.04	E.04	<.008	<.02	.005	.010	--	--	.9	E12	E10

WHITE RIVER BASIN

07056000 BUFFALO RIVER NEAR ST. JOE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fecal streptococci KF, MF, col/100 mL (31673)	Suspnd. sediment, sieve diameter <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 24...	7	67	4	.29
NOV 05...	28	86	2	.26
DEC 17...	E18	65	3	1.0
JAN 14...	E10	72	3	3.1
MAR 12...	E1	75	3	4.5
MAR 25...	E6	70	5	17
APR 21...	E1000	94	84	336
MAY 15...	24	97	27	81
MAY 17...	5200	73	132	5380
JUN 10...	E8	95	24	40
JUL 23...	E15	81	29	5.9
AUG 19...	74	100	18	2.8
SEP 01...	22	95	26	3.9

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL

LOCATION.--Lat 35°56'23", long 92°42'48", in SW₁/₄SW₁/₄ sec.17, T.15 N., R.16 W., Searcy County, Hydrologic Unit 11010005, on left bank 40 ft upstream of U.S. Highway 65, 1.5 mi upstream from Holder Creek, and 2.7 mi southeast of Silver Hill.

DRAINAGE AREA.--77.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 638.7 ft above NGVD of 1929. Prior to Oct. 3, 2001, water-stage recorder, 1.5 mi downstream at datum 20 ft lower. Prior to Aug. 8, 2002, water-stage recorder 150 ft downstream at same datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	6.2	12	310	17	106	73	42	45	30	14	7.5
2	4.0	5.7	12	201	17	99	69	65	202	30	18	7.7
3	4.0	5.7	12	150	16	91	64	56	170	23	16	8.7
4	4.0	6.1	14	123	15	86	61	49	111	22	26	8.3
5	4.0	7.5	16	105	14	80	56	49	89	19	15	7.7
6	4.0	8.0	15	90	14	74	54	45	79	17	11	7.3
7	3.9	8.7	16	79	14	69	90	64	72	15	8.6	7.2
8	3.8	11	15	73	14	64	74	125	61	13	6.4	6.4
9	3.8	11	13	67	14	60	66	126	53	11	5.2	6.5
10	3.9	9.8	13	59	14	55	62	93	46	11	4.4	6.5
11	3.9	7.8	13	52	14	53	59	198	52	11	4.3	6.7
12	4.0	6.6	13	47	18	51	55	117	55	13	4.9	6.9
13	4.0	5.8	14	44	24	56	52	93	53	12	5.1	6.8
14	4.0	5.8	16	41	74	63	48	114	47	13	5.0	6.0
15	3.8	6.8	34	38	107	57	45	107	48	13	4.9	5.5
16	3.8	6.4	29	36	107	54	43	436	67	13	4.9	5.2
17	3.9	9.9	23	33	92	51	41	591	198	13	5.0	4.9
18	5.2	14	21	30	82	49	38	348	111	13	5.3	4.7
19	5.4	14	18	29	80	151	37	217	81	16	5.5	4.9
20	4.9	14	15	29	85	148	40	429	66	23	5.2	4.8
21	4.9	13	14	27	88	137	40	282	56	25	5.3	6.8
22	4.8	12	12	25	361	114	35	193	48	30	5.2	10
23	5.1	12	11	23	222	102	32	144	41	26	6.1	13
24	5.6	13	43	22	168	93	74	130	35	20	6.5	15
25	5.7	12	56	20	134	130	95	148	30	18	6.4	16
26	5.3	13	40	19	121	174	75	112	26	17	7.5	16
27	e5.3	13	32	18	110	125	64	93	23	15	8.7	16
28	5.4	12	31	17	108	107	56	79	21	13	8.4	15
29	5.8	12	35	17	---	94	50	69	19	12	8.3	14
30	6.2	13	361	18	---	84	45	60	19	13	8.4	12
31	6.4	---	666	18	---	78	---	52	---	14	8.1	---
TOTAL	142.8	295.8	1635	1860	2144	2755	1693	4726	2024	534	253.6	264.0
MEAN	4.61	9.86	52.7	60.0	76.6	88.9	56.4	152	67.5	17.2	8.18	8.80
MAX	6.4	14	666	310	361	174	95	591	202	30	26	16
MIN	3.8	5.7	11	17	14	49	32	42	19	11	4.3	4.7
AC-FT	283	587	3240	3690	4250	5460	3360	9370	4010	1060	503	524
CFSM	0.06	0.12	0.63	0.72	0.92	1.07	0.68	1.83	0.81	0.21	0.10	0.11
IN.	0.06	0.13	0.73	0.83	0.96	1.23	0.76	2.12	0.91	0.24	0.11	0.12

WHITE RIVER BASIN

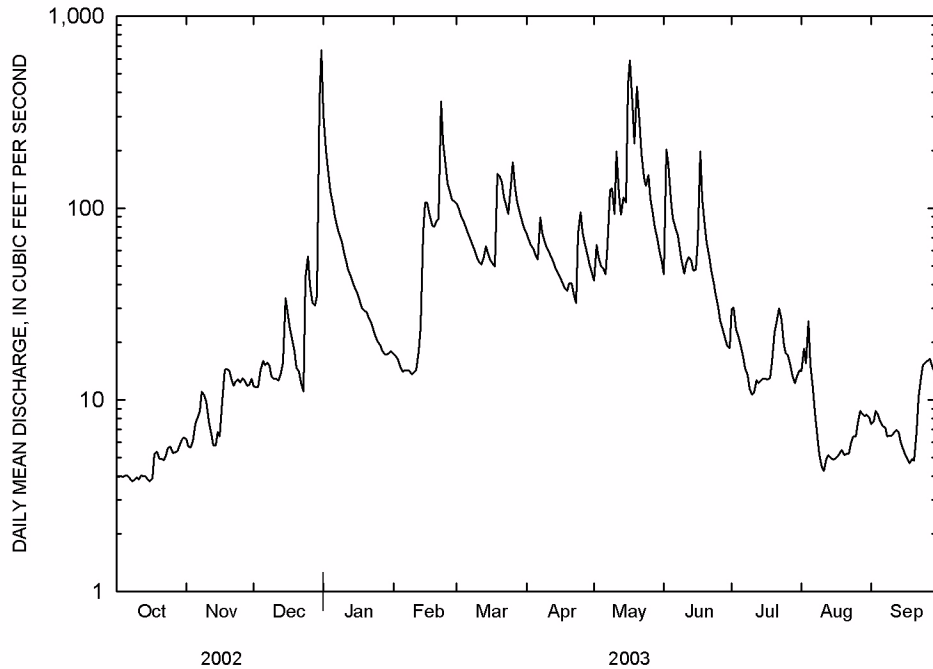
07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	5.79	28.7	109	123	203	220	129	117	65.2	24.4	9.01	6.53
MAX	8.28	87.8	291	322	516	713	319	257	170	35.2	12.2	8.80
(WY)	2001	2001	2002	2002	2001	2002	2002	2000	2000	1999	2002	2003
MIN	3.52	4.98	18.2	22.9	76.6	62.2	46.1	21.4	14.3	17.2	5.94	3.50
(WY)	2000	2000	2001	2000	2003	2000	2000	2001	2001	2003	1999	1999

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	57284.7		18327.2			
ANNUAL MEAN	157		50.2		91.2	
HIGHEST ANNUAL MEAN					178 2002	
LOWEST ANNUAL MEAN					50.2 2003	
HIGHEST DAILY MEAN	4200	Jan 31	666	Dec 31	4200	Jan 31 2002
LOWEST DAILY MEAN	3.8	Oct 8	3.8	Oct 8	2.7	Oct 3 1999
ANNUAL SEVEN-DAY MINIMUM	3.9	Oct 5	3.9	Oct 5	2.8	Oct 1 1999
MAXIMUM PEAK FLOW			2060	Dec 30	13600	Jan 31 2002
MAXIMUM PEAK STAGE			6.92	Dec 30	14.07	Jan 31 2002
INSTANTANEOUS LOW FLOW			3.8	at times	2.3	Oct 4 1999
ANNUAL RUNOFF (AC-FT)	113600		36350		66060	
ANNUAL RUNOFF (CFSM)	1.89		0.60		1.10	
ANNUAL RUNOFF (INCHES)	25.64		8.20		14.91	
10 PERCENT EXCEEDS	352		113		166	
50 PERCENT EXCEEDS	30		20		21	
90 PERCENT EXCEEDS	5.2		5.2		5.4	

^eEstimated



WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	ANC, wat unfltrd end pt, field, mg/L as CaCO3 (00410)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
24...	1000	80513	80020	5.6	776	6.5	6.2	62	7.8	433	15.8	188	213
NOV													
05...	1315	80513	80020	7.3	742	36	8.3	86	7.0	385	15.6	178	218
DEC													
17...	1035	80513	80020	24	754	4.0	9.2	90	7.7	263	13.8	102	159
JAN													
14...	0830	80513	80020	41	763	8.8	8.8	75	7.3	233	8.5	91	131
MAR													
12...	1050	80513	80020	51	760	2.3	11.8	107	8.0	222	10.9	105	118
25...	0930	80513	80020	86	760	3.3	10.4	101	7.6	175	13.6	70	100
APR													
21...	1430	80513	80020	39	764	1.4	10.1	107	8.1	230	18.0	98	124
MAY													
15...	1245	80513	80020	106	758	1.2	8.8	96	7.9	123	19.5	53	81
16...	1645	80513	80020	622	754	2.2	9.2	97	7.7	60	17.5	54	67
JUN													
10...	1320	80513	80020	49	756	4.6	8.1	92	7.6	225	21.2	94	152
JUL													
23...	0830	80513	80020	37	764	14	5.4	57	7.3	319	17.4	148	186
AUG													
19...	1045	80513	80020	31	760	16	5.6	60	7.2	326	18.4	142	193
SEP													
01...	1430	80513	80020	34	753	28	7.2	79	7.0	357	18.7	157	204

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)
OCT													
24...	<.10	<.10	<.04	1.14	<.008	.098	.03	.037	.043	--	--	.6	77
NOV													
05...	E.08	E.08	<.04	1.13	<.008	.086	.03	.034	.044	--	--	.6	110
DEC													
17...	.12	E.07	<.04	.83	<.008	.086	.03	.036	.043	.95	--	1.1	E6
JAN													
14...	E.10	E.05	<.04	.87	<.008	.071	.02	.028	.033	--	--	.9	E15
MAR													
12...	E.07	<.10	<.04	.40	<.008	--	E.02	.016	.023	--	--	.9	E5
25...	.10	.12	<.04	.24	<.008	--	E.01	.017	.024	.34	.36	1.1	21
APR													
21...	.11	.12	<.04	.39	<.008	--	E.01	.024	.034	.51	.52	.9	E10
MAY													
15...	.12	.20	<.04	.19	<.008	--	E.01	.020	.041	.31	.39	1.6	E100
16...	.34	1.0	E.02	.22	<.008	.095	.03	.049	.26	.56	1.2	7.5	4400
JUN													
10...	.16	E.10	E.02	.44	<.008	--	E.01	.022	.029	.60	--	.9	33
JUL													
23...	.13	E.05	<.04	.89	<.008	--	E.02	.035	.040	1.0	--	.6	79
AUG													
19...	<.10	<.10	<.04	.83	<.008	.083	.03	.034	.042	--	--	.6	31
SEP													
01...	E.05	E.09	<.04	.91	E.004	.077	.03	.030	.038	--	--	.6	E9

WHITE RIVER BASIN

07056515 BEAR CREEK NEAR SILVER HILL--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fecal coli-form, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 24...	E170	97	59	8	.12
NOV 05...	130	90	32	58	1.1
DEC 17...	57	170	93	4	.26
JAN 14...	29	21	92	2	.22
MAR 12...	E6	E4	64	2	.28
MAR 25...	50	26	92	4	.93
APR 21...	E11	E3	92	39	4.1
MAY 15...	140	190	100	23	6.6
MAY 16...	5500	68000	94	178	299
JUN 10...	41	35	98	26	3.4
JUL 23...	190	340	80	29	2.9
AUG 19...	38	240	92	17	1.4
SEP 01...	E16	190	72	21	1.9

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

WHITE RIVER BASIN

07057370 WHITE RIVER NEAR NORFORK

LOCATION.--Lat 36°13'23", long 92°18'02", in SE_{1/4}SE_{1/4} sec.18, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010004, on right bank of river, 100 ft below bridge on State Highway 341, and 1.7 mi northwest of Norfolk.

DRAINAGE AREA.--8,050 mi².

PERIOD OF RECORD.--May 1996 to November 1996, May 2003 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Flow regulated by Bull Shoals Lake, capacity 5,408,000 acre-ft, Table Rock Lake (Missouri), capacity 3,567,500 acre-ft, and Beaver Lake, capacity 1,951,500 acre-ft. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 24,900 ft³/s, gage height 12.36 ft, May 17; minimum discharge 315 ft³/s, September 28-29, 1996.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	---	---	---	---	---	---	---	3290	1800	e4740	7240	2940	
2	---	---	---	---	---	---	---	2630	1960	e2090	6480	3050	
3	---	---	---	---	---	---	---	3400	4200	3000	4730	1450	
4	---	---	---	---	---	---	---	2880	8890	e5120	3210	2650	
5	---	---	---	---	---	---	---	2760	7820	e2800	5070	3540	
6	---	---	---	---	---	---	---	3410	7440	e1750	3820	2250	
7	---	---	---	---	---	---	---	1860	2590	e1750	5420	3910	
8	---	---	---	---	---	---	---	1640	2850	e6100	4690	1800	
9	---	---	---	---	---	---	---	5650	3810	2390	e6560	4540	1910
10	---	---	---	---	---	---	---	4610	4270	2810	e7580	1460	3400
11	---	---	---	---	---	---	---	4330	2380	3690	e6120	2450	2160
12	---	---	---	---	---	---	---	2110	2340	4370	e6040	5320	3470
13	---	---	---	---	---	---	---	1070	2880	7580	e2580	6040	3390
14	---	---	---	---	---	---	---	977	2620	7940	e2690	6150	971
15	---	---	---	---	---	---	---	3960	2670	3390	e5900	7800	818
16	---	---	---	---	---	---	---	1090	3930	2770	e7750	7720	1640
17	---	---	---	---	---	---	---	860	17400	8040	e8910	6470	1840
18	---	---	---	---	---	---	---	1020	19200	4300	e8300	8410	2810
19	---	---	---	---	---	---	---	793	9990	4000	6320	10600	1280
20	---	---	---	---	---	---	---	1120	8580	3660	5200	11700	1440
21	---	---	---	---	---	---	---	1310	12800	4280	6530	10100	690
22	---	---	---	---	---	---	---	2350	9140	1990	6470	9580	620
23	---	---	---	---	---	---	---	2490	8710	2420	4860	9320	547
24	---	---	---	---	---	---	---	3090	4640	6690	6080	8580	515
25	---	---	---	---	---	---	---	4710	3970	6570	6910	8630	3110
26	---	---	---	---	---	---	---	4410	3980	5600	6780	8550	894
27	---	---	---	---	---	---	---	2870	3640	3580	4300	8290	741
28	---	---	---	---	---	---	---	4680	3000	3270	4780	7440	450
29	---	---	---	---	---	---	---	8600	2610	2180	7940	7640	512
30	---	---	---	---	---	---	---	5090	3480	2540	6320	4980	2380
31	---	---	---	---	---	---	---	---	3450	---	11000	1120	---
TOTAL	---	---	---	---	---	---	---	161360	131610	173270	203550	57178	
MEAN	---	---	---	---	---	---	---	5205	4387	5589	6566	1906	
MAX	---	---	---	---	---	---	---	19200	8890	11000	11700	3910	
AC-FT	---	---	---	---	---	---	---	320100	261000	343700	403700	113400	

WHITE RIVER BASIN

07057370 WHITE RIVER NEAR NORFORK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996-97, 2003, BY WATER YEAR (WY)

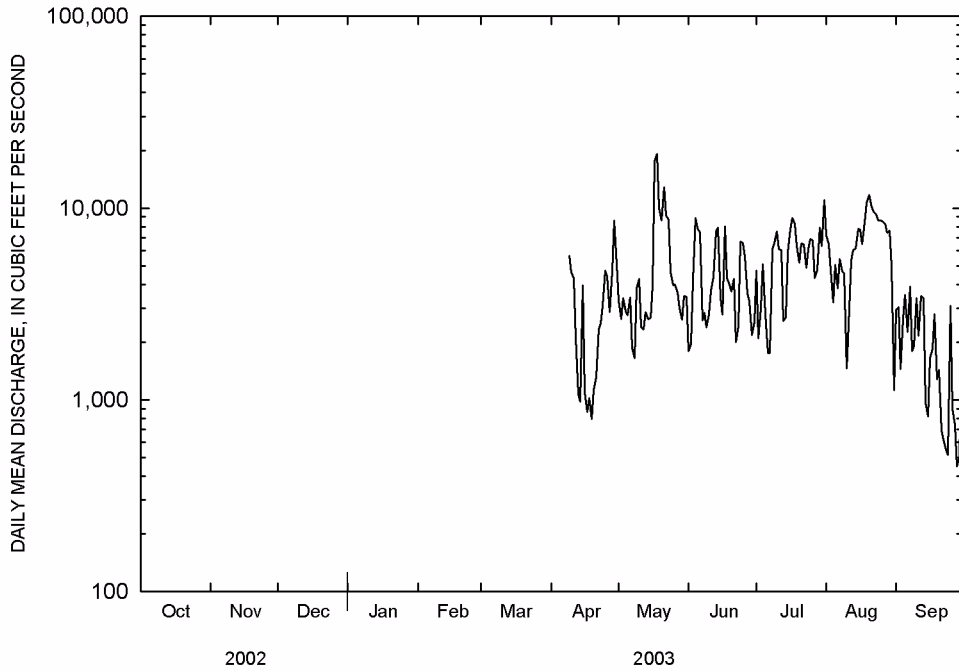
MEAN	6400	14340	---	---	---	---	---	4513	5055	4593	5906	4050
MAX	6400	14340	---	---	---	---	---	5205	5722	5589	6566	6195
(WY)	1997	1997	---	---	---	---	---	2003	1996	2003	2003	1996

SUMMARY STATISTICS

WATER YEARS 1996-97. 2003

HIGHEST DAILY MEAN	64900	Nov 8 1996
LOWEST DAILY MEAN	450	Sep 28 2003
MAXIMUM PEAK FLOW	79400	Nov 8 1996
MAXIMUM PEAK STAGE	22.45	Nov 8 1996
INSTANTANEOUS LOW FLOW	274	Sep 15 1996

^eEstimated



WHITE RIVER BASIN

07058980 BENNETT'S RIVER AT VIDETTE

LOCATION.--Lat 36°25'19", long 92°07'07", in SW₁/4SE₁/4SE₁/4 sec.2, T.20 N., R.11 W., Fulton County, Hydrologic Unit 11010006, on State Highway 87, 2.9 mi north from intersection with State Highway 62, 0.4 mi south of Vidette.

DRAINAGE AREA.--68.2 mi².

PERIOD OF RECORD.--October 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	8.4	5.0	135	6.2	66	31	60	23	8.3	4.3	5.0
2	2.5	8.3	5.0	81	5.9	59	29	100	31	8.3	5.2	5.2
3	2.6	8.5	4.7	57	6.0	52	27	73	33	8.1	5.2	5.6
4	2.7	8.5	7.4	44	5.6	49	26	57	29	6.7	4.0	4.5
5	2.6	9.8	6.4	35	5.9	45	24	50	26	6.2	3.3	3.5
6	2.8	10	5.6	27	6.8	41	23	43	25	5.9	3.1	2.8
7	3.2	9.7	5.4	23	6.1	38	23	42	23	5.4	2.7	2.7
8	3.5	9.1	5.9	21	5.5	35	21	36	21	5.4	2.3	2.5
9	3.9	9.0	6.9	19	6.2	31	20	33	19	5.2	2.0	2.4
10	4.3	9.2	7.2	16	6.3	29	19	37	18	5.0	1.2	2.3
11	4.3	9.1	7.2	15	6.2	27	19	162	18	4.8	0.71	2.6
12	3.7	8.1	6.7	13	6.2	26	18	67	18	5.7	0.44	12
13	3.4	7.9	9.3	12	6.9	25	18	53	17	5.9	1.0	9.1
14	2.9	8.0	13	12	25	24	17	59	16	6.0	1.9	7.2
15	3.1	8.5	12	10	53	23	16	50	15	5.1	1.00	5.9
16	3.4	8.0	11	10	43	22	16	76	15	4.4	0.61	5.0
17	3.8	7.7	9.9	9.6	38	21	16	291	14	4.1	0.37	4.3
18	3.6	7.5	9.3	9.1	36	21	16	155	14	4.0	0.75	4.2
19	7.0	7.4	9.0	8.7	90	155	16	114	14	28	0.95	3.7
20	6.9	7.2	8.3	8.5	98	137	22	90	12	12	1.1	3.6
21	5.2	6.9	7.9	8.3	80	141	19	75	12	10	1.6	3.6
22	4.5	6.4	7.7	7.8	261	100	19	63	11	8.0	4.4	4.1
23	4.1	6.5	7.9	6.8	171	80	18	54	11	7.0	2.8	3.7
24	4.2	6.5	10	6.4	125	68	87	50	10	6.4	1.3	3.6
25	6.5	6.4	9.9	6.6	100	61	155	47	9.5	5.8	0.85	3.4
26	6.5	6.0	9.7	6.2	84	55	68	42	9.1	5.1	1.7	3.3
27	6.0	5.7	9.7	5.8	75	50	50	37	9.0	4.3	3.2	3.5
28	6.5	5.7	11	5.9	69	46	40	31	8.4	4.1	2.4	3.6
29	12	5.8	11	6.6	---	e41	34	28	8.0	4.7	2.3	3.7
30	10	5.5	72	6.0	---	e36	30	27	8.1	6.6	4.8	4.2
31	9.0	---	398	6.0	---	33	---	25	---	5.6	8.2	---
TOTAL	147.2	231.3	710.0	638.3	1427.8	1637	937	2127	497.1	212.1	75.68	130.8
MEAN	4.75	7.71	22.9	20.6	51.0	52.8	31.2	68.6	16.6	6.84	2.44	4.36
MAX	12	10	398	135	261	155	155	291	33	28	8.2	12
MIN	2.5	5.5	4.7	5.8	5.5	21	16	25	8.0	4.0	0.37	2.3
MED	3.9	7.9	8.3	10	31	41	21	53	15	5.8	2.0	3.7
AC-FT	292	459	1410	1270	2830	3250	1860	4220	986	421	150	259
CFSM	0.07	0.11	0.34	0.30	0.75	0.77	0.46	1.01	0.24	0.10	0.04	0.06
IN.	0.08	0.13	0.39	0.35	0.78	0.89	0.51	1.16	0.27	0.12	0.04	0.07

WHITE RIVER BASIN

07058980 BENNETT'S RIVER AT VIDETTE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

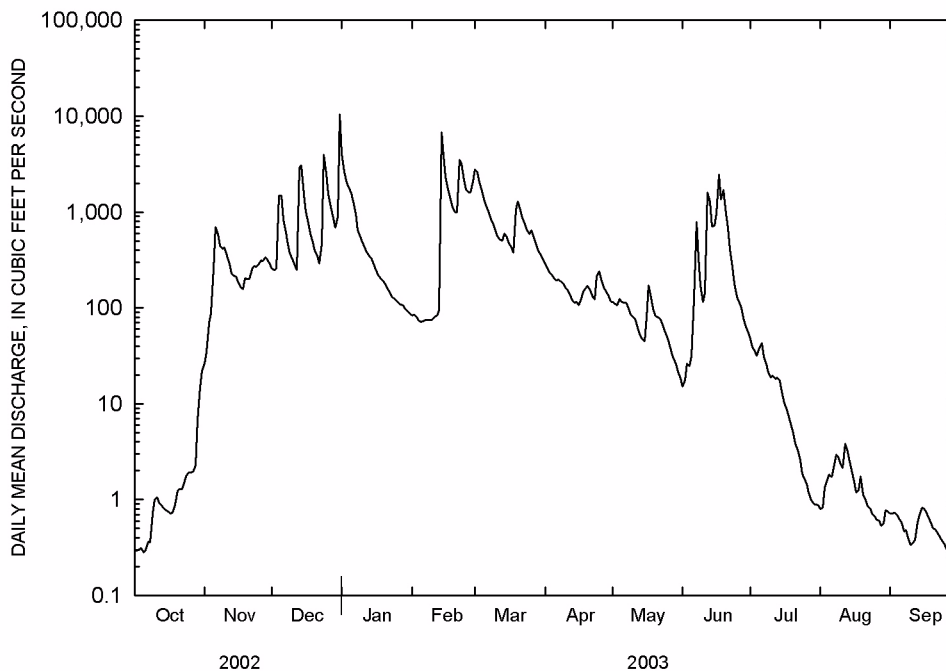
MEAN	3.71	8.60	51.4	50.5	53.9	247	98.2	110	20.3	15.4	18.6	3.44
MAX	4.75	9.49	79.9	80.5	56.7	441	165	152	24.0	23.9	34.8	4.36
(WY)	2003	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2003
MIN	2.68	7.71	22.9	20.6	51.0	52.8	31.2	68.6	16.6	6.84	2.44	2.53
(WY)	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2002

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 2002 - 2003

ANNUAL TOTAL	31126.71		8771.28		57.1		2002	
ANNUAL MEAN	85.3		24.0		90.1		2002	
HIGHEST ANNUAL MEAN					24.0		2003	
LOWEST ANNUAL MEAN								
HIGHEST DAILY MEAN	2620	Mar 19	398	Dec 31	2620	Mar 19	2002	
LOWEST DAILY MEAN	0.00	Aug 11	0.37	Aug 17	0.00	Oct 1	2001	
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 6	0.86	Aug 11	0.00	Oct 1	2001	
MAXIMUM PEAK FLOW			909	Dec 31	¹ 5060	Nov 5	1994	
MAXIMUM PEAK STAGE			6.45	Dec 31	¹ 10.99	Nov 5	1994	
INSTANTANEOUS LOW FLOW			0.00 at times		0.00		at times	
ANNUAL RUNOFF (AC-FT)	61740		17400		41340			
ANNUAL RUNOFF (CFSM)	1.25		0.35		0.84			
ANNUAL RUNOFF (INCHES)	16.98		4.78		11.37			
10 PERCENT EXCEEDS	192		60		109			
50 PERCENT EXCEEDS	17		8.7		12			
90 PERCENT EXCEEDS	2.9		3.2		2.7			

¹Occurred during period of computation of annual maximum only, water years 1995-2001

^eEstimated



WHITE RIVER BASIN

07059450 BIG CREEK NEAR ELIZABETH

LOCATION.--Lat 36°21'25", long 92°06'48", in NE_{1/4}SE_{1/4}NW_{1/4} sec.36, T.20 N., R.11 W., Fulton County, Hydrologic Unit 11010006, at downstream right bank bridge abutment on State Highway 87, 1.9 mi northwest of Elizabeth.

DRAINAGE AREA.--51.9 mi².

PERIOD OF RECORD.--September 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.47	5.6	4.5	192	8.9	32	9.9	18	6.8	5.0	3.9	8.8
2	0.47	5.0	4.5	86	8.3	27	9.4	51	12	4.6	4.3	6.4
3	0.51	5.8	4.5	57	9.6	23	8.8	21	20	4.3	4.3	8.4
4	0.60	5.5	e5.2	43	11	20	8.4	16	11	3.2	4.4	9.8
5	0.49	8.5	e8.4	40	11	20	8.0	16	8.2	2.6	5.4	5.5
6	0.55	10	8.4	28	13	17	7.7	12	7.6	2.1	5.1	3.9
7	0.62	9.9	7.8	22	13	15	7.9	21	7.3	1.5	3.8	2.9
8	0.69	8.8	8.5	21	12	14	7.0	15	6.4	1.4	2.7	2.1
9	0.81	7.9	9.4	19	13	14	6.3	12	5.8	1.3	2.0	1.7
10	1.0	8.1	9.6	17	13	12	6.0	11	5.4	0.96	1.4	1.2
11	0.91	7.5	9.3	15	14	12	5.7	22	6.1	1.1	1.0	1.0
12	0.86	7.4	9.0	14	14	12	5.8	14	6.6	1.9	0.56	61
13	0.75	7.0	13	14	15	11	6.1	12	6.8	e2.2	0.58	20
14	0.58	6.9	18	13	28	10	6.1	16	7.0	e2.2	0.88	11
15	0.49	8.0	13	12	33	9.7	6.2	14	7.4	e1.7	0.92	7.4
16	0.56	7.4	11	14	43	9.1	6.2	56	8.0	e1.2	0.89	5.6
17	0.66	7.1	e9.8	13	38	9.8	8.1	287	8.5	1.2	0.59	5.2
18	0.69	6.5	8.9	12	34	9.7	9.2	101	8.3	0.98	0.23	4.9
19	1.3	6.5	9.2	12	138	78	10	51	8.1	149	0.18	4.4
20	1.6	7.0	10	12	83	51	20	35	8.0	16	0.03	4.2
21	1.3	6.2	11	11	59	59	15	26	7.2	13	0.00	3.9
22	1.2	5.8	14	11	290	32	12	20	6.7	7.4	0.00	4.1
23	1.0	5.6	14	11	146	24	13	17	6.0	5.4	0.00	4.3
24	0.88	5.5	18	10	81	19	257	15	5.6	4.6	0.00	3.7
25	1.7	5.5	20	9.8	53	18	437	16	5.3	4.1	0.00	2.7
26	1.6	5.3	17	9.7	42	18	68	14	5.2	3.6	0.00	2.8
27	1.4	5.2	16	9.1	36	15	33	11	4.9	3.1	0.50	2.2
28	1.6	4.7	17	9.1	34	14	22	9.9	4.3	2.7	3.8	1.9
29	7.6	4.8	18	10	---	e17	18	8.7	3.9	3.0	2.8	2.3
30	7.5	4.6	49	10	---	e15	15	8.5	4.9	3.4	4.1	2.2
31	6.6	---	508	9.3	---	10	---	7.4	---	4.0	48	---
TOTAL	46.99	199.6	884.0	766.0	1293.8	647.3	1052.8	954.5	219.3	258.74	102.36	205.5
MEAN	1.52	6.65	28.5	24.7	46.2	20.9	35.1	30.8	7.31	8.35	3.30	6.85
MAX	7.6	10	508	192	290	78	437	287	20	149	48	61
MIN	0.47	4.6	4.5	9.1	8.3	9.1	5.7	7.4	3.9	0.96	0.00	1.0
AC-FT	93	396	1750	1520	2570	1280	2090	1890	435	513	203	408

WHITE RIVER BASIN

07059450 BIG CREEK NEAR ELIZABETH--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

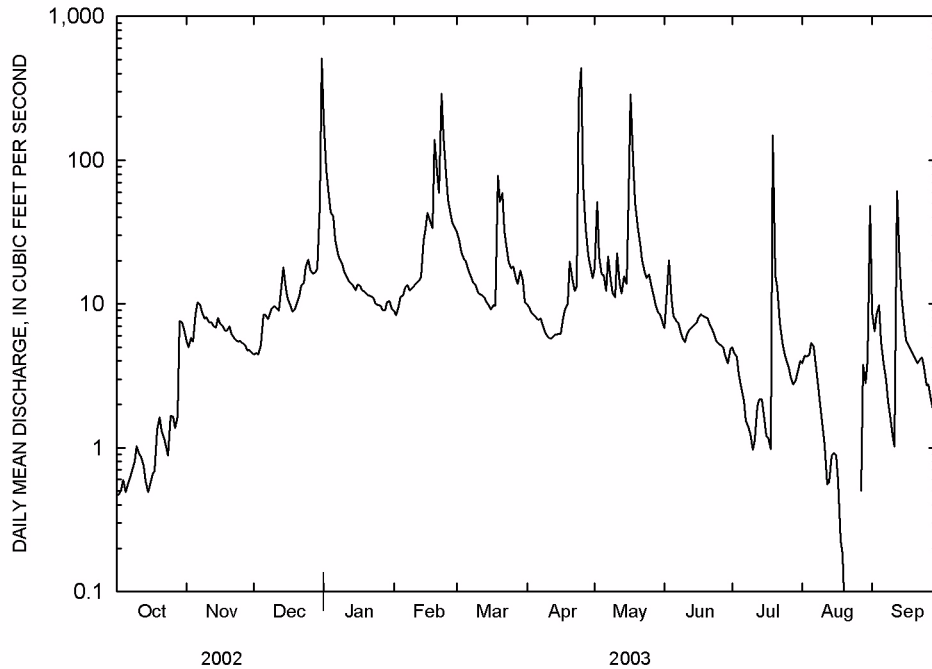
MEAN	0.85	4.58	40.7	44.5	49.0	160	54.4	68.8	7.79	7.80	8.80	3.91
MAX	1.52	6.65	52.8	64.4	51.8	298	73.8	107	8.27	8.35	14.3	6.85
(WY)	2003	2003	2002	2002	2002	2002	2002	2002	2002	2003	2002	2003
MIN	0.19	2.51	28.5	24.7	46.2	20.9	35.1	30.8	7.31	7.26	3.30	0.96
(WY)	2002	2002	2003	2003	2003	2003	2003	2003	2003	2002	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	20286.77		6630.89			
ANNUAL MEAN	55.6		18.2		37.7	
HIGHEST ANNUAL MEAN					57.2 2002	
LOWEST ANNUAL MEAN					18.2 2003	
HIGHEST DAILY MEAN	1910	Mar 19	508	Dec 31	1910	Mar 19 2002
LOWEST DAILY MEAN	0.47	Oct 1	0.00	Aug 21	0.00	Oct 1 2001
ANNUAL SEVEN-DAY MINIMUM	0.52	Sep 30	0.00	Aug 20	0.00	Oct 1 2001
MAXIMUM PEAK FLOW			1950	Apr 24	1	
MAXIMUM PEAK STAGE			12.60	Apr 24	2 15.15 Nov 5 1994	
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	40240		13150		27300	
10 PERCENT EXCEEDS	87		33		57	
50 PERCENT EXCEEDS	8.0		8.2		7.9	
90 PERCENT EXCEEDS	0.93		0.99		0.69	

¹Not determined

²Occurred during period of computation of annual maximum only, water years 1995-2001

^eEstimated



WHITE RIVER BASIN

07059500 NORFORK LAKE NEAR NORFORK

LOCATION.--Lat 36°14'57", long 92°14'16", in SE1/4 sec.2, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, at dam on North Fork River, 4.3 mi northeast of Norfork.

DRAINAGE AREA.--1,808 mi².

PERIOD OF RECORD.--Water years 1968-69, 1971-72, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT												
23...	1008	80513	80513	153	.80	3.00	778	6.1	66	7.5	299	19.9
23...	1009	80513	80513	153	10.1	--	778	6.0	65	6.5	298	19.9
23...	1010	80513	80513	153	20.1	--	778	6.0	65	7.8	298	19.9
23...	1011	80513	80513	153	30.0	--	778	5.9	63	7.8	298	19.9
23...	1012	80513	80513	153	40.1	--	778	5.9	63	7.8	298	19.9
23...	1013	80513	80513	153	50.0	--	778	5.9	63	7.7	298	19.9
23...	1016	80513	80513	153	60.1	--	778	5.8	62	7.7	298	19.9
23...	1017	80513	80513	153	65.0	--	778	.5	5	7.2	280	18.8
23...	1018	80513	80513	153	68.1	--	778	.2	2	7.1	274	18.1
23...	1019	80513	80513	153	70.2	--	778	.2	2	7.1	273	17.9
23...	1021	80513	80513	153	80.0	--	778	.2	2	7.0	269	17.1
23...	1022	80513	80513	153	90.0	--	778	.2	2	7.0	266	16.3
23...	1023	80513	80513	153	100	--	778	.1	1	7.0	271	15.6
23...	1024	80513	80513	153	110	--	778	.2	2	7.0	275	14.7
23...	1025	80513	80513	153	120	--	778	.2	2	7.0	287	13.8
23...	1027	80513	80513	153	125	--	778	.1	1	7.0	296	13.2
23...	1028	80513	80513	130	130	--	778	.1	1	7.0	313	12.2
23...	1029	80513	80513	153	136	--	778	.2	2	7.1	327	11.2
23...	1030	80513	80513	153	140	--	778	.2	2	7.1	325	10.9
23...	1031	80513	80513	153	150	--	778	.2	2	7.1	331	10.3
23...	1032	80513	80513	153	153	--	778	.2	2	7.1	331	10.2
NOV												
06...	1450	80513	80513	153	.50	3.00	771	6.0	61	7.4	289	17.0
06...	1451	80513	80513	153	10.0	--	771	5.7	59	7.4	289	17.0
06...	1452	80513	80513	153	20.0	--	771	5.7	58	7.4	289	17.0
06...	1453	80513	80513	153	30.1	--	771	5.8	59	7.4	289	17.0
06...	1454	80513	80513	153	39.6	--	771	5.8	59	7.4	290	17.0
06...	1457	80513	80513	153	50.2	--	771	5.8	59	7.4	290	17.0
06...	1458	80513	80513	153	60.1	--	771	5.7	58	7.4	290	17.0
06...	1459	80513	80513	153	70.2	--	771	5.7	58	7.4	290	17.0
06...	1500	80513	80513	153	80.1	--	771	5.6	58	7.4	290	17.0
06...	1501	80513	80513	153	90.1	--	771	1.7	17	7.0	276	16.3
06...	1502	80513	80513	153	100	--	771	.4	4	6.9	272	15.7
06...	1503	80513	80513	153	110	--	771	.4	4	6.9	279	15.0
06...	1504	80513	80513	153	120	--	771	.3	3	6.9	290	13.9
06...	1505	80513	80513	153	130	--	771	.3	3	6.9	325	11.7
06...	1506	80513	80513	153	140	--	771	.4	3	7.0	329	10.6
06...	1507	80513	80513	153	150	--	771	.3	3	7.0	331	10.2
06...	1508	80513	80513	153	153	--	771	.4	3	7.0	332	10.1
DEC												
06...	0759	80513	80513	155	.40	2.40	768	6.9	64	7.5	296	12.3
06...	0800	80513	80513	155	10.0	--	768	6.6	61	7.5	295	12.4
06...	0801	80513	80513	155	20.0	--	768	6.5	60	7.5	295	12.4
06...	0802	80513	80513	155	30.1	--	768	6.3	59	7.5	295	12.4
06...	0803	80513	80513	155	40.1	--	768	6.3	59	7.5	295	12.4
06...	0804	80513	80513	155	50.0	--	768	6.3	59	7.5	295	12.4
06...	0805	80513	80513	155	60.0	--	768	6.3	58	7.5	295	12.4
06...	0806	80513	80513	155	69.9	--	768	6.3	58	7.5	295	12.4
06...	0807	80513	80513	155	80.1	--	768	6.2	58	7.5	295	12.4
06...	0808	80513	80513	155	90.0	--	768	6.1	57	7.5	296	12.4
06...	0809	80513	80513	155	100	--	768	6.2	57	7.5	296	12.4
06...	0810	80513	80513	155	110	--	768	6.1	57	7.5	295	12.4
06...	0811	80513	80513	155	120	--	768	6.1	56	7.5	296	12.4
06...	0812	80513	80513	155	130	--	768	6.0	56	7.5	296	12.4
06...	0813	80513	80513	155	140	--	768	5.8	54	7.5	298	12.2
06...	0814	80513	80513	155	150	--	768	4.7	43	7.4	305	11.9
06...	0816	80513	80513	155	155	--	768	.7	7	7.2	335	10.6
MAR												
19...	1529	80513	80513	152	.30	6.80	744	11.3	98	8.2	297	7.8
19...	1530	80513	80513	152	10.0	--	744	11.2	96	8.3	298	7.7
19...	1531	80513	80513	152	20.2	--	744	11.1	93	8.1	298	7.0
19...	1532	80513	80513	152	30.0	--	744	10.9	90	8.0	299	6.3
19...	1533	80513	80513	152	40.1	--	744	10.6	88	8.1	300	6.2
19...	1534	80513	80513	152	50.1	--	744	10.4	86	8.1	302	6.0
19...	1535	80513	80513	152	59.6	--	744	10.3	85	8.1	304	5.9
19...	1536	80513	80513	152	69.5	--	744	10.2	84	8.1	304	5.9
19...	1537	80513	80513	152	80.0	--	744	10.3	84	8.0	305	5.8
19...	1538	80513	80513	152	90.1	--	744	10.4	85	8.1	307	5.8
19...	1539	80513	80513	152	100	--	744	10.2	84	8.1	308	5.8
19...	1540	80513	80513	152	110	--	744	10.3	84	8.1	309	5.8
19...	1541	80513	80513	152	120	--	744	10.3	84	8.1	311	5.8
19...	1542	80513	80513	152	130	--	744	10.3	84	8.1	311	5.8
19...	1543	80513	80513	152	140	--	744	10.3	84	8.1	312	5.8
19...	1544	80513	80513	152	150	--	744	10.2	83	8.1	315	5.7
19...	1545	80513	80513	152	152	--	744	8.0	65	7.7	315	5.7

WHITE RIVER BASIN

179

07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
JUN												
17...	1626	80513	80513	154	0.10	5.60	758	8.1	102	8.6	323	26.6
17...	1627	80513	80513	154	10.0	--	758	8.4	105	8.6	323	26.2
17...	1628	80513	80513	154	13.0	--	758	9.0	111	8.6	322	25.9
17...	1629	80513	80513	154	17.0	--	758	9.9	119	8.6	317	24.4
17...	1630	80513	80513	154	20.1	--	758	10.0	126	8.6	318	26.5
17...	1631	80513	80513	154	23.1	--	758	10.0	116	8.6	320	22.2
17...	1632	80513	80513	154	25.0	--	758	9.5	108	8.6	320	21.4
17...	1633	80513	80513	154	28.0	--	758	9.0	101	8.5	321	20.6
17...	1634	80513	80513	154	29.9	--	758	8.8	96	8.4	321	19.6
17...	1635	80513	80513	154	33.0	--	758	8.6	92	8.3	320	18.1
17...	1636	80513	80513	154	35.1	--	758	8.7	90	8.3	322	17.1
17...	1637	80513	80513	154	37.0	--	758	8.6	89	8.3	322	16.5
17...	1638	80513	80513	154	40.0	--	758	8.3	83	8.2	320	15.2
17...	1639	80513	80513	154	43.0	--	758	8.1	79	8.2	321	14.3
17...	1640	80513	80513	154	45.0	--	758	7.8	76	8.2	320	13.5
17...	1641	80513	80513	154	47.0	--	758	7.5	72	8.1	321	13.0
17...	1642	80513	80513	154	50.0	--	758	7.3	69	8.1	321	12.4
17...	1643	80513	80513	154	55.0	--	758	7.2	66	8.1	322	11.3
17...	1644	80513	80513	154	60.0	--	758	7.1	64	8.0	322	10.3
17...	1645	80513	80513	154	65.0	--	758	6.9	61	8.0	323	9.7
17...	1646	80513	80513	154	70.1	--	758	7.0	61	8.0	326	9.0
17...	1647	80513	80513	154	80.0	--	758	7.1	61	8.1	326	8.3
17...	1648	80513	80513	154	90.0	--	758	7.2	61	8.1	326	7.8
17...	1649	80513	80513	154	100	--	758	7.0	59	8.1	328	7.6
17...	1650	80513	80513	154	110	--	758	7.1	60	8.1	328	7.4
17...	1651	80513	80513	154	120	--	758	7.0	58	8.1	329	7.3
17...	1654	80513	80513	154	130	--	758	6.8	56	8.1	328	7.1
17...	1655	80513	80513	154	140	--	758	6.8	56	8.1	327	7.0
17...	1656	80513	80513	154	150	--	758	6.4	53	8.1	328	6.9
17...	1657	80513	80513	154	154	--	758	5.9	49	8.0	328	6.8
JUL												
01...	1510	80513	80513	158	.40	4.00	760	8.4	108	--	307	27.6
01...	1511	80513	80513	158	10.1	--	760	8.6	108	--	307	27.0
01...	1512	80513	80513	158	20.1	--	760	9.2	115	--	308	26.5
01...	1513	80513	80513	158	20.9	--	760	10.7	132	--	309	25.7
01...	1514	80513	80513	158	23.0	--	760	11.3	137	--	306	24.7
01...	1515	80513	80513	158	24.1	--	760	11.6	137	--	309	23.8
01...	1516	80513	80513	158	25.0	--	760	11.5	135	--	309	23.2
01...	1517	80513	80513	158	26.0	--	760	11.1	129	--	311	22.7
01...	1518	80513	80513	158	28.0	--	760	10.1	115	--	319	21.6
01...	1519	80513	80513	158	30.0	--	760	9.3	105	--	322	20.9
01...	1520	80513	80513	158	33.1	--	760	9.0	98	--	324	19.7
01...	1521	80513	80513	158	35.3	--	760	8.6	93	--	322	18.8
01...	1522	80513	80513	158	38.0	--	760	8.4	88	--	321	17.7
01...	1523	80513	80513	158	40.1	--	760	8.1	84	--	320	17.2
01...	1524	80513	80513	158	43.0	--	760	7.8	79	--	318	15.9
01...	1525	80513	80513	158	46.0	--	760	7.7	76	--	319	14.7
01...	1526	80513	80513	158	50.1	--	760	7.2	69	--	317	13.5
01...	1527	80513	80513	158	54.9	--	760	6.9	65	--	320	12.5
01...	1528	80513	80513	158	59.0	--	760	6.8	62	--	320	11.5
01...	1529	80513	80513	158	60.1	--	760	6.7	61	--	320	11.3
01...	1531	80513	80513	158	65.1	--	760	6.5	59	--	322	10.4
01...	1532	80513	80513	158	70.1	--	760	6.7	58	--	324	9.4
01...	1533	80513	80513	158	80.0	--	760	6.7	58	--	327	8.6
01...	1534	80513	80513	158	89.9	--	760	6.6	56	--	326	8.0
01...	1535	80513	80513	158	100	--	760	6.6	56	--	328	7.7
01...	1536	80513	80513	158	110	--	760	6.5	55	--	332	7.5
01...	1537	80513	80513	158	120	--	760	6.5	54	--	330	7.4
01...	1538	80513	80513	158	130	--	760	6.4	53	--	326	7.3
01...	1539	80513	80513	158	140	--	760	6.3	52	--	328	7.2
01...	1540	80513	80513	158	150	--	760	6.1	51	--	328	7.0
01...	1541	80513	80513	158	158	--	760	5.1	42	--	328	7.0
AUG												
14...	0711	80513	80513	154	.90	5.80	766	7.4	96	8.4	305	28.9
14...	0712	80513	80513	154	10.2	--	766	7.3	94	8.4	306	28.9
14...	0714	80513	80513	154	20.1	--	766	7.3	94	8.4	306	28.9
14...	0716	80513	80513	154	27.2	--	766	7.3	95	8.4	308	28.9
14...	0717	80513	80513	154	28.0	--	766	8.2	105	8.4	313	28.1
14...	0718	80513	80513	154	29.1	--	766	10.2	125	8.3	322	26.1
14...	0719	80513	80513	154	30.1	--	766	10.0	121	8.2	324	25.1
14...	0720	80513	80513	154	31.1	--	766	9.9	117	8.2	326	24.3
14...	0721	80513	80513	154	33.1	--	766	8.9	104	8.1	328	23.4
14...	0722	80513	80513	154	35.1	--	766	8.0	92	8.0	330	22.3
14...	0723	80513	80513	154	40.1	--	766	7.1	79	7.9	331	20.6
14...	0724	80513	80513	154	45.1	--	766	6.0	63	7.6	330	18.1
14...	0725	80513	80513	154	50.1	--	766	5.4	55	7.4	330	16.1
14...	0726	80513	80513	154	55.1	--	766	5.1	50	7.3	329	14.5
14...	0727	80513	80513	154	60.1	--	766	4.7	45	7.2	332	13.2
14...	0728	80513	80513	154	70.1	--	766	4.4	40	7.1	334	11.5
14...	0729	80513	80513	154	80.1	--	766	4.1	37	7.0	335	10.2
14...	0730	80513	80513	154	90.2	--	766	4.0	34	7.0	334	9.3
14...	0731	80513	80513	154	100	--	766	4.2	35	7.0	342	8.7
14...	0732	80513	80513	154	110	--	766	3.9	33	6.9	345	8.5
14...	0733	80513	80513	154	120	--	766	3.4	29	6.9	347	8.2
14...	0734	80513	80513	154	130	--	766	3.3	28	6.9	346	8.0
14...	0735	80513	80513	154	140	--	766	3.3	28	6.9	344	7.8
14...	0736	80513	80513	154	150	--	766	2.3	19	6.8	344	7.7
14...	0737	80513	80513	154	154	--	766	2.1	18	6.9	344	7.7

WHITE RIVER BASIN

07059500 NORFORK LAKE NEAR NORFORK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Reser- voir depth, feet (72025)	Sam- pling depth, feet (00003)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd std, units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
SEP												
10...	0725	80513	80513	151	.20	4.90	765	7.6	97	8.5	312	27.5
10...	0726	80513	80513	151	10.0	--	765	7.5	94	8.5	312	27.5
10...	0727	80513	80513	151	20.0	--	765	7.5	95	8.5	313	27.5
10...	0728	80513	80513	151	30.0	--	765	7.1	89	8.4	317	27.2
10...	0729	80513	80513	151	33.0	--	765	6.2	77	8.0	334	26.1
10...	0730	80513	80513	151	34.0	--	765	6.1	75	7.9	337	25.6
10...	0731	80513	80513	151	36.0	--	765	6.0	72	7.9	337	24.6
10...	0732	80513	80513	151	37.0	--	765	6.3	75	7.9	334	23.9
10...	0733	80513	80513	151	38.0	--	765	6.4	75	7.9	334	23.6
10...	0734	80513	80513	151	40.0	--	765	5.8	67	7.8	334	22.6
10...	0735	80513	80513	151	42.0	--	765	4.9	55	7.7	333	21.6
10...	0736	80513	80513	151	45.0	--	765	4.4	48	7.7	333	20.4
10...	0737	80513	80513	151	48.1	--	765	3.8	40	7.6	333	18.9
10...	0738	80513	80513	151	50.0	--	765	3.7	40	7.5	332	18.5
10...	0739	80513	80513	151	55.0	--	765	3.5	35	7.5	333	16.5
10...	0740	80513	80513	151	60.0	--	765	3.3	32	7.4	334	14.8
10...	0741	80513	80513	151	70.0	--	765	3.2	30	7.3	335	12.6
10...	0742	80513	80513	151	80.0	--	765	2.8	25	7.2	337	10.9
10...	0743	80513	80513	151	90.0	--	765	2.6	23	7.2	344	9.9
10...	0744	80513	80513	151	100	--	765	2.1	18	7.1	343	9.1
10...	0745	80513	80513	151	110	--	765	1.5	13	7.1	354	8.8
10...	0746	80513	80513	151	120	--	765	1.5	13	7.1	349	8.5
10...	0747	80513	80513	151	130	--	765	1.7	14	7.1	350	8.3
10...	0748	80513	80513	151	140	--	765	1.1	9	7.0	347	8.0
10...	0749	80513	80513	151	150	--	765	.5	4	7.0	348	8.0
10...	0750	80513	80513	151	151	--	765	.2	2	7.0	348	7.9

WHITE RIVER BASIN

07059998 NORTH FORK RIVER AT BASE OF NORFORK DAM NEAR NORFORK

LOCATION.--Lat 36°14'54", long 92°14'24", in NE1/4NW1/4 sec.11, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, 300 ft below Norfork Dam, 3.9 mi northeast of Norfork.

DRAINAGE AREA.--1,808 mi².

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Water years 1967-71, May 1991 to current year. Prior to October 1998, published as "07060000 North Fork River at Norfork Dam, near Norfork".

DISSOLVED OXYGEN: May 1991 to current year. Prior to October 1998, published as "07060000 North Fork River at Norfork Dam, near Norfork".

REMARKS.--Flow completely regulated by Norfork Reservoir. Dissolved oxygen and water temperature collected continuously June through December. Dissolved oxygen records good except those for October 1 through 15, November 6 through 12, June 1 through July 29. Satellite telemeter at station.

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.0	4.0	5.0	9.0	0.3	5.3	8.0	6.2	6.9	---	---	---
2	5.0	4.3	4.5	9.5	0.1	3.0	10.6	6.3	7.6	---	---	---
3	5.0	4.3	4.5	8.4	0.1	3.2	9.4	7.0	7.9	---	---	---
4	4.7	4.2	4.3	9.6	0.3	5.3	10.0	7.5	8.2	---	---	---
5	4.7	3.5	3.9	9.8	0.3	4.7	9.3	7.3	8.1	---	---	---
6	5.2	3.2	3.4	9.5	0.3	5.4	8.7	7.6	8.0	---	---	---
7	5.2	3.3	3.7	9.0	0.6	4.7	8.8	7.4	7.8	---	---	---
8	7.8	0.5	4.2	7.8	0.6	4.0	---	---	---	---	---	---
9	8.1	1.0	4.6	7.5	0.2	1.9	---	---	---	---	---	---
10	7.6	1.0	5.8	7.4	0.1	1.7	10.7	8.0	8.8	---	---	---
11	7.3	0.4	3.2	---	---	---	---	---	---	---	---	---
12	7.2	0.2	2.1	7.5	0.2	4.0	---	---	---	---	---	---
13	8.1	0.4	3.2	8.5	0.9	5.0	---	---	---	---	---	---
14	7.6	0.5	5.4	7.9	0.8	5.9	---	---	---	---	---	---
15	7.9	0.2	3.9	9.4	0.8	5.5	---	---	---	---	---	---
16	8.0	2.5	6.1	---	---	---	---	---	---	---	---	---
17	7.8	2.1	6.1	9.0	1.6	5.7	---	---	---	---	---	---
18	6.6	0.5	3.8	8.4	1.6	6.1	10.9	9.2	9.8	---	---	---
19	7.1	0.1	1.4	9.4	2.0	6.0	---	---	---	---	---	---
20	7.3	0.1	1.6	9.4	2.4	5.6	---	---	---	---	---	---
21	8.2	0.3	5.7	10.0	2.9	6.2	---	---	---	---	---	---
22	10.5	0.3	5.4	10.9	6.0	8.8	---	---	---	---	---	---
23	7.4	0.8	4.9	10.2	3.4	6.2	---	---	---	---	---	---
24	7.7	1.0	5.1	10.1	4.0	6.3	---	---	---	---	---	---
25	7.0	0.5	4.2	10.0	7.0	8.7	---	---	---	---	---	---
26	6.4	0.1	1.2	10.2	6.4	7.7	11.2	9.5	10.2	---	---	---
27	7.5	0.1	1.4	10.9	6.8	7.9	---	---	---	---	---	---
28	7.9	0.2	4.3	7.7	5.9	6.6	---	---	---	---	---	---
29	7.4	0.1	3.7	7.0	5.5	6.1	---	---	---	---	---	---
30	7.8	0.1	3.8	7.8	5.8	6.7	---	---	---	---	---	---
31	9.1	0.3	6.1	---	---	---	---	---	---	---	---	---
MONTH	10.5	0.1	4.1	---	---	---	---	---	---	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	11.7	7.5	9.0	11.0	6.6	8.3	8.5	6.3	6.7	7.2	2.4	4.6
2	10.0	7.4	8.2	12.9	7.4	9.0	9.4	5.2	6.6	10.0	2.4	5.6
3	9.7	7.1	8.1	12.2	7.0	8.5	9.9	5.2	7.2	7.9	2.5	4.8
4	9.5	7.2	8.2	11.0	6.6	8.1	10.8	5.0	6.7	8.7	2.1	4.0
5	11.9	6.9	9.1	11.4	7.2	8.6	9.3	5.2	6.5	7.1	2.5	4.3
6	9.8	6.8	8.1	10.8	7.1	8.5	10.4	4.7	6.7	7.2	2.6	4.4
7	10.6	6.9	8.5	11.1	7.0	8.2	10.4	5.1	6.3	8.2	2.5	5.1
8	10.9	6.8	8.2	10.8	6.5	7.9	8.3	4.2	6.1	7.9	2.9	4.9
9	12.2	7.1	8.6	11.8	6.4	7.9	10.0	4.5	6.9	10.0	2.6	5.4
10	10.9	6.7	8.1	10.3	5.9	7.2	9.2	4.2	6.5	10.0	2.7	5.4
11	10.7	6.5	8.3	10.4	6.0	7.2	8.2	4.0	5.9	8.6	2.1	4.5
12	8.4	6.8	8.0	8.6	5.7	6.9	8.7	4.1	6.0	7.2	2.2	3.9
13	8.2	8.0	8.1	9.5	5.5	6.8	8.1	4.1	5.7	8.5	2.6	4.8
14	8.5	6.6	7.8	9.1	5.5	6.6	11.7	3.9	6.1	9.4	2.7	4.7
15	8.4	6.3	7.7	9.2	5.0	6.4	8.0	4.2	5.7	7.2	2.6	4.3
16	10.8	6.2	8.1	9.6	5.5	6.5	9.5	3.9	5.6	7.7	2.7	4.5
17	9.8	6.4	8.0	9.1	5.2	6.5	8.0	3.6	5.4	8.4	2.8	4.5
18	12.3	7.0	9.2	8.6	5.5	6.8	10.7	3.6	5.6	7.2	2.6	4.3
19	11.8	6.8	8.9	9.2	5.6	7.0	8.1	3.6	5.0	7.2	2.4	4.2
20	11.6	6.7	8.3	10.1	5.2	6.8	7.9	3.4	5.2	6.8	2.5	4.1
21	11.6	6.9	8.8	9.0	5.0	6.6	8.7	3.2	5.3	6.0	2.2	3.3
22	11.2	6.9	8.3	9.2	5.6	6.8	9.0	3.1	5.4	7.5	2.0	3.7
23	12.4	6.8	8.9	8.8	5.3	6.7	8.5	2.9	5.1	7.2	2.3	4.0
24	11.8	7.0	8.3	10.0	5.4	6.9	9.0	2.6	4.8	9.7	2.2	4.5
25	12.5	6.9	8.5	9.3	5.5	6.8	9.0	2.9	4.9	10.0	2.1	4.6
26	10.2	6.6	8.2	9.0	5.6	6.9	7.4	2.8	4.8	9.9	2.0	5.6
27	11.0	7.0	8.3	8.6	5.5	6.8	7.2	2.5	4.6	7.5	2.2	4.5
28	11.3	6.9	8.5	11.9	5.5	7.1	7.6	2.6	4.4	6.7	1.9	3.4
29	11.1	6.9	8.4	9.2	5.2	6.9	8.4	2.3	4.4	7.3	2.0	4.4
30	10.8	6.6	8.0	9.1	5.2	6.6	7.4	2.5	4.6	4.8	2.2	3.4
31	---	---	---	9.1	5.2	6.6	9.5	2.5	4.8	---	---	---
MONTH	12.5	6.2	8.4	12.9	5.0	7.2	11.7	2.3	5.7	10.0	1.9	4.5

WHITE RIVER BASIN

07059998 NORTH FORK RIVER AT BASE OF NORFORK DAM NEAR NORFORK--CONTINUED

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	4.0	5.0	9.0	0.3	5.3	8.0	6.2	6.9	---	---	---
2	5.0	4.3	4.5	9.5	0.1	3.0	10.6	6.3	7.6	---	---	---
3	5.0	4.3	4.5	8.4	0.1	3.2	9.4	7.0	7.9	---	---	---
4	4.7	4.2	4.3	9.6	0.3	5.3	10.0	7.5	8.2	---	---	---
5	4.7	3.5	3.9	9.8	0.3	4.7	9.3	7.3	8.1	---	---	---
6	5.2	3.2	3.4	9.5	0.3	5.4	8.7	7.6	8.0	---	---	---
7	5.2	3.3	3.7	9.0	0.6	4.7	8.8	7.4	7.8	---	---	---
8	7.8	0.5	4.2	7.8	0.6	4.0	---	---	---	---	---	---
9	8.1	1.0	4.6	7.5	0.2	1.9	---	---	---	---	---	---
10	7.6	1.0	5.8	7.4	0.1	1.7	10.7	8.0	8.8	---	---	---
11	7.3	0.4	3.2	---	---	---	---	---	---	---	---	---
12	7.2	0.2	2.1	7.5	0.2	4.0	---	---	---	---	---	---
13	8.1	0.4	3.2	8.5	0.9	5.0	---	---	---	---	---	---
14	7.6	0.5	5.4	7.9	0.8	5.9	---	---	---	---	---	---
15	7.9	0.2	3.9	9.4	0.8	5.5	---	---	---	---	---	---
16	8.0	2.5	6.1	---	---	---	---	---	---	---	---	---
17	7.8	2.1	6.1	9.0	1.6	5.7	---	---	---	---	---	---
18	6.6	0.5	3.8	8.4	1.6	6.1	10.9	9.2	9.8	---	---	---
19	7.1	0.1	1.4	9.4	2.0	6.0	---	---	---	---	---	---
20	7.3	0.1	1.6	9.4	2.4	5.6	---	---	---	---	---	---
21	8.2	0.3	5.7	10.0	2.9	6.2	---	---	---	---	---	---
22	10.5	0.3	5.4	10.9	6.0	8.8	---	---	---	---	---	---
23	7.4	0.8	4.9	10.2	3.4	6.2	---	---	---	---	---	---
24	7.7	1.0	5.1	10.1	4.0	6.3	---	---	---	---	---	---
25	7.0	0.5	4.2	10.0	7.0	8.7	---	---	---	---	---	---
26	6.4	0.1	1.2	10.2	6.4	7.7	11.2	9.5	10.2	---	---	---
27	7.5	0.1	1.4	10.9	6.8	7.9	---	---	---	---	---	---
28	7.9	0.2	4.3	7.7	5.9	6.6	---	---	---	---	---	---
29	7.4	0.1	3.7	7.0	5.5	6.1	---	---	---	---	---	---
30	7.8	0.1	3.8	7.8	5.8	6.7	---	---	---	---	---	---
31	9.1	0.3	6.1	---	---	---	---	---	---	---	---	---
MONTH	10.5	0.1	4.1	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.7	7.5	9.0	11.0	6.6	8.3	8.5	6.3	6.7	7.2	2.4	4.6
2	10.0	7.4	8.2	12.9	7.4	9.0	9.4	5.2	6.6	10.0	2.4	5.6
3	9.7	7.1	8.1	12.2	7.0	8.5	9.9	5.2	7.2	7.9	2.5	4.8
4	9.5	7.2	8.2	11.0	6.6	8.1	10.8	5.0	6.7	8.7	2.1	4.0
5	11.9	6.9	9.1	11.4	7.2	8.6	9.3	5.2	6.5	7.1	2.5	4.3
6	9.8	6.8	8.1	10.8	7.1	8.5	10.4	4.7	6.7	7.2	2.6	4.4
7	10.6	6.9	8.5	11.1	7.0	8.2	10.4	5.1	6.3	8.2	2.5	5.1
8	10.9	6.8	8.2	10.8	6.5	7.9	8.3	4.2	6.1	7.9	2.9	4.9
9	12.2	7.1	8.6	11.8	6.4	7.9	10.0	4.5	6.9	10.0	2.6	5.4
10	10.9	6.7	8.1	10.3	5.9	7.2	9.2	4.2	6.5	10.0	2.7	5.4
11	10.7	6.5	8.3	10.4	6.0	7.2	8.2	4.0	5.9	8.6	2.1	4.5
12	8.4	6.8	8.0	8.6	5.7	6.9	8.7	4.1	6.0	7.2	2.2	3.9
13	8.2	8.0	8.1	9.5	5.5	6.8	8.1	4.1	5.7	8.5	2.6	4.8
14	8.5	6.6	7.8	9.1	5.5	6.6	11.7	3.9	6.1	9.4	2.7	4.7
15	8.4	6.3	7.7	9.2	5.0	6.4	8.0	4.2	5.7	7.2	2.6	4.3
16	10.8	6.2	8.1	9.6	5.5	6.5	9.5	3.9	5.6	7.7	2.7	4.5
17	9.8	6.4	8.0	9.1	5.2	6.5	8.0	3.6	5.4	8.4	2.8	4.5
18	12.3	7.0	9.2	8.6	5.5	6.8	10.7	3.6	5.6	7.2	2.6	4.3
19	11.8	6.8	8.9	9.2	5.6	7.0	8.1	3.6	5.0	7.2	2.4	4.2
20	11.6	6.7	8.3	10.1	5.2	6.8	7.9	3.4	5.2	6.8	2.5	4.1
21	11.6	6.9	8.8	9.0	5.0	6.6	8.7	3.2	5.3	6.0	2.2	3.3
22	11.2	6.9	8.3	9.2	5.6	6.8	9.0	3.1	5.4	7.5	2.0	3.7
23	12.4	6.8	8.9	8.8	5.3	6.7	8.5	2.9	5.1	7.2	2.3	4.0
24	11.8	7.0	8.3	10.0	5.4	6.9	9.0	2.6	4.8	9.7	2.2	4.5
25	12.5	6.9	8.5	9.3	5.5	6.8	9.0	2.9	4.9	10.0	2.1	4.6
26	10.2	6.6	8.2	9.0	5.6	6.9	7.4	2.8	4.8	9.9	2.0	5.6
27	11.0	7.0	8.3	8.6	5.5	6.8	7.2	2.5	4.6	7.5	2.2	4.5
28	11.3	6.9	8.5	11.9	5.5	7.1	7.6	2.6	4.4	6.7	1.9	3.4
29	11.1	6.9	8.4	9.2	5.2	6.9	8.4	2.3	4.4	7.3	2.0	4.4
30	10.8	6.6	8.0	9.1	5.2	6.6	7.4	2.5	4.6	4.8	2.2	3.4
31	---	---	---	9.1	5.2	6.6	9.5	2.5	4.8	---	---	---
MONTH	12.5	6.2	8.4	12.9	5.0	7.2	11.7	2.3	5.7	10.0	1.9	4.5

WHITE RIVER BASIN

07059998 NORTH FORK RIVER AT BASE OF NORFORK DAM NEAR NORFORK--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.4	14.5	15.3	16.3	14.7	15.7	13.9	13.2	13.5	---	---	---
2	15.5	15.2	15.4	15.9	14.3	15.0	13.7	13.2	13.4	---	---	---
3	15.5	15.3	15.4	15.8	14.4	15.0	13.3	13.0	13.2	---	---	---
4	15.7	15.4	15.5	15.9	14.7	15.5	13.0	12.8	12.9	---	---	---
5	16.0	15.4	15.7	15.9	14.8	15.4	12.9	12.6	12.7	---	---	---
6	15.6	15.4	15.5	15.9	14.8	15.5	12.7	12.4	12.5	---	---	---
7	15.9	15.6	15.8	15.8	14.5	15.2	12.7	12.2	12.3	---	---	---
8	15.8	14.8	15.4	15.5	14.4	15.0	12.6	12.1	12.3	---	---	---
9	15.7	14.3	15.0	15.5	14.6	14.9	12.2	11.9	12.1	---	---	---
10	15.8	14.5	15.5	15.6	14.9	15.2	11.9	11.6	11.8	---	---	---
11	15.7	14.4	15.0	15.7	14.7	15.2	---	---	---	---	---	---
12	15.7	14.2	14.7	15.5	14.6	15.3	---	---	---	---	---	---
13	16.4	14.2	15.0	15.4	14.2	15.1	11.4	11.2	11.3	---	---	---
14	16.0	14.4	15.6	15.3	14.5	15.1	11.4	10.9	11.1	---	---	---
15	16.0	13.9	15.2	15.6	14.9	15.3	11.4	10.8	11.0	---	---	---
16	16.2	15.1	15.9	15.5	14.9	15.2	11.0	10.7	10.9	---	---	---
17	16.2	14.7	15.7	15.4	14.4	15.0	---	---	---	---	---	---
18	15.8	14.3	15.3	15.0	14.6	14.8	---	---	---	---	---	---
19	16.0	14.5	14.8	15.4	14.5	14.9	---	---	---	---	---	---
20	16.1	14.4	14.9	15.2	14.2	14.8	---	---	---	---	---	---
21	16.0	14.6	15.7	15.0	14.2	14.8	---	---	---	---	---	---
22	15.9	14.6	15.6	15.1	14.5	14.8	10.9	10.0	10.4	---	---	---
23	16.1	14.4	15.7	15.0	14.2	14.5	---	---	---	---	---	---
24	16.2	14.8	15.8	14.9	14.1	14.5	---	---	---	---	---	---
25	16.1	14.8	15.7	14.6	14.3	14.4	10.5	10.0	10.2	---	---	---
26	16.1	14.5	15.0	14.4	14.0	14.2	10.3	9.9	10.1	---	---	---
27	16.0	14.4	14.9	14.3	13.8	14.0	10.5	9.8	10.0	---	---	---
28	16.0	14.4	15.5	14.2	13.6	13.9	10.2	9.7	9.9	---	---	---
29	16.1	14.8	15.5	14.0	13.5	13.7	10.2	9.7	9.9	---	---	---
30	16.1	14.8	15.6	14.1	13.4	13.7	---	---	---	---	---	---
31	16.3	14.9	15.9	---	---	---	---	---	---	---	---	---
MONTH	16.4	13.9	15.4	16.3	13.4	14.9	---	---	---	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	7.4	7.7	8.6	8.0	8.2	9.8	8.8	9.5	10.8	9.2	9.5
2	8.0	7.4	7.7	8.9	7.9	8.3	9.7	8.6	8.9	10.8	9.3	9.8
3	8.4	7.5	7.8	8.7	8.0	8.3	9.6	8.6	9.0	11.0	9.4	9.7
4	8.4	7.4	7.9	8.8	8.0	8.3	10.0	8.6	9.2	10.9	9.2	9.8
5	8.1	7.4	7.8	8.8	8.0	8.4	10.0	8.6	9.3	11.0	9.2	9.7
6	7.9	7.5	7.7	8.9	8.0	8.3	10.0	8.8	9.2	11.0	9.3	10.1
7	8.6	7.6	7.9	8.9	7.9	8.4	9.9	8.8	9.3	11.2	9.4	10.0
8	8.3	7.6	7.9	9.0	8.0	8.5	9.9	8.7	9.3	11.0	9.3	9.9
9	8.6	7.4	8.0	9.0	8.0	8.5	9.8	8.7	9.0	10.7	9.2	9.8
10	8.3	7.5	7.9	9.3	8.1	8.5	9.7	8.7	9.1	10.6	9.2	9.7
11	8.3	7.6	7.9	9.1	8.1	8.5	10.1	8.8	9.3	10.8	9.2	9.8
12	8.3	7.6	8.1	8.9	8.2	8.5	10.3	8.8	9.5	11.4	9.3	9.9
13	8.3	8.0	8.2	9.3	8.2	8.6	10.0	8.9	9.3	11.0	9.4	9.8
14	8.4	7.7	8.1	9.0	8.2	8.5	10.1	8.8	9.3	11.0	9.3	9.7
15	8.3	7.7	8.1	9.0	8.2	8.6	10.3	8.8	9.5	11.1	9.3	9.9
16	8.6	7.8	8.0	9.4	8.3	8.7	10.4	8.9	9.6	10.9	9.1	9.9
17	8.3	7.7	8.0	9.2	8.2	8.7	10.1	8.9	9.5	11.3	9.3	10.1
18	8.5	7.8	8.0	9.2	8.2	8.6	10.4	8.8	9.7	11.4	9.3	10.1
19	8.8	7.7	8.2	9.2	8.3	8.7	10.6	8.9	9.8	11.8	9.4	10.2
20	8.7	7.8	8.2	9.3	8.2	8.7	10.5	8.9	9.8	11.1	9.3	9.8
21	8.6	7.6	8.0	9.5	8.3	8.8	10.8	9.1	10	11.0	9.1	9.6
22	8.5	7.7	8.1	9.6	8.4	8.8	10.8	9.1	9.9	11.6	9.4	9.9
23	8.4	7.7	8.0	9.3	8.3	8.8	10.7	9.1	9.7	11.4	9.4	10.1
24	8.7	7.8	8.2	9.3	8.2	8.7	10.8	9.1	9.7	11.1	9.3	10
25	8.6	7.8	8.2	9.5	8.4	8.9	10.9	9.1	10	11.8	9.4	10.0
26	8.8	7.9	8.2	9.7	8.5	9.0	11.1	9.2	10.1	11.2	9.3	9.9
27	8.5	7.8	8.1	9.8	8.5	9.1	11.1	9.3	10.2	11.2	9.4	9.9
28	8.7	7.8	8.1	9.8	8.5	9.0	10.9	9.3	9.9	11.6	9.4	9.9
29	8.6	7.7	8.1	9.7	8.5	8.9	11.1	9.3	9.9	11.4	9.4	10.0
30	8.7	7.9	8.2	9.6	8.4	8.8	11.2	9.4	9.7	11.3	9.4	10
31	---	---	---	9.8	8.5	9.0	10.7	9.2	9.5	---	---	---
MONTH	8.8	7.4	8.0	9.8	7.9	8.6	11.2	8.6	9.5	11.8	9.1	9.9

WHITE RIVER BASIN

07060000 NORTH FORK RIVER AT NORFORK DAM NEAR NORFORK

LOCATION.--Lat 36°14'18", long 92°14'18", in SE1/4SW1/4 sec.2, T.18 N., R.12 W., Baxter County, Hydrologic Unit 11010006, at Norfolk Dam, 3.9 mi northeast of Norfolk, and at mile 4.8.

DRAINAGE AREA.--1,808 mi².

PERIOD OF RECORD.--Water years 1946-71, 1974-89, November 1990 to current year.

REMARKS.--Flow completely regulated by Norfolk Reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
OCT									
23...	0941	80513	80513	778	6.1	60	7.2	285	15.5
NOV									
06...	1531	80513	80513	775	9.7	95	7.3	328	15.3
DEC									
06...	0836	80513	80513	772	8.5	78	7.6	297	12.0
MAR									
19...	1619	80513	80513	748	12.7	110	8.3	312	8.3
JUN									
17...	1723	80513	80513	763	8.9	78	8.2	329	10.0
JUL									
01...	1445	80513	80513	763	8.9	81	5.9	324	11.2
AUG									
14...	0800	80513	80513	766	8.9	80	7.2	350	11.1
SEP									
10...	0817	80513	80513	772	8.4	74	7.3	355	10.6

WHITE RIVER BASIN

185

07060500 WHITE RIVER AT CALICO ROCK

LOCATION.--Lat 36°06'58", long 92°08'35", in SE1/4NE1/4 sec.22, T.17 N., R.11 W., IZARD COUNTY, Hydrologic Unit 11010004, on left bank at Calico Rock, 200 ft upstream from bridge on State Highway 5, 700 ft upstream from Calico Creek, 3.2 mi downstream from Cataract Creek, 6.0 mi upstream from Piney Creek, and at mile 359.1.

DRAINAGE AREA.--9,978 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at same site since 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 316.38 ft above NGVD of 1929. Prior to Jan. 26, 1940, nonrecording gage at same site and Jan. 27 to Aug. 13, 1940, nonrecording gage at site 500 ft downstream, both at datum 2.07 ft higher. Aug. 14, 1940, to Dec. 5, 1966, water-stage recorder at datum 1.00 ft higher.

REMARKS.--Water-discharge records fair. Satellite telemeter at station. Flow regulated since 1943 by Norfolk Lake, capacity, 1,983,000 acre-ft, since July 24, 1951, by Bull Shoals Lake, 59.5 mi upstream, capacity, 5,408,000 acre-ft, since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity, 3,567,500 acre-ft, and since Dec. 26, 1963, by Beaver Lake, capacity, 1,951,500 acre-ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1904, 52.9 ft Jan. 31, 1916, present datum, from records of National Weather Service, discharge, 350,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

1	12200	4560	808	8240	4770	8550	2050	5960	2850	6790	13500	1930
2	15100	5060	934	6700	1140	3090	3960	2830	2460	3970	8620	3770
3	14600	1980	4700	8090	999	4460	5620	3360	3450	4740	5750	1450
4	14600	1300	9430	9070	3150	7580	5850	3700	11300	7150	4530	2360
5	12600	2790	9120	7140	9500	9390	4190	3000	8540	4750	7360	3900
6	10300	3920	8580	5990	11700	8580	1990	4670	9380	3690	6150	2280
7	5000	5510	7570	11500	8940	8190	2250	3930	5430	3710	7540	4390
8	5650	3880	4960	10800	6650	5300	5000	2070	3750	8060	7190	1960
9	4250	2470	4320	8110	3740	2720	5860	4230	3490	8460	6790	1940
10	4710	1190	7310	12600	4050	3300	6190	6420	4260	9620	2120	3570
11	5100	633	7320	10700	6890	9700	5130	3560	4920	8150	2910	2790
12	3660	1390	5520	6040	6260	4550	4280	2100	4210	8010	7300	4390
13	1430	5190	5200	4200	7190	4340	1500	3790	10100	4520	8010	4880
14	2220	5980	5080	11500	6880	7340	1200	3190	11800	4710	7080	3150
15	5410	5420	2020	10200	5110	5000	3350	3200	5330	e7900	8820	2330
16	6610	2670	1010	8750	2130	2110	2080	3200	3780	9750	10400	3540
17	7130	1700	4140	7420	1860	2200	1110	14300	8130	10900	7560	4120
18	4840	1400	6680	12100	9610	6370	1010	23100	5710	10200	10000	2970
19	6790	6650	6330	7360	7830	6700	1760	13400	4770	9520	12600	1710
20	1970	4660	6880	3190	5850	5210	1060	10900	4150	6460	12800	1230
21	3230	3800	8680	4450	6630	8600	1230	11700	5290	7270	13600	1020
22	5670	4010	2670	7760	7040	6420	1990	13000	2680	8920	12100	649
23	5680	3280	3180	11600	5730	3790	2860	10600	2940	7170	11100	527
24	6140	1540	3650	14500	7600	3180	3470	6220	8090	9160	10100	863
25	5890	964	2240	11500	12200	4120	6350	5070	8670	8250	10000	2940
26	4510	6660	2670	4580	14600	6620	5360	4840	7590	10200	10800	1560
27	1570	5560	3060	3490	14900	6770	3730	5140	5460	6080	10800	951
28	3040	6190	2580	4960	13300	6400	3320	4120	4080	6670	9040	692
29	7510	2620	1680	3160	---	4330	13200	3480	2540	9990	9520	458
30	5800	1440	1450	4060	---	e2680	7260	4650	2690	6940	5570	2170
31	5440	---	4710	7720	---	2250	---	4490	---	10500	2110	---
TOTAL	198650	104417	144482	247480	196249	169840	114210	194220	167840	232210	261770	70490
MEAN	6408	3481	4661	7983	7009	5479	3807	6265	5595	7491	8444	2350
MAX	15100	6660	9430	14500	14900	9700	13200	23100	11800	10900	13600	4880
MIN	1430	633	808	3160	999	2110	1010	2070	2460	3690	2110	458
AC-FT	394000	207100	286600	490900	389300	336900	226500	385200	332900	460600	519200	139800

WHITE RIVER BASIN

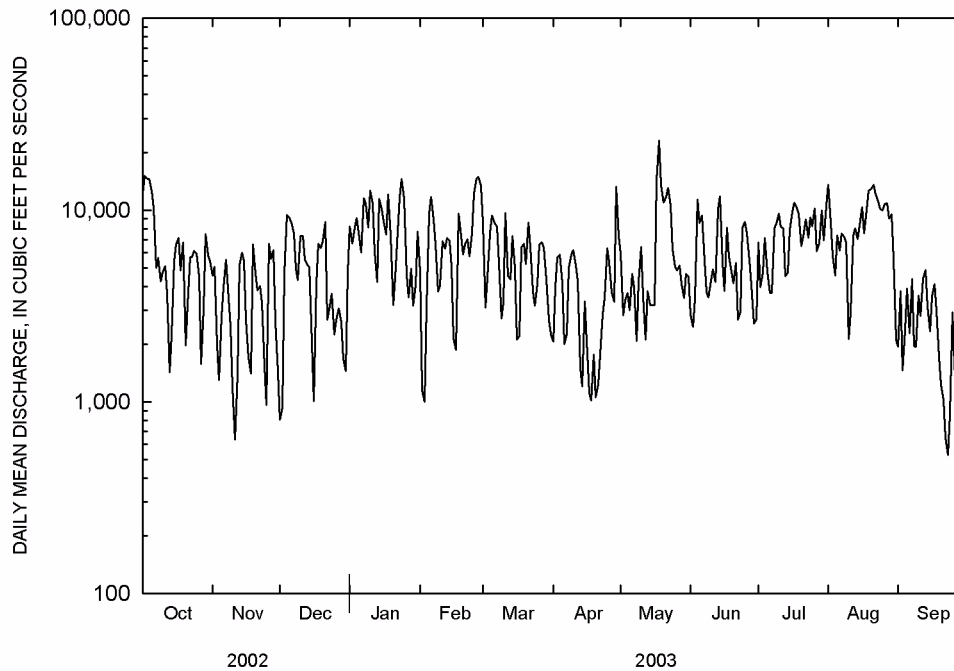
07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2003, BY WATER YEAR (WY)

MEAN	5280	6974	9983	10670	12610	14630	15300	13980	10320	9504	8001	6057
MAX	13150	26560	31170	34700	39600	62300	86320	64400	44330	29410	25390	25180
(WY)	1958	1947	1997	1950	1949	1945	1945	1943	1945	1957	1957	1957
MIN	584	892	1359	1680	2204	3468	1610	2137	3095	1545	1210	678
(WY)	1955	1982	1982	1955	1964	2000	1981	2001	2001	1944	1943	1943

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1943 - 2003	
ANNUAL TOTAL	4435939		2101858			
ANNUAL MEAN	12150		5759		10260	
HIGHEST ANNUAL MEAN					22890 1945	
LOWEST ANNUAL MEAN					3482 1981	
HIGHEST DAILY MEAN	76900	Mar 20	23100	May 18	292000	Apr 16 1945
LOWEST DAILY MEAN	633	Nov 11	458	Sep 29	310	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	2480	Dec 24	1140	Sep 23	412	Sep 23 1954
MAXIMUM PEAK FLOW			25700	May 18	310000	Apr 16 1945
MAXIMUM PEAK STAGE			10.88	May 18	¹ 49.84	Apr 16 1945
INSTANTANEOUS LOW FLOW			292	Sep 23	² 305	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	8799000		4169000		7436000	
10 PERCENT EXCEEDS	20400		10700		21600	
50 PERCENT EXCEEDS	11200		5100		7000	
90 PERCENT EXCEEDS	3050		1820		2050	

¹At present datum
²Observed
^eEstimated



WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1966 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Water years 1967-1981, 1991 to current year.

DISSOLVED OXYGEN: May 1991 to December 1994.

REMARKS.--Flow regulated by upstream reservoirs.

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.6	15.9	16.2	14.5	14.0	14.3	12.1	11.8	12.0	10.3	10.1	10.2
2	16.3	15.7	16.0	14.0	13.5	13.8	11.8	11.5	11.6	10.1	10.0	10.1
3	16.1	15.7	15.9	13.5	13.3	13.4	11.5	11.4	11.5	10.0	9.6	9.8
4	16.2	15.7	15.9	13.4	13.2	13.3	11.4	11.3	11.3	9.6	9.6	9.6
5	16.3	15.7	16.0	13.6	13.3	13.4	11.4	11.2	11.3	9.7	9.6	9.6
6	15.9	15.6	15.7	13.7	13.5	13.6	11.4	11.1	11.3	9.8	9.6	9.7
7	16.1	15.5	15.7	13.8	13.5	13.6	11.4	11.3	11.3	9.6	9.5	9.6
8	16.1	15.5	15.7	14.1	13.7	13.9	11.4	11.3	11.4	9.7	9.6	9.6
9	15.6	15.2	15.4	14.4	14.1	14.2	11.4	11.3	11.4	9.9	9.7	9.8
10	15.2	15.1	15.2	14.8	14.4	14.6	11.4	11.3	11.3	9.9	9.8	9.8
11	15.5	15.2	15.4	14.8	14.5	14.6	11.3	11.2	11.2	9.8	9.7	9.7
12	16.3	15.5	15.7	14.6	14.0	14.2	11.3	11.2	11.3	9.7	9.4	9.6
13	16.4	16.2	16.3	14.0	13.5	13.7	11.3	11.2	11.3	9.4	9.3	9.3
14	16.3	15.4	15.7	13.7	13.6	13.7	11.2	11.1	11.1	9.4	9.3	9.3
15	15.7	15.2	15.4	13.8	13.7	13.8	11.2	11.1	11.1	9.4	9.3	9.4
16	15.3	14.9	15.1	13.8	13.7	13.7	---	---	---	9.3	9.2	9.3
17	15.2	14.8	15.0	13.7	13.2	13.4	11.2	11.1	11.1	9.2	8.8	9.0
18	15.2	15.0	15.1	13.3	13.0	13.2	11.7	11.2	11.4	8.8	8.7	8.8
19	15.3	15.1	15.2	13.3	13.0	13.1	11.7	11.7	11.7	8.8	8.7	8.8
20	15.1	14.8	14.9	13.3	13.2	13.2	11.7	11.3	11.5	8.9	8.8	8.8
21	15.2	14.6	14.8	13.2	13.1	13.2	11.3	11.0	11.1	9.0	8.9	9.0
22	15.6	15.2	15.4	13.2	13.1	13.1	11.1	11.0	11.1	9.0	8.8	8.9
23	15.6	15.3	15.5	13.1	12.9	13.0	11.1	10.7	10.9	8.8	8.6	8.7
24	15.5	15.4	15.5	13.0	12.9	12.9	10.7	10.4	10.6	8.6	8.4	8.5
25	15.5	15.4	15.5	13.1	12.7	12.9	10.4	10.0	10.1	8.4	8.4	8.4
26	15.5	15.2	15.4	12.7	12.5	12.6	10.0	9.7	9.8	8.4	8.4	8.4
27	15.2	14.7	14.8	12.7	12.4	12.6	9.7	9.4	9.6	8.4	8.2	8.3
28	14.8	14.4	14.6	12.4	12.3	12.3	9.5	9.4	9.4	8.2	8.1	8.1
29	14.8	14.5	14.6	12.3	12.2	12.2	9.6	9.4	9.5	8.3	8.1	8.2
30	14.8	14.7	14.7	12.2	12.1	12.2	10.0	9.6	9.8	8.4	8.3	8.3
31	14.7	14.5	14.6	---	---	---	10.3	10.0	10.2	8.3	8.3	8.3
MONTH	16.6	14.4	15.4	14.8	12.1	13.4	---	---	---	10.3	8.1	9.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.5	8.3	8.4	7.9	7.8	7.9	11.5	11.2	11.3	14.1	13.8	14.0
2	8.9	8.5	8.7	8.1	7.9	8.0	12.3	11.5	11.9	13.8	13.7	13.7
3	9.4	8.9	9.1	8.2	8.1	8.2	12.6	12.3	12.5	13.9	13.8	13.9
4	9.6	9.4	9.5	8.3	8.2	8.3	12.6	12.5	12.6	14.2	13.9	14.1
5	9.5	9.0	9.3	8.3	8.3	8.3	12.5	12.3	12.4	14.3	14.2	14.2
6	9.0	8.6	8.8	8.3	8.2	8.3	12.3	12.3	12.3	14.6	14.3	14.5
7	8.6	8.4	8.5	8.2	8.2	8.2	12.3	12.1	12.2	14.6	14.5	14.6
8	8.4	8.2	8.3	8.5	8.2	8.3	12.4	12.2	12.3	14.6	14.5	14.5
9	8.3	8.2	8.2	8.9	8.5	8.7	12.3	11.7	12.1	15.2	14.6	15.0
10	8.2	8.1	8.1	9.1	8.9	9.0	11.7	11.3	11.5	15.3	15.0	15.2
11	8.1	8.1	8.1	9.1	8.9	9.0	11.3	11.3	11.3	15.0	14.7	14.9
12	8.3	8.1	8.2	9.0	8.9	8.9	11.6	11.3	11.5	14.8	14.7	14.8
13	8.3	8.3	8.3	9.4	9.0	9.2	11.9	11.6	11.8	---	---	---
14	8.5	8.3	8.4	9.6	9.4	9.5	12.6	11.9	12.3	---	---	---
15	8.8	8.5	8.7	9.5	9.4	9.5	13.5	12.6	13.1	---	---	---
16	8.9	8.8	8.9	9.7	9.5	9.6	13.6	13.3	13.5	---	---	---
17	8.8	8.5	8.7	10.3	9.7	10.0	13.3	13.3	13.3	---	---	---
18	8.5	8.2	8.3	10.7	10.3	10.5	13.7	13.3	13.5	---	---	---
19	8.3	8.2	8.2	10.6	10.4	10.5	14.2	13.7	14.1	---	---	---
20	8.4	8.3	8.4	10.4	10.4	10.4	14.1	13.9	14.0	---	---	---
21	8.4	8.4	8.4	10.4	10.3	10.4	14.6	14.0	14.4	---	---	---
22	8.5	8.4	8.4	10.5	10.3	10.4	14.9	14.6	14.8	---	---	---
23	8.5	8.4	8.5	10.9	10.5	10.7	15.2	14.9	15.1	---	---	---
24	8.4	8.2	8.3	11.4	10.9	11.1	15.1	14.9	15.0	---	---	---
25	8.2	8.0	8.1	12.0	11.4	11.7	14.9	14.6	14.8	---	---	---
26	8.0	7.9	7.9	12.1	12.0	12.1	14.6	14.2	14.4	---	---	---
27	7.9	7.8	7.8	12.0	11.7	11.8	14.3	14.2	14.2	---	---	---
28	7.8	7.8	7.8	11.7	11.6	11.7	14.8	14.3	14.5	---	---	---
29	---	---	---	11.6	11.3	11.5	15.0	14.7	14.9	---	---	---
30	---	---	---	---	---	---	14.7	14.1	14.4	---	---	---
31	---	---	---	11.2	11.1	11.2	---	---	---	---	---	---
MONTH	9.6	7.8	8.4	---	---	---	15.2	11.2	13.2	---	---	---

WHITE RIVER BASIN

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN												
													JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	---	---	---	---	---	---												
2	---	---	---	---	---	---	---	---	---	---	---	---												
3	---	---	---	---	---	---	---	---	---	---	---	---												
4	---	---	---	---	---	---	---	---	---	---	---	---												
5	---	---	---	---	---	---	---	---	---	---	---	---												
6	---	---	---	---	---	---	---	---	---	---	---	---												
7	---	---	---	---	---	---	---	---	---	---	---	---												
8	---	---	---	---	---	---	---	---	---	---	---	---												
9	---	---	---	---	---	---	---	---	---	---	---	---												
10	---	---	---	---	---	---	---	---	---	---	---	---												
11	---	---	---	---	---	---	---	---	---	---	---	---												
12	---	---	---	---	---	---	---	---	---	---	---	---												
13	---	---	---	---	---	---	---	---	---	---	---	---												
14	---	---	---	---	---	---	---	---	---	---	---	---												
15	---	---	---	---	---	---	---	---	---	---	---	---												
16	---	---	---	---	---	---	---	---	---	---	---	---												
17	---	---	---	---	---	---	---	---	---	---	---	---												
18	---	---	---	---	---	---	---	---	---	19.5	15.8	17.8												
19	---	---	---	---	---	---	---	---	---	19.3	15.9	17.7												
20	---	---	---	---	---	---	---	---	---	19.6	16.0	18.1												
21	---	---	---	---	---	---	---	---	---	18.9	17.2	17.7												
22	---	---	---	---	---	---	---	---	---	20.5	16.4	18.3												
23	---	---	---	---	---	---	---	---	---	20.8	18.5	19.6												
24	---	---	---	---	---	---	---	---	---	20.6	16.3	18.9												
25	---	---	---	---	---	---	---	---	---	20.7	16.1	18.1												
26	---	---	---	---	---	---	---	---	---	20.0	15.4	17.5												
27	---	---	---	---	---	---	---	---	---	19.5	17.0	18.4												
28	---	---	---	---	---	---	---	---	---	19.7	17.2	18.3												
29	---	---	---	---	---	---	---	---	---	19.4	15.8	17.4												
30	---	---	---	---	---	---	---	---	---	17.3	13.7	15.2												
31	---	---	---	---	---	---	---	---	---	---	---	---												
MONTH	---	---	---	---	---	---	---	---	---	---	---	---												

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth at sample location, feet (81903)	Sample location, cross section ft from rt bank (72103)	Sampling depth, feet (00003)	Stream width, feet (00004)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	
OCT	23...	1245	80513	81213	--	--	--	774	10.2	101	8.1	271	15.5	
DEC	17...	1515	80513	81213	--	--	--	761	6.5	60	8.2	319	11.4	
MAR	26...	0749	80513	80513	6.00	25.0	3.10	500	774	11.9	107	8.1	255	11.4
	26...	0750	80513	80513	8.00	75.0	4.00	500	774	11.3	101	8.1	257	11.2
	26...	0751	80513	80513	5.00	125.0	2.70	500	774	11.5	103	8.1	258	11.1
	26...	0752	80513	80513	4.00	175.0	2.20	500	774	11.6	103	8.1	261	10.9
	26...	0753	80513	80513	5.00	225.0	2.60	500	774	11.5	102	8.1	263	10.8
	26...	0754	80513	80513	6.00	275.0	3.30	500	774	11.7	103	8.1	264	10.7
	26...	0755	80513	80513	6.00	325.0	2.90	500	774	11.5	102	8.1	268	10.6
	26...	0756	80513	80513	7.00	375.0	3.60	500	774	11.5	102	8.1	271	10.7
	26...	0757	80513	80513	5.00	425.0	2.70	500	774	11.3	101	8.1	271	10.7
	26...	0758	80513	80513	4.00	475.0	1.90	500	774	11.2	100	8.1	272	10.8
	26...	0800	80513	81213	--	--	--	--	774	11.1	98	8.2	277	10.3
MAY	14...	1145	80513	81213	--	--	--	--	758	8.8	87	8.2	250	14.6
JUL	22...	1102	80513	80513	4.60	10.0	2.30	200	768	9.8	92	8.4	254	12.8
	22...	1105	80513	80513	4.20	30.0	2.10	200	768	10.0	94	8.4	254	13.0
	22...	1107	80513	80513	4.20	50.0	2.10	200	768	9.8	92	8.4	253	12.8
	22...	1108	80513	80513	3.80	70.0	1.90	200	768	9.8	92	8.5	253	13.2
	22...	1109	80513	80513	5.40	90.0	2.70	200	768	9.8	92	8.5	256	12.8
	22...	1111	80513	80513	4.80	110.0	2.40	200	768	9.7	91	8.4	256	12.9
	22...	1112	80513	80513	4.60	130.0	2.30	200	768	9.7	91	8.4	257	13.0
	22...	1114	80513	80513	5.60	150.0	2.80	200	768	9.7	91	8.4	258	12.8
	22...	1116	80513	80513	5.00	170.0	2.50	200	768	9.7	91	8.4	260	13.1
	22...	1118	80513	80513	3.80	190.0	--	200	768	9.6	91	8.4	260	13.1
	22...	1130	80513	81213	--	--	--	--	768	9.7	91	8.5	256	12.8
AUG	20...	1015	80513	81213	--	--	--	--	766	9.3	86	7.7	291	11.9

WHITE RIVER BASIN

189

07060500 WHITE RIVER AT CALICO ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	
OCT	23...	1245	4680	2.0	130	36.4	10.4	1.85	.1	4.0	6	134	6.49	6.86
DEC	17...	1515	6040	1.6	170	41.0	16.0	1.60	.1	2.8	3	144	5.40	5.70
MAR	26...	0800	5470	1.5	130	37.0	10.0	1.60	.1	3.2	5	126	5.40	6.40
MAY	14...	1145	3100	2.0	140	33.0	13.0	1.50	.1	2.1	3	150	4.00	5.10
JUL	22...	1130	11000	.9	140	38.0	11.0	1.80	.1	3.8	5	141	6.10	7.20
AUG	20...	1015	17000	5.0	140	39.0	11.0	1.70	.1	3.8	5	130	6.40	7.60

Date	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	
OCT	23...	148	.21	1980	157	.30	.01	.01	.36	<.010	.29	<.01	<.02	<.02
DEC	17...	160	.22	2640	162	.40	--	<.01	.22	<.010	--	<.01	<.02	.04
MAR	26...	140	.21	2260	153	.20	.03	.02	.15	<.010	.18	<.01	<.02	<.02
MAY	14...	149	.21	1320	158	<.20	.03	.02	.16	<.010	--	<.01	<.02	<.02
JUL	22...	154	.25	5380	181	.20	--	<.01	.28	<.010	--	<.01	<.02	<.02
AUG	20...	149	.21	7110	155	.20	--	<.01	.31	<.010	--	<.01	<.02	<.02

Date	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	
OCT	23...	.66	8	23	4	59	7	88
DEC	17...	.62	13	10	E6	86	6	98
MAR	26...	.35	23	22	31	64	5	74
MAY	14...	--	24	26	E19	100	34	285
JUL	22...	.48	47	71	53	80	39	1160
AUG	20...	.51	47	49	82	90	32	1470

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX
(Hydrologic benchmark station)

LOCATION.--Lat 35°59'30", long 92°12'50", in SW_{1/4}NW_{1/4} sec.25, T.16 N., R.12 W., Stone County, Hydrologic Unit 11010004, on right bank 30 ft upstream from bridge on Ozark National Forest service road, 200 ft downstream from Gunner Creek, 2.7 mi north of Fifty-Six, and 7.0 mi upstream from South Sylamore Creek.

DRAINAGE AREA.--58.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1966 to current year.

REVISED RECORDS.--WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 434.99 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	11	9.4	232	3.5	24	11	26	15	7.3	7.5	12
2	2.4	11	9.2	100	3.4	22	10	27	60	7.1	8.5	135
3	2.7	14	9.6	60	3.5	19	11	22	89	8.1	34	52
4	3.0	16	22	35	3.4	17	10	19	48	8.7	338	22
5	2.8	25	23	23	3.0	14	9.6	23	32	6.7	83	14
6	2.6	29	19	17	4.0	12	11	21	26	5.9	42	11
7	2.5	20	17	13	4.1	10	17	18	22	4.7	23	8.7
8	2.3	15	19	11	3.3	9.9	16	16	18	4.9	14	7.8
9	3.6	13	21	11	3.7	8.1	15	15	16	5.0	11	6.5
10	5.9	12	20	9.8	4.0	8.0	13	14	14	4.8	9.3	5.4
11	5.0	12	18	8.5	4.6	7.7	13	17	15	6.3	8.1	6.0
12	4.3	11	16	8.0	5.3	7.6	12	13	15	7.6	7.6	10
13	3.8	10	23	7.4	5.3	7.5	11	13	14	7.2	6.8	23
14	3.3	10	54	7.0	16	6.8	11	22	12	5.4	6.7	17
15	3.5	11	32	6.5	43	7.5	10	25	13	4.8	6.5	11
16	3.6	11	14	6.4	92	7.3	10	273	12	4.1	5.8	7.6
17	4.0	10	11	6.0	58	7.1	11	866	14	5.0	5.2	6.7
18	4.2	10	8.7	5.5	35	8.0	10	412	14	5.5	5.2	6.1
19	6.7	9.7	8.8	5.4	28	50	9.6	204	17	15	5.0	4.9
20	8.2	9.9	9.2	5.6	34	85	11	128	18	10	4.5	4.9
21	6.1	9.5	8.0	5.3	35	98	11	87	11	7.2	4.3	4.7
22	5.6	9.7	6.6	4.7	260	73	10	62	9.4	13	4.1	4.7
23	5.5	10	6.8	4.2	190	48	9.6	46	9.4	13	4.1	4.7
24	5.2	9.6	23	3.6	102	33	46	39	8.5	9.7	3.7	4.5
25	8.3	9.6	33	3.6	62	28	120	46	8.3	8.5	3.5	4.3
26	11	9.3	18	3.8	42	24	80	38	9.7	7.8	3.7	4.3
27	9.3	9.0	12	3.6	30	20	52	30	8.7	7.3	3.5	3.9
28	8.9	8.9	10	3.9	26	17	36	24	7.6	7.2	3.3	3.8
29	18	9.0	10	4.5	---	15	28	20	7.1	7.9	6.7	3.8
30	19	9.4	13	4.2	---	13	23	18	7.0	9.0	24	3.4
31	15	---	347	3.6	---	12	---	16	---	8.5	22	---
TOTAL	188.5	364.6	851.3	623.1	1104.1	719.5	647.8	2600	570.7	233.2	714.6	413.7
MEAN	6.08	12.2	27.5	20.1	39.4	23.2	21.6	83.9	19.0	7.52	23.1	13.8
MAX	19	29	347	232	260	98	120	866	89	15	338	135
MIN	2.2	8.9	6.6	3.6	3.0	6.8	9.6	13	7.0	4.1	3.3	3.4
AC-FT	374	723	1690	1240	2190	1430	1280	5160	1130	463	1420	821
CFSM	0.10	0.21	0.47	0.35	0.68	0.40	0.37	1.44	0.33	0.13	0.40	0.24
IN.	0.12	0.23	0.55	0.40	0.71	0.46	0.41	1.66	0.37	0.15	0.46	0.26

WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

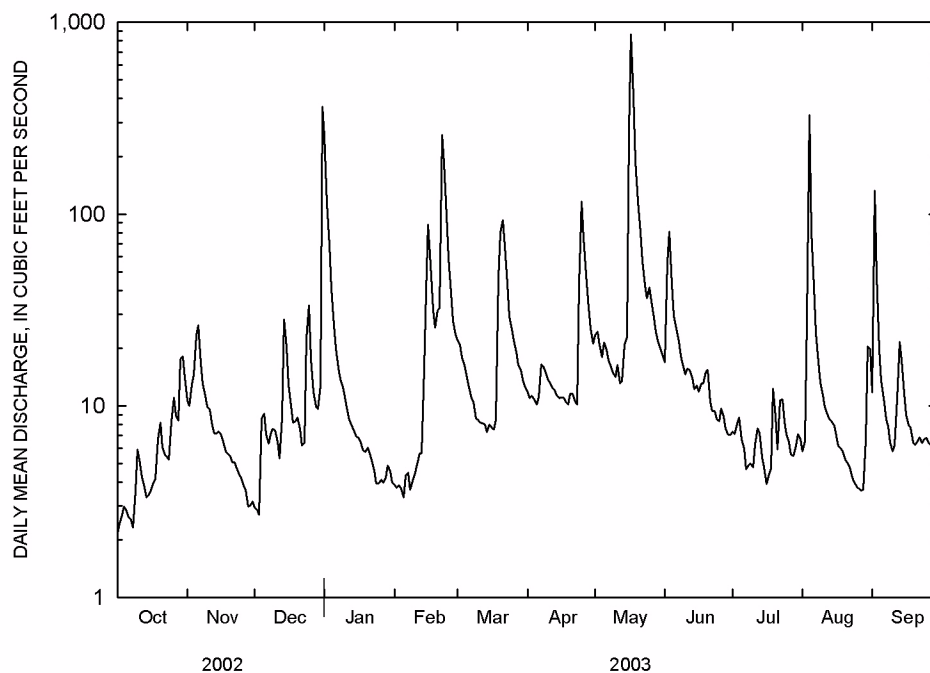
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2003, BY WATER YEAR (WY)

MEAN	16.4	45.9	69.7	44.1	65.1	98.4	101	69.7	22.2	9.87	6.70	11.2
MAX	99.3	232	501	171	295	397	493	230	102	32.8	23.1	56.7
(WY)	1974	1997	1983	1993	1989	2002	1973	1990	1974	1992	2003	1968
MIN	3.84	4.10	3.57	4.43	9.16	9.15	12.9	7.40	6.45	3.89	3.06	2.45
(WY)	1967	1990	1990	1981	1972	1972	1971	2001	1966	1980	1987	1987

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1966 - 2003	
ANNUAL TOTAL	26309.0		9031.1			
ANNUAL MEAN	72.1		24.7		46.1	
HIGHEST ANNUAL MEAN					102	1973
LOWEST ANNUAL MEAN					15.8	1967
HIGHEST DAILY MEAN	2440	Mar 25	866	May 17	11500	Dec 3 1982
LOWEST DAILY MEAN	1.4	Sep 7	2.2	Oct 1	1.3	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 7	2.6	Oct 1	1.4	Sep 1 2000
MAXIMUM PEAK FLOW			1330	May 17	¹ 25200	Dec 3 1982
MAXIMUM PEAK STAGE			5.49	May 17	20.60	Dec 3 1982
INSTANTANEOUS LOW FLOW			^e 2.00	Oct 1	1.00	at times
ANNUAL RUNOFF (AC-FT)	52180		17910		33380	
ANNUAL RUNOFF (CFSM)	1.24		0.43		0.79	
ANNUAL RUNOFF (INCHES)	16.85		5.78		10.78	
10 PERCENT EXCEEDS	114		44		87	
50 PERCENT EXCEEDS	16		10		12	
90 PERCENT EXCEEDS	3.1		4.0		3.9	

¹From rating curve extended above 3,700 ft³/s

^eEstimated



WHITE RIVER BASIN

07060710 NORTH SYLAMORE CREEK NEAR FIFTY-SIX--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)
NOV													
27...	0820	80513	80020	11	780	11.2	88	8.2	300	6.2	151	182	1
DEC													
11...	0930	80513	80020	18	771	12.2	97	8.2	295	6.2	150	181	1
JAN													
15...	1145	80513	80020	6.4	778	13.7	104	8.1	264	4.5	137	166	1
FEB													
20...	0840	80513	80020	40	774	10.8	90	8.2	240	7.9	116	139	1
MAR													
12...	0840	80513	80020	11	766	12.1	102	8.1	263	8.1	129	155	1
MAY													
21...	1130	80513	80020	94	773	10.9	107	8.1	251	15.2	124	150	1
JUL													
09...	0900	80513	80020	6.0	769	8.8	104	7.8	280	24.0	138	167	1
SEP													
02...	1515	80513	80020	182	766	8.2	92	8.1	218	21.2	104	125	1
11...	0915	80513	80020	--	--	--	--	--	--	--	--	--	--

Date	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)		Ammonia + nitrate, water, fltrd, mg/L as N (00608)		Nitrite + nitrate, water, fltrd, mg/L as N (00613)		Ortho-phos-phate, water, unfltrd mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Biomass peri-phyton, ashfree drymass g/m2 (49954)	Peri-phyton biomass weight, g/m2 (00572)	Peri-phyton biomass dry weight, g/m2 (00573)
			Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite water, fltrd, mg/L as N (00613)	Nitrate water, fltrd, mg/L as N (00613)								
NOV														
27...	2.01	4.7	<.10	--	<.04	E.06	<.008	<.02	<.004	--	--	--	--	--
DEC														
11...	1.89	5.0	<.10	--	<.04	E.04	<.008	<.02	E.003	--	--	--	--	--
JAN														
15...	1.36	5.2	.17	--	<.04	.07	<.008	<.02	E.003	.24	--	--	--	--
FEB														
20...	.88	5.3	<.10	.06	.04	E.05	<.008	<.02	E.002	--	--	--	--	--
MAR														
12...	1.27	5.4	E.06	--	<.04	.07	<.008	<.02	E.003	--	--	--	--	--
MAY														
21...	1.26	5.0	.18	--	<.04	.06	<.008	<.02	.004	.24	--	--	--	--
JUL														
09...	1.96	3.8	E.10	--	<.04	.12	<.008	<.02	.006	--	--	--	--	--
SEP														
02...	.99	3.0	.28	--	<.04	.10	<.008	<.02	.020	.39	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	69.9	600	665.9	--

Date	Pheo-phytin a, peri-phyton, mg/m2 (62359)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/100 mL (31625)	Fecal strep-tococci KF MF, col/100 mL (31673)	Chloro-phyll a peri-phyton, chromo-fluoro, mg/m2 (70957)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV								
27...	--	E3	<1	E14	--	71	4	.12
DEC								
11...	--	E5	E1	E12	--	17	4	.19
JAN								
15...	--	E3	E4	E5	--	75	2	.03
FEB								
20...	--	E4	E8	E7	--	100	1	.11
MAR								
12...	--	<1	E5	E3	--	50	1	.03
MAY								
21...	--	32	21	57	--	90	28	7.1
JUL								
09...	--	22	36	105	--	78	11	.18
SEP								
02...	--	680	790	6600	--	91	22	11
11...	21	--	--	--	106	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

193

07061000 WHITE RIVER AT BATESVILLE

LOCATION.--Lat 35°45'35", long 91°38'28", in NE1/4NW1/4 sec.21, T.13 N., R.6 W., Independence County, Hydrologic Unit 11010004, at bridge on U.S. Highway 167 in Batesville.

DRAINAGE AREA.--11,070 mi².

PERIOD OF RECORD.--October 1937 to September 1958, October 1986 to September 1994, October 2000 to current year. Stage only station 1995-2000. Gage-height records collected at lower lock gage since 1904 are published in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 237.72 ft above NGVD of 1929. Prior to Jan. 28, 1939, staff gage on upper lock wall of dam no. 1, 0.3 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1943 by Norfolk Lake, capacity 1,983,000 acre-ft; since July 24, 1951, by Bull Shoals Lake, 59.5 mi upstream, capacity 5,408,000 acre-ft; since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity 3,567,500 acre-ft; and since Dec. 26, 1963, by Beaver Lake, capacity 1,951,500 acre ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 31.1 ft, Feb. 1, 1916, at former site, observed by U.S. Army Corps of Engineers (discharge 382,000 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10600	5960	1490	13900	8320	13400	2730	7920	4580	4990	15000	2760
2	14500	5140	940	11700	3940	7840	2530	5100	5140	7270	12200	8950
3	16500	5400	1010	9350	1610	4320	5070	3380	5670	4680	8670	7540
4	15500	2420	6490	11100	1260	6900	5540	3650	7950	5810	7560	3220
5	13500	1920	10100	9180	4810	9210	6040	3950	11500	8170	6960	3940
6	12900	3370	8710	7660	11200	9970	4070	4070	10300	5000	8750	4720
7	9870	4520	9090	9960	11900	9690	2570	4690	9820	4070	7510	3490
8	5540	5720	6610	12000	8880	8470	3100	3530	5100	5060	8750	5090
9	5840	4140	4900	11500	5560	5200	5490	2630	4740	8820	8160	2640
10	5160	2780	6150	9240	4140	3280	7060	5480	4170	9690	6910	2500
11	5130	1520	6600	14900	5560	6640	6340	6300	5250	9920	2810	3880
12	5560	874	7190	9230	7020	8340	5080	3900	5710	8710	4500	2940
13	3810	1520	5670	6390	6540	5010	3660	3040	7590	7980	8430	4580
14	1910	5590	5630	7010	9680	5890	1770	5560	12800	4720	8290	4390
15	2880	6410	4830	12100	8160	7440	1390	5140	10200	5670	8700	2300
16	6450	5340	2270	11000	8690	4740	3630	10500	6570	10200	11200	1560
17	6900	2760	1430	7910	4900	2540	2120	29500	5950	11400	9940	2260
18	7430	1880	5070	11200	5850	3120	1240	32400	9490	12200	9850	2680
19	6070	2500	7710	11200	11400	7900	1190	24000	6470	14400	12800	3550
20	6450	6040	6640	6250	7920	7490	1880	15800	5870	9800	14200	2230
21	2400	4830	8260	3760	7120	7360	1160	12600	5770	7870	15600	1840
22	4610	3950	7840	5310	10800	9630	1300	17900	6060	10500	14100	1650
23	5810	4120	2920	10100	11500	6270	2150	12700	3740	9790	13200	1160
24	6440	3330	4490	14300	9180	4510	3290	10900	5610	9040	11800	1050
25	6460	1740	4580	14900	12100	4000	5650	7020	10300	9790	11400	1400
26	6860	1370	2930	9560	16200	6130	7180	5840	10900	11100	11600	3490
27	3950	6420	3080	4620	18000	7600	5470	5730	8550	9450	12500	1930
28	1980	6600	3710	4420	16000	7150	3680	5310	6150	7360	11300	1310
29	4640	5220	2850	5050	---	6730	8050	4290	5040	8820	10600	1010
30	7840	2610	2080	3540	---	4480	10600	4190	3950	10100	9700	887
31	5640	---	8590	5200	---	3270	---	4900	---	9360	6920	---
TOTAL	219130	115994	159860	283540	238240	204520	121030	271920	210940	261740	309910	90947
MEAN	7069	3866	5157	9146	8509	6597	4034	8772	7031	8443	9997	3032
MAX	16500	6600	10100	14900	18000	13400	10600	32400	12800	14400	15600	8950
MIN	1910	874	940	3540	1260	2540	1160	2630	3740	4070	2810	887
AC-FT	434600	230100	317100	562400	472500	405700	240100	539400	418400	519200	614700	180400

WHITE RIVER BASIN

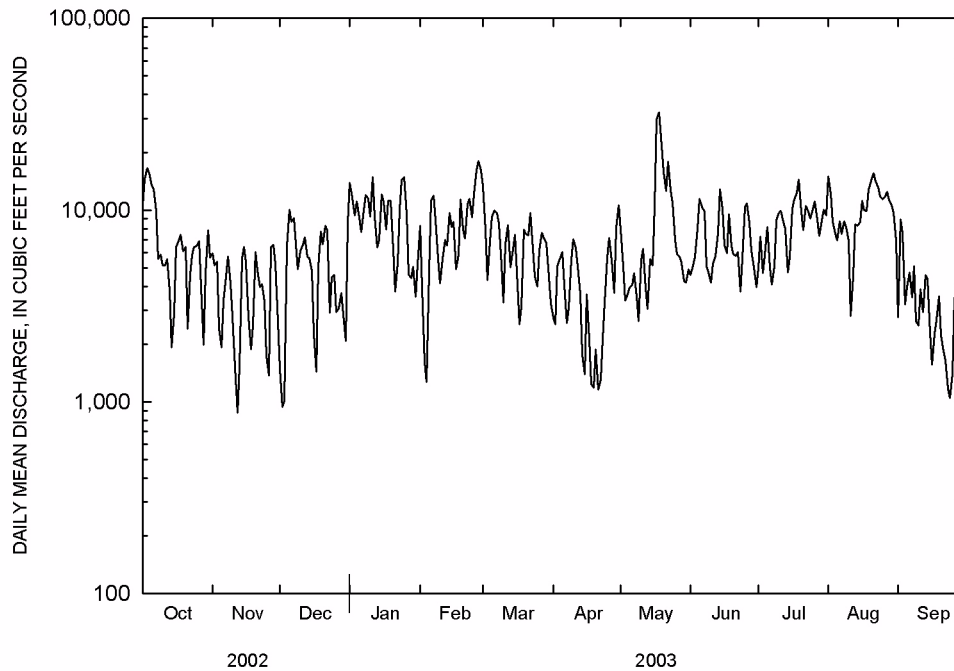
07061000 WHITE RIVER AT BATESVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943-58, 1987-94, 2001-03, BY WATER YEAR (WY)

MEAN	5271	8242	11360	13300	16820	20140	21200	19290	13770	10820	8151	6564
MAX	15350	28600	32380	45000	44790	72740	100400	71230	53690	29620	25860	24680
(WY)	1994	1947	1943	1949	1949	1945	1945	1943	1945	1957	1957	1957
MIN	1224	1587	1640	2454	4974	4812	4034	2495	3216	1893	1504	912
(WY)	1955	1955	1944	1945	1943	1947	2003	2001	2001	1944	1943	1943

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1943-58, 1987-94 2001-03	
ANNUAL TOTAL	5060944		2487771			
ANNUAL MEAN	13870		6816		¹ 12890	
HIGHEST ANNUAL MEAN					26510 1945	
LOWEST ANNUAL MEAN					5671 1954	
HIGHEST DAILY MEAN	100000	Mar 21	32400	May 18	303000	Apr 16 1945
LOWEST DAILY MEAN	874	Nov 12	874	Nov 12	592	Sep 28 1954
ANNUAL SEVEN-DAY MINIMUM	3010	Nov 7	1580	Apr 17	709	Sep 23 1954
MAXIMUM PEAK FLOW			34500	May 18	324000	Apr 16 1945
MAXIMUM PEAK STAGE			12.10	May 18	29.43	Apr 16 1945
INSTANTANEOUS LOW FLOW			581	Dec 3	580	Sep 28 1954
ANNUAL RUNOFF (AC-FT)	10040000		4934000		9336000	
10 PERCENT EXCEEDS	22300		11700		26900	
50 PERCENT EXCEEDS	12100		5960		7840	
90 PERCENT EXCEEDS	3560		2250		2300	

¹Prior to regulation, water years 1938-42, 10,850 ft³/s



WHITE RIVER BASIN

195

07064000 BLACK RIVER NEAR CORNING

LOCATION.--Lat 36°24'07", long 90°32'29", in SW_{1/4}NE_{1/4} sec.4, T.20 N., R.5 E., Clay County, Hydrologic Unit 11010007, near left bank on downstream side of bridge on U.S. Highway 62, 2.2 mi east of Corning, 11.9 mi downstream from Cane Creek, and at mile 152.2.

DRAINAGE AREA.--1,749 mi².

PERIOD OF RECORD.--October 1938 to March 1996, September 1998 to current year. Annual maximum water years 1996-98. Gage-height records collected January 1925 to December 1929 at site 7.0 mi downstream are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 272.90 ft above NGVD of 1929. Prior to Nov. 5, 1953, nonrecording gage, and Nov. 5, 1953, to Oct. 9, 1957, water-stage recorder, at site 30 ft downstream at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station. Some regulation by Clearwater Lake (Missouri) since June 3, 1948, 105 mi upstream, capacity, 413,700 acre-ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 18, 1927, reached a stage of 14.4 ft, from records of U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	467	441	4110	605	3740	1960	1250	1480	863	1930	2140
2	535	496	428	9080	626	3250	1730	1690	1370	773	1630	2410
3	535	534	427	10600	639	2890	1550	2030	1220	737	1190	2800
4	565	587	449	9310	629	2610	1460	2260	1130	720	999	4300
5	624	646	465	7640	609	2380	1430	2400	1080	703	1300	7090
6	668	720	485	e7050	603	2180	1440	2650	1020	670	2000	7630
7	687	734	498	e6150	596	1960	1950	2870	993	632	2530	6050
8	693	627	492	4540	594	1770	2700	2890	970	609	2580	4410
9	701	538	486	3980	595	1650	2970	2900	929	597	2300	3200
10	713	514	491	e3600	591	1550	2850	2850	877	583	1800	2390
11	716	537	507	e3250	592	1390	2520	2760	847	552	1200	1730
12	721	579	534	e2920	604	1230	2230	2770	893	520	806	1240
13	710	571	585	e2630	616	1180	2020	2850	1050	568	638	1010
14	696	530	805	e2400	776	1190	1840	2850	1180	607	573	934
15	685	503	1100	e2180	1870	1180	1620	2800	1160	587	557	1020
16	678	504	1090	e2000	2750	1160	1420	2750	1150	532	559	941
17	671	515	934	e1800	3190	1110	1320	2880	1270	480	550	820
18	635	518	798	e1650	3180	1030	1210	3340	1390	454	508	736
19	549	511	1230	e1500	2890	1030	1060	3980	1530	543	468	717
20	483	503	2450	e1400	2830	1250	949	3990	1690	845	451	688
21	467	501	3380	e1300	3220	1520	920	3580	1790	863	465	631
22	446	510	3710	e1200	3670	1660	920	3040	1750	734	484	599
23	424	519	3420	e1100	4330	1700	910	2720	1490	629	480	596
24	410	509	2910	e1000	5380	1750	902	2530	1150	582	467	598
25	404	489	2410	e900	5790	1840	1060	2430	940	628	455	570
26	402	461	2060	e830	5500	1930	1280	2340	848	691	444	530
27	416	436	1800	e800	4910	2010	1260	2200	873	675	430	500
28	426	426	1620	648	4260	2100	1200	2040	1060	594	429	486
29	423	439	1490	622	---	2170	1100	1890	1110	711	429	494
30	431	452	1400	606	---	2210	1000	1740	996	1530	477	498
31	456	---	1930	602	---	2150	---	1600	---	1920	1420	---
TOTAL	17497	15876	40825	97398	62445	56770	46781	80870	35236	22132	30549	57758
MEAN	564	529	1317	3142	2230	1831	1559	2609	1175	714	985	1925
MAX	721	734	3710	10600	5790	3740	2970	3990	1790	1920	2580	7630
MIN	402	426	427	602	591	1030	902	1250	847	454	429	486
AC-FT	34710	31490	80980	193200	123900	112600	92790	160400	69890	43900	60590	114600

WHITE RIVER BASIN

07064000 BLACK RIVER NEAR CORNING--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948-95, 1998-03, BY WATER YEAR (WY)

MEAN	751	1291	2102	2575	2641	3013	3202	2727	1581	1056	722	712
MAX	2868	5220	8417	8969	7490	7308	9125	7217	4433	3858	3266	2116
(WY)	1950	1973	1983	1950	1949	1975	1973	2002	2002	1957	1957	1957
MIN	269	340	356	319	459	753	783	463	419	358	278	252
(WY)	1957	1954	1956	1956	1963	1981	1981	2001	2001	1980	1954	1954

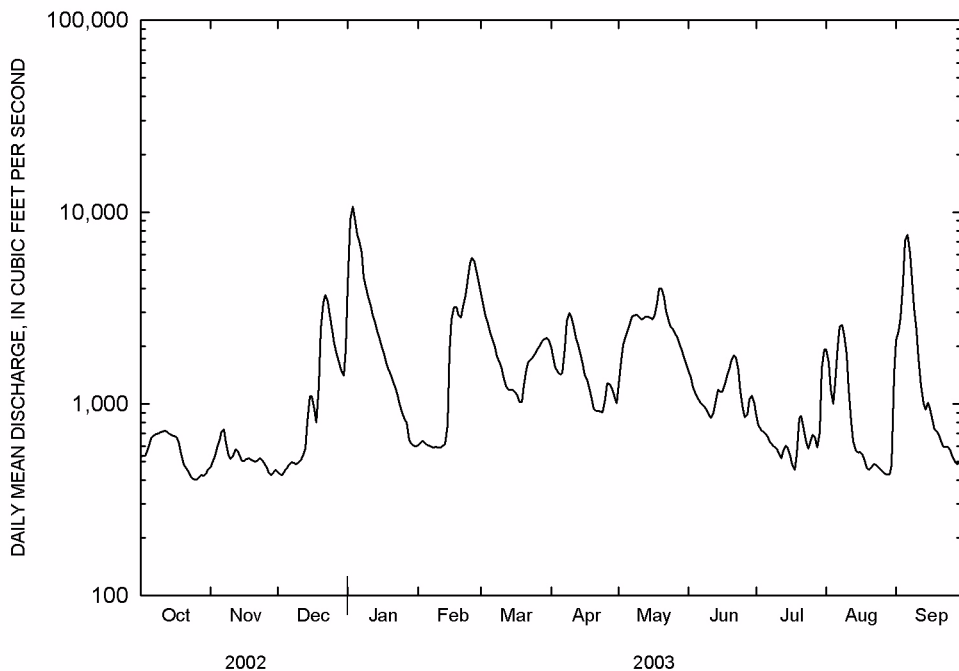
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948-95, 1998-03	
ANNUAL TOTAL	1010798		564137			
ANNUAL MEAN	2769		1546		¹ 1869	
HIGHEST ANNUAL MEAN					4014 1973	
LOWEST ANNUAL MEAN					662 1954	
HIGHEST DAILY MEAN	12300	Mar 28	10600	Jan 3	32000	Mar 12 1964
LOWEST DAILY MEAN	382	Sep 18	402	Oct 26	191	Sep 22 2000
ANNUAL SEVEN-DAY MINIMUM	396	Sep 13	415	Oct 23	202	Sep 18 2000
MAXIMUM PEAK FLOW			10800	Jan 3	² 32500	Mar 13 1964
MAXIMUM PEAK STAGE			12.67	Jan 3	³ 15.23	Mar 13 1964
INSTANTANEOUS LOW FLOW			402	Oct 26	191	Sep 21 2000
ANNUAL RUNOFF (AC-FT)	2005000		1119000		1354000	
10 PERCENT EXCEEDS	5590		3100		4140	
50 PERCENT EXCEEDS	2290		1020		1060	
90 PERCENT EXCEEDS	487		484		403	

¹Prior to regulation, water years 1939-47, 1,741 ft³/s

²Maximum discharge for period of record, 48,600 ft³/s, June 13, 1945

³Maximum gage height for period of record, 16.92 ft, June 13, 1945

^eEstimated



WHITE RIVER BASIN

197

07069000 BLACK RIVER AT POCAHONTAS

LOCATION.--Lat 36°15'14", long 90°58'12", in SW1/4SW1/4 sec.27, T.19 N., R.1 E., Randolph County, Hydrologic Unit 11010009, near right bank on downstream side of bridge on U.S. Highway 67 at Pocahontas, 2.2 mi downstream from Fourche River, 6.4 mi downstream from Current River, 18.1 mi upstream from Spring River, and at mile 90.1.

DRAINAGE AREA.--4,845 mi².

PERIOD OF RECORD.--January 1936 to September 1970, October 2000 to current year. Annual maximum 1971-78, 1981-94, Stage only 1995-2000.

REVISIONS.--WSP 927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 241.81 ft above NGVD of 1929. Prior to July 15, 1937, nonrecording gage at site 0.3 mi upstream at same datum. July 15, 1937, to July 23, 1940, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Some regulation by Clearwater Lake (Missouri), 167 mi upstream, since June 3, 1948 (capacity, 413,700 acre-ft). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1915 reached a stage of 27.9 ft, from floodmarks from information by the U.S. Army Corps of Engineers. Flood of Apr. 17, 1927, reached a stage of 25.9 ft (discharge, about 80,000 cfs).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2580	2320	2130	13400	2850	8940	4710	5500	4430	2790	2980	3290
2	2400	2310	2130	14600	2780	8690	4630	5270	4210	2790	2980	4560
3	2320	2290	2130	14900	2750	8390	4560	5210	4090	2680	2980	8690
4	2300	2280	2170	14600	2740	8060	4490	5570	3950	2520	3010	8970
5	2280	2350	2220	14200	2710	7740	4410	5780	3760	2400	3050	8050
6	2270	2480	2230	13900	2700	7390	4420	5750	3590	2310	2930	7250
7	2280	2540	2240	13700	2700	7030	6240	5890	3400	2240	3200	6610
8	2320	2530	2240	13300	2670	6720	7020	6050	3200	2160	3560	6140
9	2350	2490	2250	12600	2620	6370	6790	5970	3060	2090	3320	5810
10	2390	2450	2260	11500	2610	5990	6520	5880	2950	2020	3140	5670
11	2410	2390	2280	10200	2620	5620	6110	5820	2890	2020	3050	5720
12	2410	2340	2280	8930	2700	5280	5800	5860	3040	2000	2950	5750
13	2410	2310	2350	7770	2720	5000	5620	6020	3160	1980	2810	5720
14	2390	2290	2720	6910	3520	4750	5500	5980	3330	1970	2610	5760
15	2380	2280	3080	6300	5780	4480	5390	5770	3650	1940	2370	5770
16	2360	2280	3100	5850	7280	4250	5180	5660	3750	1950	2210	5250
17	2360	2270	3100	5460	7830	4080	4960	7160	3600	1920	2130	4790
18	2350	2260	3180	5070	7420	3950	4740	8390	3410	1850	2080	4210
19	2340	2240	4880	4710	7010	3960	4510	8610	3350	1890	2030	3550
20	2280	2250	6630	4370	7620	4400	4250	8550	3300	2170	1990	3070
21	2220	2240	6340	4030	8000	4880	3980	8270	3250	2530	1930	2780
22	2170	2220	5850	3720	9230	5240	3730	7730	3250	2700	1890	2620
23	2130	2200	5260	3470	10700	5830	3550	7310	3210	2660	1860	2500
24	2110	2190	4830	3240	10900	5990	3480	7010	3150	2400	1860	2390
25	2100	2190	4770	3090	10700	5740	4020	6710	3050	2170	1850	2310
26	2120	2180	4790	3020	10300	5470	4520	6390	2920	2050	1800	2250
27	2120	2170	4840	2950	9780	5270	5320	6080	2770	1990	1760	2190
28	2110	2160	4870	2890	9260	5120	7100	5740	2660	1990	1740	2130
29	2140	2150	4850	2870	---	5000	6950	5390	2670	2000	1740	2080
30	2200	2140	4800	2840	---	4890	6150	5040	2710	2420	1840	2040
31	2260	---	8710	2860	---	4790	---	4720	---	2900	2550	---
TOTAL	70860	68790	115510	237250	160500	179310	154650	195080	99760	69500	76200	137920
MEAN	2286	2293	3726	7653	5732	5784	5155	6293	3325	2242	2458	4597
MAX	2580	2540	8710	14900	10900	8940	7100	8610	4430	2900	3560	8970
MIN	2100	2140	2130	2840	2610	3950	3480	4720	2660	1850	1740	2040
AC-FT	140600	136400	229100	470600	318400	355700	306700	386900	197900	137900	151100	273600

WHITE RIVER BASIN

07069000 BLACK RIVER AT POCAHONTAS--CONTINUED

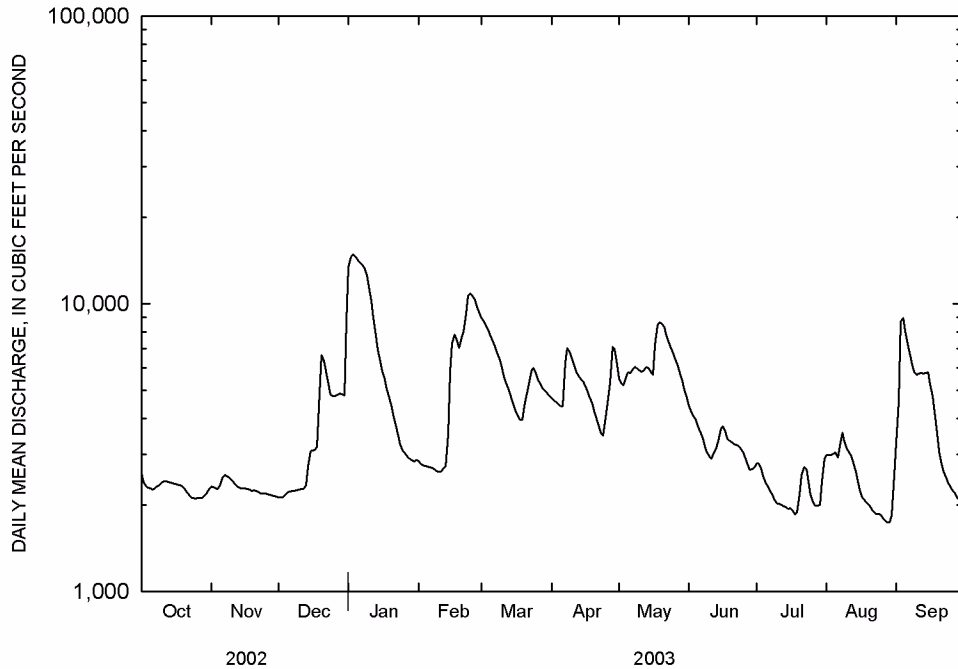
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948-70, 2001-03, BY WATER YEAR (WY)

MEAN	2402	3214	4242	6490	7551	8635	9822	9115	5543	3401	2552	2337
MAX	8203	10850	12600	25910	24220	27680	33680	22900	27300	12520	6287	4597
(WY)	1950	1952	1952	1950	1949	1945	1945	1961	1945	1951	1951	2003
MIN	1149	1390	1408	1408	1850	2161	3140	2032	1717	1524	1282	1213
(WY)	1957	1957	1956	1956	1963	1941	1956	2001	2001	2001	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948-70, 2001-03	
ANNUAL TOTAL	2961410		1565330			
ANNUAL MEAN	8113		4289		5417	
HIGHEST ANNUAL MEAN					10820 1950	
LOWEST ANNUAL MEAN					2383 1954	
HIGHEST DAILY MEAN	43400	May 21	14900	Jan 3	53800	Jan 29 1949
LOWEST DAILY MEAN	2060	Sep 15	1740	Aug 28	1080	Oct 16 1956
ANNUAL SEVEN-DAY MINIMUM	2090	Sep 12	1800	Aug 24	1090	Oct 15 1956
MAXIMUM PEAK FLOW			14900	Jan 3	59600	Jun 17 1945
MAXIMUM PEAK STAGE			17.10	Jan 3	¹ 24.32	Jun 17 1945
INSTANTANEOUS LOW FLOW			1730	Aug 28-29	1080	² Oct 16 1956
ANNUAL RUNOFF (AC-FT)	5874000		3105000		3924000	
10 PERCENT EXCEEDS	15700		7660		11800	
50 PERCENT EXCEEDS	5850		3200		3390	
90 PERCENT EXCEEDS	2240		2130		1660	

¹Prior to regulation

²Also October 17-19, 1956



WHITE RIVER BASIN

199

07069190 MAMMOTH SPRING AT MAMMOTH SPRING

LOCATION.--Lat 36°29'53", long 91°32'08", in SE1/4SW1/4 sec.5, T.21 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at southeast bank of spring outlet pool, 0.25 mi upstream from confluence of Mammoth Spring and Warm Fork at town of Mammoth Spring.

PERIOD OF RECORD.--Occasional low-flow measurements made beginning in 1924. March 1981 to current year. Prior to October 1992 published under Station Number 07069200.

GAGE.--Water-stage recorder. Datum of gage is 500.90 ft above NGVD of 1929.

REMARKS.--Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	289	253	235	332	230	341	311	288	312	e250	e240	e300
2	288	251	234	e320	230	339	308	295	311	e250	e240	e250
3	287	251	233	314	229	336	306	299	321	e250	e230	238
4	286	251	233	310	227	334	303	297	318	e250	e230	235
5	284	253	233	302	226	334	298	295	310	e250	e240	231
6	283	252	232	290	226	331	296	295	305	e240	e240	227
7	282	251	231	279	225	326	293	299	300	e240	e230	224
8	277	251	230	274	224	322	291	295	296	e240	e230	221
9	277	249	230	272	223	317	289	291	293	e240	e230	219
10	274	248	230	268	223	314	287	289	293	e240	e230	216
11	273	247	230	263	223	311	285	352	303	e240	e230	214
12	271	245	230	259	223	308	283	366	299	e240	e230	219
13	270	245	232	257	223	307	279	354	293	e240	e230	223
14	269	245	237	255	246	304	277	346	290	e240	e230	225
15	268	244	237	252	272	299	275	339	287	e240	e220	224
16	268	243	236	250	275	297	275	343	283	e230	e220	221
17	266	243	234	248	272	295	273	376	278	e230	e220	227
18	265	243	233	247	269	293	271	396	276	e280	e220	230
19	265	241	237	245	288	298	270	393	273	e270	e220	230
20	265	240	238	244	323	314	270	390	271	e260	e220	228
21	261	240	237	242	331	332	273	383	268	e250	e220	228
22	259	240	235	241	347	338	271	376	267	e250	e220	227
23	258	240	233	239	363	339	269	369	265	e240	e210	225
24	257	239	242	238	361	338	280	362	262	e240	e210	224
25	257	238	242	238	358	335	310	355	261	e240	e210	222
26	257	238	233	236	356	333	308	347	259	e240	e210	221
27	256	238	233	235	352	331	301	338	e260	e240	e240	218
28	254	238	233	235	347	329	295	334	e260	e240	e230	218
29	257	236	233	234	---	323	292	328	e250	e240	e230	216
30	257	235	237	232	---	316	289	323	e250	e240	e240	214
31	255	---	305	231	---	313	---	317	---	e250	e250	---
TOTAL	8335	7328	7328	8082	7692	9947	8628	10430	8514	7590	7050	6815
MEAN	269	244	236	261	275	321	288	336	284	245	227	227
MAX	289	253	305	332	363	341	311	396	321	280	250	300
MIN	254	235	230	231	223	293	269	288	250	230	210	214
AC-FT	16530	14540	14540	16030	15260	19730	17110	20690	16890	15050	13980	13520

WHITE RIVER BASIN

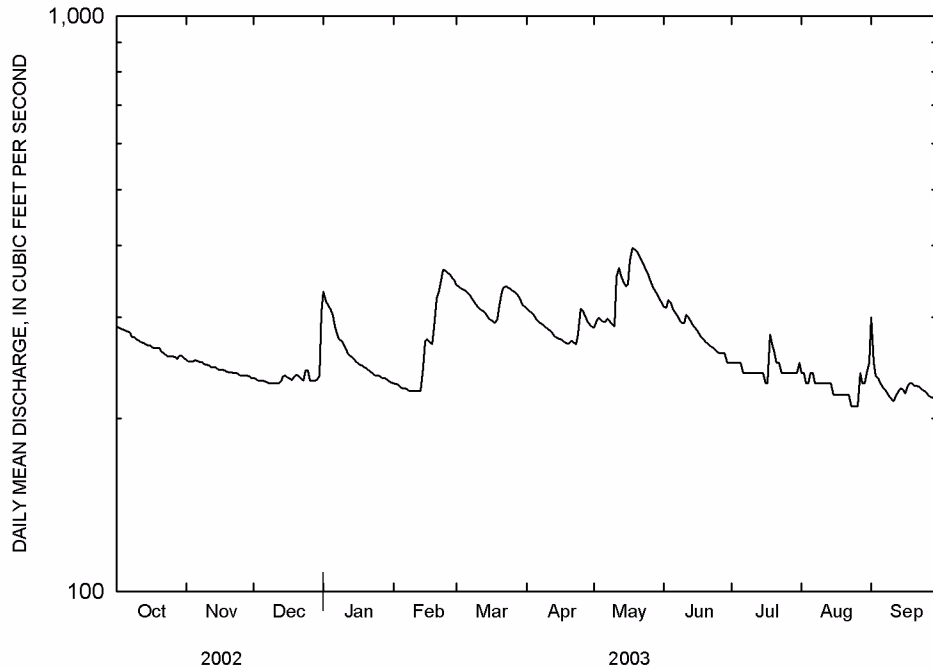
07069190 MAMMOTH SPRING AT MAMMOTH SPRING--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2003, BY WATER YEAR (WY)

MEAN	270	297	342	358	386	406	431	423	387	335	299	274
MAX	399	473	523	530	540	525	566	568	513	436	384	329
(WY)	1994	1985	1985	1985	1989	1989	2002	1991	2002	2002	2002	1991
MIN	185	178	186	204	254	205	220	228	232	217	208	199
(WY)	2002	2002	1982	2001	2000	1981	1981	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1981 - 2003	
ANNUAL TOTAL	142016		97739			
ANNUAL MEAN	389		268		354	
HIGHEST ANNUAL MEAN					453 1985	
LOWEST ANNUAL MEAN					233 2001	
HIGHEST DAILY MEAN	600	Apr 15	396	May 18	689	Apr 13 1991
LOWEST DAILY MEAN	230	Dec 8	210	Aug 23	173	Nov 20 2001
ANNUAL SEVEN-DAY MINIMUM	230	Dec 6	214	Aug 20	174	Nov 15 2001
MAXIMUM PEAK FLOW			401	May 18	706	Apr 13 1991
MAXIMUM PEAK STAGE			4.58	May 18	5.13	Apr 13 1991
INSTANTANEOUS LOW FLOW					173	Oct 9 2001
ANNUAL RUNOFF (AC-FT)	281700		193900		256500	
10 PERCENT EXCEEDS	570		332		492	
50 PERCENT EXCEEDS	372		255		348	
90 PERCENT EXCEEDS	240		225		231	

^eEstimated



WHITE RIVER BASIN

201

07069305 SPRING RIVER AT TOWN BRANCH BRIDGE AT HARDY

LOCATION.--Lat 36°18'49", long 91°28'58", in NE1/4SW1/4 sec.11, T.19 N., R.5 W., Sharp County, Hydrologic Unit 11010100, on left upstream abutment of Town Branch bridge in Hardy, 800 ft south of Highway 634/412 (downtown Hardy).

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	425	379	2470	367	1080	595	978	739	463	471	463
2	419	428	374	1580	361	1040	575	966	863	448	509	1140
3	395	431	381	1240	357	996	560	991	913	433	520	1220
4	402	414	469	1060	351	940	557	942	868	423	495	679
5	397	481	416	947	349	899	549	953	805	415	713	575
6	396	524	408	859	373	858	689	864	765	409	540	505
7	399	448	404	799	361	812	969	873	725	400	485	466
8	395	433	398	744	351	770	720	922	696	394	455	441
9	410	439	394	691	352	744	639	828	624	388	434	423
10	411	433	406	656	344	715	596	783	633	384	417	423
11	391	428	405	624	341	686	569	925	672	377	404	405
12	387	428	401	594	333	658	551	1300	662	379	401	399
13	388	421	477	565	327	648	529	1050	633	384	396	448
14	385	422	511	549	509	616	517	968	615	398	388	494
15	383	415	510	525	698	610	507	915	601	372	381	476
16	380	349	505	516	1210	596	496	1000	586	387	375	458
17	379	412	491	502	989	586	495	2320	578	355	370	434
18	372	407	540	488	859	570	487	2360	e560	342	377	419
19	409	405	561	469	1220	627	479	1700	e545	1650	353	409
20	397	403	516	456	1710	743	506	1450	e530	1420	361	399
21	384	413	486	450	1430	919	489	1430	e520	812	351	399
22	380	401	471	440	2320	971	e495	1240	e510	667	346	390
23	379	394	474	435	2390	870	e500	1130	e500	564	344	380
24	374	390	521	422	1750	810	e545	1060	e490	535	336	375
25	423	391	519	413	1480	791	e2100	1030	480	499	333	371
26	402	387	512	409	1330	769	1530	972	491	486	329	365
27	389	390	498	398	1220	735	e955	915	479	457	389	373
28	393	387	489	393	1140	723	e985	864	468	439	348	364
29	500	381	475	386	---	683	886	824	456	487	367	380
30	453	377	500	377	---	647	872	792	476	485	399	354
31	440	---	3620	376	---	613	---	773	---	709	481	---
TOTAL	12448	12457	17511	20833	24822	23725	20942	34118	18483	16361	12868	14427
MEAN	402	415	565	672	886	765	698	1101	616	528	415	481
MAX	500	524	3620	2470	2390	1080	2100	2360	913	1650	713	1220
MIN	372	349	374	376	327	570	479	773	456	342	329	354
AC-FT	24690	24710	34730	41320	49230	47060	41540	67670	36660	32450	25520	28620

WHITE RIVER BASIN

07069305 SPRING RIVER AT TOWN BRANCH BRIDGE AT HARDY--CONTINUED

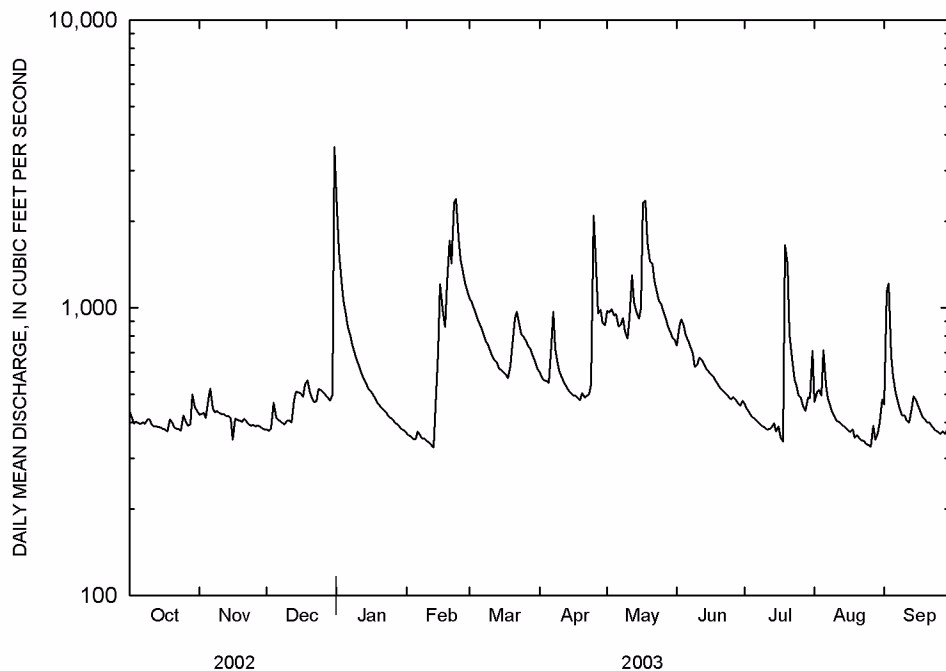
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	329	357	831	784	1184	2081	1539	1755	896	806	520	466
MAX	402	415	1097	897	1482	3396	2380	2409	1177	1083	625	481
(WY)	2003	2003	2002	2002	2002	2002	2002	2002	2002	2002	2002	2003
MIN	256	299	565	672	886	765	698	1101	616	528	415	452
(WY)	2002	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	464879		228995			
ANNUAL MEAN	1274		627		962	
HIGHEST ANNUAL MEAN					1297 2002	
LOWEST ANNUAL MEAN					627 2003	
HIGHEST DAILY MEAN	16300	Mar 20	3620	Dec 31	16300	Mar 20 2002
LOWEST DAILY MEAN	349	Nov 16	327	Feb 13	205	Oct 1 2001
ANNUAL SEVEN-DAY MINIMUM	377	Jan 16	343	Aug 20	222	Oct 1 2001
MAXIMUM PEAK FLOW			4630	Dec 31	19300	Mar 20 2002
MAXIMUM PEAK STAGE			6.36	Dec 31	11.48	Mar 20 2002
INSTANTANEOUS LOW FLOW			271	Nov 16	182	¹ Oct 1 2001
ANNUAL RUNOFF (AC-FT)	922100		454200		697100	
10 PERCENT EXCEEDS	2560		998		1870	
50 PERCENT EXCEEDS	741		488		558	
90 PERCENT EXCEEDS	395		375		346	

¹Also October 2, 2001

^eEstimated



WHITE RIVER BASIN

203

07069500 SPRING RIVER AT IMBODEN

LOCATION.--Lat 36°12'19", long 91°10'19", in SE₁/4NE₁/4 sec.15, T.18 N., R.2 W., Randolph County, Hydrologic Unit 11010010, near left bank on downstream side of bridge on U.S. Highway 62 at Imboden, 1.8 mi upstream from Harding Creek, 3.9 mi downstream from Janes Creek, 8.2 mi upstream from Eleven Point River, and at mile 12.1.

DRAINAGE AREA.--1,183 mi².

PERIOD OF RECORD.--April 1936 to December 1994, March 1995, October 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder. Datum of gage is 254.07 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	501	490	430	5660	575	1610	888	1150	884	801	581	673
2	505	481	431	2760	567	1530	869	1330	922	599	550	7590
3	488	501	432	2030	565	1460	851	1210	1100	560	617	4090
4	493	489	505	1680	554	1390	839	1170	1020	538	635	1520
5	475	528	e512	1470	539	1330	840	1200	955	526	694	1050
6	469	551	477	1310	562	1260	845	1110	905	512	716	847
7	469	548	472	1180	570	1200	1970	1090	866	502	762	736
8	464	496	475	1120	540	1150	1460	1110	828	495	618	666
9	469	501	477	1030	544	1100	1200	1070	791	486	560	618
10	495	502	481	963	549	1040	1090	977	729	477	526	593
11	477	491	498	903	543	1010	1020	938	756	469	505	563
12	471	478	492	854	543	983	960	1320	778	468	487	553
13	468	472	538	823	544	968	916	1230	751	466	481	592
14	455	470	644	795	956	930	876	1120	728	485	475	642
15	454	480	650	763	1590	894	843	1060	715	469	469	628
16	451	437	632	750	e2300	887	818	1150	695	453	463	593
17	450	450	619	728	e1900	872	811	3510	675	458	454	563
18	447	464	766	702	e1550	856	782	3420	672	436	448	540
19	463	462	1470	687	1710	938	767	2400	686	1490	448	520
20	485	458	1060	680	2520	1030	773	1960	655	1690	454	500
21	465	455	841	668	2220	1240	760	1770	636	1100	439	490
22	457	460	749	649	3120	1330	734	1600	617	826	431	491
23	450	446	687	631	4070	1260	724	1430	602	710	424	475
24	450	446	738	614	2880	1170	828	1320	590	623	417	468
25	464	443	769	609	2280	1120	4430	1270	583	596	412	462
26	483	442	733	606	2020	1120	2510	1200	585	568	409	450
27	461	439	699	592	1850	1060	1670	1130	573	545	415	452
28	458	438	672	589	1710	1040	1400	1060	559	528	441	440
29	519	438	651	594	---	e1000	1260	1000	547	537	422	430
30	528	438	652	584	---	e950	1150	961	668	570	713	446
31	504	---	9640	579	---	909	---	925	---	718	1090	---
TOTAL	14688	14194	28892	33603	39871	34637	34884	43191	22071	19701	16556	28681
MEAN	474	473	932	1084	1424	1117	1163	1393	736	636	534	956
MAX	528	551	9640	5660	4070	1610	4430	3510	1100	1690	1090	7590
MIN	447	437	430	579	539	856	724	925	547	436	409	430
AC-FT	29130	28150	57310	66650	79080	68700	69190	85670	43780	39080	32840	56890
CFSM	0.40	0.40	0.79	0.92	1.20	0.94	0.98	1.18	0.62	0.54	0.45	0.81
IN.	0.46	0.45	0.91	1.06	1.25	1.09	1.10	1.36	0.69	0.62	0.52	0.90

WHITE RIVER BASIN

07069500 SPRING RIVER AT IMBODEN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-95, 2002-03, BY WATER YEAR (WY)

MEAN	602	1147	1514	1671	1866	2326	2463	2077	1183	779	577	593
MAX	2197	4396	10660	6945	6241	6607	8443	6841	6451	2716	1504	1718
(WY)	1985	1974	1983	1949	1989	1945	1973	1961	1945	1951	1950	1993
MIN	281	296	297	286	346	488	505	483	356	342	287	278
(WY)	1957	1955	1956	1956	1963	1941	1981	1941	1941	1941	1954	1954

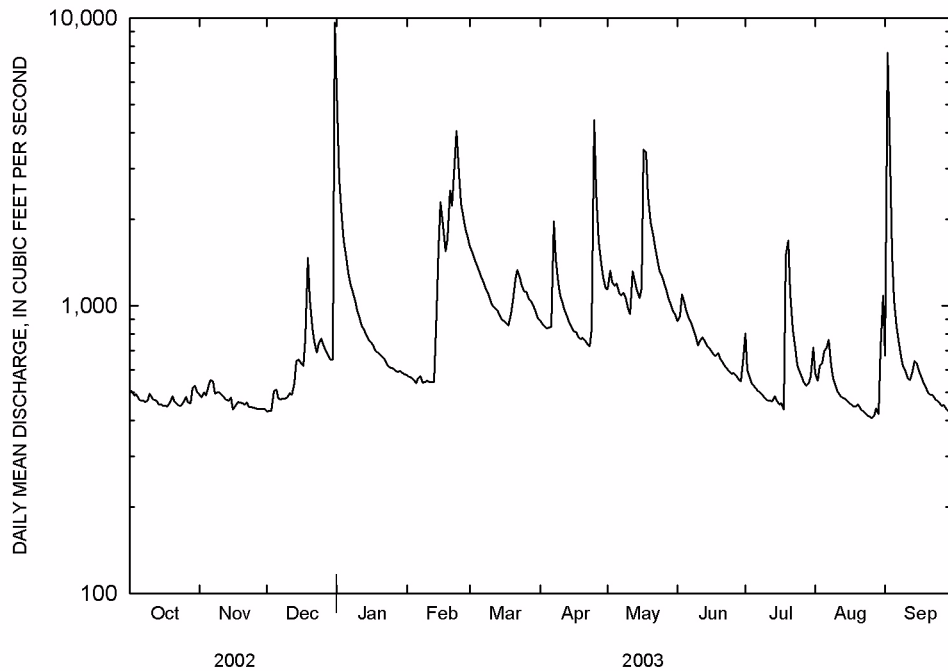
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1936-95, 2002-03
ANNUAL TOTAL	616345	330969	
ANNUAL MEAN	1689	907	1400
HIGHEST ANNUAL MEAN			2793 1973
LOWEST ANNUAL MEAN			466 1981
HIGHEST DAILY MEAN	22600 Mar 26	9640 Dec 31	112000 Dec 3 1982
LOWEST DAILY MEAN	430 Dec 1	409 Aug 26	215 Aug 1 1936
ANNUAL SEVEN-DAY MINIMUM	435 Nov 27	420 Aug 23	253 Sep 16 1941
MAXIMUM PEAK FLOW		17800 Sep 2	¹ 244000 Dec 3 1982
MAXIMUM PEAK STAGE		18.25 Sep 2	² 38.12 Dec 3 1982
INSTANTANEOUS LOW FLOW		393 ³ Nov 16	
ANNUAL RUNOFF (AC-FT)	1223000	656500	1014000
ANNUAL RUNOFF (CFSM)	1.43	0.77	1.18
ANNUAL RUNOFF (INCHES)	19.38	10.41	16.07
10 PERCENT EXCEEDS	3340	1480	2610
50 PERCENT EXCEEDS	860	651	794
90 PERCENT EXCEEDS	470	454	376

¹From rating curve extended above 78,000 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow

²From floodmarks

³Also July 18, 2003

^eEstimated



WHITE RIVER BASIN

205

07072000 ELEVEN POINT RIVER NEAR RAVENDEN SPRINGS

LOCATION.--Lat 36°20'48", long 91°06'48", in SE1/4SE1/4 sec.30, T.20 N., R.1 W., Randolph County, Hydrologic Unit 11010010, on right bank at upstream side of bridge on State Highway 90, 0.9 mi downstream from Hinch Creek, 1.9 mi upstream from Eassis Creek, 6.6 mi northeast of Ravenden Springs and at mile 21.2.

DRAINAGE AREA.--1,134 mi².

PERIOD OF RECORD.--October 1929 to September 1933, October 1935 to October 1994, March 1995, October 2000 to current year. Annual maximum water years 1995-2000. Prior to October 1949, published as "near Elevenpoint." Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 877: 1930-33, 1936-38. WSP 977: 1933, 1937-39, 1942 WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 291.98 ft above NGVD of 1929. Prior to Nov. 21, 1938, non-recording gage at present site at datum 0.04 ft higher. Nov. 21 to Dec. 11, 1938, non-recording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729	465	399	2310	430	1060	781	811	850	651	577	592
2	714	461	398	1440	425	1030	772	956	875	631	579	2260
3	703	469	397	1150	424	1000	762	969	903	618	596	1080
4	701	462	431	1000	417	986	755	960	877	607	582	804
5	681	489	417	913	405	972	753	1020	841	597	577	714
6	665	485	402	838	415	942	801	1020	819	588	595	667
7	658	473	397	779	411	910	1120	1210	804	582	574	637
8	640	466	395	742	395	884	921	1130	786	574	548	616
9	635	466	392	710	395	855	882	1050	768	567	533	596
10	632	468	395	675	398	829	858	988	755	566	522	579
11	612	462	402	642	396	808	838	1100	773	560	515	566
12	599	453	397	612	392	796	822	1390	792	556	509	558
13	585	445	427	592	391	787	804	1170	790	552	503	587
14	564	446	451	576	697	766	785	1090	792	545	506	635
15	553	453	451	558	917	753	765	1030	795	541	496	575
16	544	444	448	549	1190	741	754	1020	783	534	488	567
17	531	438	442	533	1010	736	750	1660	757	521	484	557
18	519	436	554	519	921	728	737	1730	750	519	489	548
19	531	433	1000	510	1160	826	722	1560	738	688	487	539
20	515	428	682	505	1230	861	723	1450	725	654	484	529
21	492	426	571	498	1240	933	706	1300	711	690	476	525
22	478	422	529	485	1670	969	691	1200	697	664	469	522
23	471	420	501	471	1590	958	677	1130	684	629	466	513
24	465	418	517	459	1460	935	726	1080	673	606	467	503
25	488	415	513	455	1310	915	1160	1050	663	586	458	494
26	485	410	497	452	1210	905	902	1010	673	572	454	487
27	470	407	482	443	1150	874	855	970	658	559	453	487
28	466	404	470	440	1100	865	822	934	641	549	449	476
29	506	403	461	445	---	849	796	908	629	577	448	468
30	493	403	479	436	---	815	776	891	641	605	481	464
31	481	---	5410	432	---	792	---	872	---	595	682	---
TOTAL	17606	13270	19707	21169	23149	27080	24216	34659	22643	18283	15947	19145
MEAN	568	442	636	683	827	874	807	1118	755	590	514	638
MAX	729	489	5410	2310	1670	1060	1160	1730	903	690	682	2260
MIN	465	403	392	432	391	728	677	811	629	519	448	464
AC-FT	34920	26320	39090	41990	45920	53710	48030	68750	44910	36260	31630	37970
CFSM	0.50	0.39	0.56	0.60	0.73	0.77	0.71	0.99	0.67	0.52	0.45	0.56
IN.	0.58	0.44	0.65	0.69	0.76	0.89	0.79	1.14	0.74	0.60	0.52	0.63

WHITE RIVER BASIN

07072000 ELEVEN POINT RIVER NEAR RAVENDEN SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930-33, 1936-95, 2001-03, BY WATER YEAR (WY)

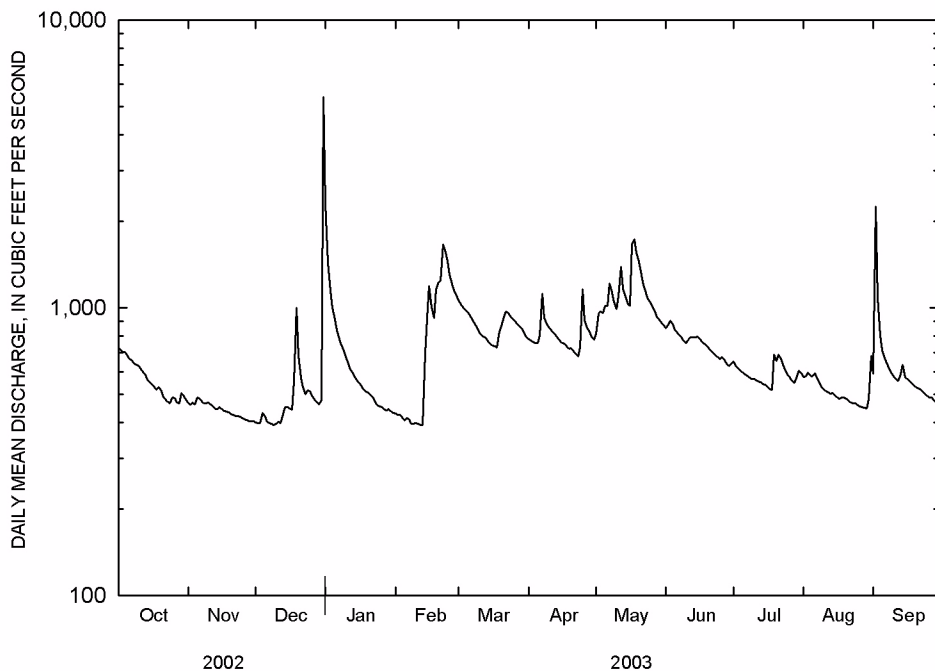
MEAN	590	859	1070	1269	1353	1633	1931	1721	1178	831	670	616
MAX	1515	3028	6625	4757	3833	4603	6204	4528	4550	2105	1147	1666
(WY)	1985	1959	1983	1949	1950	1945	1973	1973	1945	1951	1946	1975
MIN	272	284	276	266	354	419	440	446	355	311	269	291
(WY)	1957	1957	1956	1956	1963	1981	1981	2001	1936	1936	1936	1956

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1930-33, 1936-95, 2001-03	
ANNUAL TOTAL	256874			
ANNUAL MEAN	704		1137	
HIGHEST ANNUAL MEAN			2326	1973
LOWEST ANNUAL MEAN			435	1981
HIGHEST DAILY MEAN	5410	Dec 31	53500	Dec 3 1982
LOWEST DAILY MEAN	391	Feb 13	226	Sep 9 1936
ANNUAL SEVEN-DAY MINIMUM	397	Feb 7	241	Aug 25 1936
MAXIMUM PEAK FLOW	8120	Dec 31	¹ 162000	Dec 3 1982
MAXIMUM PEAK STAGE	12.27	Dec 31	² 29.06	Dec 3 1982
INSTANTANEOUS LOW FLOW	386	Feb 13	³ 226	Sep 9 1936
ANNUAL RUNOFF (AC-FT)	509500		823500	
ANNUAL RUNOFF (CFSM)	0.62		1.00	
ANNUAL RUNOFF (INCHES)	8.43		13.62	
10 PERCENT EXCEEDS	1040		2050	
50 PERCENT EXCEEDS	605		797	
90 PERCENT EXCEEDS	431		400	

¹From rating curve extended above 23,000 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow

²From floodmark

³Observed



WHITE RIVER BASIN

207

07072500 BLACK RIVER AT BLACK ROCK

LOCATION.--Lat 36°06'15", long 91°05'50", in NW1/4 sec.21, T.17 N., R.1 W., Lawrence County, Hydrologic Unit 11010009, on right bank beneath U.S. Highway 63 bridge at Black Rock, 3.7 mi downstream from Spring River, and at mile 69.3.

DRAINAGE AREA.--7,369 mi².

PERIOD OF RECORD.--October 1929 to September 1931, October 1939 to current year. Gage-height records collected since 1904 in same vicinity are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1211: 1930-31. WRD Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 229.56 ft above NGVD of 1929. Prior to Aug. 1, 1946, nonrecording gage at site 900 ft upstream at same datum. Aug. 1, 1946, to Aug. 17, 1978, nonrecording gage at site 650 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Some regulation by Clearwater Lake (Missouri), since June 3, 1948, 189 mi upstream, capacity, 413,700 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 21, 1915, reached a stage of 31.9 ft, from records of National Weather Service, discharge, 160,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4010	3330	3050	24400	3940	12800	6500	7820	6430	4230	4110	4650
2	3790	3330	3050	22400	3870	12300	6390	7630	6190	4050	4030	8530
3	3650	3330	3040	21200	3820	11800	6280	7490	6230	3880	4080	16900
4	3590	3320	3150	20300	3780	11300	6170	7580	6050	3660	4170	13800
5	3540	3420	3220	19500	3730	10800	6090	8040	5770	3490	4220	11900
6	3490	3560	3190	18600	3730	10300	6030	8140	5500	3350	4200	10100
7	3470	3620	3180	18000	3740	9780	8460	8100	5250	3240	4250	8750
8	3480	3590	3180	17400	3690	9310	9690	8370	4970	3140	4610	7870
9	3510	3540	3180	16600	3630	8860	9260	8300	4720	3040	4450	7290
10	3590	3510	3200	15500	3610	8360	8840	8060	4510	2970	4200	6960
11	3580	3450	3230	13900	3600	7880	8360	8290	4420	2910	4040	6870
12	3560	3360	3250	12200	3630	7440	7900	8410	4480	2880	3910	6890
13	3530	3320	3340	10600	3680	7080	7570	8650	4650	2860	3750	6910
14	3500	3290	3710	9330	4870	6760	7360	8470	4720	2870	3580	6980
15	3470	3280	4170	8390	7710	6420	7190	8170	5050	2850	3350	7040
16	3440	3270	4280	7730	11200	6140	6990	8120	5250	2820	3150	6710
17	3420	3220	4260	7240	11700	5900	6710	12600	5160	2810	3030	6150
18	3410	3240	4310	6770	10800	5730	6440	14900	4950	2730	2950	5650
19	3410	3230	6680	6340	10200	5770	6190	14600	4820	3270	2910	4990
20	3410	3220	8460	5950	11500	6160	5930	13700	4710	4290	2880	4380
21	3310	3210	8260	5580	11900	6790	5660	12800	4600	4180	2820	3970
22	3240	3190	7630	5210	13600	7330	5350	11900	4530	4090	2750	3740
23	3160	3160	6970	4890	16800	7860	5100	10900	4470	4010	2710	3570
24	3120	3140	6500	4610	16900	8170	5070	10200	4390	3690	2690	3430
25	3110	3130	6370	4380	16200	8010	7720	9620	4280	3380	2670	3310
26	3150	3120	6260	4240	15400	7710	9130	9130	4160	3150	2630	3220
27	3130	3100	6220	4150	14500	7420	7800	8640	3990	3040	2590	3150
28	3110	3090	6210	4060	13600	7190	8820	8170	3790	2980	2600	3070
29	3180	3080	6180	4010	---	7000	9240	7680	3730	3020	2580	2980
30	3270	3060	6130	3960	---	6800	8600	7230	3820	3280	2820	2940
31	3290	---	15500	3930	---	6630	---	6810	---	3890	4270	---
TOTAL	105920	98710	159360	331370	235330	251800	216840	288520	145590	104050	107000	192700
MEAN	3417	3290	5141	10690	8405	8123	7228	9307	4853	3356	3452	6423
MAX	4010	3620	15500	24400	16900	12800	9690	14900	6430	4290	4610	16900
MIN	3110	3060	3040	3930	3600	5730	5070	6810	3730	2730	2580	2940
AC-FT	210100	195800	316100	657300	466800	499400	430100	572300	288800	206400	212200	382200

WHITE RIVER BASIN

07072500 BLACK RIVER AT BLACK ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

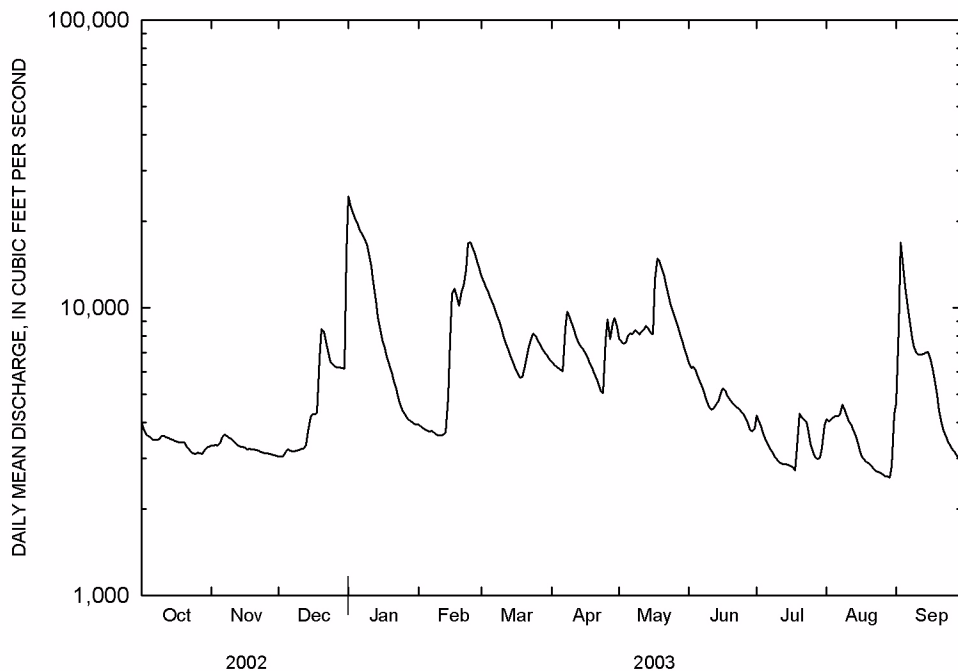
MEAN	3932	6463	9302	10510	11390	13680	15360	13470	7653	5182	4041	3836
MAX	11570	23020	44020	40410	36240	30410	42280	36370	18890	17630	9130	7630
(WY)	1985	1973	1983	1950	1989	1979	1973	1961	1957	1951	1998	1975
MIN	1797	1984	2042	1998	2650	3784	3721	2921	2515	2216	2028	1853
(WY)	1957	1957	1956	1956	1963	1981	1981	2001	2001	2001	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	4401480		2237190			
ANNUAL MEAN	12060		6129		18721	
HIGHEST ANNUAL MEAN					17330 1973	
LOWEST ANNUAL MEAN					3552 1954	
HIGHEST DAILY MEAN	54400	May 18	24400	Jan 1	123000	Dec 5 1982
LOWEST DAILY MEAN	3040	Dec 3	2580	Aug 29	1730	Sep 18 1956
ANNUAL SEVEN-DAY MINIMUM	3070	Nov 27	2640	Aug 23	1730	Sep 22 1956
MAXIMUM PEAK FLOW			25200	Jan 1	2190000	Dec 4 1982
MAXIMUM PEAK STAGE			19.37	Jan 1	31.51	Dec 4 1982
ANNUAL RUNOFF (AC-FT)	8730000		4437000		6318000	
10 PERCENT EXCEEDS	27200		11200		18800	
50 PERCENT EXCEEDS	7980		4530		5680	
90 PERCENT EXCEEDS	3280		3100		2690	

¹Prior to regulation, water years 1930-31 and 1940-47, 7,854 ft³/s

²From rating curve extended above 105,000 ft³/s

³From floodmarks



WHITE RIVER BASIN

209

07074000 STRAWBERRY RIVER NEAR POUGHKEEPSIE

LOCATION.--Lat 36°06'37", long 91°26'59", in SE1/4NW1/4 sec.19, T.17 N., R.4 W., Sharp County, Hydrologic Unit 11010012, on left bank 250 ft upstream from bridge on State Highway 58, 0.5 mi downstream from Hurricane Creek, 2.5 mi northeast of Poughkeepsie, and at mile 35.9.

DRAINAGE AREA.--473 mi².

PERIOD OF RECORD.--April 1936 to January 1995, October 2001 to current year. Annual maximum 1995-2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	60	61	2450	125	620	192	352	223	391	151	359
2	57	60	61	1120	123	574	184	368	241	156	141	12400
3	57	68	62	809	121	520	178	324	374	124	142	4000
4	60	67	88	647	117	476	174	286	365	108	164	961
5	57	82	84	544	113	446	176	285	269	98	296	674
6	55	81	79	466	121	410	186	287	236	91	199	539
7	56	74	75	332	122	378	420	266	215	85	178	443
8	55	71	73	371	113	352	452	242	197	80	152	375
9	56	67	71	343	114	328	332	231	181	76	134	322
10	63	68	72	313	115	305	e290	214	168	74	119	281
11	61	66	74	284	114	286	e270	248	164	70	110	252
12	59	65	73	262	114	273	e240	197	159	69	102	241
13	58	64	92	246	114	263	e220	183	154	69	98	278
14	53	64	114	233	316	250	e190	224	149	403	100	275
15	53	65	116	218	741	238	198	244	250	177	92	242
16	53	65	108	209	1640	229	187	625	261	104	86	213
17	53	64	110	197	1110	221	180	4520	190	88	81	197
18	52	64	208	185	754	214	171	2530	171	81	83	184
19	60	65	368	181	679	232	165	1370	182	2240	77	170
20	58	63	235	175	900	310	161	963	180	1690	72	159
21	56	63	188	170	774	367	154	801	150	527	74	153
22	54	62	163	161	1650	375	148	668	133	396	91	149
23	53	63	151	155	2260	324	142	554	e120	356	85	141
24	52	63	180	144	1270	294	172	479	e110	295	71	134
25	53	62	192	146	992	276	3850	449	e110	233	66	127
26	53	62	188	142	834	265	1630	407	e100	196	63	121
27	53	61	189	137	740	251	752	359	e100	171	61	116
28	55	61	176	137	671	242	563	317	101	153	60	110
29	70	61	163	139	---	227	456	283	95	159	59	105
30	64	61	164	133	---	e190	382	262	178	165	1120	102
31	62	---	2520	129	---	200	---	243	---	190	1180	---
TOTAL	1759	1962	6498	11178	16857	9936	12815	18781	5526	9115	5507	23823
MEAN	56.7	65.4	210	361	602	321	427	606	184	294	178	794
MAX	70	82	2520	2450	2260	620	3850	4520	374	2240	1180	12400
MIN	52	60	61	129	113	190	142	183	95	69	59	102
AC-FT	3490	3890	12890	22170	33440	19710	25420	37250	10960	18080	10920	47250
CFSM	0.12	0.14	0.44	0.76	1.27	0.68	0.90	1.28	0.39	0.62	0.38	1.68
IN.	0.14	0.15	0.51	0.88	1.33	0.78	1.01	1.48	0.43	0.72	0.43	1.87

WHITE RIVER BASIN

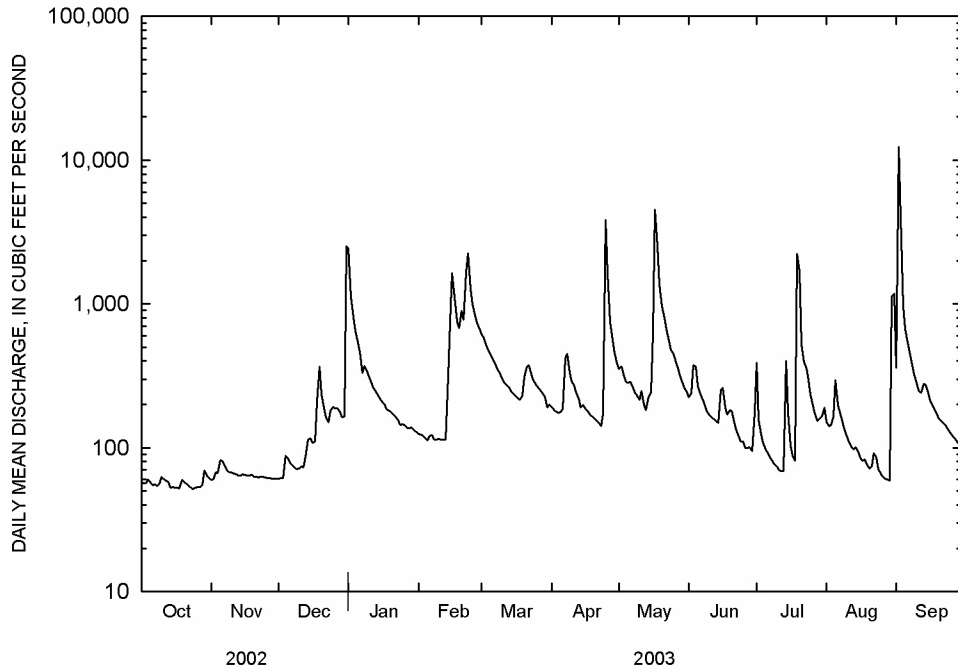
0707400 STRAWBERRY RIVER NEAR POUGHKEEPSIE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-95, 2002-03, BY WATER YEAR (WY)

MEAN	182	421	572	686	780	950	910	685	338	180	119	170
MAX	1190	2324	3117	4369	3194	3219	3706	2274	2892	1286	694	1050
(WY)	1985	1952	1983	1949	1989	1945	1957	1961	1945	1949	1975	1965
MIN	42.3	56.0	53.3	63.5	86.1	122	136	109	58.7	60.2	44.0	45.1
(WY)	1957	1957	1956	1944	1963	1941	1963	1941	1941	1936	1936	1944

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1936-95, 2002-03	
ANNUAL TOTAL	200998		123757			
ANNUAL MEAN	551		339		499	
HIGHEST ANNUAL MEAN					1084 1945	
LOWEST ANNUAL MEAN					163 1981	
HIGHEST DAILY MEAN	16000	Mar 26	12400	Sep 2	42000	Dec 3 1982
LOWEST DAILY MEAN	52	Oct 18	52	Oct 18	31	Oct 4 1938
ANNUAL SEVEN-DAY MINIMUM	53	Oct 22	53	Oct 22	34	Oct 4 1994
MAXIMUM PEAK FLOW			25200	Sep 2	158000	Dec 3 1982
MAXIMUM PEAK STAGE			21.95	Sep 2	¹ 35.90	Dec 3 1982
INSTANTANEOUS LOW FLOW			50	Oct 24	31	Oct 1 2001
ANNUAL RUNOFF (AC-FT)	398700		245500		361400	
ANNUAL RUNOFF (CFSM)	1.16		0.72		1.05	
ANNUAL RUNOFF (INCHES)	15.81		9.73		14.33	
10 PERCENT EXCEEDS	1180		634		955	
50 PERCENT EXCEEDS	164		171		189	
90 PERCENT EXCEEDS	61		61		60	

¹From floodmark
^eEstimated



WHITE RIVER BASIN

211

07074420 BLACK RIVER AT ELGIN FERRY

LOCATION.--Lat 35°45'51", long 91°17'40", in NW1/4SE1/4 sec.15, T.13 N., R.3 W., Jackson County, Hydrologic Unit 11010009, on left bank 1,800 ft upstream from State Highway 37 bridge at Elgin Ferry.

DRAINAGE AREA.--8,418 mi².

PERIOD OF RECORD.--February 1999 to current year. Annual maximum water years 1979-98.

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above NGVD of 1929.

REMARKS.--Water-discharge records fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 4, 1982, reached a stage of 27.7 ft, from floodmarks, discharge unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4720	3370	3120	17100	4810	15400	7320	9580	7760	5400	4580	6210
2	4450	3400	3120	21100	4800	14300	7170	8940	7550	5700	4870	6680
3	4320	3430	3110	22800	4720	13400	7050	8630	7430	5170	4780	12900
4	4250	3420	e4510	22900	4610	12700	6960	8440	7310	4700	5010	16800
5	4140	3520	e4670	22500	4540	12200	6910	8810	7130	4360	5130	18000
6	4010	3730	3360	21900	4540	11800	6850	9070	6810	4110	5110	16100
7	3900	3740	3340	21000	4600	11400	7290	9210	6500	3910	4950	13000
8	3810	3730	3320	20100	4590	10800	9470	9250	6190	3740	4920	10900
9	3790	3680	3300	19200	4500	10300	10300	9250	5820	3610	5110	9450
10	3820	3640	3280	18300	4420	9820	10000	9070	5530	3510	4990	8570
11	3830	3590	3300	16900	4420	9420	9630	9450	5330	3420	4710	8060
12	3810	3520	3310	15200	4450	8930	9150	9860	5240	3330	4480	7850
13	3770	3440	3390	13300	4490	8480	8680	9500	5240	3280	4340	7810
14	3730	3390	3640	11800	5350	8050	8330	9910	5350	3380	4230	7880
15	3690	3360	3970	10500	8060	7710	8080	9980	5690	3450	4060	7910
16	3650	3350	4230	9670	10900	7390	7870	10000	5970	3380	3860	7840
17	3610	3330	4310	8970	13400	7090	7650	16000	6120	3210	3690	7490
18	3590	3290	4330	8360	13200	6840	7390	20700	6060	3180	3490	6990
19	3590	3280	5170	7970	12400	6710	7130	22600	6070	3370	3370	6460
20	e5010	3280	7590	7520	12100	6790	6880	22400	5880	5200	3370	5810
21	e4950	3270	8510	7050	12600	7140	6610	20600	5610	6510	3400	5220
22	e4880	3260	8130	6620	13500	7730	6320	18400	5330	5610	3400	4780
23	3410	3240	7470	6240	15800	8250	6020	16300	5180	5330	3320	4480
24	3340	3220	7000	5970	17600	8650	5890	14100	5060	4920	3240	4260
25	3290	3210	6860	5850	18000	8860	7460	12700	4970	4460	3150	4070
26	3270	3190	6490	5630	17800	8750	11400	11600	4920	4040	3050	3910
27	3280	3170	6230	5300	17200	8510	11700	10700	4870	3790	3020	3780
28	3250	3170	6120	5110	16500	8240	10000	9980	4620	3600	2970	3670
29	3270	3160	6080	5040	---	7980	10100	9330	4360	3490	2920	3550
30	3290	3150	6050	4960	---	e7720	10100	8750	4320	3620	2900	3450
31	3350	---	8920	4860	---	7510	---	8230	---	4040	4420	---
TOTAL	119070	101530	156230	379720	263900	288870	245710	371340	174220	128820	124840	233880
MEAN	3841	3384	5040	12250	9425	9318	8190	11980	5807	4155	4027	7796
MAX	5010	3740	8920	22900	18000	15400	11700	22600	7760	6510	5130	18000
MIN	3250	3150	3110	4860	4420	6710	5890	8230	4320	3180	2900	3450
AC-FT	236200	201400	309900	753200	523400	573000	487400	736600	345600	255500	247600	463900

WHITE RIVER BASIN

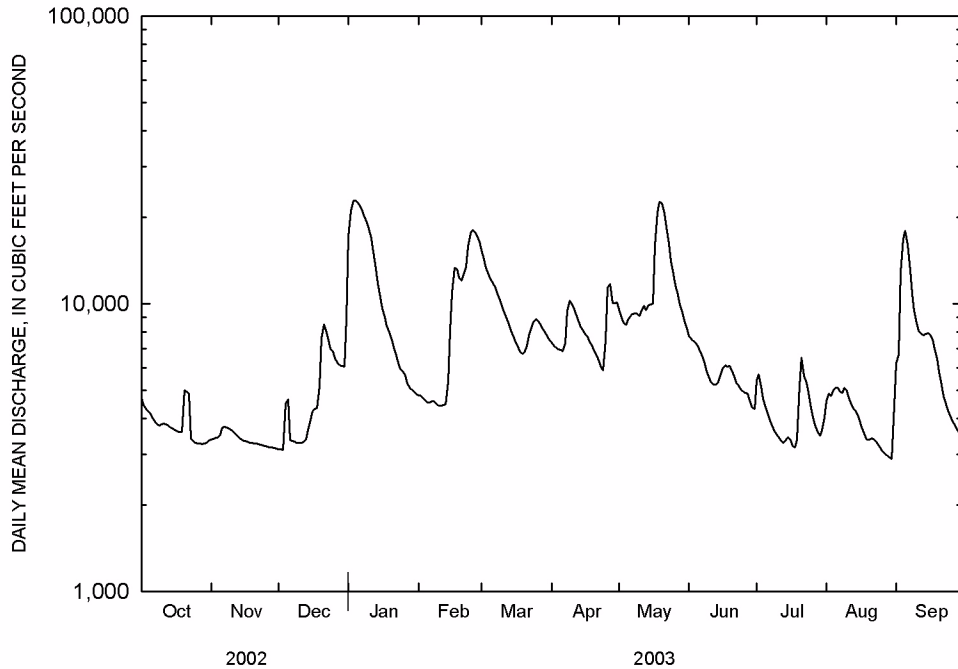
07074420 BLACK RIVER AT ELGIN FERRY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	3166	3185	8393	8296	12750	13580	13540	11900	7608	5072	4028	4469
MAX	3841	3384	20270	12250	17750	25690	27440	26660	14190	10060	6822	7796
(WY)	2003	2003	2002	2003	2002	2002	2002	2002	2002	2002	2002	2003
MIN	2404	2917	3013	3145	6620	9318	5280	3452	3050	2654	3032	2427
(WY)	2001	2001	2001	2001	2000	2003	2001	2001	2001	2001	2001	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	4751780		2588130			
ANNUAL MEAN	13020		7091		7894	
HIGHEST ANNUAL MEAN					14240 2002	
LOWEST ANNUAL MEAN					4567 2001	
HIGHEST DAILY MEAN	58300	Mar 28	22900	Jan 4	58300	Mar 28 2002
LOWEST DAILY MEAN	3110	Dec 3	2900	Aug 30	2010	Oct 28 2000
ANNUAL SEVEN-DAY MINIMUM	3140	Nov 27	3040	Aug 24	2040	Oct 25 2000
MAXIMUM PEAK FLOW			23100	Jan 3-4	59500	Mar 28 2002
MAXIMUM PEAK STAGE			20.86	Jan 3-4	26.33	Mar 28 2002
INSTANTANEOUS LOW FLOW			2880	Aug 30	2000	Oct 28 2000
ANNUAL RUNOFF (AC-FT)	9425000		5134000		5719000	
10 PERCENT EXCEEDS	29600		13100		17500	
50 PERCENT EXCEEDS	8870		5610		4930	
90 PERCENT EXCEEDS	3390		3320		2690	

^eEstimated



WHITE RIVER BASIN

213

07074500 WHITE RIVER AT NEWPORT

LOCATION.--Lat 35°36'18", long 91°17'19", in NE1/4NE1/4 sec.10, T.11 N., R.3 W., Jackson County, Hydrologic Unit 11010013, on left bank 100 ft downstream from bridge on State Highway 367 at Newport, 7.2 mi downstream from Black River, and at mile 254.7.

DRAINAGE AREA.--19,860 mi².

PERIOD OF RECORD.--September 1927 to September 1931 (published as "near Newport"), October 1937 to current year. Gage-height records collected at present site since 1885 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR Ark. 1973: Drainage area. WDR Ark. 2001: 2000.

GAGE.--Water-stage recorder. Datum of gage is 194.09 ft above NGVD of 1929. September 1927 to September 1931, nonrecording gage at site 2.8 mi downstream at datum 2.30 ft lower. Oct. 1, 1937, to Aug. 14, 1953, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Some regulation since 1943 by Norfolk Lake, capacity, 1,983,000 acre-ft since 1948 by Clearwater Lake (Missouri), capacity, 413,700 acre-ft, since July 24, 1951, by Bull Shoals Lake, 149 mi upstream, capacity, 5,408,000 acre-ft, since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity, 3,567,500 acre-ft, and since Dec. 26, 1963, by Beaver Lake, capacity, 1,951,500 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 16, 1927, reached a stage of 35.6 ft, from records of National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13700	8720	5970	e29000	10500	34700	13000	20300	15400	11000	15600	13600
2	15800	8660	5200	e32900	11200	31700	12300	18900	14900	12900	19300	12100
3	18100	8580	4660	e34600	8670	27200	12100	16200	15600	12900	17400	e19600
4	19000	8050	5440	e35500	7010	24000	13600	14700	15100	11600	15300	22300
5	18700	6610	9500	e35700	6690	24000	13900	15100	18100	12400	14100	22600
6	17300	6690	11100	e34900	10200	24600	14100	15000	18500	12400	14500	23500
7	15900	7520	10900	e34100	13500	24200	12900	15800	18300	10700	14600	21700
8	12600	8510	10700	e34600	13600	23300	13100	16100	16800	9780	14600	19100
9	10700	8700	9130	34100	12100	21300	15200	15200	13600	11500	14800	17200
10	10000	7830	8030	32300	9910	18500	16900	14600	12400	13000	14600	14700
11	9670	6660	9170	31700	8740	16700	17800	17000	11900	14000	12200	13700
12	9570	5780	9470	31000	10000	19100	17200	17400	12500	13600	9940	13700
13	9330	5270	9460	26000	10500	17900	16100	15800	12200	13100	11800	13400
14	8010	6270	9250	21300	12300	16000	14300	15800	15200	11600	13700	14300
15	6730	8340	9400	20900	16500	16500	12700	17800	19000	10100	13400	14100
16	7830	8730	8810	20900	18600	16100	12200	18300	e16500	11700	14100	12500
17	9710	7890	7400	19600	21000	14100	13000	38000	14700	13900	15500	11700
18	10200	6470	7210	17300	20200	12300	11700	48600	15700	15100	13900	11500
19	9880	5640	e12300	19000	21500	13200	10900	51800	16100	16000	14800	11400
20	9980	6950	e15200	17300	22500	15500	10600	49500	14500	17900	16800	11200
21	8930	7920	e17300	e13800	21400	15500	10400	46100	13500	16500	e18600	9750
22	6880	7540	e18000	e12400	22900	16900	9810	43100	13400	15700	e19000	8950
23	8430	7120	e17600	e13500	28000	17700	9610	41300	12300	16700	18000	8220
24	8900	7120	e17300	e15700	29100	16300	10300	37100	11000	15500	17100	7660
25	9360	6410	e16900	18000	29500	15400	11900	32400	13100	15400	16100	7330
26	9300	5360	e16700	17600	32000	15300	16600	27800	15800	14900	15700	7470
27	9190	6140	e15200	13600	34400	16600	19300	24100	16200	15800	15800	8620
28	7150	8100	e13700	10600	35500	17200	17800	21600	14300	13500	16200	7530
29	6150	8700	e12500	10300	---	16800	16100	19300	12300	12700	15200	6870
30	8600	7590	e12600	9770	---	15700	20900	17200	10800	14600	15000	6470
31	9480	---	e19800	8950	---	14200	---	16000	---	14300	14100	---
TOTAL	335080	219870	355900	706920	498020	588500	416320	777900	439700	420780	471740	392770
MEAN	10810	7329	11480	22800	17790	18980	13880	25090	14660	13570	15220	13090
MAX	19000	8730	19800	35700	35500	34700	20900	51800	19000	17900	19300	23500
MIN	6150	5270	4660	8950	6690	12300	9610	14600	10800	9780	9940	6470
AC-FT	664600	436100	705900	1402000	987800	1167000	825800	1543000	872100	834600	935700	779100

WHITE RIVER BASIN

07074500 WHITE RIVER AT NEWPORT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2003, BY WATER YEAR (WY)

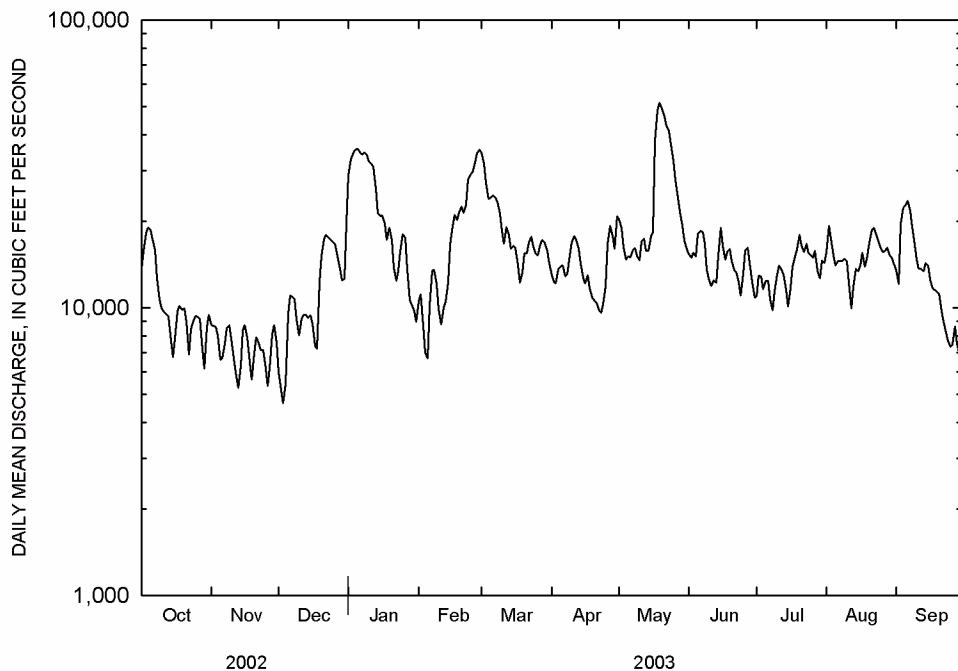
MEAN	10290	15090	22790	25700	28660	34250	37590	33770	21930	16450	13280	11060
MAX	26280	41430	89140	90830	95540	117400	164200	102800	98630	43020	34390	29530
(WY)	1994	1973	1983	1950	1949	1945	1945	1943	1945	1951	1957	1957
MIN	3667	3795	4371	5310	7052	9148	6539	6022	5986	5354	4611	3702
(WY)	2001	1955	1944	1944	1964	1981	1981	2001	2001	1944	1944	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1943 - 2003	
ANNUAL TOTAL	9887010		5623500			
ANNUAL MEAN	27090		15410		122540	
HIGHEST ANNUAL MEAN					46320	1945
LOWEST ANNUAL MEAN					8073	1981
HIGHEST DAILY MEAN	86500	Mar 28	51800	May 19	340000	Apr 18 1945
LOWEST DAILY MEAN	4660	Dec 3	4660	Dec 3	2870	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	6520	Nov 28	6520	Nov 28	2960	Sep 24 1954
MAXIMUM PEAK FLOW			52200	May 19	343000	Apr 17 1945
MAXIMUM PEAK STAGE			21.80	May 19	35.19	Apr 18 1945
INSTANTANEOUS LOW FLOW			4500	Dec 4	2820	Oct 26 2000
ANNUAL RUNOFF (AC-FT)	19610000		11150000		16330000	
10 PERCENT EXCEEDS	50200		24000		47600	
50 PERCENT EXCEEDS	25800		14200		15600	
90 PERCENT EXCEEDS	8240		7830		6520	
ANNUAL TOTAL	9886570		5623060			
ANNUAL MEAN	27090		15410		22540	

¹Prior to regulation, water years 1928-31, 26,370 ft³/s

²Observed

^eEstimated



WHITE RIVER BASIN

215

07074850 WHITE RIVER NEAR AUGUSTA

LOCATION.--Lat 35°18'02", long 91°23'35", in SE1/4SE1/4 sec.22, T.8 N., R.4 W., Woodruff County, Hydrologic Unit 11010013, on left bank of Taylor Bay 0.5 mi upstream from White River, 0.7 mi from bridge on U.S. Highway 64 and 1.5 mi northwest of Augusta.

DRAINAGE AREA.--20,464 mi².

PERIOD OF RECORD.--October 2002 to current year. Annual maximum 1983-94. Stage only 1995-02. Gage-height records collected November 1937 to June 1975 at site 0.7 mi downstream and at present site since July 1975 are contained in the reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 169.25 ft above NGVD of 1929. Prior to June 6, 1975 non-recording gage at site 0.7 mi downstream at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage for the period of record 38.31 ft, discharge 250,000 ft³/s December 7,1982, (occurred during period of computation of annual maximum, water years 1983-1994).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15100	9370	8210	18400	10200	32400	12400	17300	15400	10900	13800	13800
2	14200	9240	7190	26900	11100	31300	11600	17100	14500	10900	15600	12900
3	15300	9170	6490	30000	11100	28100	11000	15900	14000	11900	17100	13700
4	16700	9140	6350	31100	9690	24400	11000	14300	14000	11700	16000	19000
5	17200	8710	6760	32100	8430	22300	11700	13900	14000	11200	14600	20700
6	16800	8090	9560	32200	8150	21700	12100	14000	15500	11700	13800	21300
7	15900	7860	11100	e32000	10700	21300	12000	14100	15800	11400	13900	21600
8	14600	8250	11400	e31000	12800	20700	11400	14800	15700	10400	14100	20000
9	12400	8990	11000	31100	12900	19600	11800	14600	14500	9740	14200	18400
10	11400	9130	9970	30800	12000	17800	13200	13800	13100	10900	14300	16600
11	10800	8560	9320	29400	10800	16200	14200	14400	12200	12000	13800	14800
12	10300	7690	9880	29100	10000	15600	14600	15700	11900	12700	12000	14000
13	9960	7000	10400	26700	10600	16300	14200	15400	11900	12500	10600	13500
14	9460	6510	10600	23000	11600	15200	13600	14600	12100	12100	11700	13400
15	8520	7030	10500	20400	15000	14300	12600	15100	14500	10900	12800	13700
16	7670	8510	10400	20100	18200	14300	11500	16000	16200	10100	12900	13200
17	8250	9030	9720	19300	20600	13700	11300	26000	15200	11300	13700	12200
18	9550	8470	8870	17900	20600	12500	11300	39800	14200	12800	14300	11500
19	10200	7490	10300	17200	20300	11500	10500	45700	14600	13900	13700	11100
20	10100	6750	13100	17300	21500	12100	9890	50700	14500	15200	14500	10900
21	10100	7440	14900	15800	21300	13200	9600	50800	13800	15900	15900	10400
22	9120	8140	15800	13800	21700	13500	9260	48300	12900	15300	17000	9390
23	8090	8120	16200	12600	24400	14600	8860	45200	12600	15100	17400	8530
24	8670	7890	15500	13200	26800	14700	8810	41200	11700	15200	17000	7810
25	9190	7670	15200	15100	27100	13900	9470	37300	11000	14500	16300	7240
26	9560	7230	14900	16500	e28000	13400	11100	32900	12500	14300	15500	6920
27	9620	6630	14100	15600	e31000	13500	14300	28100	14200	14200	15200	6920
28	9280	6960	13100	13400	31900	14200	15700	24000	14300	14300	15300	7390
29	8090	8310	12500	11900	---	14500	14900	20800	13100	13000	15300	7000
30	7430	8840	12200	11300	---	e14000	15000	18400	11700	12600	14600	6850
31	8770	---	12500	10700	---	13400	---	16600	---	13600	14400	---
TOTAL	342330	242220	348020	665900	478470	534200	358890	766800	411600	392240	451300	384750
MEAN	11040	8074	11230	21480	17090	17230	11960	24740	13720	12650	14560	12820
MAX	17200	9370	16200	32200	31900	32400	15700	50800	16200	15900	17400	21600
MIN	7430	6510	6350	10700	8150	11500	8810	13800	11000	9740	10600	6850
AC-FT	679000	480400	690300	1321000	949000	1060000	711900	1521000	816400	778000	895200	763200

WHITE RIVER BASIN

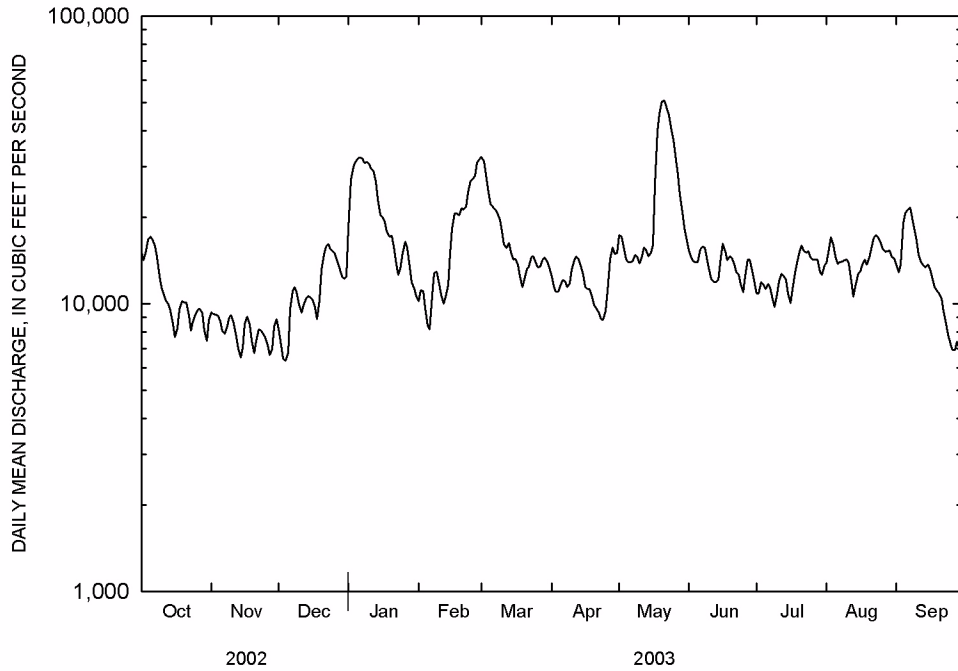
07074850 WHITE RIVER NEAR AUGUSTA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	11040	8074	11230	21480	17090	17230	11960	24740	13720	12650	14560	12820
MAX	11040	8074	11230	21480	17090	17230	11960	24740	13720	12650	14560	12820
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
MIN	11040	8074	11230	21480	17090	17230	11960	24740	13720	12650	14560	12820
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR	
ANNUAL TOTAL	9896460		5376720	
ANNUAL MEAN	27110		14730	
HIGHEST DAILY MEAN	95100	Mar 30	50800	May 21
LOWEST DAILY MEAN	6350	Dec 4	6350	Dec 4
ANNUAL SEVEN-DAY MINIMUM	7450	Nov 29	7160	Sep 24
MAXIMUM PEAK FLOW			51700	May 20
MAXIMUM PEAK STAGE			31.51	May 20
INSTANTANEOUS LOW FLOW			6250	Dec 4
ANNUAL RUNOFF (AC-FT)	19630000		10660000	
10 PERCENT EXCEEDS	54700		21900	
50 PERCENT EXCEEDS	22400		13600	
90 PERCENT EXCEEDS	8860		8380	

^eEstimated



WHITE RIVER BASIN

217

07075300 SOUTH FORK LITTLE RED RIVER AT CLINTON

LOCATION.--Lat 35°35'29", long 92°27'20", in SW1/4 sec.14, T.11 N., R.14 W., Van Buren County, Hydrologic Unit 11010014, at U.S. Highway 65, 0.25 mi upstream from Archey Fork at Clinton.

DRAINAGE AREA.--148 mi².

PERIOD OF RECORD.--October 1961 to September 1994, September 2001 to current year. Annual maximum 1995-2001.

REVISED RECORDS.--WDR Ark. 1968: 1962, 1964. WDR Ark. 1973: Drainage area. WDR Ark. 1974: 1964 (M).

GAGE.--Water-stage recorder. Datum of gage is 481.11 ft above NGVD of 1929. Prior to Oct. 1, 1966, non-recording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.97	e8.6	e9.0	973	e18	e121	98	59	52	40	4.7	12
2	0.82	e11	e8.9	543	e17	e117	90	107	83	33	4.9	14
3	0.87	e13	e9.0	e248	e17	e102	85	99	305	30	e20	11
4	0.91	e15	e11	e159	e17	e92	84	76	168	26	e60	9.1
5	0.87	e25	e11	e122	e16	e84	80	72	114	25	e54	7.4
6	0.57	e47	e12	e98	e17	e76	84	66	94	26	e39	6.3
7	0.70	e37	e13	e81	e16	e68	89	57	83	23	e29	5.2
8	0.66	e28	e14	e71	e16	e63	96	54	68	21	e22	e5.7
9	1.1	e22	e13	e64	e16	e58	81	105	53	19	e17	4.1
10	1.5	e20	e14	e56	e16	e52	73	83	44	18	e13	3.7
11	1.4	e18	e17	e49	e16	e48	70	106	42	17	e10	4.4
12	1.3	e17	e16	e43	e18	e46	65	105	87	15	e7.8	7.7
13	1.2	e16	e17	e39	e21	e46	62	74	184	14	e5.8	24
14	1.0	e14	e19	e36	e128	e49	61	82	117	e12	e3.9	25
15	0.92	e13	e25	e33	e293	e51	59	128	113	e9.3	e2.7	22
16	0.78	e11	e27	e31	e325	e47	55	847	138	e8.3	e1.1	16
17	0.61	e10	e25	e29	e224	e44	54	2800	155	e8.2	e1.7	13
18	0.47	e9.5	e23	e27	e150	e42	52	1260	131	e8.5	e2.2	11
19	0.77	e8.6	26	e25	e119	e100	47	674	135	e8.5	e1.9	9.7
20	1.0	e7.1	25	e24	e110	e254	46	504	109	11	e1.7	8.1
21	0.97	e6.7	22	e23	e104	e210	42	520	82	9.8	1.6	7.3
22	1.0	e9.0	21	e22	e410	e174	38	366	65	14	1.4	6.9
23	1.1	e10	24	e21	e471	e131	35	265	53	14	1.2	6.4
24	0.89	e10	50	e19	e263	e108	191	210	45	11	1.1	5.5
25	0.87	e10	80	e18	e179	e95	210	220	38	10	0.95	4.7
26	1.0	e9.5	63	e17	e143	e200	146	176	96	10	0.97	4.1
27	0.99	e9.4	49	e16	e123	e161	114	142	65	8.8	0.99	3.7
28	1.0	e9.3	41	e16	e115	e125	95	107	49	7.5	0.83	3.4
29	e1.9	e9.1	35	e17	---	e107	78	85	38	6.2	2.1	3.2
30	2.4	e9.1	42	e18	---	e105	62	71	40	5.7	6.8	3.0
31	1.8	---	838	e18	---	e100	---	61	---	5.5	7.4	---
TOTAL	32.34	442.9	1599.9	2956	3378	3076	2442	9581	2846	475.3	327.74	267.6
MEAN	1.04	14.8	51.6	95.4	121	99.2	81.4	309	94.9	15.3	10.6	8.92
MAX	2.4	47	838	973	471	254	210	2800	305	40	60	25
MIN	0.47	6.7	8.9	16	16	42	35	54	38	5.5	0.83	3.0
AC-FT	64	878	3170	5860	6700	6100	4840	19000	5650	943	650	531
CFSM	0.01	0.10	0.35	0.64	0.82	0.67	0.55	2.09	0.64	0.10	0.07	0.06
IN.	0.01	0.11	0.40	0.74	0.85	0.77	0.61	2.41	0.72	0.12	0.08	0.07

WHITE RIVER BASIN

07075300 SOUTH FORK LITTLE RED RIVER AT CLINTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962-94, 2001-03, BY WATER YEAR (WY)

MEAN	90.1	244	390	276	352	494	453	305	120	23.4	17.5	46.3
MAX	851	721	2118	921	1255	1330	1461	892	617	73.3	98.0	473
(WY)	1985	1989	1983	1969	1989	1977	1973	1990	1974	1979	1977	1970
MIN	0.000	1.99	5.24	11.5	34.3	75.3	61.2	40.5	6.30	1.71	0.11	0.000
(WY)	1964	1990	1990	1981	1963	1972	1963	1977	1977	1966	1985	1969

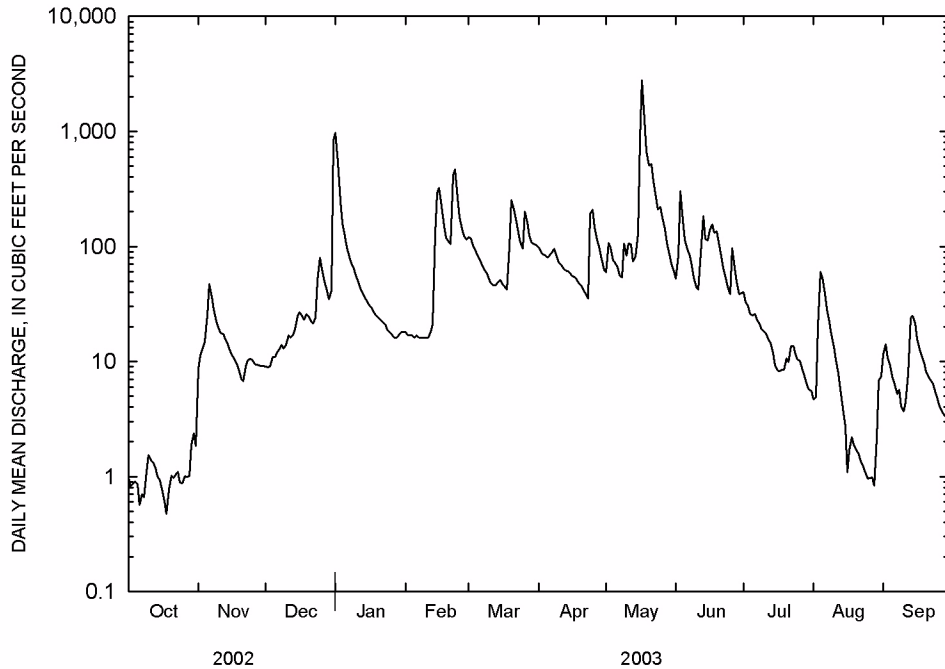
SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1962-94, 2001-03

ANNUAL TOTAL	70774.82		27424.78		234		
ANNUAL MEAN	194		75.1		490		
HIGHEST ANNUAL MEAN					1973		
LOWEST ANNUAL MEAN					75.1		
HIGHEST DAILY MEAN	3860	Mar 20	2800	May 17	41600	Dec 3	1982
LOWEST DAILY MEAN	0.47	Oct 18	0.47	Oct 18	0.00	Aug 9	1963
ANNUAL SEVEN-DAY MINIMUM	0.77	Oct 2	0.77	Oct 2	0.00	Aug 23	1963
MAXIMUM PEAK FLOW			3840	May 17	167900	Dec 3	1982
MAXIMUM PEAK STAGE			10.02	May 17	234.27	Dec 3	1982
INSTANTANEOUS LOW FLOW			0.19	Oct 18	0.00	Jan 1	1962
ANNUAL RUNOFF (AC-FT)	140400		54400		169200		
ANNUAL RUNOFF (CFSM)	1.31		0.51		1.58		
ANNUAL RUNOFF (INCHES)	17.79		6.89		21.44		
10 PERCENT EXCEEDS	545		144		514		
50 PERCENT EXCEEDS	39		25		77		
90 PERCENT EXCEEDS	1.6		1.6		1.5		

¹From rating curve extended above 24,000 ft³/s on the basis of contracted-opening and flow-over-road measurement of peak flow

²From floodmarks

^eEstimated



WHITE RIVER BASIN

219

07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS

LOCATION.--Lat 35°31'15", long 91°59'42", in SE1/4 sec.6, T.10 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, on State Highway 25 at Greers Ferry Dam on Little Red River, 2.5 mi northwest of Heber Springs, 5.5 mi upstream from Canoe Creek, and at mile 79.0.

DRAINAGE AREA.--1,153 mi².

PERIOD OF RECORD.--October 1970 to September 1972, December 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT												
22...	1210	80513	80513	145	.80	3.00	778	8.2	88	7.2	45	19.9
22...	1211	80513	80513	145	10.1	--	778	8.1	87	7.3	45	19.7
22...	1212	80513	80513	145	20.0	--	778	8.0	86	7.2	45	19.7
22...	1213	80513	80513	145	30.0	--	778	7.8	84	7.1	45	19.7
22...	1215	80513	80513	145	40.0	--	778	2.3	24	6.3	46	18.6
22...	1216	80513	80513	145	43.0	--	778	1.8	18	6.2	46	17.5
22...	1218	80513	80513	145	45.1	--	778	1.9	19	6.1	46	16.5
22...	1219	80513	80513	145	47.0	--	778	2.2	21	6.1	46	15.6
22...	1220	80513	80513	145	49.2	--	778	2.3	22	6.1	46	14.8
22...	1221	80513	80513	145	50.1	--	778	2.4	23	6.0	46	14.4
22...	1222	80513	80513	145	53.1	--	778	2.8	26	6.0	45	13.6
22...	1223	80513	80513	145	56.0	--	778	3.3	30	6.0	45	12.7
22...	1224	80513	80513	145	60.0	--	778	3.9	35	6.1	45	12.0
22...	1225	80513	80513	145	65.0	--	778	4.5	40	6.1	45	11.3
22...	1226	80513	80513	145	70.0	--	778	4.9	43	6.1	45	10.6
22...	1227	80513	80513	145	80.0	--	778	5.5	47	6.1	45	9.9
22...	1228	80513	80513	145	89.9	--	778	5.5	47	6.1	46	9.4
22...	1229	80513	80513	145	100	--	778	5.5	47	6.1	46	9.0
22...	1230	80513	80513	145	110	--	778	5.2	43	6.1	46	8.7
22...	1231	80513	80513	145	120	--	778	4.5	37	6.1	47	8.5
22...	1232	80513	80513	145	130	--	778	4.0	34	6.0	47	8.4
22...	1233	80513	80513	145	140	--	778	3.6	30	6.0	47	8.4
22...	1234	80513	80513	145	145	--	778	3.5	29	6.0	48	8.3
NOV												
04...	1155	80513	80513	149	1.10	3.40	772	7.8	79	6.8	44	16.5
04...	1157	80513	80513	149	10.2	--	772	7.7	78	6.3	44	16.5
04...	1158	80513	80513	149	20.0	--	772	7.8	78	6.5	44	16.5
04...	1159	80513	80513	149	30.1	--	772	7.6	77	6.7	44	16.5
04...	1200	80513	80513	149	40.0	--	772	7.6	77	6.7	44	16.4
04...	1202	80513	80513	149	46.0	--	772	2.3	23	6.0	45	15.4
04...	1203	80513	80513	149	50.0	--	772	2.5	25	6.0	44	14.3
04...	1204	80513	80513	149	55.0	--	772	3.1	29	6.0	44	13.1
04...	1205	80513	80513	149	60.0	--	772	3.6	33	6.0	44	12.1
04...	1206	80513	80513	149	65.0	--	772	4.3	39	6.0	44	11.2
04...	1207	80513	80513	149	70.0	--	772	4.8	42	6.0	44	10.5
04...	1208	80513	80513	149	80.0	--	772	5.2	45	6.0	44	9.8
04...	1209	80513	80513	149	90.0	--	772	5.3	46	6.0	44	9.3
04...	1210	80513	80513	149	100	--	772	5.2	44	6.0	44	9.0
04...	1211	80513	80513	149	110	--	772	4.7	40	6.0	45	8.7
04...	1212	80513	80513	149	120	--	772	4.2	35	6.0	46	8.6
04...	1213	80513	80513	149	130	--	772	3.7	31	5.9	46	8.5
04...	1214	80513	80513	149	140	--	772	3.4	28	5.9	46	8.4
04...	1215	80513	80513	149	149	--	772	2.9	24	5.9	48	8.3
DEC												
04...	1042	80513	80513	143	.20	5.20	762	8.7	80	6.8	43	11.9
04...	1043	80513	80513	143	10.0	--	762	8.7	81	6.8	43	11.9
04...	1044	80513	80513	143	20.1	--	762	8.6	80	6.8	43	11.9
04...	1045	80513	80513	143	30.1	--	762	8.6	79	6.8	43	11.9
04...	1046	80513	80513	143	40.0	--	732	8.5	82	6.8	43	11.9
04...	1047	80513	80513	143	50.0	--	762	8.5	78	6.8	43	11.9
04...	1048	80513	80513	143	60.0	--	762	8.5	79	6.7	43	11.9
04...	1049	80513	80513	143	70.1	--	762	6.4	59	6.4	43	11.3
04...	1050	80513	80513	143	80.0	--	762	4.2	37	6.2	43	10.3
04...	1051	80513	80513	143	90.1	--	762	4.2	37	6.1	43	9.8
04...	1052	80513	80513	143	100	--	762	4.1	36	6.1	43	9.4
04...	1053	80513	80513	143	110	--	762	3.5	31	6.1	44	8.9
04...	1054	80513	80513	143	120	--	762	2.8	24	6.1	44	8.7
04...	1055	80513	80513	143	130	--	762	2.4	21	6.1	44	8.6
04...	1056	80513	80513	143	140	--	762	1.9	16	6.0	46	8.5
04...	1057	80513	80513	143	143	--	762	1.9	16	6.1	46	8.5
19...	1650	80513	80513	144	.00	--	732	9.3	87	6.6	43	10.7
19...	1651	80513	80513	144	10.0	--	732	9.2	86	6.6	43	10.8
19...	1652	80513	80513	144	20.0	--	732	9.2	86	6.7	43	10.7
19...	1653	80513	80513	144	30.0	--	732	8.9	83	6.6	43	10.6
19...	1654	80513	80513	144	40.0	--	732	8.7	82	6.5	43	10.5
19...	1655	80513	80513	144	50.0	--	732	8.5	79	6.5	43	10.3
19...	1656	80513	80513	144	60.1	--	732	8.5	79	6.5	43	10.2
19...	1657	80513	80513	144	70.0	--	732	8.4	78	6.5	43	10.1
19...	1658	80513	80513	144	80.1	--	732	8.1	75	6.4	43	10.1
19...	1659	80513	80513	144	90.1	--	732	8.1	74	6.4	43	10.0
19...	1700	80513	80513	144	100	--	732	7.0	64	6.2	43	9.9
19...	1701	80513	80513	144	110	--	732	4.4	40	6.0	43	9.6
19...	1702	80513	80513	144	120	--	732	3.2	29	5.9	44	9.3
19...	1703	80513	80513	144	130	--	732	2.4	22	5.9	45	9.0
19...	1704	80513	80513	144	140	--	732	1.8	16	5.9	46	8.8
19...	1705	80513	80513	144	144	--	732	1.6	15	5.9	46	8.8

WHITE RIVER BASIN

07075900 GREERS FERRY LAKE NEAR HEBER SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Reser- voir depth, feet (72025)	Sam- pling depth, feet (00003)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat un- f/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
MAR												
18...	0903	80513	80513	147	.60	4.20	752	10.9	101	7.4	43	11.3
18...	0904	80513	80513	147	9.90	--	752	11.8	103	7.6	43	8.8
18...	0905	80513	80513	147	20.0	--	752	11.8	99	7.4	43	7.5
18...	0906	80513	80513	147	30.0	--	752	11.1	93	7.2	43	7.0
18...	0907	80513	80513	147	40.0	--	752	10.6	87	7.0	43	6.4
18...	0908	80513	80513	147	50.0	--	752	10.4	85	6.9	43	6.2
18...	0909	80513	80513	147	60.0	--	752	10.5	86	6.8	43	6.2
18...	0910	80513	80513	147	70.0	--	752	10.4	85	6.9	43	6.1
18...	0911	80513	80513	147	80.0	--	752	10.5	86	6.8	43	6.1
18...	0912	80513	80513	147	90.0	--	752	10.4	85	6.8	43	6.1
18...	0913	80513	80513	147	100	--	752	10.6	86	6.8	43	6.0
18...	0914	80513	80513	147	110	--	752	10.7	87	6.8	43	6.0
18...	0915	80513	80513	147	120	--	752	10.6	86	6.8	43	6.0
18...	0916	80513	80513	147	130	--	752	10.5	85	6.8	43	6.0
18...	0917	80513	80513	147	140	--	752	10.4	85	6.8	43	6.0
18...	0918	80513	80513	147	147	--	752	10.4	85	6.8	43	6.0
AUG												
14...	1250	80513	80513	146	1.00	3.40	775	7.4	95	7.4	47	29.5
14...	1251	80513	80513	146	10.0	--	775	7.4	94	7.5	47	28.7
14...	1252	80513	80513	146	20.1	--	775	7.2	92	7.5	47	28.6
14...	1253	80513	80513	146	25.1	--	775	7.8	98	7.3	46	27.9
14...	1254	80513	80513	146	27.1	--	775	8.0	99	7.3	46	27.0
14...	1255	80513	80513	146	28.1	--	775	8.0	98	7.1	46	26.1
14...	1256	80513	80513	146	30.0	--	775	7.5	90	6.8	46	25.2
14...	1257	80513	80513	146	32.0	--	775	5.5	63	6.3	45	23.4
14...	1258	80513	80513	146	34.1	--	775	3.9	44	6.0	45	22.1
14...	1259	80513	80513	146	36.1	--	775	3.1	35	5.9	44	20.9
14...	1300	80513	80513	146	38.1	--	775	2.8	31	5.8	44	20.1
14...	1301	80513	80513	146	40.0	--	775	2.8	30	5.8	44	19.2
14...	1302	80513	80513	146	44.0	--	775	3.3	34	5.8	44	18.1
14...	1303	80513	80513	146	50.0	--	775	4.0	40	5.8	45	16.4
14...	1304	80513	80513	146	55.1	--	775	5.0	48	5.8	46	14.9
14...	1305	80513	80513	146	60.1	--	775	5.9	55	5.9	46	13.6
14...	1306	80513	80513	146	65.0	--	775	6.6	61	5.9	47	12.3
14...	1307	80513	80513	146	70.1	--	775	6.8	61	5.9	47	11.4
14...	1308	80513	80513	146	80.0	--	775	7.1	62	5.8	47	10.1
14...	1309	80513	80513	146	90.1	--	775	7.1	60	5.8	48	8.9
14...	1310	80513	80513	146	100	--	775	7.1	59	5.8	49	8.0
14...	1311	80513	80513	146	110	--	775	6.8	56	5.7	49	7.5
14...	1312	80513	80513	146	120	--	775	6.6	53	5.7	49	7.2
14...	1313	80513	80513	146	130	--	775	6.4	52	5.7	49	7.1
14...	1314	80513	80513	146	140	--	775	6.3	51	5.7	49	7.0
14...	1315	80513	80513	146	146	--	775	6.1	49	5.7	49	6.9
SEP												
10...	1403	80513	80513	128	.70	5.50	768	6.8	87	7.3	47	28.1
10...	1404	80513	80513	128	10.0	--	768	6.7	84	7.4	47	27.4
10...	1405	80513	80513	128	20.0	--	768	6.6	83	7.4	47	27.3
10...	1406	80513	80513	128	28.0	--	768	6.5	81	7.0	47	26.9
10...	1407	80513	80513	128	30.0	--	768	5.9	71	6.7	46	25.4
10...	1408	80513	80513	128	32.0	--	768	5.1	61	6.5	46	24.4
10...	1409	80513	80513	128	34.0	--	768	3.4	39	6.2	45	23.0
10...	1410	80513	80513	128	36.0	--	768	2.2	24	6.0	45	21.4
10...	1411	80513	80513	128	38.0	--	768	1.8	19	5.9	45	20.5
10...	1412	80513	80513	128	40.0	--	768	1.8	19	5.9	44	19.6
10...	1413	80513	80513	128	42.0	--	768	2.0	21	5.9	44	18.6
10...	1414	80513	80513	128	45.0	--	768	2.2	22	5.8	45	17.2
10...	1415	80513	80513	128	50.0	--	768	3.4	34	5.9	46	15.6
10...	1416	80513	80513	128	60.0	--	768	5.0	48	5.9	47	13.2
10...	1417	80513	80513	128	70.0	--	768	5.7	52	5.9	47	11.4
10...	1418	80513	80513	128	80.1	--	768	6.0	53	5.9	48	10.0
10...	1419	80513	80513	128	90.0	--	768	5.9	50	5.8	49	8.9
10...	1420	80513	80513	128	100	--	768	5.7	48	5.8	49	8.3
10...	1421	80513	80513	128	110	--	768	5.5	45	5.7	50	7.8
10...	1422	80513	80513	128	120	--	768	5.1	42	5.7	50	7.4
10...	1423	80513	80513	128	128	--	768	4.9	41	5.8	50	7.3

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS

LOCATION.--Lat 35°31'02", long 91°59'50", in NE1/4 sec.7, T.10 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, on right bank 1,600 ft downstream from Greers Ferry Dam, 3.0 mi northeast of Heber Springs, and at mile 78.8.

DRAINAGE AREA.--1,153 mi².

PERIOD OF RECORD.--November 1949 to September 1952, water years 1955-71, December 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1949 to September 1952, water years 1968-71, May 1991 to current year.

DISSOLVED OXYGEN: May 1991 to current year.

REMARKS.--Flow regulated by Greers Ferry Lake. Dissolved oxygen and water temperature collected continuously June through December. Dissolved oxygen records good except those from the period June 17 to July 1, which are poor. Satellite telemeter at station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth at sample location, feet (81903)	Sampling depth, feet (00003)	Stream width, feet (00004)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Location in X-sect. looking downstrm ft from l bank (00009)
OCT	22... 1145	80513	80513	--	--	--	778	7.2	63	5.5	46	10.4	--
NOV	04... 1247	80513	80513	--	--	--	775	11.8	104	6.6	46	10.8	--
DEC	04... 1128	80513	80513	--	--	--	767	7.1	62	6.0	44	9.7	--
	19... 1726	80513	80513	--	--	--	730	7.7	71	6.2	46	9.8	--
MAR	18... 0950	80513	80513	--	--	--	752	10.5	87	6.8	45	6.9	--
JUL	28... 1201	80513	80513	1.00	.50	500	767	8.6	76	6.3	47	10.0	25.0
	28... 1202	80513	80513	1.00	.50	500	767	8.6	76	6.3	47	10.0	75.0
	28... 1203	80513	80513	1.50	.50	500	767	8.7	76	6.3	47	9.8	125
	28... 1204	80513	80513	1.00	.50	500	767	8.8	77	6.3	47	9.7	175
	28... 1205	80513	80513	2.00	.50	500	767	8.8	77	6.3	47	9.6	225
	28... 1206	80513	80513	2.20	.50	500	767	8.8	77	6.3	47	9.7	275
	28... 1207	80513	80513	2.10	.50	500	767	8.8	77	6.3	47	9.7	325
	28... 1208	80513	80513	1.70	.50	500	767	8.8	77	6.3	48	9.8	375
	28... 1209	80513	80513	1.30	.50	500	767	8.8	77	6.3	48	10.0	425
	28... 1210	80513	80513	1.00	.50	500	767	8.4	74	6.2	49	10.4	475
AUG	14... 1134	80513	80513	--	--	--	775	10.2	94	6.4	48	12.5	--
SEP	10... 1331	80513	80513	--	--	--	775	8.2	71	5.9	49	9.5	--

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.2	6.0	7.8	9.4	7.7	8.4	9.4	5.4	7.5	---	---	---
2	9.4	6.1	7.6	9.0	8.0	8.5	9.0	5.4	7.1	---	---	---
3	8.9	5.9	7.2	9.0	7.8	8.4	9.2	5.4	6.8	---	---	---
4	9.8	6.9	7.9	8.8	6.6	7.5	8.9	5.3	6.6	---	---	---
5	9.4	6.1	8.0	7.6	5.7	7.0	9.2	5.9	7.2	---	---	---
6	9.3	7.2	7.9	7.6	6.8	7.1	9.2	5.7	6.8	---	---	---
7	9.7	7.3	8.0	7.7	6.7	7.1	9.2	6.0	6.8	---	---	---
8	9.4	7.4	8.2	8.0	6.5	7.1	6.3	5.9	6.1	---	---	---
9	8.2	5.9	7.5	7.3	6.1	6.6	7.8	5.6	6.3	---	---	---
10	8.6	7.1	7.7	7.5	6.2	6.7	8.7	5.8	6.9	---	---	---
11	8.1	5.7	7.4	7.5	6.4	6.9	8.9	5.8	7.0	---	---	---
12	8.8	6.7	7.5	8.1	5.6	7.2	8.6	5.7	7.0	---	---	---
13	9.0	5.9	7.7	10.3	5.5	8.1	8.0	5.9	7.0	---	---	---
14	8.1	5.6	7.3	8.0	5.3	7.2	7.8	5.4	6.1	---	---	---
15	7.9	5.4	7.1	8.0	6.6	7.3	7.4	5.2	5.8	---	---	---
16	8.8	5.2	7.0	8.4	7.1	7.7	7.1	5.0	5.6	---	---	---
17	7.8	5.9	7.2	8.1	7.1	7.6	9.4	5.5	6.8	---	---	---
18	8.1	5.2	6.9	8.6	5.4	6.9	9.4	5.4	6.5	---	---	---
19	7.2	6.4	6.7	8.8	5.2	7.0	8.9	4.9	6.0	---	---	---
20	7.3	6.3	6.7	8.6	5.5	7.4	8.9	5.5	6.5	---	---	---
21	7.9	5.0	6.7	9.4	5.8	7.6	6.2	5.1	5.5	---	---	---
22	7.4	5.0	6.3	8.8	5.3	6.9	6.5	4.9	5.7	---	---	---
23	9.0	5.4	7.0	10.6	6.0	8.8	9.8	5.2	6.3	---	---	---
24	8.4	5.4	6.9	9.9	7.6	8.5	8.5	5.5	6.6	---	---	---
25	7.7	6.6	7.0	8.2	4.9	6.2	7.1	6.4	6.6	---	---	---
26	7.9	6.7	7.2	8.4	4.8	6.0	10.0	5.7	7.1	---	---	---
27	8.4	7.0	7.5	8.8	4.8	6.5	6.3	5.2	5.5	---	---	---
28	8.2	5.7	6.8	8.8	6.4	7.1	5.8	5.0	5.4	---	---	---
29	9.3	5.9	7.6	8.9	5.4	7.7	5.7	4.7	5.2	---	---	---
30	8.9	5.8	7.5	10.9	6.1	8.2	6.1	4.8	5.2	---	---	---
31	9.3	6.2	8.2	---	---	---	---	---	---	---	---	---
MONTH	9.8	5.0	7.4	10.9	4.8	7.4	---	---	---	---	---	---

WHITE RIVER BASIN

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.7	9.6	10.4	10.0	8.6	9.3	9.0	7.4	8.4
2	---	---	---	11.8	10.3	10.9	9.9	8.8	9.5	9.3	8.1	8.6
3	---	---	---	11.8	10.3	10.9	9.8	8.7	9.5	8.9	7.1	8.3
4	---	---	---	12.1	10.3	10.9	10.0	8.5	9.2	9.2	7.2	8.3
5	---	---	---	11.9	10.5	11.0	10.0	8.5	9.3	8.9	7.2	8.3
6	---	---	---	12.9	10.2	11.0	9.9	8.4	9.1	9.3	7.8	8.5
7	---	---	---	12.7	9.8	10.5	9.9	8.3	9.1	9.2	7.3	8.6
8	---	---	---	11.8	9.7	10.6	9.6	8.2	9.1	9.0	7.2	8.4
9	---	---	---	12.1	9.6	10.7	11.4	9.1	10	9.8	7.4	8.5
10	---	---	---	11.3	9.4	10.2	11.5	9.3	10.2	10.3	8.2	9.1
11	---	---	---	13.5	10.0	11.1	9.9	8.2	9.2	10.4	8.3	9.2
12	---	---	---	10.9	10.2	10.5	9.6	8.1	9.0	9.2	7.3	8.4
13	---	---	---	11.0	10.0	10.4	9.5	8.2	9.0	9.8	8.1	8.8
14	---	---	---	11.9	9.0	10.0	10.9	8.7	9.4	9.9	7.9	8.8
15	---	---	---	10.8	9.0	9.6	---	---	---	10.1	7.2	8.4
16	---	---	---	11.6	8.9	9.9	---	---	---	8.9	7.1	8.3
17	---	---	---	11.0	8.3	9.7	---	---	---	9.0	7.0	8.5
18	11.1	9.3	9.9	13.4	8.7	11.2	9.7	7.8	8.7	9.0	7.2	8.4
19	10.3	9.3	9.6	10.0	9.1	9.6	9.7	7.7	8.6	9.6	8.1	8.7
20	11.6	9.2	9.8	10.0	8.9	9.5	9.4	7.5	8.4	9.5	8.3	8.8
21	11.6	9.2	10.3	9.9	8.6	9.3	9.6	7.4	8.3	9.3	8.1	8.5
22	11.1	9.2	10.1	11.1	9.1	9.8	10.0	7.3	8.4	9.0	7.2	8.4
23	10.9	9.2	10	10.2	9.3	9.7	10.1	7.3	8.5	9.1	7.7	8.3
24	10.3	9.1	9.7	11.1	9.0	10	8.6	7.1	8.0	9.4	7.5	8.1
25	10.6	9.2	9.9	10.3	8.9	9.6	8.6	6.9	7.8	9.4	7.6	8.4
26	10.6	9.8	10.1	10.0	9.1	9.6	8.6	6.8	7.8	8.4	6.5	7.7
27	10.6	9.7	10.1	10.2	8.9	9.5	8.9	6.8	7.8	8.8	7.3	7.9
28	10.4	9.6	10	11.2	8.8	9.6	8.9	6.9	7.9	8.9	7.6	8.1
29	10.6	9.6	10.1	10.5	8.7	9.6	9.6	6.8	8.0	8.6	7.7	8.2
30	10.8	9.6	10	11.1	8.6	9.7	9.0	6.9	8.2	8.4	6.6	7.6
31	---	---	---	11.1	8.6	9.6	9.5	8.0	8.7	---	---	---
MONTH	---	---	---	13.5	8.3	10.1	---	---	---	10.4	6.5	8.4

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.6	8.6	9.1	9.2	8.3	8.8	9.7	8.2	9.2	---	---	---
2	10.9	8.6	9.0	8.8	8.3	8.5	10.1	8.5	9.5	---	---	---
3	9.5	8.7	9.1	9.0	8.5	8.7	9.8	8.9	9.5	---	---	---
4	11.1	8.8	9.4	8.9	8.4	8.6	9.8	9.2	9.6	---	---	---
5	10.6	8.4	9.2	9.6	8.5	9.0	9.8	8.4	9.5	---	---	---
6	10.3	8.5	9.0	10.0	8.3	8.8	9.8	8.2	9.4	---	---	---
7	10.9	8.4	9.3	10.3	8.1	8.8	9.7	8.3	9.0	---	---	---
8	10.4	8.4	8.9	10.6	8.1	9.0	9.2	8.1	8.5	---	---	---
9	9.2	8.6	8.8	9.8	8.8	9.2	9.5	8.3	9.0	---	---	---
10	9.3	8.7	8.9	11.0	8.6	9.5	9.6	8.6	9.3	---	---	---
11	9.8	8.7	9.1	9.7	8.3	8.7	9.8	8.7	9.4	---	---	---
12	9.5	8.7	9.0	9.8	7.9	8.7	9.6	8.8	9.3	---	---	---
13	9.8	8.3	9.0	9.9	8.1	9.0	9.5	8.5	9.2	---	---	---
14	9.9	8.0	8.8	9.7	8.3	8.9	9.8	8.3	8.9	---	---	---
15	10.6	8.1	9.0	9.1	8.3	8.7	9.8	8.1	8.7	---	---	---
16	13.4	8.2	9.6	9.4	8.0	8.5	9.3	8.4	8.8	---	---	---
17	11.1	8.7	9.6	10.0	8.0	8.6	10.0	8.9	9.4	---	---	---
18	10.6	8.7	9.3	9.6	8.1	9.1	10.0	9.2	9.4	---	---	---
19	9.5	8.8	9.1	10.1	8.4	9.3	9.6	8.9	9.2	---	---	---
20	9.5	8.8	9.1	10.0	8.2	9.2	9.6	8.3	8.8	---	---	---
21	10.3	8.8	9.3	9.8	8.2	9.0	9.4	8.0	8.5	---	---	---
22	10.4	8.9	9.3	9.8	8.2	9.2	9.4	8.0	8.5	---	---	---
23	11.0	8.6	9.3	9.9	8.2	9.1	9.1	8.0	8.4	---	---	---
24	9.9	8.7	9.2	10.0	8.2	8.9	8.5	7.6	8.1	---	---	---
25	9.8	8.8	9.2	9.8	8.2	9.3	8.9	7.5	8.0	---	---	---
26	9.6	8.7	9.0	9.8	8.6	9.5	9.0	7.7	8.4	---	---	---
27	9.9	8.4	9.0	9.9	9.1	9.5	9.4	8.0	8.4	---	---	---
28	9.4	8.8	9.1	9.5	8.0	8.7	9.2	7.9	8.4	---	---	---
29	9.4	8.8	9.2	9.8	8.2	9.0	9.5	8.1	8.7	---	---	---
30	9.4	8.7	9.1	9.7	8.1	9.1	9.6	9.0	9.3	---	---	---
31	9.2	8.4	8.9	---	---	---	---	---	---	---	---	---
MONTH	13.4	8.0	9.1	11.0	7.9	9.0	---	---	---	---	---	---

WHITE RIVER BASIN

223

07076000 LITTLE RED RIVER NEAR HEBER SPRINGS--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.4	6.9	7.2	9.8	7.2	7.8	9.4	7.5	8.1	10.1	8.0	8.6
2	7.4	7.1	7.2	9.8	7.1	7.8	9.5	7.5	8.1	9.6	8.0	8.5
3	7.4	7.1	7.3	9.0	7.3	7.7	10.4	7.4	8.2	9.4	7.9	8.4
4	7.6	7.3	7.4	8.1	7.1	7.5	10.1	7.6	8.2	11.0	7.6	8.5
5	---	---	---	8.8	7.2	7.6	9.2	7.6	8.1	11.2	7.6	8.5
6	---	---	---	8.9	7.2	7.6	10.4	7.6	8.2	10.6	7.5	8.4
7	---	---	---	8.5	7.2	7.6	10.3	7.6	8.3	10.3	7.5	8.4
8	---	---	---	10.0	7.2	7.9	10.5	7.5	8.3	10.5	7.6	8.4
9	---	---	---	10.3	7.3	8.0	9.4	7.5	8.0	10.4	7.6	8.3
10	---	---	---	8.9	7.4	7.9	9.8	7.4	8.0	9.8	7.7	8.4
11	---	---	---	9.7	7.3	8.0	9.5	7.4	8.1	9.6	7.8	8.5
12	---	---	---	10.8	7.5	8.2	10.2	7.4	8.2	8.9	7.9	8.3
13	---	---	---	9.6	7.3	7.7	9.0	7.7	8.2	10.9	7.9	8.5
14	---	---	---	8.1	7.2	7.7	10.5	7.6	8.3	9.5	7.8	8.5
15	---	---	---	8.2	7.3	7.8	10.0	7.5	8.2	9.8	7.5	8.1
16	---	---	---	8.4	7.3	7.8	9.5	7.6	8.3	10.4	7.3	8.2
17	---	---	---	8.4	7.4	7.8	9.6	7.6	8.3	10.7	7.5	8.5
18	7.8	7.2	7.6	8.5	7.3	7.7	8.7	7.7	8.3	10.6	7.5	8.5
19	7.9	7.1	7.6	12.0	7.5	8.7	10.1	7.7	8.4	10.1	7.9	8.5
20	7.8	7.2	7.6	10.4	7.5	8.2	9.9	7.8	8.5	10.5	7.5	8.3
21	8.0	7.0	7.6	8.8	7.7	8.1	8.9	7.8	8.5	8.6	7.6	8.0
22	8.6	7.2	7.7	10.4	7.4	8.4	9.6	7.8	8.4	11.0	7.8	8.6
23	9.9	7.0	7.7	10.9	7.3	8.4	10.8	8.0	8.7	9.7	7.6	8.2
24	9.1	7.1	7.7	10.8	7.3	8.3	10.3	7.8	8.5	9.7	7.6	8.3
25	9.5	7.1	7.7	9.9	7.3	7.9	10.0	7.8	8.6	10.0	7.7	8.6
26	9.0	7.2	7.9	9.7	7.3	7.9	9.1	8.0	8.5	10.8	7.5	8.4
27	11.3	7.0	8.1	9.3	7.3	7.9	9.7	7.8	8.5	9.9	7.7	8.4
28	10.9	7.0	8.2	10.3	7.4	8.1	9.3	7.9	8.5	10.2	7.4	8.4
29	9.6	7.1	8.1	9.6	7.4	8.1	10.4	7.9	8.7	10.1	7.3	8.2
30	8.2	7.3	7.6	9.2	7.6	8.2	10.2	7.9	8.6	8.9	7.6	8.2
31	---	---	---	10.2	7.5	8.2	9.9	7.9	8.7	---	---	---
MONTH	---	---	---	12.0	7.1	8.0	10.8	7.4	8.3	11.2	7.3	8.4

WHITE RIVER BASIN

07076517 LITTLE RED RIVER NEAR DEWEY

LOCATION.--Lat 35°26'16", long 91°44'48", in SW_{1/4}NW_{1/4} sec.3, T.9 N., R.7 W., White County, Hydrologic Unit 11010014, near right bank on downstream side of bridge on State Highway 124, 1.3 mi northeast of Dewey.

DRAINAGE AREA.--1,340 mi².

PERIOD OF RECORD.--December 1996 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow completely regulated since March 30, 1962, by Greers Ferry Lake 30.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	747	699	843	2620	135	4240	643	152	3090	1680	1900	305
2	1290	454	1950	1380	111	1530	142	472	3800	967	2350	451
3	2070	182	2840	1080	107	2820	114	233	3660	2150	310	593
4	2100	96	4520	1070	104	3570	109	206	3970	2120	247	400
5	793	109	4060	584	102	2410	107	934	3890	2410	2150	318
6	412	610	2810	398	341	1500	105	860	4040	2080	917	408
7	249	257	3050	326	169	1490	121	1800	2350	1840	2190	266
8	591	120	340	1070	451	662	318	683	6040	2500	1490	292
9	382	104	210	493	128	228	1660	946	6740	2160	1520	336
10	327	98	2470	296	146	469	784	2070	6720	2190	331	273
11	200	94	3820	1290	681	2140	132	1510	6730	2080	229	277
12	495	91	3000	284	785	751	104	690	6870	308	921	290
13	324	329	2910	287	749	443	98	1060	6780	352	1870	919
14	294	868	1990	1390	3100	174	95	1070	6790	717	713	899
15	382	279	372	1570	2790	286	91	1390	6870	2880	702	476
16	708	159	193	1790	3530	147	89	4470	5270	2520	2170	809
17	1510	89	427	1930	1680	127	89	24100	3050	1960	1960	732
18	346	205	1070	844	1460	121	88	5430	3870	1810	2160	350
19	1150	2550	1540	658	1020	275	86	1390	3600	962	2420	433
20	203	1860	1150	141	788	379	89	1900	3570	328	2220	623
21	114	811	447	112	977	287	90	930	3370	225	3040	312
22	1160	2590	253	107	1690	1700	743	798	3280	2040	2690	333
23	1430	1830	238	876	1530	335	144	547	1900	425	2990	248
24	1420	688	1070	2010	1310	174	112	1520	1890	168	1760	314
25	1050	1160	911	1180	3550	254	214	576	2050	211	2140	343
26	187	4620	504	197	5770	314	422	466	2080	1770	2420	260
27	84	3340	649	146	4240	380	210	422	263	915	2410	419
28	171	2200	291	696	3870	230	108	1540	167	1990	2270	275
29	1540	513	223	628	---	539	98	3090	156	1900	2370	300
30	1310	1470	209	134	---	177	295	3260	200	1640	1590	266
31	1280	---	2380	349	---	446	---	2900	---	1900	474	---
TOTAL	24319	28475	46740	25936	41314	28598	7500	67415	113056	47198	52924	12520
MEAN	784	949	1508	837	1476	923	250	2175	3769	1523	1707	417
MAX	2100	4620	4520	2620	5770	4240	1660	24100	6870	2880	3040	919
MIN	84	89	193	107	102	121	86	152	156	168	229	248
AC-FT	48240	56480	92710	51440	81950	56720	14880	133700	224200	93620	105000	24830

WHITE RIVER BASIN

07076517 LITTLE RED RIVER NEAR DEWEY--CONTINUED

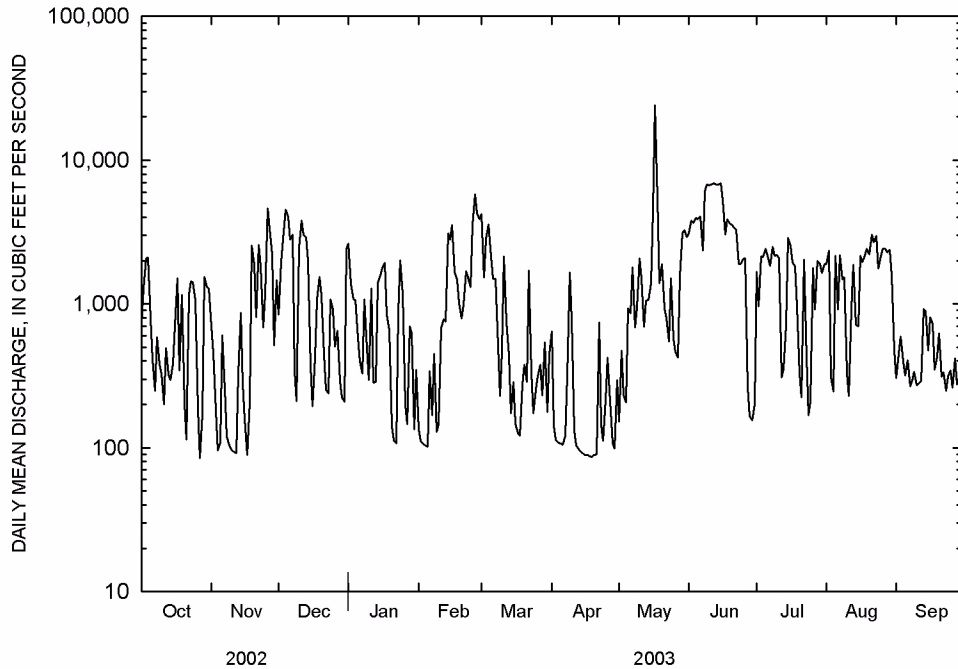
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	632	503	1564	1558	2615	2882	1900	1835	1924	1486	1186	591
MAX	1159	949	5060	4241	4394	4573	3445	3501	3769	2975	1707	855
(WY)	1999	2003	1997	1997	1998	1997	1998	1997	2003	2002	2003	2000
MIN	213	149	199	353	383	923	250	420	474	972	704	374
(WY)	2002	1998	1998	2000	2000	2003	2003	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	737699		495995			
ANNUAL MEAN	2021		1359		1383	
HIGHEST ANNUAL MEAN					2010 2002	
LOWEST ANNUAL MEAN					949 2000	
HIGHEST DAILY MEAN	7930	Mar 20	24100	May 17	24100	May 17 2003
LOWEST DAILY MEAN	84	Oct 27	84	Oct 27	83	Oct 30 2000
ANNUAL SEVEN-DAY MINIMUM	156	Nov 7	89	Apr 15	89	Apr 15 2003
MAXIMUM PEAK FLOW			28200	May 17	¹ 28200	May 17 2003
MAXIMUM PEAK STAGE			30.24	May 17	30.24	May 17 2003
INSTANTANEOUS LOW FLOW			79	Oct 27	79	² Oct 27 2002
ANNUAL RUNOFF (AC-FT)	1463000		983800		1002000	
10 PERCENT EXCEEDS	3820		3090		3420	
50 PERCENT EXCEEDS	1690		747		795	
90 PERCENT EXCEEDS	296		128		142	

¹From rating curve extended above 25,700 ft³/s

²Also October 28, 2002



WHITE RIVER BASIN

07077000 WHITE RIVER AT DEVALLS BLUFF

LOCATION.--Lat 34°47'25", long 91°26'45", in SE_{1/4} sec.17, T.2 N., R.4 W., Prairie County, Hydrologic Unit 08020301, near center of span on downstream side of bridge on U.S. Highway 70, 1.0 mi northeast of DeValls Bluff, 7.5 mi downstream from Wattensaw Bayou, 24.1 mi upstream from Cache River, and at mile 125.3.

DRAINAGE AREA.--23,431 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1945 (large part of floodflow above station overflowed into Cache River and was not included in the records), October 1949 to September 1970, October 1988 to current year. Monthly discharge only for some periods, published in WSP 1311. Daily stages for the period October 1970 to date published in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 152.93 ft above NGVD of 1929. Prior to Dec. 22, 1933, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. Some regulation since 1943 by Norfork Lake, capacity, 1,983,000 acre-ft, since 1948 by Clearwater Lake (Missouri), capacity, 413,700 acre-ft, since July 24, 1951, by Bull Shoals Lake, capacity, 5,408,000 acre-ft, since Sept. 9, 1956, by Table Rock Lake (Missouri), capacity, 3,567,500 acre-ft, since Mar. 30, 1962, by Greers Ferry Lake, capacity, 2,926,500 acre-ft, and since Dec. 26, 1963, by Beaver Lake, capacity, 1,951,500 acre-ft. Satellite telemeter at station.

COOPERATION.--Gage-height record was provided by the U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 23, 1927, reached a stage of 34.6 ft. Flood of Feb. 3, 1949, reached a stage of 31.35 ft, discharge, 220,000 ft³/s by current-meter measurement, furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23800	9870	9390	23800	14600	41400	18200	17600	35900	15900	15900	16800
2	21500	10600	9370	27900	13800	41800	17500	18600	e33600	15200	16200	16000
3	19700	10800	8720	31400	13500	41700	16400	19700	31600	14700	17100	15200
4	19600	10800	8920	33600	13600	41200	15300	19700	30000	15000	17900	15000
5	20600	10900	10300	35100	13000	40200	14500	18800	28600	15400	17700	16900
6	21100	10800	11700	36200	11900	38600	14400	18700	27600	15400	17400	19200
7	21000	10400	12900	37000	10900	36900	14700	18900	27200	15400	16800	20800
8	20200	9910	14200	37300	11500	35500	14900	20200	26900	15000	16500	21700
9	19000	9560	14400	37400	13500	34500	14700	21200	26500	14400	16500	21500
10	17700	9700	13600	37300	14800	32800	14900	20900	26400	13700	16400	20600
11	16400	9920	12900	37000	14700	31000	15900	20900	25700	13600	16100	19200
12	15100	9680	12900	36600	13900	29400	16700	21400	24800	14200	15600	17700
13	14000	8990	13500	36000	13200	27900	17300	22200	23600	14500	14700	16700
14	13200	8110	14700	34900	14400	26800	17400	22500	22700	14300	13800	16200
15	12400	7440	15400	33600	19200	25600	17100	22500	22200	14000	13500	16400
16	11400	7290	14800	31900	25800	23900	16300	22800	23100	13900	13600	16300
17	10300	7880	13900	30400	30000	22500	15200	27700	24800	13700	14300	16000
18	10100	8670	13100	29200	32400	21300	14300	35800	24700	13700	15200	15400
19	11100	8870	15600	27300	33600	19800	13800	41500	24000	14500	16000	14600
20	12200	8670	18900	25600	34000	18300	13300	44900	23900	15500	16200	13700
21	12800	8820	20500	24400	34100	17700	12600	46700	23100	16400	16500	13000
22	12600	8620	21300	22700	35400	17900	12000	47900	21800	17200	17400	12500
23	12100	9000	22300	20300	37000	18500	11600	48700	20400	17900	18400	11700
24	11400	9750	25300	18300	37800	19300	11400	49100	18800	17800	19400	10700
25	11000	9510	27400	17800	38400	19600	11000	49300	17400	17300	19400	9740
26	11100	8800	27300	18600	39000	19300	11000	48900	16300	16700	18900	8920
27	11100	9120	26300	19500	39900	18700	12000	48100	16400	16600	18400	8240
28	10900	9680	25200	19300	40800	18400	14400	46800	16900	16500	18000	7730
29	10700	9630	23900	18200	---	18500	16700	44700	17100	16600	17800	7700
30	10200	9430	22500	16900	---	18800	17400	42200	16700	16400	17700	7620
31	9690	---	21700	15700	---	18800	---	39200	---	15800	17400	---
TOTAL	453990	281220	522900	871200	664700	836600	442900	988100	718700	477200	516700	443750
MEAN	14640	9374	16870	28100	23740	26990	14760	31870	23960	15390	16670	14790
MAX	23800	10900	27400	37400	40800	41800	18200	49300	35900	17900	19400	21700
MIN	9690	7290	8720	15700	10900	17700	11000	17600	16300	13600	13500	7620
AC-FT	900500	557800	1037000	1728000	1318000	1659000	878500	1960000	1426000	946500	1025000	880200

WHITE RIVER BASIN

07077000 WHITE RIVER AT DEVALLS BLUFF--CONTINUED

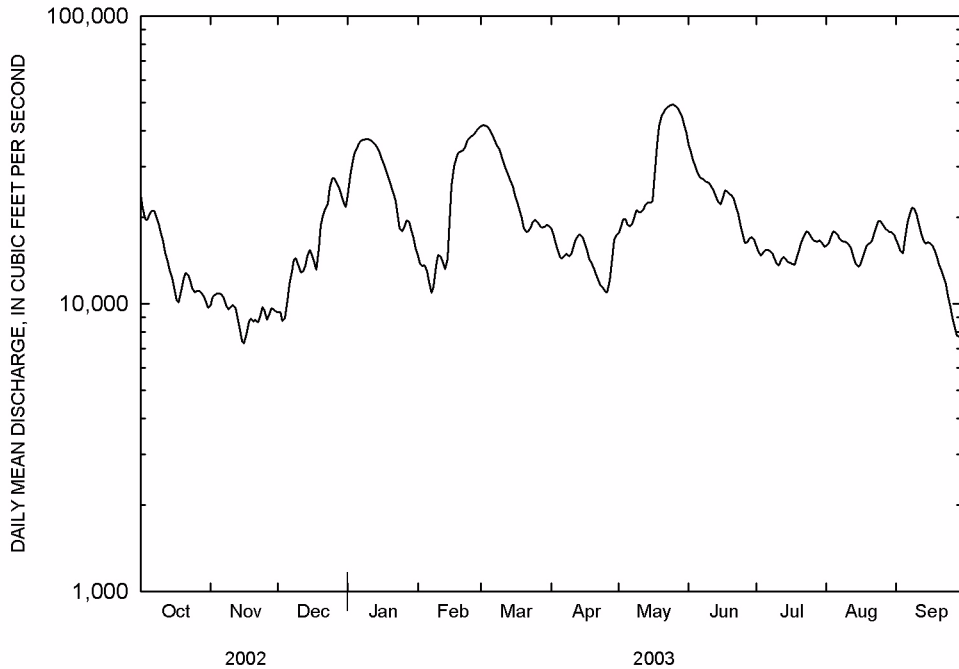
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-70, 1989-03, BY WATER YEAR (WY)

MEAN	11850	15460	23920	30330	36110	40310	41560	40570	26220	19550	16260	13100
MAX	30100	48890	67180	110000	107100	73060	75360	90730	73590	48560	48900	36450
(WY)	1950	1958	1952	1950	1950	1989	1957	1957	1957	1951	1957	1950
MIN	3715	3831	5260	6042	7974	13240	13230	7448	6676	7822	7112	4276
(WY)	1955	1955	1955	1964	1964	1996	1963	2001	2001	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950-70, 1989-03	
ANNUAL TOTAL	11373710		7217960			
ANNUAL MEAN	31160		19780		26220	
HIGHEST ANNUAL MEAN					51270 1950	
LOWEST ANNUAL MEAN					12230 1963	
HIGHEST DAILY MEAN	76200	Apr 3	49300	May 25	154000	Jan 19 1950
LOWEST DAILY MEAN	7290	Nov 16	7290	Nov 16	3230	Sep 29 1954
ANNUAL SEVEN-DAY MINIMUM	8130	Nov 14	8130	Nov 14	3290	Sep 26 1954
MAXIMUM PEAK FLOW			49400	May 24	154000	Jan 19 1950
MAXIMUM PEAK STAGE			21.73	May 24	28.42	Jan 20 1950
INSTANTANEOUS LOW FLOW			7240	Nov 16	3230	¹ Sep 29 1954
ANNUAL RUNOFF (AC-FT)	22560000		14320000		18990000	
10 PERCENT EXCEEDS	50000		35600		53800	
50 PERCENT EXCEEDS	28400		17100		19000	
90 PERCENT EXCEEDS	10800		10200		7920	

¹Also Sept. 30 to Oct. 1 and Oct. 29, 1954

^eEstimated



WHITE RIVER BASIN

07077000 WHITE RIVER AT DEVALLS BLUFF--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1946-60, 1968-70, 1974-95, and 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, unfltrd water, mg/L as CaCO3 (00900)	Calcium, unfltrd water, mg/L (00915)	Magnesium, unfltrd water, mg/L (00925)
OCT 30...	0800	80513	80020	10400	782	10.8	107	8.2	311	15.8	160	38.2	14.9
JAN 27...	0915	80513	80020	18500	783	11.6	90	7.7	291	5.8	140	33.7	13.7
MAR 05...	1000	80513	80020	41200	764	10.6	87	7.3	190	6.8	90	21.6	8.68
APR 23...	0810	80513	80020	10800	773	8.9	97	7.7	292	19.9	150	33.3	15.2
JUN 11...	0915	80513	80020	22800	763	9.6	106	7.5	212	20.5	100	25.7	9.32
AUG 06...	0815	80513	80020	16100	767	8.5	99	8.3	286	23.3	150	36.6	13.4

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT 30...	1.56	.1	3.97	5	4.92	<.2	6.1	160	.19	<.04	.21	<.008	E.01
JAN 27...	1.55	.1	3.49	5	4.19	.06	6.7	159	.21	<.04	.27	<.008	E.01
MAR 05...	1.53	.1	2.43	5	3.89	.06	5.7	103	.31	<.04	.24	<.008	E.01
APR 23...	1.53	.1	3.44	5	3.65	.06	6.3	155	.39	<.04	E.05	<.008	<.02
JUN 11...	1.34	.1	2.77	5	11.1	<.2	18.9	179	.39	<.04	.17	<.008	E.01
AUG 06...	1.73	.2	4.21	6	5.97	<.2	6.5	165	.41	<.04	.18	<.008	<.02

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 30...	E.02	E.03	.40	42	66	22	82	13	365
JAN 27...	.04	.04	.48	39	7	E5	93	38	1900
MAR 05...	E.02	.07	.55	E11	E15	62	84	77	8570
APR 23...	<.04	.05	--	86	E3	E5	90	95	2770
JUN 11...	<.04	.08	.56	56	E26	E12	94	83	5110
AUG 06...	<.04	.09	.59	E11	E15	--	89	121	5260

Remark codes used in this report:

< -- Less than
E -- Estimated value

WHITE RIVER BASIN

229

07077380 CACHE RIVER AT EGYPT

LOCATION.--Lat 35°51'28", long 90°56'00", in NW1/4SE1/4 sec.12, T.14 N., R.1 E., Craighead County, Hydrologic Unit 08020302, on right bank on downstream side of bridge on State Highway 91, 1.0 mi southeast of Egypt, 2.2 mi northwest of Winesburg, and at mile 143.

DRAINAGE AREA.--701 mi².

PERIOD OF RECORD.--October 1964 to current year. Daily stages and results of discharge measurements for July 1937 to December 1940, and December 1944 to date are published in reports of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR Ark. 1972: 1966. WDR Ark. 1973: Drainage area. WDR Ark. 2000: 1998-99.

GAGE.--Water-stage recorder. Datum of gage is 222.99 ft above NGVD of 1929(levels by U.S. Army Corps of Engineers).

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e100	7.5	22	3440	80	3650	31	67	28	968	2970	3120
2	e60	7.3	23	3570	104	3500	28	455	32	1460	2900	3230
3	e40	14	18	3610	91	2900	26	633	63	962	2770	3440
4	e35	25	34	3590	86	1770	27	263	116	444	2420	3520
5	e30	583	199	3560	105	1200	128	1080	110	208	1670	3530
6	e30	1610	314	3510	116	899	349	e2200	72	108	1040	3500
7	e25	1290	257	3450	97	642	2820	e2300	41	104	1030	3450
8	e20	625	207	3380	80	445	3080	e1900	32	47	1000	3380
9	e20	239	183	3310	60	379	2950	e1700	30	45	690	3260
10	277	161	179	3000	69	292	2770	676	24	38	486	2810
11	179	506	157	1790	169	215	1970	1710	79	46	343	1580
12	e80	392	106	781	335	182	614	2130	724	82	228	791
13	e45	285	202	431	383	189	191	853	632	96	224	1050
14	e30	101	1640	287	1980	256	76	629	737	160	301	1710
15	e20	50	2160	207	3330	211	49	334	524	134	466	1250
16	e10	27	1650	186	3580	132	35	781	341	100	497	808
17	e8	16	842	168	e3700	106	31	3710	310	72	439	546
18	e6	8.4	580	90	e3500	79	26	4270	516	72	376	370
19	e6	7.0	2880	88	3500	162	27	4460	1290	244	326	248
20	e5	0.05	3350	115	3520	1090	28	4480	861	1040	535	165
21	e4	0.00	3280	103	3510	904	24	4370	458	1080	580	130
22	e4	0.00	3120	93	3780	502	20	4140	191	773	558	118
23	e2	8.0	2780	73	4000	271	16	3910	79	575	1040	158
24	e4	17	2100	51	4010	132	20	3480	41	300	1150	156
25	e3	26	1600	78	3950	74	2000	2320	28	155	799	122
26	2.4	17	1140	68	3850	208	2950	1150	36	118	628	101
27	2.0	7.2	658	54	3760	87	2820	428	114	93	571	78
28	1.9	15	382	58	3680	55	2290	116	217	91	520	75
29	3.0	19	255	69	---	48	852	50	155	333	483	59
30	4.6	22	201	89	---	e35	183	39	119	2200	441	49
31	9.2	---	2010	86	---	35	---	29	---	2840	2370	---
TOTAL	1066.1	6085.45	32529	39385	55425	20650	26431	54663	8000	14988	29851	42804
MEAN	34.4	203	1049	1270	1979	666	881	1763	267	483	963	1427
MAX	277	1610	3350	3610	4010	3650	3080	4480	1290	2840	2970	3530
MIN	1.9	0.00	18	51	60	35	16	29	24	38	224	49
AC-FT	2110	12070	64520	78120	109900	40960	52430	108400	15870	29730	59210	84900
CFSM	0.05	0.29	1.50	1.81	2.82	0.95	1.26	2.52	0.38	0.69	1.37	2.04
IN.	0.06	0.32	1.73	2.09	2.94	1.10	1.40	2.90	0.42	0.80	1.58	2.27

WHITE RIVER BASIN

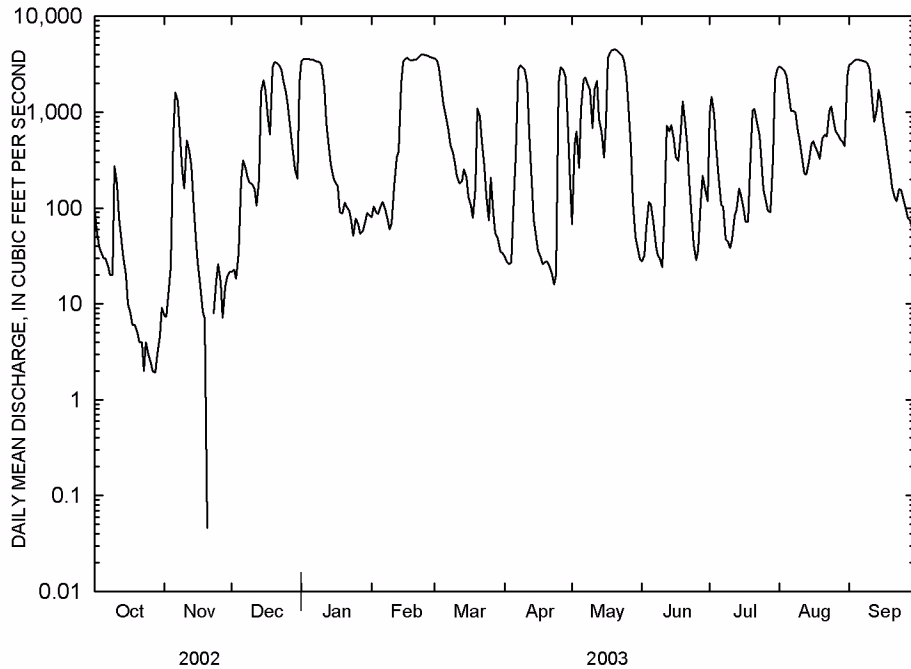
07077380 CACHE RIVER AT EGYPT

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	366	760	1344	1307	1303	1226	1216	1091	485	423	443	479
MAX	2437	2942	4729	4249	3552	3543	4759	4256	1655	1528	2117	1637
(WY)	1985	1997	2002	1991	1989	1997	1979	1973	2000	1976	1998	1965
MIN	12.5	4.50	45.0	11.8	87.4	216	75.2	84.9	29.2	102	85.8	75.1
(WY)	1995	2000	1977	1981	1996	1996	1981	1987	1988	1968	1968	1971

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	352807.55		331877.55			
ANNUAL MEAN	967		909		868	
HIGHEST ANNUAL MEAN					1762 1973	
LOWEST ANNUAL MEAN					299 1972	
HIGHEST DAILY MEAN	4020	Jan 1	4480	May 20	7940	Apr 25 1973
LOWEST DAILY MEAN	0.00	Nov 21	0.00	Nov 21	0.00	Nov 6 1982
ANNUAL SEVEN-DAY MINIMUM	2.6	Oct 23	2.6	Oct 23	0.00	Oct 14 1991
MAXIMUM PEAK FLOW			4510	May 20	8490	Jan 6 1966
MAXIMUM PEAK STAGE			19.93	May 20	21.88	Jan 6 1966
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	699800		658300		629000	
ANNUAL RUNOFF (CFSM)	1.38		1.30		1.24	
ANNUAL RUNOFF (INCHES)	18.72		17.61		16.83	
10 PERCENT EXCEEDS	3210		3380		2800	
50 PERCENT EXCEEDS	384		239		300	
90 PERCENT EXCEEDS	22		20		37	

^eEstimated



WHITE RIVER BASIN

231

07077500 CACHE RIVER AT PATTERSON

LOCATION.--Lat 35°16'10", long 91°14'15", in SE1/4 sec.31, T.8 N., R.2 W., Woodruff County, Hydrologic Unit 08020302, at bridge on U.S. Highway 64 at Patterson, 10.9 mi upstream from Maple Slough, and at mile 77.2.

DRAINAGE AREA.--1,037 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1931, February 1937, August 1937 to September 1960, October 1965 to September 1977, October 1997 to current year in reports of the U.S. Geological Survey. Monthly discharge only for some periods, published in WSP 1311 and WSP 1731. January 1947 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of U.S. Army Corps of Engineers, Memphis District. Gage-height records July 11, 1916, to Dec. 31, 1931, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 182.96 ft above NGVD of 1929. Prior to Oct. 3, 1966, nonrecording and recording gages at or within 1,000 ft of old U.S. Highway 64 crossing, 1.4 mi downstream as follows: Prior to 1931, nonrecording gage at datum 183.17 ft above NGVD of 1929; January 1937 to Oct. 5, 1949, nonrecording gage; and Oct. 6, 1949, to Dec. 31, 1950, water-stage recorder at mean Gulf level, or 0.24 ft below sea level; Jan. 1, 1950, to Oct. 2, 1966, water-stage recorder at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges and those below 100 ft³/s, which are fair. Satellite telemeter at station.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 19, 1927, reached a stage of 16.1 ft, present datum, from floodmarks, discharge, 24,500 ft³/s, due to break in White River levee.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2740	56	19	1550	201	3860	257	1910	1780	398	689	719
2	2350	40	23	1720	207	3850	209	1820	1410	415	1020	802
3	1880	33	26	1970	212	3710	171	1450	1150	403	1720	984
4	1480	51	34	2510	214	3580	131	1020	941	503	2340	1450
5	1130	111	78	2880	222	3460	97	919	833	721	2680	2040
6	866	264	152	2980	243	3300	81	1250	787	896	2820	2360
7	686	432	194	3010	256	3020	84	1570	719	918	2790	2510
8	462	554	216	3000	269	2550	84	1730	644	796	2510	2610
9	300	698	242	2980	275	2070	126	1800	570	629	2100	2690
10	297	970	267	2950	266	1720	453	1850	479	465	1700	2750
11	583	1210	282	2900	245	1450	1170	2140	432	340	1410	2790
12	869	1250	276	2860	221	1250	1740	2720	480	269	1210	2830
13	874	1100	293	2790	202	1100	1900	2510	455	240	1040	2870
14	744	858	493	2590	339	976	1900	1980	353	226	889	2720
15	613	669	781	2180	1020	870	1680	1860	432	223	738	2290
16	461	574	926	1750	1880	772	1260	1850	848	226	615	1790
17	323	499	990	1380	2490	688	865	3530	934	229	510	1490
18	218	401	1200	1090	3100	627	561	5540	1070	247	453	1380
19	192	293	2110	891	3370	581	344	6070	1100	271	453	1290
20	255	196	3210	735	3350	507	226	6540	982	321	471	1110
21	280	124	3380	608	3340	423	151	6750	858	396	470	902
22	245	77	3130	484	3910	368	110	6420	843	547	447	714
23	164	49	3190	390	4580	410	88	5870	913	850	419	533
24	94	29	3700	e330	4670	551	89	5290	902	1180	424	368
25	64	17	4120	290	4490	641	103	4890	772	1320	462	260
26	49	12	4080	252	4160	625	262	4530	652	1240	543	192
27	38	14	3640	218	3910	537	405	4270	509	1040	697	155
28	32	17	2990	191	3810	440	612	4040	431	833	849	135
29	35	15	2390	184	---	399	1190	3680	416	646	905	115
30	47	16	1910	189	---	376	1740	3090	384	526	860	95
31	64	---	1610	194	---	321	---	2350	---	527	764	---
TOTAL	18435	10629	45952	48046	51452	45032	18089	101239	23079	17841	34998	42944
MEAN	595	354	1482	1550	1838	1453	603	3266	769	576	1129	1431
MAX	2740	1250	4120	3010	4670	3860	1900	6750	1780	1320	2820	2870
MIN	32	12	19	184	201	321	81	919	353	223	419	95
AC-FT	36570	21080	91150	95300	102100	89320	35880	200800	45780	35390	69420	85180

WHITE RIVER BASIN

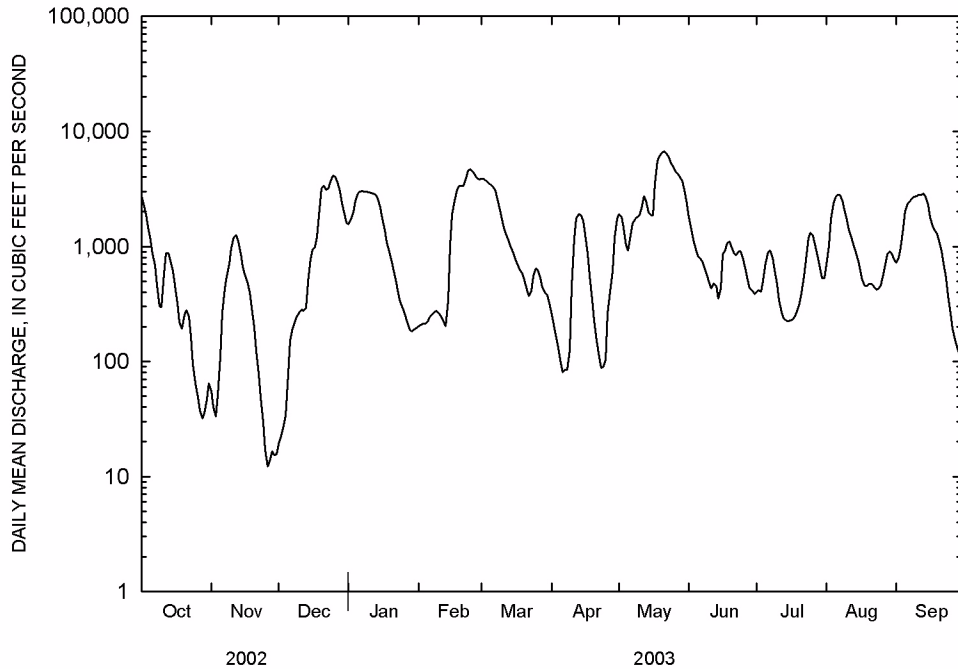
07077500 CACHE RIVER AT PATTERSON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928-31, 1937-60, 1966-77, 1998-03, BY WATER YEAR (WY)

MEAN	393	722	1550	1973	2178	2248	1989	1598	895	488	462	441
MAX	3100	5297	6168	8809	8817	5770	7586	6075	5890	2093	3009	2210
(WY)	1985	1958	1958	1950	1950	1945	1979	1973	1928	1945	1998	1965
MIN	8.32	16.3	67.3	37.8	68.6	168	133	150	67.7	57.6	47.1	45.5
(WY)	1988	1972	1954	1964	1963	1941	1981	1941	1941	1954	1944	1943

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1928-31, 1937-60 1966-77, 1998-03	
ANNUAL TOTAL	513751		457736			
ANNUAL MEAN	1408		1254		1246	
HIGHEST ANNUAL MEAN					2984 1950	
LOWEST ANNUAL MEAN					308 1931	
HIGHEST DAILY MEAN	5980	Jan 1	6750	May 21	12100	Jun 27 1928
LOWEST DAILY MEAN	12	Nov 26	12	Nov 26	0.00	Oct 27 1956
ANNUAL SEVEN-DAY MINIMUM	16	Nov 25	16	Nov 25	0.00	Oct 24 1978
MAXIMUM PEAK FLOW			6850	May 21	13200	Jan 24 1937
MAXIMUM PEAK STAGE			11.52	May 21	¹ 13.21	Jan 24 1937
INSTANTANEOUS LOW FLOW			11	Nov 26	0.00	Oct 27 1956
ANNUAL RUNOFF (AC-FT)	1019000		907900		902900	
10 PERCENT EXCEEDS	3210		3150		3640	
50 PERCENT EXCEEDS	997		738		445	
90 PERCENT EXCEEDS	146		113		68	

¹At present datum
^eEstimated



WHITE RIVER BASIN

233

07077500 CACHE RIVER AT PATTERSON--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1952 to May 1955, October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
NOV 06...	1010	80513	81213	253	775	1.4	7.6	68	8.0	181	11.0	63	16.0
JAN 22...	1655	80513	81213	459	771	9.6	11.5	84	7.0	133	3.0	41	10.0
FEB 05...	0955	80513	81213	220	772	6.1	9.7	77	7.3	156	6.0	52	13.0
APR 28...	1045	80513	81213	578	773	1.8	6.2	66	7.8	151	19.4	51	13.0
JUN 24...	1115	80513	81213	915	774	5.1	6.5	77	7.5	218	25.3	79	20.0
AUG 25...	1150	80513	81213	461	765	10	5.3	69	7.6	403	28.9	190	48.0

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
NOV 06...	5.50	7.30	.4	7.3	18	78	9.30	9.00	102	.16	82.0	120	1.0
JAN 22...	3.90	4.70	.5	7.0	24	51	6.70	7.10	71	.12	107	86	1.2
FEB 05...	4.80	5.50	.5	8.7	24	61	8.40	8.40	87	.15	64.7	109	1.1
APR 28...	4.50	3.70	.4	6.6	20	55	5.50	15.0	84	.13	153	98	1.2
JUN 24...	7.10	4.00	.6	12.0	24	85	8.80	22.0	129	.21	378	153	.90
AUG 25...	16.0	2.80	.7	21.0	19	188	13.0	27.0	241	.38	349	280	.60

Date	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
NOV 06...	.04	.03	--	--	.09	--	<.010	.97	.215	.07	.08	.19	1.1
JAN 22...	.13	.10	--	--	.09	--	<.010	1.1	.123	.04	.05	.23	1.3
FEB 05...	.15	.12	.797	.18	.19	.033	.010	.98	.153	.05	.03	.22	1.3
APR 28...	.13	.10	2.61	.59	.61	.066	.020	1.1	.184	.06	.06	.30	1.8
JUN 24...	.03	.02	3.67	.83	.84	.033	.010	.88	.123	.04	.04	.13	1.7
AUG 25...	.03	.02	--	--	.13	--	<.010	.58	.276	.09	.08	.13	.73

Date	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci KF col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 06...	350	330	570	95	59	40
JAN 22...	110	E67	390	99	147	182
FEB 05...	E63	E86	E50	99	135	80
APR 28...	260	250	180	98	250	390
JUN 24...	E150	140	120	97	97	240
AUG 25...	160	120	120	91	98	122

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

WHITE RIVER BASIN

07077555 CACHE RIVER NEAR COTTON PLANT

LOCATION.--Lat 35°02'07", long 91°19'19", in SE₁/4SW₁/4 sec.21, T.5 N.,R.3 W., Woodruff County, Hydrologic Unit 08020302, on left bank on downstream side of bridge on county road, 1.4 mi upstream from Roaring Slough, and 4.2 mi northwest of Cotton Plant.

DRAINAGE AREA.--1,172 mi², of which an estimated 20 mi² is probably noncontributing.

PERIOD OF RECORD.--May 1987 to current year.

REVISED RECORDS.--WDR Ark. 1989: 1988 (M).

GAGE.--Water-stage recorder. Datum of gage is 164.17 ft above NGVD of 1929. Non-recording gage Oct. 10, 1989 to Sept. 27, 1990 at same site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2320	129	72	3420	591	4970	662	642	4550	683	831	677
2	2430	139	72	3130	461	4910	585	850	4090	610	749	718
3	2500	162	67	2850	395	4860	499	1100	3700	552	698	753
4	2530	179	117	2700	408	4810	415	1310	3280	523	703	774
5	2500	186	205	2640	428	4750	346	1440	2870	498	809	792
6	2410	209	229	2680	437	4660	291	1460	2610	508	1030	865
7	2280	245	251	2800	481	4560	262	1430	2410	559	1290	1040
8	2130	303	268	2990	486	4430	243	1400	2220	626	1580	1270
9	1990	382	281	3170	472	4240	223	1400	2050	675	1810	1540
10	1880	434	289	3290	470	3940	214	1450	1900	710	1960	1760
11	1720	478	303	3360	477	3670	245	1540	1770	711	2040	1920
12	1540	534	311	3390	483	3350	360	1620	1630	670	2050	2040
13	1350	608	359	3400	462	3060	577	1730	1480	603	2010	2160
14	1150	688	465	3400	595	2780	826	1870	1310	495	1940	2290
15	1020	764	532	3360	893	2570	1080	2010	1120	386	1850	2390
16	914	799	586	3300	1080	2420	1290	2090	949	318	1730	2460
17	824	790	638	3140	1220	2270	1430	2290	812	288	1580	2480
18	733	744	717	2900	1400	2130	1460	2510	765	276	1440	2450
19	685	677	1110	2660	1660	2040	1430	3140	826	291	1250	2370
20	665	597	1380	2460	1930	1930	1360	4070	953	327	1040	2260
21	605	504	1600	2290	2220	1810	1240	4900	1040	335	845	2140
22	555	401	1850	2110	2690	1690	1030	5500	1070	363	700	2040
23	498	296	2100	1970	3360	1550	799	5900	1060	418	599	1920
24	428	208	2460	1920	3910	1420	610	6270	1010	474	526	1780
25	346	152	2850	1770	4440	1290	451	6360	970	558	470	1610
26	261	130	3370	1510	4730	1160	325	6280	947	655	432	1430
27	186	109	3730	1380	4890	1040	270	6100	936	760	422	1190
28	151	92	3890	1240	4970	947	312	5810	902	864	435	913
29	140	83	3890	1100	---	879	386	5580	835	920	480	656
30	139	76	3790	927	---	808	485	5280	754	942	548	423
31	132	---	3660	754	---	736	---	4980	---	907	618	---
TOTAL	37012	11098	41442	78011	46039	85680	19706	98312	50819	17505	34465	47111
MEAN	1194	370	1337	2516	1644	2764	657	3171	1694	565	1112	1570
MAX	2530	799	3890	3420	4970	4970	1460	6360	4550	942	2050	2480
MIN	132	76	67	754	395	736	214	642	754	276	422	423
AC-FT	73410	22010	82200	154700	91320	169900	39090	195000	100800	34720	68360	93440
CFSM	1.02	0.32	1.14	2.15	1.40	2.36	0.56	2.71	1.45	0.48	0.95	1.34
IN.	1.17	0.35	1.32	2.48	1.46	2.72	0.63	3.12	1.61	0.56	1.09	1.50

WHITE RIVER BASIN

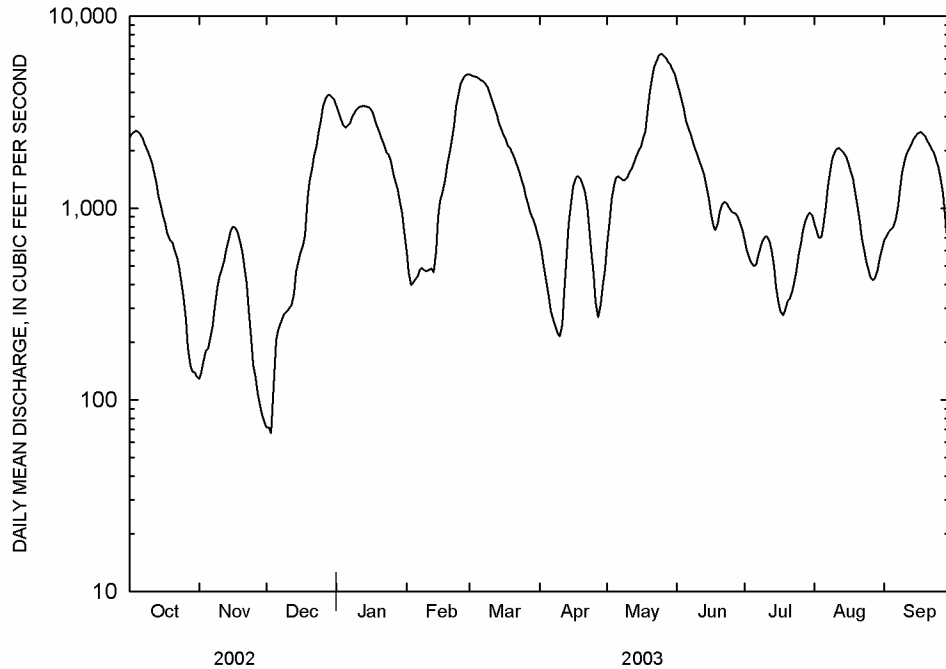
07077555 CACHE RIVER NEAR COTTON PLANT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)

MEAN	592	958	2208	2363	2341	2458	1730	1292	822	672	739	533
MAX	2067	3211	5102	6779	5238	5759	3585	3595	2026	1413	2591	1570
(WY)	1991	1997	2002	1991	1989	1989	1997	1991	2000	1994	1998	2003
MIN	55.9	16.6	44.9	579	377	303	515	217	116	274	348	201
(WY)	1988	2000	1990	2001	2000	1996	1995	1987	1988	1990	1990	1987

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1987 - 2003	
ANNUAL TOTAL	618055		567200			
ANNUAL MEAN	1693		1554		1400	
HIGHEST ANNUAL MEAN					2356 1989	
LOWEST ANNUAL MEAN					560 1996	
HIGHEST DAILY MEAN	6270	Jan 1	6360	May 25	9770	Dec 28 1987
LOWEST DAILY MEAN	67	Dec 3	67	Dec 3	7.8	Nov 1 2000
ANNUAL SEVEN-DAY MINIMUM	82	Nov 27	82	Nov 27	8.6	Oct 28 2000
MAXIMUM PEAK FLOW			6540	May 25	9950	Dec 28 1987
MAXIMUM PEAK STAGE			19.66	May 25	20.23	Dec 21 2001
INSTANTANEOUS LOW FLOW			64	Dec 3	7.8	¹ Dec 1 1999
ANNUAL RUNOFF (AC-FT)	1226000		1125000		1014000	
ANNUAL RUNOFF (CFSM)	1.44		1.33		1.19	
ANNUAL RUNOFF (INCHES)	19.62		18.00		16.23	
10 PERCENT EXCEEDS	3650		3520		3440	
50 PERCENT EXCEEDS	1340		1040		804	
90 PERCENT EXCEEDS	239		285		141	

¹Also November 1-2, 2000



WHITE RIVER BASIN

07077700 BAYOU DEVIEU NEAR MORTON

LOCATION.--Lat 35°15'07", long 91°06'37", near center of secs.4, 5, 8, and 9, T.7 N.,R.1 W., Woodruff County, Hydrologic Unit 08020302, at bridge on U.S. Highway 64, 1.0 mi west of Morton, and at mile 39.6.

DRAINAGE AREA.--421 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1939 to May 1973, August 1973 to September 1977, October 1997 to current year. February 1939 to December 1963 in reports of Mississippi River Commission. January 1964 to date in reports of U.S. Army Corps of Engineers, Memphis District.

REVISED RECORDS.--WDR Ark. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 187.71 ft above NGVD of 1929. Non-recording gage prior to Nov. 8, 1949. At datum 0.26 ft below NGVD of 1929 prior to Jan. 1, 1952.

REMARKS.--No estimated daily discharges. Water-discharge records good except those below 10 ft³/s, which are poor. Satellite telemeter at station.

COOPERATION.--Gage-height records furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	44	0.91	1390	72	2100	93	840	2380	268	999	523
2	112	22	0.73	1430	63	2070	76	609	2300	260	1120	634
3	53	23	0.92	1470	59	2040	82	411	2220	255	1200	684
4	31	131	29	1480	71	2000	84	244	2070	152	1280	719
5	18	296	211	1480	152	1950	62	647	1830	75	1310	714
6	7.6	640	349	1450	200	1880	64	1030	1430	41	1310	582
7	7.2	833	326	1330	197	1760	225	1290	1020	31	1300	396
8	5.6	789	223	1090	187	1570	582	1480	716	26	1180	246
9	3.6	529	134	813	179	1310	673	1550	515	22	874	131
10	174	326	66	605	162	1040	537	1530	366	27	554	71
11	744	180	36	459	172	843	351	1600	341	33	357	43
12	925	77	25	357	269	709	210	1670	453	55	217	29
13	931	34	86	268	313	642	116	1720	381	66	128	36
14	661	15	577	198	744	561	67	1770	289	61	102	167
15	396	6.4	801	144	1280	469	44	1800	559	55	155	390
16	225	2.5	850	106	1650	364	31	1840	750	50	214	324
17	86	0.26	686	88	1810	255	21	2430	915	42	220	201
18	25	0.00	519	74	1890	184	14	2620	911	33	213	99
19	72	0.00	1270	59	1920	218	12	2590	925	183	184	44
20	306	0.00	1750	52	1930	324	11	2550	966	595	142	24
21	299	0.00	1940	49	1960	401	8.5	2510	970	660	177	15
22	222	0.00	1990	47	2120	306	6.4	2460	938	793	208	12
23	130	0.00	2030	42	2170	235	6.1	2420	785	992	200	10
24	63	0.20	2170	35	2180	173	22	2440	528	977	183	15
25	30	0.80	2170	32	2170	136	328	2480	331	742	186	17
26	14	1.4	2140	32	2160	122	724	2490	213	479	162	13
27	5.9	2.4	2090	34	2130	261	843	2500	456	302	147	8.0
28	3.1	2.3	2030	56	2100	254	930	2490	644	184	134	5.6
29	5.8	1.4	1920	84	---	190	974	2480	524	97	138	3.6
30	56	1.3	1670	72	---	155	957	2470	354	230	150	2.1
31	74	---	1400	78	---	123	---	2430	---	797	358	---
TOTAL	5892.8	3957.96	29490.56	14904	30310	24645	8154.0	57391	27080	8583	15102	6158.3
MEAN	190	132	951	481	1082	795	272	1851	903	277	487	205
MAX	931	833	2170	1480	2180	2100	974	2620	2380	992	1310	719
MIN	3.1	0.00	0.73	32	59	122	6.1	244	213	22	102	2.1
AC-FT	11690	7850	58490	29560	60120	48880	16170	113800	53710	17020	29950	12210
CFSM	0.45	0.31	2.26	1.14	2.57	1.89	0.65	4.40	2.14	0.66	1.16	0.49
IN.	0.52	0.35	2.61	1.32	2.68	2.18	0.72	5.07	2.39	0.76	1.33	0.54

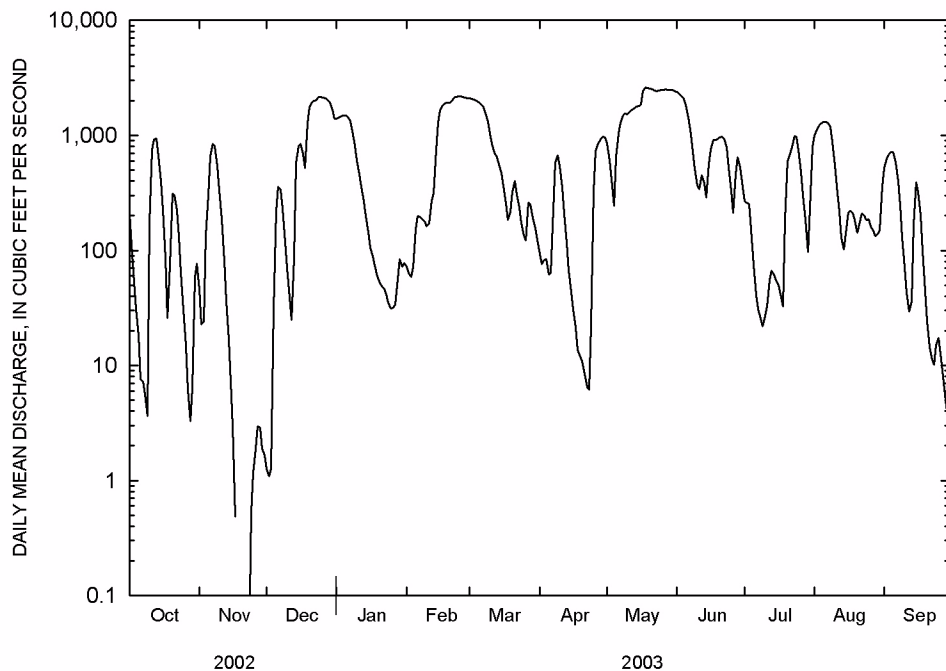
WHITE RIVER BASIN

07077700 BAYOU DEVIEW NEAR MORTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-77, 1998-03, BY WATER YEAR (WY)

MEAN	124	345	644	871	1015	995	756	567	313	162	206	209
MAX	1798	2811	2515	3917	3837	2658	1981	2389	2173	682	1020	1073
(WY)	1950	1958	2002	1950	1956	1945	1957	1958	1945	1967	1966	1965
MIN	0.000	0.000	0.000	12.8	2.96	44.2	24.2	5.55	4.47	0.000	0.065	0.000
(WY)	1957	1954	1963	1964	1963	1941	1963	1948	1941	1954	1947	1943

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1939-77, 1998-03
ANNUAL TOTAL	218165.98	231668.62	
ANNUAL MEAN	598	635	503
HIGHEST ANNUAL MEAN			1312 1950
LOWEST ANNUAL MEAN			141 1941
HIGHEST DAILY MEAN	2700 Jan 1	2620 May 18	6640 Nov 23 1957
LOWEST DAILY MEAN	0.00 Jun 23	0.00 Nov 18	0.00 Aug 7 1943
ANNUAL SEVEN-DAY MINIMUM	0.03 Nov 18	0.03 Nov 18	0.00 Aug 7 1943
MAXIMUM PEAK FLOW		2620 May 17	6700 Nov 23 1957
MAXIMUM PEAK STAGE		18.43 May 17	18.79 Dec 25 2001
INSTANTANEOUS LOW FLOW		0.00 at times	0.00 at times
ANNUAL RUNOFF (AC-FT)	432700	459500	364700
ANNUAL RUNOFF (CFSM)	1.42	1.51	1.20
ANNUAL RUNOFF (INCHES)	19.28	20.47	16.25
10 PERCENT EXCEEDS	1710	1990	1730
50 PERCENT EXCEEDS	299	261	110
90 PERCENT EXCEEDS	2.2	12	0.00



WHITE RIVER BASIN

07077700 BAYOU DEVIEW NEAR MORTON--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1973 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, unfltrd mg/L (00915)
NOV 06...	1115	80513	81213	661	775	12	8.5	76	7.0	189	10.8	62	16.0
JAN 22...	1605	80513	81213	47	771	5.9	11.9	88	7.3	189	3.1	55	14.0
FEB 05...	1105	80513	81213	150	772	5.2	9.5	77	7.4	227	6.8	68	17.0
APR 28...	1215	80513	81213	933	773	10	6.6	70	6.6	81	19.3	25	6.60
JUN 24...	1000	80513	81213	540	773	4.5	2.9	35	7.4	157	24.9	62	16.0
AUG 25...	1335	80513	81213	189	764	16	3.2	42	7.5	186	29.2	170	45.0

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
NOV 06...	5.40	8.10	.4	7.9	19	62	11.0	12.0	99	.18	234	131	1.2
JAN 22...	4.90	5.80	.5	9.0	24	61	11.0	10.0	93	.15	14.3	113	1.1
FEB 05...	6.10	8.30	.7	14.0	28	69	18.0	13.0	123	.20	60.8	150	1.2
APR 28...	2.10	3.80	.3	3.6	21	22	4.60	10.0	46	.08	149	59	1.3
JUN 24...	5.30	3.60	.4	7.0	19	60	6.40	15.0	92	.16	174	119	1.4
AUG 25...	14.0	3.50	.6	17.0	17	251	17.0	25.0	274	.35	132	259	.60

Date	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
NOV 06...	--	<.01	--	--	.18	--	<.010	--	.307	.10	.11	.24	1.4
JAN 22...	.04	.03	1.15	.26	.27	.033	.010	1.1	.337	.11	.12	.32	1.4
FEB 05...	.08	.06	3.23	.73	.76	.099	.030	1.1	1.29	.42	.29	.61	2.0
APR 28...	.19	.15	1.68	.38	.40	.066	.020	1.2	.368	.12	.11	.40	1.7
JUN 24...	.24	.19	1.64	.37	.43	.197	.060	1.2	.153	.05	.05	.24	1.8
AUG 25...	.06	.05	1.15	.26	.27	.033	.010	.55	.307	.10	.09	.14	.87

Date	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 06...	570	650	6400	96	83	148
JAN 22...	46	56	E16	96	47	6.0
FEB 05...	E35	E33	E35	98	71	29
APR 28...	180	290	240	97	272	685
JUN 24...	E400	110	E68	96	177	258
AUG 25...	120	E220	100	93	76	39

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

239

07194800 ILLINOIS RIVER AT SAVOY

LOCATION.--Lat 36°06'11", long 94°20'40", in NW₁/₄SE₁/₄ sec.36, T.17 N., R.32 W., Washington County, Hydrologic Unit 11110103, on left bank at downstream side of State Highway 16 bridge, at Savoy.

DRAINAGE AREA.--167 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1979 to December 1981, October 1985 to September 1986, August 1995 to current year. Occasional low-flow discharge measurements 1957-63; occasional discharge measurements 1974-78, 1982-85, and 1990-95.

REVISED RECORDS.--WDR Ark. 2000: 1986 (M) (P), 1997-99 (M)

GAGE.--Water-stage recorder. Datum of gage is 1,017.90 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	14	20	351	25	277	69	26	49	21	14	86
2	9.2	14	18	248	24	245	61	27	579	20	15	46
3	9.7	17	15	190	23	202	56	23	367	18	15	31
4	9.7	16	43	156	22	174	52	20	207	17	15	25
5	9.1	26	36	129	20	154	47	19	143	16	16	22
6	9.3	28	25	109	22	133	44	18	110	16	16	19
7	10	28	20	93	22	117	43	22	91	15	14	18
8	11	26	18	84	21	105	39	25	72	15	14	17
9	11	26	17	77	22	92	34	23	58	14	13	16
10	12	26	16	68	24	82	32	20	48	19	12	15
11	12	27	16	59	25	76	30	20	279	18	13	16
12	11	27	15	54	25	72	28	25	253	16	13	23
13	11	26	43	50	25	70	27	37	140	269	13	24
14	10	27	92	47	28	66	25	1030	95	104	13	23
15	11	27	53	48	33	61	24	520	71	56	12	21
16	11	27	38	49	33	58	22	1480	56	37	13	19
17	11	26	31	46	30	55	22	1260	46	29	12	17
18	11	26	32	43	29	53	21	552	45	25	12	16
19	12	26	29	42	206	398	21	334	50	22	11	15
20	13	24	25	42	243	436	70	1070	39	21	12	15
21	14	21	22	41	179	370	60	508	36	20	12	15
22	13	20	20	38	638	253	40	323	32	25	11	15
23	12	20	23	35	470	194	32	234	29	24	11	15
24	11	20	91	33	363	157	56	193	26	20	12	15
25	13	20	108	33	260	131	63	221	23	18	11	14
26	13	20	77	32	222	110	47	166	29	17	11	14
27	13	20	64	31	253	96	37	130	29	16	11	14
28	16	20	66	31	307	98	32	102	24	16	10	13
29	34	20	75	32	---	105	28	83	21	15	32	13
30	19	20	321	30	---	89	24	68	20	14	25	14
31	15	---	813	27	---	78	---	57	---	15	22	---
TOTAL	386.5	685	2282	2348	3594	4607	1186	8636	3067	968	436	626
MEAN	12.5	22.8	73.6	75.7	128	149	39.5	279	102	31.2	14.1	20.9
MAX	34	28	813	351	638	436	70	1480	579	269	32	86
MIN	9.1	14	15	27	20	53	21	18	20	14	10	13
AC-FT	767	1360	4530	4660	7130	9140	2350	17130	6080	1920	865	1240
CFSM	0.07	0.14	0.44	0.45	0.77	0.89	0.24	1.67	0.61	0.19	0.08	0.12
IN.	0.09	0.15	0.51	0.52	0.80	1.03	0.26	1.92	0.68	0.22	0.10	0.14

ARKANSAS RIVER BASIN

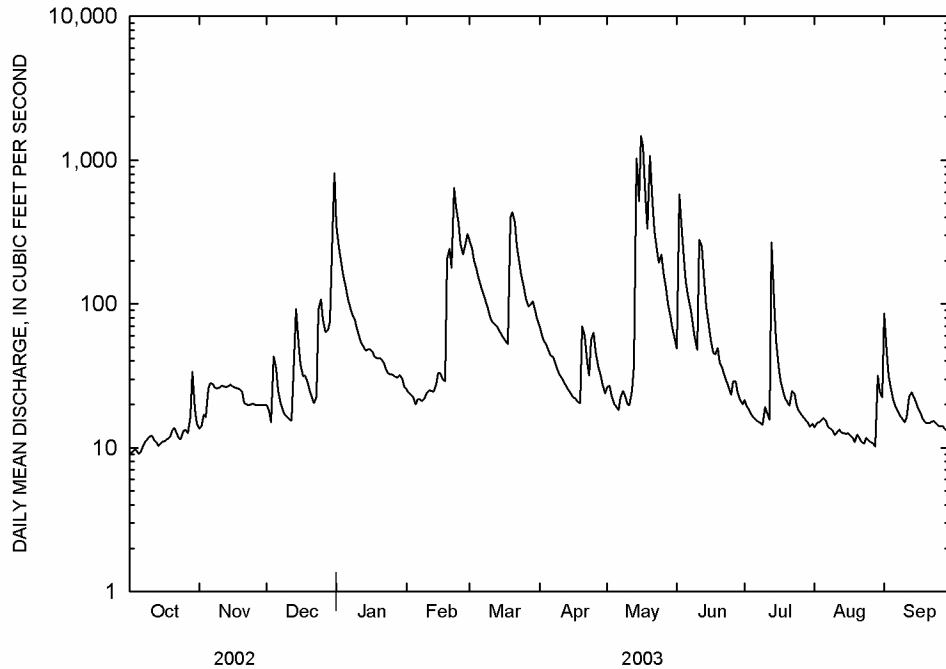
07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979-82, 1986, 1995-03, BY WATER YEAR (WY)

MEAN	50.0	203	148	171	216	230	223	195	214	48.7	33.3	62.6
MAX	180	981	532	882	720	608	533	519	1166	158	136	392
(WY)	1999	1997	2002	1998	2001	1998	1986	1999	2000	2000	2002	1986
MIN	10.1	12.4	12.0	6.68	18.3	44.6	39.5	32.7	24.3	5.43	2.23	3.73
(WY)	2000	2000	1980	1981	1980	1996	2003	1997	1998	1980	1980	1980

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979-82, 1986 1995-03	
ANNUAL TOTAL	61362.5		28821.5			
ANNUAL MEAN	168		79.0		151	
HIGHEST ANNUAL MEAN					245 1986	
LOWEST ANNUAL MEAN					33.7 1980	
HIGHEST DAILY MEAN	5090	Apr 8	1480	May 16	10500	Nov 19 1985
LOWEST DAILY MEAN	9.1	Oct 5	9.1	Oct 5	1.8	Aug 10 1980
ANNUAL SEVEN-DAY MINIMUM	9.5	Oct 1	9.5	Oct 1	1.9	Aug 22 1980
MAXIMUM PEAK FLOW			3880	May 16	31500	Nov 19 1985
MAXIMUM PEAK STAGE			10.45	May 16	¹ 18.42	Nov 19 1985
INSTANTANEOUS LOW FLOW			9.1	Oct 1-6	1.6	Aug 11 1980
ANNUAL RUNOFF (AC-FT)	121700		57170		109400	
ANNUAL RUNOFF (CFSM)	1.01		0.47		0.90	
ANNUAL RUNOFF (INCHES)	13.67		6.42		12.29	
10 PERCENT EXCEEDS	338		204		304	
50 PERCENT EXCEEDS	72		26		39	
90 PERCENT EXCEEDS	12		13		10	

¹From floodmarks



ARKANSAS RIVER BASIN

241

07194800 ILLINOIS RIVER AT SAVOY--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 24...	1030	80513	81213	12	734	7.23	73	7.7	316	13.9	140	54.0	2.40
JAN 08...	1430	80513	81213	83	731	12.3	106	8.1	278	7.1	120	44.0	2.70
MAR 05...	1050	80513	81213	155	749	9.3	79	8.1	251	7.4	110	38.0	2.70
MAY 01...	0900	80513	81213	28	741	7.2	85	8.0	270	22.0	120	45.0	2.70
JUL 02...	1400	80513	81213	20	732	7.8	101	7.9	306	26.1	140	51.0	2.70
AUG 20...	1000	80513	81213	10	736	10.4	132	7.8	318	25.7	140	52.0	2.80

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT 24...	2.90	.3	7.0	9	10.0	5.60	185	<.20	--	<.01	--	--	1.80
JAN 08...	2.50	.2	5.0	8	8.90	15.0	169	.30	.01	.01	--	--	3.10
MAR 05...	2.40	.2	5.1	9	8.30	16.0	153	.40	--	<.01	--	--	2.40
MAY 01...	2.70	.2	5.6	9	8.10	12.0	170	.40	.12	.09	4.74	1.07	1.10
JUL 02...	3.00	.2	6.3	9	9.00	10.0	195	.30	.03	.02	7.04	1.59	1.60
AUG 20...	3.70	.3	7.0	9	11.0	6.20	181	.40	.05	.04	2.92	.66	.67

Date	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC, MF, col/100 mL (31633)	Fecal coliform, M-FC, MF, col/100 mL (31625)	Fecal streptococci, KF, col/100 mL (31673)	Suspnd. sediment, sieve percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT 24...	--	<.010	--	.061	.02	.02	.03	--	55	77	190	72	4
JAN 08...	--	<.010	.29	.092	.03	.03	.05	3.4	78	93	100	93	3
MAR 05...	--	<.010	--	.061	.02	.03	.08	2.8	130	94	170	88	9
MAY 01...	.099	.030	.31	.123	.04	.05	.08	1.5	160	260	620	99	78
JUL 02...	.033	.010	.28	.123	.04	.04	.05	1.9	130	91	99	92	32
AUG 20...	.033	.010	.36	.092	.03	.03	.05	1.1	49	49	110	90	46

Date	Suspended sediment load, tons/d (80155)
OCT 24...	.13
JAN 08...	.67
MAR 05...	3.8
MAY 01...	5.9
JUL 02...	1.7
AUG 20...	1.2

Remark codes used in this report:
 < -- Less than

ARKANSAS RIVER BASIN

07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE

LOCATION.--Lat 36°05'05", long 94°08'05", in NW1/4NW1/4 sec.2, T.16 N., R.30 W., Washington County, Hydrologic Unit 11110003, downstream of the culvert at Township Street.

DRAINAGE AREA.--1.22 mi².

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records fair except estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.70	0.06	1.3	0.38	1.1	0.07	0.00	e0.03	6.2
2	0.00	0.48	0.00	0.61	0.08	0.89	0.31	0.28	4.2	0.00	e0.79	0.09
3	0.00	0.23	0.78	0.46	0.08	0.74	0.34	0.26	0.28	0.00	e0.26	0.00
4	0.00	0.02	2.6	0.43	0.03	e0.55	0.28	0.23	0.13	0.00	e0.22	0.00
5	0.00	0.12	0.19	0.37	0.00	e0.49	0.22	0.20	0.10	0.00	e0.62	0.00
6	0.00	0.00	0.14	0.30	0.14	e0.47	0.27	1.3	0.07	0.00	e0.26	0.00
7	0.00	0.00	0.11	0.29	0.02	e0.45	0.22	0.90	0.04	0.00	e0.14	0.00
8	0.00	0.02	0.13	0.29	0.03	e0.39	0.17	0.35	0.08	0.00	e0.14	0.00
9	0.00	0.04	0.11	0.27	0.18	e0.35	0.16	0.29	0.08	0.00	e0.14	0.00
10	0.00	0.00	0.11	0.18	0.10	e0.34	0.17	0.43	0.00	0.67	e0.14	0.00
11	0.00	0.00	0.11	0.16	0.12	e0.36	0.16	0.23	6.2	0.00	e0.24	0.05
12	0.00	0.00	0.24	0.13	0.14	e0.31	0.16	0.18	2.0	0.76	e0.15	0.35
13	0.00	0.00	2.9	0.12	0.20	e1.1	0.13	4.4	0.35	2.3	e0.11	0.03
14	0.00	0.03	0.20	0.11	0.43	e0.34	0.11	6.4	0.26	0.00	e0.05	0.00
15	0.00	0.01	0.12	0.11	0.22	e0.22	0.11	0.65	0.19	0.00	e0.01	0.00
16	0.00	0.00	0.06	0.13	0.16	e0.16	0.13	18	0.12	0.00	e0.01	0.00
17	0.00	0.00	0.08	0.10	0.16	e0.27	0.14	10	0.15	0.00	0.00	0.00
18	0.00	0.00	0.24	0.11	0.19	e1.0	0.10	1.4	0.13	0.00	0.00	0.00
19	0.00	0.00	0.20	0.14	4.0	e8.0	2.1	0.73	0.01	0.00	0.00	0.00
20	0.00	0.00	0.16	0.12	0.62	e3.1	0.47	13	0.00	0.00	0.00	0.00
21	0.00	0.00	0.15	0.11	0.90	e1.1	0.10	1.7	0.00	0.00	0.00	0.00
22	0.00	0.00	0.15	0.11	6.2	e0.73	0.09	0.78	0.00	1.2	0.00	0.00
23	0.00	0.00	0.71	0.09	1.1	e0.58	1.6	0.51	0.00	0.00	0.00	0.00
24	0.01	0.00	0.86	0.06	0.89	e0.46	2.1	0.97	0.00	0.00	0.00	0.00
25	0.04	0.00	0.26	0.07	0.63	e0.44	0.35	0.49	0.00	0.00	0.00	0.00
26	0.00	0.00	0.16	0.06	0.66	0.45	0.26	0.38	0.27	0.00	0.00	0.00
27	0.00	0.00	0.19	0.07	0.81	0.44	0.16	0.22	0.00	0.00	0.00	0.00
28	1.9	0.00	0.23	0.11	1.2	1.1	0.14	0.17	0.00	0.00	0.00	0.00
29	0.48	0.00	0.30	0.07	---	0.48	0.11	0.14	0.02	0.00	6.0	0.00
30	0.06	0.00	17	0.06	---	0.44	0.10	0.10	0.44	e0.02	0.00	0.00
31	0.00	---	6.0	0.07	---	0.39	---	0.06	---	e0.05	0.00	---
TOTAL	2.49	0.95	34.49	6.01	19.35	27.44	11.14	65.85	15.19	5.00	9.31	6.72
MEAN	0.080	0.032	1.11	0.19	0.69	0.89	0.37	2.12	0.51	0.16	0.30	0.22
MAX	1.9	0.48	17	0.70	6.2	8.0	2.1	18	6.2	2.3	6.0	6.2
MIN	0.00	0.00	0.00	0.06	0.00	0.16	0.09	0.06	0.00	0.00	0.00	0.00
AC-FT	4.9	1.9	68	12	38	54	22	131	30	9.9	18	13

ARKANSAS RIVER BASIN

07194809 MUD CREEK TRIBUTARY AT TOWNSHIP STREET AT FAYETTEVILLE--CONTINUED

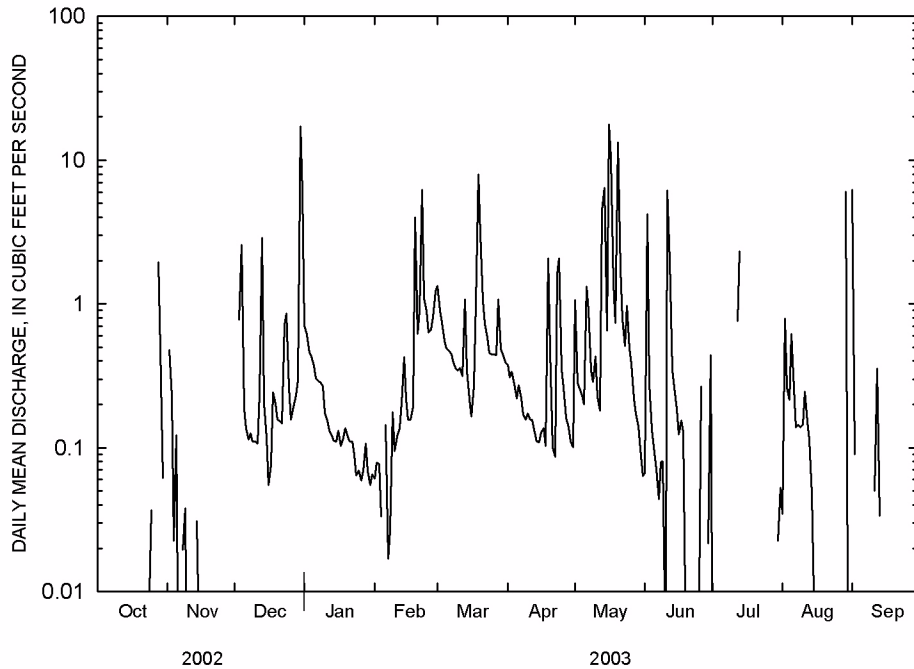
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	0.88	1.25	0.98	1.49	1.74	2.50	1.39	1.42	1.73	0.29	0.29	0.47
MAX	3.07	4.92	2.39	6.53	3.68	7.02	3.64	2.15	5.50	0.59	0.79	1.08
(WY)	1999	1997	2002	1998	1997	1998	2002	2002	2000	2000	2002	1998
MIN	0.080	0.032	0.11	0.19	0.44	0.40	0.19	0.78	0.23	0.073	0.000	0.053
(WY)	2003	2003	1997	2003	2000	2001	2000	1997	1998	1998	2000	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	418.56		203.94			
ANNUAL MEAN	1.15		0.56		1.20	
HIGHEST ANNUAL MEAN					1.83 1998	
LOWEST ANNUAL MEAN					0.56 2003	
HIGHEST DAILY MEAN	28	Apr 7	18	May 16	80	Jan 4 1998
LOWEST DAILY MEAN	0.00	Jul 14	0.00	Oct 1	0.00	Sep 19 1996
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 14	0.00	Oct 1	0.00	Sep 28 1996
MAXIMUM PEAK FLOW			178	May 16	¹ 553	Jun 30 1999
MAXIMUM PEAK STAGE			2.41	May 16	4.54	Jun 30 1999
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	830		405		869	
10 PERCENT EXCEEDS	2.3		0.93		3.0	
50 PERCENT EXCEEDS	0.23		0.11		0.25	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

¹From rating curve extended above 100 ft³/s on basis of slope-area measurement of peak flow

^eEstimated



ARKANSAS RIVER BASIN

07194880 OSAGE CREEK NEAR CAVE SPRINGS

LOCATION.--Lat 36°16'53", long 94°13'40", in NE₁/₄NE₁/₄ sec.36, T.19 N., R.31 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 112, 1.4 mi north of Cave Springs.

DRAINAGE AREA.--34.7 mi².

PERIOD OF RECORD.--October 1990 to October 1993, May 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1131.59 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Some regulation by City of Rogers sewage treatment facility, 1.5 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	20	15	43	16	41	27	60	32	22	17	147
2	15	20	16	35	16	39	24	39	53	21	19	71
3	16	20	17	31	15	35	23	30	41	20	19	33
4	15	19	45	29	17	33	23	27	34	19	17	28
5	15	20	25	27	18	32	23	26	32	18	18	26
6	17	19	21	25	18	30	75	25	30	18	19	25
7	16	19	19	25	17	27	42	24	28	19	18	22
8	16	19	20	23	17	26	33	28	25	18	17	20
9	16	20	19	23	17	25	30	24	24	17	16	21
10	17	19	17	23	17	24	29	24	25	22	16	19
11	17	18	18	21	18	24	28	24	232	21	16	29
12	17	19	19	21	18	23	27	23	205	28	17	31
13	16	18	43	20	18	23	27	183	61	94	16	27
14	16	19	29	20	21	23	23	117	45	37	17	24
15	17	19	25	20	22	22	22	58	34	27	16	23
16	17	18	23	20	22	21	24	252	32	25	16	22
17	16	17	20	19	20	21	23	128	29	23	14	20
18	16	17	66	19	20	23	23	68	26	21	15	20
19	16	17	34	19	49	72	24	55	28	21	16	20
20	16	17	27	19	32	55	23	310	26	19	16	18
21	16	17	25	19	29	43	22	93	25	19	16	17
22	17	17	24	18	64	35	21	68	26	35	14	18
23	17	17	24	18	42	30	21	57	24	24	15	19
24	18	17	24	18	34	28	43	89	22	21	13	18
25	20	17	23	18	34	27	29	82	22	20	15	17
26	20	19	22	18	32	25	26	51	29	19	16	17
27	19	18	23	18	32	25	25	45	25	18	15	17
28	21	17	24	17	36	34	23	41	23	18	14	16
29	47	17	27	16	---	e29	23	38	21	18	73	17
30	24	16	101	15	---	e26	23	35	21	17	41	17
31	21	---	95	16	---	27	---	33	---	17	51	---
TOTAL	561	546	930	673	711	948	829	2157	1280	736	618	819
MEAN	18.1	18.2	30.0	21.7	25.4	30.6	27.6	69.6	42.7	23.7	19.9	27.3
MAX	47	20	101	43	64	72	75	310	232	94	73	147
MIN	14	16	15	15	15	21	21	23	21	17	13	16
AC-FT	1110	1080	1840	1330	1410	1880	1640	4280	2540	1460	1230	1620
CFSM	0.52	0.52	0.86	0.63	0.73	0.88	0.80	2.01	1.23	0.68	0.57	0.79
IN.	0.60	0.59	1.00	0.72	0.76	1.02	0.89	2.31	1.37	0.79	0.66	0.88

ARKANSAS RIVER BASIN

07194880 OSAGE CREEK NEAR CAVE SPRINGS--CONTINUED

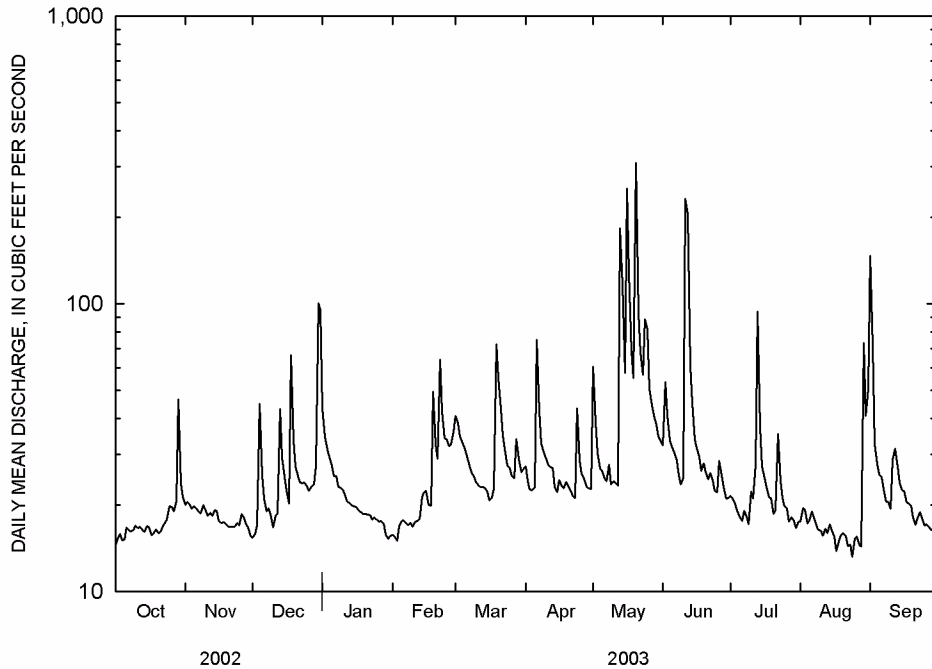
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991-94, 2000-03, BY WATER YEAR (WY)

MEAN	27.4	42.9	70.3	56.5	54.9	43.4	63.3	64.1	79.3	37.0	21.2	32.4
MAX	43.5	77.7	160	135	108	75.8	96.3	120	217	73.2	27.1	98.4
(WY)	1991	1993	1993	1991	2001	1993	2002	2002	2000	2000	2002	1993
MIN	17.8	18.2	22.4	21.7	25.4	22.8	26.6	28.2	21.0	15.8	13.9	16.9
(WY)	1993	2003	2001	2003	2003	1992	2001	1992	1991	1991	1991	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1991-94, 2000-03	
ANNUAL TOTAL	17609		10808			
ANNUAL MEAN	48.2		29.6		47.5	
HIGHEST ANNUAL MEAN					77.0 1993	
LOWEST ANNUAL MEAN					29.6 2003	
HIGHEST DAILY MEAN	677	Apr 8	310	May 20	1630	Dec 15 1992
LOWEST DAILY MEAN	14	Sep 30	13	Aug 24	11	Sep 15 1991
ANNUAL SEVEN-DAY MINIMUM	15	Sep 29	15	Aug 22	12	Oct 6 1991
MAXIMUM PEAK FLOW			925	May 20	2980	Jun 21 2000
MAXIMUM PEAK STAGE			6.04	May 20	9.85	Jun 21 2000
INSTANTANEOUS LOW FLOW			10	Aug 24	8.3	¹ Oct 10 1991
ANNUAL RUNOFF (AC-FT)	34930		21440		34400	
ANNUAL RUNOFF (CFSM)	1.39		0.85		1.37	
ANNUAL RUNOFF (INCHES)	18.88		11.59		18.59	
10 PERCENT EXCEEDS	88		44		81	
50 PERCENT EXCEEDS	32		22		28	
90 PERCENT EXCEEDS	17		16		16	

¹Also October 11-12, 18, 20-22, 1991

^eEstimated



ARKANSAS RIVER BASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS

LOCATION.--Lat 36°13'19", long 94°17'18", in SW₁/₄NE₁/₄ sec.21, T.18 N., R.31 W., Benton County, Hydrologic Unit 11110103, on left bank 0.7 mi downstream from Little Osage Creek, and 3.2 mi northwest of Elm Springs.

DRAINAGE AREA.--130 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to September 1975, August 1995 to current year. October 1976 to September 1979 a crest-stage partial-record station. Occasional discharge measurements 1977-79 and 1982-95. Monthly discharge only for some periods, published in WSP 1731.

REVISED RECORDS.--WDR Ark.1970: Drainage area. WDR Ark. 1974: 1969.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1979 water stage recorder about 400 ft downstream at present datum. Altitude of gage is 1,052 ft by barometer.

REMARKS.--No estimated daily discharges. Water-discharge records good. Low flow slightly regulated by operation of small lake at Cave Springs, and City of Rogers sewage treatment plant. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	79	44	127	52	133	106	139	107	64	52	298
2	70	77	54	110	51	129	107	121	178	60	56	258
3	76	83	66	98	59	126	104	94	151	56	46	147
4	67	77	147	90	64	125	100	82	130	48	47	113
5	58	80	101	80	65	121	93	87	124	38	62	106
6	58	78	87	77	68	113	134	85	120	36	58	97
7	67	76	73	76	65	110	124	81	108	43	55	80
8	73	79	65	80	58	105	109	90	97	45	57	90
9	76	78	68	85	56	98	104	92	98	43	42	83
10	80	67	68	85	63	98	99	80	102	69	38	81
11	77	71	68	80	72	99	96	74	390	55	56	97
12	69	75	68	71	71	98	90	74	321	85	62	124
13	57	74	129	75	72	115	84	284	166	167	60	114
14	64	75	106	77	82	101	82	341	133	123	56	91
15	74	78	85	75	84	92	83	200	111	93	65	90
16	74	65	82	75	78	84	84	567	106	80	52	99
17	72	57	78	72	77	88	83	498	103	76	36	104
18	72	64	122	67	80	96	79	278	95	74	46	101
19	68	69	96	62	130	198	74	243	92	61	49	99
20	61	68	84	68	111	172	83	621	87	52	53	100
21	65	66	72	71	102	159	77	236	77	56	48	96
22	73	65	65	69	153	138	79	170	74	102	50	103
23	69	56	71	67	132	125	79	149	73	77	43	110
24	71	52	84	66	122	122	127	169	69	68	40	123
25	84	58	75	61	120	119	101	207	68	61	50	102
26	74	66	74	56	115	114	86	146	89	53	63	110
27	67	65	77	61	118	111	77	140	73	42	65	90
28	89	55	80	65	128	130	80	137	64	47	69	74
29	158	50	86	63	---	121	80	132	54	57	133	84
30	97	47	170	60	---	106	79	123	56	54	154	112
31	86	---	252	61	---	104	---	114	---	52	165	---
TOTAL	2315	2050	2797	2330	2448	3650	2783	5854	3516	2037	1928	3376
MEAN	74.7	68.3	90.2	75.2	87.4	118	92.8	189	117	65.7	62.2	113
MAX	158	83	252	127	153	198	134	621	390	167	165	298
MIN	57	47	44	56	51	84	74	74	54	36	36	74
AC-FT	4590	4070	5550	4620	4860	7240	5520	11610	6970	4040	3820	6700
CFSM	0.57	0.53	0.69	0.58	0.67	0.91	0.71	1.45	0.90	0.51	0.48	0.87
IN.	0.66	0.59	0.80	0.67	0.70	1.04	0.80	1.68	1.01	0.58	0.55	0.97

ARKANSAS RIVER BASIN

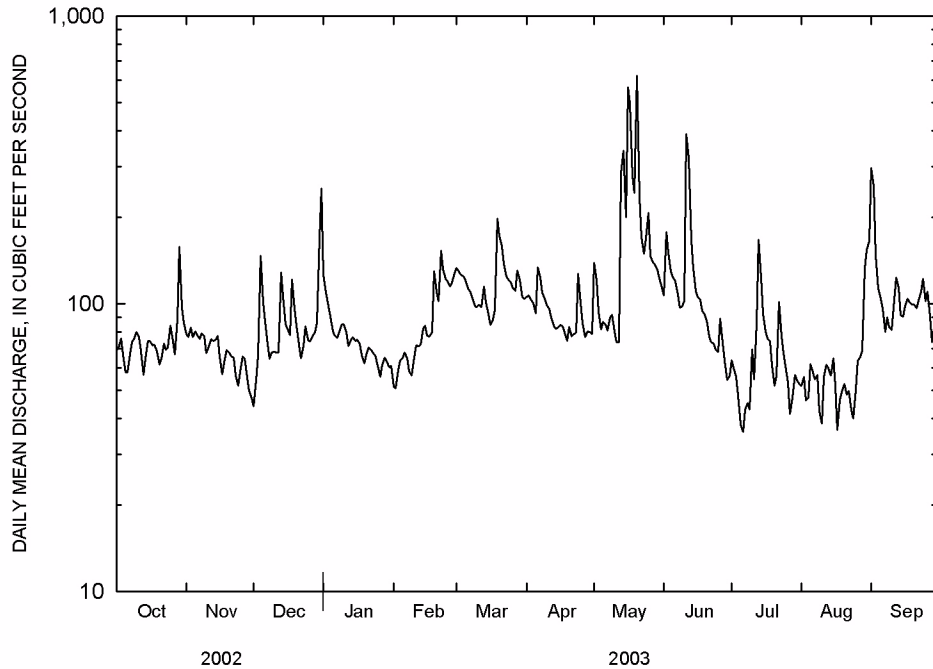
07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-75, 1995-03, BY WATER YEAR (WY)

MEAN	75.3	117	104	105	140	165	165	197	166	106	70.7	69.2
MAX	310	474	390	417	457	538	533	972	694	318	244	214
(WY)	1971	1974	1974	1998	1951	1975	1957	1961	1974	1999	1961	1975
MIN	13.2	23.3	20.9	20.4	23.8	24.5	20.8	40.2	25.0	14.2	11.3	12.4
(WY)	1957	1956	1956	1956	1964	1956	1956	1964	1954	1954	1954	1956

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951-75, 1995-03	
ANNUAL TOTAL	58228		35084			
ANNUAL MEAN	160		96.1		123	
HIGHEST ANNUAL MEAN					236 1974	
LOWEST ANNUAL MEAN					29.1 1956	
HIGHEST DAILY MEAN	1970	Apr 8	621	May 20	6540	May 19 1961
LOWEST DAILY MEAN	44	Dec 1	36	Jul 6	5.3	Sep 5 1954
ANNUAL SEVEN-DAY MINIMUM	54	Nov 26	44	Jul 3	6.1	Aug 31 1954
MAXIMUM PEAK FLOW			1690	May 20	¹ 22500	May 19 1961
MAXIMUM PEAK STAGE			6.55	May 20	16.66	May 19 1961
INSTANTANEOUS LOW FLOW			24	Aug 24	4.7	Sep 4 1954
ANNUAL RUNOFF (AC-FT)	115500		69590		89160	
ANNUAL RUNOFF (CFSM)	1.23		0.74		0.95	
ANNUAL RUNOFF (INCHES)	16.66		10.04		12.86	
10 PERCENT EXCEEDS	284		137		220	
50 PERCENT EXCEEDS	115		80		77	
90 PERCENT EXCEEDS	68		55		27	

¹From rating curve extended above 11,000 ft³/s



ARKANSAS RIVER BASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 24...	1230	80513	81213	66	735	10.0	102	8.1	498	14.9	140	51.0	2.00
JAN 08...	1130	80513	81213	65	732	12.6	110	8.2	450	7.8	140	53.0	2.10
MAR 05...	1350	80513	81213	128	748	10.5	90	8.3	424	7.8	140	51.0	2.10
APR 30...	1400	80513	81213	70	730	10.3	122	8.4	449	21.4	130	48.0	2.00
JUL 01...	1330	80513	81213	59	735	9.1	110	8.0	438	23.2	130	49.0	1.80
AUG 20...	1230	80513	81213	62	735	7.0	88	8.1	528	25.3	130	50.0	2.00

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	Nitrate, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
OCT 24...	8.50	2	44.0	40	42.0	33.0	298	.50	--	<.01	--	--	4.40
JAN 08...	6.20	1	33.0	33	31.0	28.0	260	.40	.01	.01	--	--	4.80
MAR 05...	5.10	1	26.0	28	28.0	25.0	243	.40	--	<.01	19.8	4.48	4.50
APR 30...	7.00	1	36.0	36	35.0	39.0	281	.40	.04	.03	15.0	3.38	3.40
JUL 01...	6.20	1	34.0	35	28.0	36.0	264	.30	.03	.02	--	--	3.70
AUG 20...	8.50	2	49.0	43	46.0	51.0	319	.30	.01	.01	17.7	3.99	4.00

Date	Nitrite, water, fltrd, mg/L (71856)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd, mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci, MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration, mg/L (80154)
OCT 24...	--	<.010	--	5.52	1.80	2.00	2.10	4.9	74	88	200	79	6
JAN 08...	--	<.010	.39	3.68	1.20	1.20	1.20	5.2	48	64	44	73	2
MAR 05...	.066	.020	--	1.78	.58	.59	.61	4.9	41	39	43	70	4
APR 30...	.066	.020	.37	1.69	.55	.58	.59	3.8	58	91	87	82	10
JUL 01...	--	<.010	.28	.736	.24	.23	.24	4.0	89	190	180	93	60
AUG 20...	.033	.010	.29	1.41	.46	.47	.49	4.3	57	64	82	92	70

Suspended sediment load, tons/d (80155)

OCT 24...	1.1
JAN 08...	.35
MAR 05...	1.4
APR 30...	1.9
JUL 01...	9.6
AUG 20...	12

Remark codes used in this report:
 < -- Less than

ARKANSAS RIVER BASIN

249

07195400 ILLINOIS RIVER AT HWY 16 NEAR SILOAM SPRINGS

LOCATION.--Lat 36°08'41", long 94°29'41", in SW1/4SW1/4 sec.15, T.17 N., R.33 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 16, 8.2 mi downstream from Osage Creek and 4.6 mi southeast of Siloam Springs.

DRAINAGE AREA.--509 mi².

PERIOD OF RECORD.--July 1979 to December 1981, October 1985 to September 1986, October 2002 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e124	e163	e134	781	154	565	280	191	257	181	121	320
2	e112	e161	e133	552	e149	547	268	291	727	178	123	624
3	e115	e173	e139	448	e151	495	255	224	898	169	126	328
4	e115	e174	e232	379	e153	456	249	202	539	162	121	244
5	e112	e164	e293	332	150	422	240	190	428	153	124	205
6	e113	e166	e204	295	155	386	240	184	366	146	134	179
7	e113	e164	e175	271	159	356	288	178	329	143	125	160
8	e116	e161	e161	257	154	335	259	193	291	149	120	146
9	e118	e159	e152	243	153	310	244	189	264	147	113	142
10	e122	e157	e153	231	158	290	234	182	250	166	106	136
11	e123	e152	e156	221	165	282	224	174	520	191	102	139
12	e122	e154	e146	206	167	274	218	168	862	177	109	177
13	e117	e153	e215	197	165	275	209	180	552	530	110	199
14	e114	e155	e342	196	177	304	201	1140	384	571	109	181
15	e116	e156	e269	193	193	270	199	1050	321	312	107	157
16	e117	e156	e223	194	188	253	200	1640	283	253	108	148
17	e118	e149	e198	190	181	244	196	2410	264	221	105	141
18	e119	e147	e205	184	179	248	190	1160	254	199	100	134
19	e125	e151	e241	179	262	634	187	769	245	183	102	130
20	e131	e149	e195	177	505	817	233	1580	238	166	100	126
21	e128	e146	e180	179	383	803	255	1310	219	156	99	119
22	e134	e142	e169	174	708	619	212	815	207	171	98	118
23	e138	e140	e163	168	875	515	202	633	197	228	96	121
24	e135	e137	e227	165	676	449	290	529	192	172	93	122
25	e146	e135	e309	163	551	404	297	616	186	153	93	115
26	e154	e136	e260	160	480	368	247	496	210	143	96	113
27	e136	e138	e235	158	474	337	219	416	219	131	97	111
28	e168	e138	e225	162	557	339	202	368	197	122	98	106
29	e285	e133	e256	162	---	e372	196	333	183	122	133	104
30	e250	e133	e513	162	---	e319	189	300	171	119	305	111
31	e178	---	1550	160	---	298	---	276	---	122	270	---
TOTAL	4214	4542	8053	7539	8422	12586	6923	18387	10253	6036	3743	5156
MEAN	136	151	260	243	301	406	231	593	342	195	121	172
MAX	285	174	1550	781	875	817	297	2410	898	571	305	624
MIN	112	133	133	158	149	244	187	168	171	119	93	104
AC-FT	8360	9010	15970	14950	16710	24960	13730	36470	20340	11970	7420	10230
CFSM	0.27	0.30	0.51	0.48	0.59	0.80	0.45	1.17	0.67	0.38	0.24	0.34
IN.	0.31	0.33	0.59	0.55	0.62	0.92	0.51	1.34	0.75	0.44	0.27	0.38

ARKANSAS RIVER BASIN

07195400 ILLINOIS RIVER AT HWY 16 NEAR SILOAM SPRINGS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979-82, 1986, 2002-03, BY WATER YEAR (WY)

MEAN	178	439	441	170	281	377	662	501	367	215	200	381
MAX	292	1459	1579	261	610	483	1934	695	582	358	317	1460
(WY)	1982	1986	1986	1986	1986	1980	1986	1986	1986	1981	1981	1986
MIN	69.4	79.7	105	68.6	89.1	160	170	271	153	69.5	52.6	58.8
(WY)	1981	1981	1981	1981	1981	1981	1981	1980	1980	1980	1980	1980

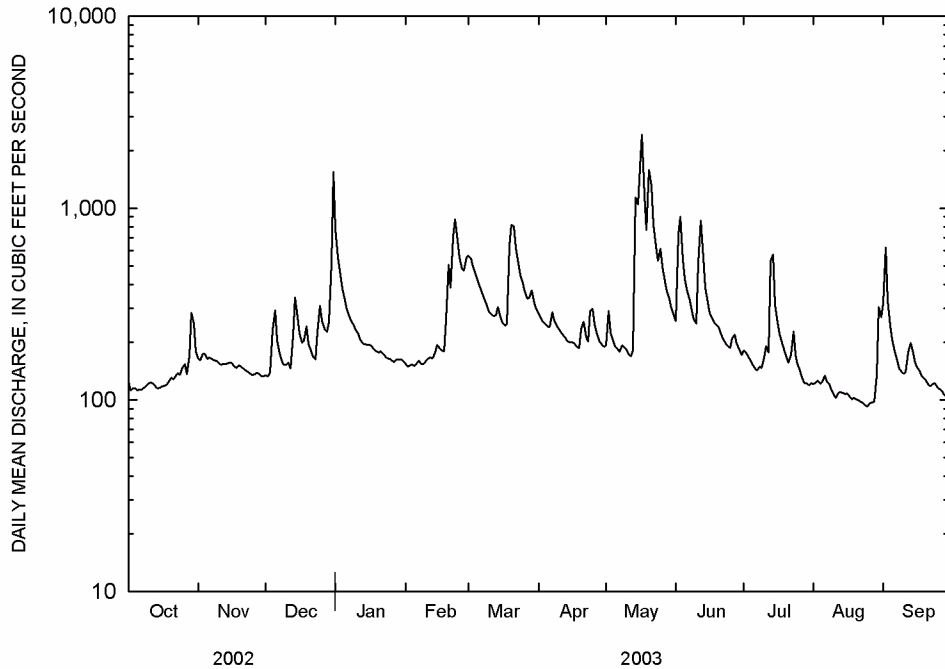
SUMMARY STATISTICS FOR 2003 WATER YEAR WATER YEARS 1979-82, 1986, 2002-03

ANNUAL TOTAL	95854		
ANNUAL MEAN	263		360
HIGHEST ANNUAL MEAN			811 1986
LOWEST ANNUAL MEAN			169 1980
HIGHEST DAILY MEAN	2410	May 17	25400 Sep 30 1986
LOWEST DAILY MEAN	93	Aug 24	46 Sep 1 1980
ANNUAL SEVEN-DAY MINIMUM	96	Aug 22	50 Aug 27 1980
MAXIMUM PEAK FLOW	4430	May 16	¹ 50800 Sep 30 1986
MAXIMUM PEAK STAGE	11.86	May 16	20.87 Sep 30 1986
INSTANTANEOUS LOW FLOW	90	Aug 24,25	45 ² Sep 1 1980
ANNUAL RUNOFF (AC-FT)	190100		260700
ANNUAL RUNOFF (CFSM)	0.52		0.71
ANNUAL RUNOFF (INCHES)	7.01		9.61
10 PERCENT EXCEEDS	514		690
50 PERCENT EXCEEDS	183		163
90 PERCENT EXCEEDS	117		72

¹From rating curve extended above 29,400 ft³/s

²Also September 2, 1980

^eEstimated



ARKANSAS RIVER BASIN

251

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS

LOCATION.--Lat 36°06'31", long 94°32'00", in SE1/4NE1/4 sec.31, T.17 N., R.33 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 59, 5.0 mi south of Siloam Springs, and 0.6 mi downstream from mouth of Cincinnati Creek.

DRAINAGE AREA.--575 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1995 to current year. Occasional low-flow measurements in 1971.

REVISED RECORDS.--WDR Ark 1997: 1996.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 3, 1990, reached a stage of 25.4 ft, from floodmarks, discharge 66,000 ft³/s from rating curve extended above 23,000 ft³/s on basis of contracted opening of peak flow.

DISCHARGE, CUBIC FEET PER SECONDD, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e151	207	169	858	202	565	320	219	273	193	149	298
2	e134	203	169	603	197	552	305	307	1100	197	147	714
3	150	220	175	492	194	499	292	257	1190	186	145	390
4	151	226	260	432	196	462	285	233	604	178	143	296
5	149	211	347	390	195	443	277	220	480	168	145	251
6	147	215	258	353	201	417	275	214	420	159	153	226
7	148	210	227	329	205	389	315	205	374	153	146	208
8	151	207	205	314	202	368	293	220	332	157	141	195
9	154	205	194	301	200	345	276	216	299	157	137	190
10	159	202	194	287	203	324	267	209	280	175	131	186
11	162	196	194	276	210	314	256	199	438	203	124	186
12	159	197	193	261	213	306	249	193	938	185	120	216
13	153	196	238	250	212	303	241	215	582	525	122	236
14	149	198	387	248	223	335	233	1140	411	665	122	225
15	151	201	319	244	240	303	228	1300	346	351	121	203
16	153	202	270	244	238	287	229	1580	303	280	119	193
17	154	193	250	244	230	277	226	3310	282	242	121	187
18	156	188	244	239	227	280	220	1410	e273	219	130	180
19	162	195	293	230	269	623	219	826	e264	201	130	176
20	172	191	247	227	515	880	243	1610	e257	185	127	171
21	167	189	230	229	420	862	289	1660	e248	173	125	163
22	174	183	213	225	643	650	242	858	e229	188	121	161
23	181	181	209	222	937	534	231	642	e218	250	117	163
24	175	177	258	222	680	471	288	528	e208	202	112	165
25	189	175	354	217	550	442	334	592	202	180	107	158
26	195	176	306	209	479	408	280	502	227	167	112	153
27	185	179	280	206	469	377	251	440	241	158	118	150
28	195	179	276	208	543	378	233	391	219	149	114	142
29	326	173	297	209	---	406	226	355	202	149	182	135
30	305	172	368	208	---	368	218	322	189	147	333	144
31	230	---	1610	207	---	340	---	295	---	149	310	---
TOTAL	5387	5847	9234	9184	9293	13508	7841	20668	11629	6691	4424	6461
MEAN	174	195	298	296	332	436	261	667	388	216	143	215
MAX	326	226	1610	858	937	880	334	3310	1190	665	333	714
MIN	134	172	169	206	194	277	218	193	189	147	107	135
AC-FT	10690	11600	18320	18220	18430	26790	15550	40990	23070	13270	8780	12820
CFSM	0.30	0.34	0.52	0.52	0.58	0.76	0.45	1.16	0.67	0.38	0.25	0.37
IN.	0.35	0.38	0.60	0.59	0.60	0.87	0.51	1.34	0.75	0.43	0.29	0.42

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

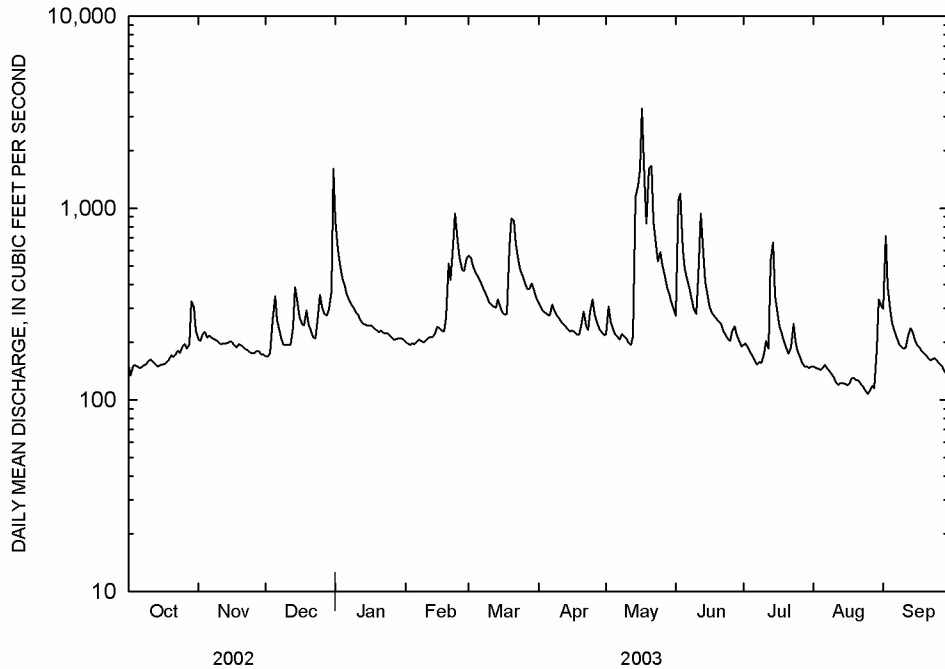
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	252	598	592	647	853	885	721	724	853	379	220	271
MAX	482	2839	1451	2256	2167	1767	1574	1780	3287	1153	507	887
(WY)	1999	1997	2002	1998	2001	1998	2002	1999	2000	1999	2002	1996
MIN	168	166	251	266	242	224	261	311	226	153	125	168
(WY)	2000	1996	1996	2000	1996	1996	2003	1997	1996	1996	1996	2002

SUMMARY STATISTICS FOR 2003 WATER YEAR WATER YEARS 1995 - 2003

ANNUAL TOTAL	110167	
ANNUAL MEAN	302	582
HIGHEST ANNUAL MEAN		795 1999
LOWEST ANNUAL MEAN		302 2003
HIGHEST DAILY MEAN	3310	May 17 19000 Jan 5 1998
LOWEST DAILY MEAN	107	Aug 25 86 Sep 7 1998
ANNUAL SEVEN-DAY MINIMUM	114	Aug 22 93 Sep 5 1998
MAXIMUM PEAK FLOW	5370	May 16 32300 Jan 5 1998
MAXIMUM PEAK STAGE	9.73	May 16 19.24 Jan 5 1998
INSTANTANEOUS LOW FLOW	105	Aug 25 78 Sep 11 1996
ANNUAL RUNOFF (AC-FT)	218500	421500
ANNUAL RUNOFF (CFSM)	0.52	1.01
ANNUAL RUNOFF (INCHES)	7.13	13.75
10 PERCENT EXCEEDS	507	1020
50 PERCENT EXCEEDS	222	293
90 PERCENT EXCEEDS	149	149

^eEstimated



ARKANSAS RIVER BASIN

253

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT	22...	80513	81213	151	740	7.8	78	7.8	384	14.2	130	49.0	2.10
JAN	09...	80513	81213	319	730	10.4	89	8.1	338	6.6	130	50.0	2.30
MAR	05...	80513	81213	501	751	10.2	86	7.9	318	7.4	120	44.0	2.20
APR	29...	80513	81213	217	738	6.9	76	7.9	344	18.4	130	48.0	2.20
MAY	14...	80513	81213	1380	750	7.2	81	7.9	275	20.0	110	39.0	1.90
	15...	80513	81213	2550	746	8.9	98	7.0	180	18.8	67	24.0	1.70
	15...	80513	81213	1190	740	7.6	86	7.3	205	19.9	75	27.0	1.80
JUL	02...	80513	81213	203	736	6.9	85	7.7	362	24.2	130	49.0	2.20
AUG	27...	80513	81213	124	740	8.3	107	7.8	411	26.7	130	49.0	2.20

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
OCT	5.10	.9	24.0	28	23.0	20.0	224	.20	.01	.01	--	--	3.00
JAN	3.60	.5	14.0	18	16.0	17.0	193	.20	.01	.01	--	--	3.30
MAR	3.10	.5	12.0	18	16.0	17.0	185	.20	--	<.01	--	--	2.90
APR	4.20	.6	16.0	21	18.0	19.0	206	.20	.01	.01	7.92	1.79	1.80
MAY	4.40	.6	13.0	20	13.0	16.0	180	1.1	.09	.07	8.32	1.88	1.90
	5.00	.3	5.1	13	6.10	10.0	114	2.4	.23	.18	5.18	1.17	1.20
	4.20	.4	7.4	17	8.40	12.0	145	1.1	.08	.06	5.67	1.28	1.30
JUL	4.40	.7	18.0	22	18.0	19.0	232	<.20	--	<.01	--	--	1.80
AUG	6.00	1	27.0	30	27.0	28.0	239	<.20	--	<.01	--	--	1.20

Date	Nitrite, water, fltrd, mg/L (71856)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)
OCT	--	<.010	.19	1.69	.55	.56	.56	3.2	56	71	66	80	3
JAN	--	<.010	.19	.675	.22	.22	.24	3.5	66	86	86	100	3
MAR	--	<.010	--	.337	.11	.13	.15	3.1	E19	22	28	46	24
APR	.033	.010	.19	.399	.13	.14	.16	2.0	120	E100	140	94	11
MAY	.066	.020	1.0	.429	.14	.15	.31	3.0	4700	4100	5500	93	230
	.099	.030	2.2	.583	.19	.19	.64	3.6	E28000	E20000	E47000	96	409
	.066	.020	1.0	.460	.15	.15	.29	2.4	E5000	E8000	E14000	97	122
JUL	--	<.010	--	.399	.13	.13	.14	--	52	70	66	94	48
AUG	--	<.010	--	.583	.19	.19	.20	--	30	57	78	92	77

ARKANSAS RIVER BASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspended sediment load, tons/d (80155)
OCT	
22...	1.2
JAN	
09...	2.6
MAR	
05...	32
APR	
29...	6.4
MAY	
14...	857
15...	2820
15...	392
JUL	
02...	26
AUG	
27...	26

Remark codes used in this report:

< -- Less than
E -- Estimated value

ARKANSAS RIVER BASIN

255

07195800 FLINT CREEK AT SPRINGTOWN

LOCATION.--Lat 36°15'20", long 94°25'50", in NW1/4 sec.7, T.13 N., R.32 W., Benton County, Hydrologic Unit 11110103, on right bank 20 ft downstream from State Highway 12, 0.8 mi southwest of Springtown.

DRAINAGE AREA.--14.2 mi².

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

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,173.47 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	7.2	6.2	15	3.7	13	7.5	12	7.9	e5.3	3.7	8.4
2	5.1	7.3	6.2	12	3.8	15	6.9	9.7	9.5	e5.0	4.8	11
3	5.1	8.2	6.5	9.9	3.8	14	6.6	7.6	8.7	4.0	5.0	6.2
4	5.1	7.4	14	8.9	3.3	12	6.4	7.4	7.8	3.6	5.1	5.0
5	5.0	7.4	9.6	7.3	3.3	11	5.8	7.8	7.4	3.5	5.7	4.3
6	5.3	7.1	8.1	6.8	3.9	9.2	7.7	16	7.2	3.5	4.8	3.9
7	5.2	7.0	7.4	6.4	3.7	8.2	7.1	12	6.6	3.4	4.3	3.5
8	5.4	7.4	6.9	6.1	3.5	7.4	6.1	14	5.9	3.4	3.9	3.4
9	6.0	8.0	6.6	5.7	4.3	6.7	5.8	13	5.5	3.8	3.6	3.2
10	6.3	8.6	6.5	5.2	4.2	6.0	5.5	12	5.9	6.3	3.6	2.9
11	6.4	8.3	6.3	4.9	4.5	5.6	5.3	10	e135	5.2	3.7	5.5
12	6.4	8.4	6.3	4.7	4.3	5.5	5.1	9.1	e104	5.4	3.7	6.9
13	6.0	8.6	11	4.5	4.1	5.5	4.8	26	e30	58	3.6	6.0
14	6.0	8.8	8.9	4.5	5.8	5.1	4.8	33	e19	25	3.7	4.7
15	6.1	9.3	7.5	4.4	6.1	4.8	4.7	27	e10	18	3.5	4.0
16	5.8	8.4	7.0	4.5	5.6	4.8	5.0	53	e10	14	3.4	3.4
17	6.0	8.3	7.0	4.2	5.2	4.8	5.2	64	e8.8	12	3.3	3.1
18	5.9	8.3	7.8	4.1	5.1	4.9	4.8	49	e6.8	10	2.6	3.1
19	6.6	8.3	7.3	4.3	8.3	12	5.5	40	8.3	9.6	2.6	3.4
20	6.8	8.2	6.5	4.5	8.8	19	5.5	94	7.5	8.1	2.6	3.2
21	6.3	8.0	6.2	4.3	8.6	19	5.0	38	6.8	7.3	2.8	3.2
22	6.2	8.0	6.0	4.1	11	17	4.8	31	6.3	8.5	2.8	3.8
23	6.2	6.0	6.5	3.8	13	15	5.2	26	e6.4	7.0	2.5	3.4
24	6.5	3.9	7.9	3.9	12	13	9.4	23	e5.8	5.7	2.7	3.3
25	8.5	6.5	7.3	4.2	10	12	6.8	20	e6.7	5.2	2.8	3.2
26	6.7	6.6	6.9	4.0	9.9	10	6.3	17	e11	4.7	2.7	3.2
27	6.9	6.9	7.0	3.9	10	9.3	6.1	14	e6.8	4.4	2.7	3.5
28	8.3	6.9	7.7	4.0	11	11	6.0	12	e6.4	4.0	3.0	3.5
29	11	6.9	9.8	4.1	---	10	6.0	11	e5.5	3.9	8.7	3.7
30	7.7	6.4	18	3.8	---	8.9	5.9	9.9	e5.5	3.9	6.8	3.9
31	7.5	---	22	3.8	---	8.2	---	8.8	---	4.0	5.1	---
TOTAL	197.1	226.6	258.9	171.8	180.8	307.9	177.6	727.3	479.0	265.7	119.8	129.8
MEAN	6.36	7.55	8.35	5.54	6.46	9.93	5.92	23.5	16.0	8.57	3.86	4.33
MAX	11	9.3	22	15	13	19	9.4	94	135	58	8.7	11
MIN	4.8	3.9	6.0	3.8	3.3	4.8	4.7	7.4	5.5	3.4	2.5	2.9
AC-FT	391	449	514	341	359	611	352	1440	950	527	238	257
CFSM	0.45	0.53	0.59	0.39	0.45	0.70	0.42	1.65	1.12	0.60	0.27	0.30
IN.	0.52	0.59	0.68	0.45	0.47	0.81	0.47	1.91	1.25	0.70	0.31	0.34

ARKANSAS RIVER BASIN

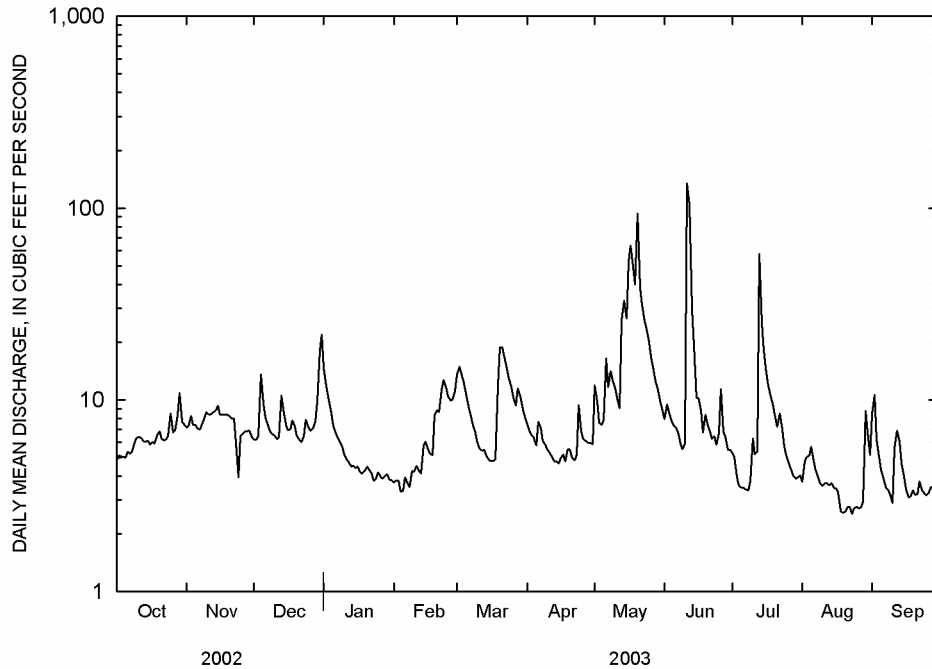
07195800 FLINT CREEK AT SPRINGTOWN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2003, BY WATER YEAR (WY)

MEAN	10.5	17.9	18.1	14.2	16.0	20.9	20.8	18.4	20.1	9.71	7.74	8.84
MAX	51.8	83.7	63.0	50.7	45.8	57.7	60.5	107	121	42.5	61.5	38.3
(WY)	1987	1974	1988	1998	2001	1973	1965	1990	1974	1999	1961	1986
MIN	2.20	2.56	2.98	2.98	3.20	3.02	3.15	3.29	2.79	1.83	0.77	1.88
(WY)	1983	1967	1967	1981	1967	1967	1981	1967	1966	1964	1980	1967

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1961 - 2003	
ANNUAL TOTAL	4291.6		3242.3			
ANNUAL MEAN	11.8		8.88		15.1	
HIGHEST ANNUAL MEAN					34.4 1974	
LOWEST ANNUAL MEAN					3.80 1967	
HIGHEST DAILY MEAN	97	Apr 8	135	Jun 11	1730	Jun 8 1974
LOWEST DAILY MEAN	3.9	Nov 24	2.5	Aug 23	0.00	Aug 3 1980
ANNUAL SEVEN-DAY MINIMUM	4.9	Sep 2	2.7	Aug 18	0.33	Aug 3 1980
MAXIMUM PEAK FLOW			456	May 20	¹ 14600	Jun 8 1974
MAXIMUM PEAK STAGE			6.37	May 20	² 17.51	Jun 8 1974
INSTANTANEOUS LOW FLOW			0.00	Nov 23-24	³ 0.00	Aug 3 1980
ANNUAL RUNOFF (AC-FT)	8510		6430		10910	
ANNUAL RUNOFF (CFSM)	0.83		0.63		1.06	
ANNUAL RUNOFF (INCHES)	11.24		8.49		14.41	
10 PERCENT EXCEEDS	22		13		28	
50 PERCENT EXCEEDS	9.3		6.3		8.4	
90 PERCENT EXCEEDS	5.3		3.5		3.4	

¹From rating curve extended above 770 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow
²From floodmark
³Result of pumpage upstream from gage for irrigation
^eEstimated



ARKANSAS RIVER BASIN

257

07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OKLAHOMA

LOCATION.--Lat 36°12'58", long 94°36'15", in NE1/4NE1/4 sec.14, T.20 N., R.25 E., Delaware County, Oklahoma, Hydrologic Unit 11110103, on left bank 800 ft downstream from county bridge, 2.5 mi from Arkansas-Oklahoma State line, northwest of West Siloam Springs, Oklahoma.

DRAINAGE AREA.--59.8 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 958.00 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow is partially regulated by Lake Siloam Springs, 4.5 mi upstream, and sewage discharge into Flint Creek from city of Gentry.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.77	9.5	18	44	14	38	28	25	25	9.5	9.7	15
2	0.71	10	17	35	15	41	26	26	35	9.5	11	27
3	0.59	12	18	29	17	39	25	24	29	9.0	12	14
4	0.76	11	24	26	15	36	25	23	24	8.4	12	9.2
5	0.72	11	19	23	14	33	23	22	22	7.8	9.9	6.5
6	0.96	11	16	20	15	29	25	22	22	8.3	9.9	8.3
7	1.4	9.7	15	19	16	27	24	24	20	9.1	7.4	8.2
8	5.5	11	13	17	15	26	23	24	18	7.1	5.4	7.5
9	1.8	11	14	18	17	22	21	17	16	7.2	6.5	7.2
10	1.6	11	13	17	18	21	21	13	16	15	6.5	6.4
11	1.8	12	12	16	18	21	20	12	37	13	6.7	4.0
12	2.0	11	11	16	18	20	20	12	51	12	5.0	6.2
13	3.4	10	16	15	18	19	20	23	41	43	4.9	7.3
14	3.8	11	14	15	21	19	20	50	44	61	5.0	5.5
15	5.0	11	13	16	24	24	20	44	30	35	4.5	4.2
16	5.6	11	12	16	22	24	21	112	25	26	4.2	3.5
17	6.8	11	12	15	21	24	21	203	22	20	3.7	5.1
18	7.4	13	13	14	21	24	20	162	18	17	3.2	5.2
19	8.4	12	12	15	28	35	22	123	20	16	2.9	5.0
20	9.9	14	11	15	30	43	22	190	19	16	2.6	2.7
21	8.4	16	11	15	32	47	21	143	17	13	1.9	2.1
22	7.5	16	10	14	38	44	20	100	16	16	2.0	4.5
23	8.1	16	12	14	43	40	20	79	15	13	1.6	5.0
24	7.9	16	19	14	39	37	28	68	14	7.8	1.5	5.1
25	11	16	16	14	35	33	26	61	14	8.0	1.3	4.8
26	10	16	14	14	33	31	24	49	23	7.6	1.1	4.6
27	9.5	16	14	14	32	29	23	41	13	7.0	0.91	2.6
28	11	18	15	15	33	35	22	36	10	6.5	0.85	2.5
29	15	18	19	15	---	33	22	32	9.7	6.7	4.8	5.0
30	12	18	45	14	---	31	21	29	9.4	8.3	4.5	5.3
31	10	---	56	14	---	29	---	25	---	9.7	7.9	---
TOTAL	179.31	389.2	524	558	662	954	674	1814	675.1	453.5	161.36	199.5
MEAN	5.78	13.0	16.9	18.0	23.6	30.8	22.5	58.5	22.5	14.6	5.21	6.65
MAX	15	18	56	44	43	47	28	203	51	61	12	27
MIN	0.59	9.5	10	14	14	19	20	12	9.4	6.5	0.85	2.1
AC-FT	356	772	1040	1110	1310	1890	1340	3600	1340	900	320	396

ARKANSAS RIVER BASIN

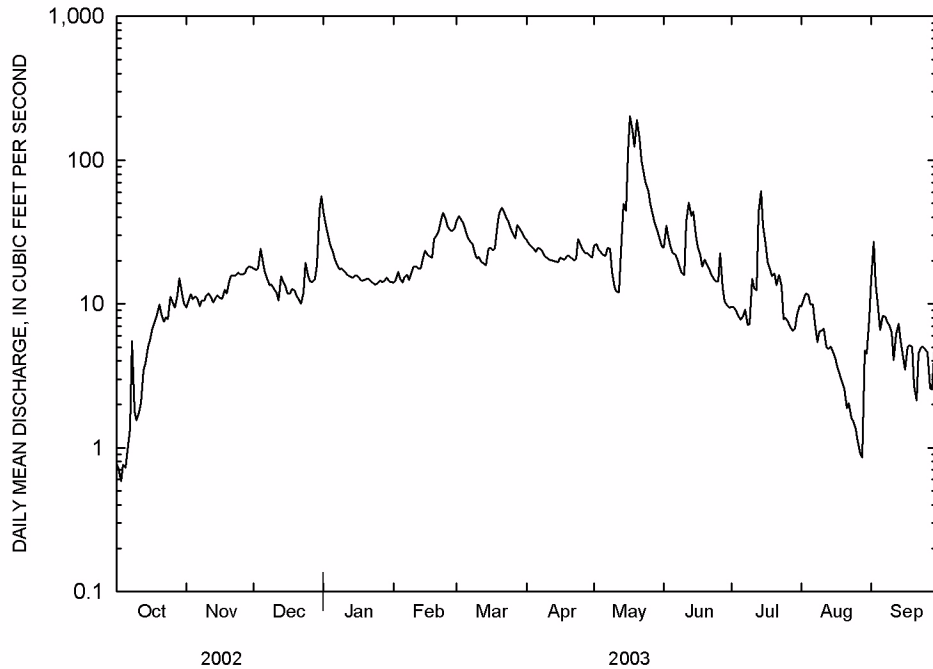
07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OKLAHOMA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2003, BY WATER YEAR (WY)

MEAN	28.2	49.8	63.1	47.5	56.6	72.2	63.3	64.9	65.4	27.8	16.1	20.0
MAX	199	148	219	123	161	176	143	251	337	130	35.6	132
(WY)	1987	1994	1993	1985	2001	1985	1985	1990	2000	1999	1986	1986
MIN	3.48	3.86	6.62	3.88	4.37	7.04	7.43	20.9	9.72	2.79	0.77	1.80
(WY)	1981	1981	1980	1980	1981	1981	1981	1981	1981	1980	1980	1980

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003	
ANNUAL TOTAL	11626.81		7243.97			
ANNUAL MEAN	31.9		19.8		47.8	
HIGHEST ANNUAL MEAN					97.9 1985	
LOWEST ANNUAL MEAN					10.7 1981	
HIGHEST DAILY MEAN	298	Apr 8	203	May 17	3160	Jun 21 2000
LOWEST DAILY MEAN	0.59	Oct 3	0.59	Oct 3	0.40	Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	0.84	Oct 1	0.84	Oct 1	0.56	Aug 5 1980
MAXIMUM PEAK FLOW			345	May 20	18750	Jun 21 2000
MAXIMUM PEAK STAGE			5.53	May 20	13.58	Jun 21 2000
ANNUAL RUNOFF (AC-FT)	23060		14370		34650	
10 PERCENT EXCEEDS	66		35		100	
50 PERCENT EXCEEDS	25		15		26	
90 PERCENT EXCEEDS	6.9		4.6		7.0	

¹From rating curve extended above 3,900 ft³/s



ARKANSAS RIVER BASIN

259

07196900 BARON FORK AT DUTCH MILLS

LOCATION.--Lat 35°52'48", long 94°29'11", on line between secs.21 and 22, T.14 N., R.33 W., Washington County, Hydrologic Unit 11110103, near right bank on downstream side of bridge on State Highway 59 at Dutch Mills, 2.2 mi downstream from Fly Creek, and 2.9 mi upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--40.6 mi² (corrected.)

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1958 to current year. Prior to October 1969, published as "Barren Fork at Dutch Mills."

REVISED RECORDS.--WDR Ark. 1970: Drainage area. WDR Ark. 1993: 1992 (m).

GAGE.--Water-stage recorder. Datum of gage is 986.47 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.3	1.5	39	3.6	34	13	6.2	8.9	6.6	1.7	9.9
2	4.1	3.5	1.4	30	3.5	30	13	6.5	96	6.8	1.8	11
3	4.0	4.1	e2.3	24	3.6	27	12	5.6	43	6.0	1.9	8.6
4	4.1	3.7	e7.0	20	3.3	24	12	5.3	25	5.2	2.1	5.6
5	4.0	3.6	4.3	17	3.1	22	11	5.1	19	5.1	2.1	4.1
6	4.4	3.2	3.3	15	3.8	19	10	4.5	16	4.9	1.7	3.6
7	4.4	2.7	2.9	13	4.0	18	10	5.6	14	4.4	1.6	3.2
8	4.3	2.5	2.8	11	3.3	16	9.3	6.7	11	4.2	1.4	2.8
9	4.4	2.6	e2.3	11	3.9	15	8.4	5.9	9.0	3.9	1.1	2.7
10	5.0	2.4	e2.4	9.4	4.5	14	8.6	5.7	7.8	5.0	0.99	2.4
11	5.2	2.2	e2.2	8.3	5.1	13	8.4	7.7	270	5.2	0.91	2.9
12	4.8	2.0	e2.5	7.6	5.4	12	8.1	6.7	74	5.2	0.72	5.0
13	4.3	1.9	e7.4	7.1	5.4	13	7.6	19	39	23	0.50	7.7
14	3.9	1.9	14	6.7	8.1	12	7.1	182	27	12	0.48	7.7
15	3.7	2.0	10	6.2	9.5	11	7.1	65	21	6.3	0.36	6.1
16	3.6	2.0	8.7	6.2	8.1	11	6.8	328	15	5.3	0.16	4.8
17	3.4	1.9	e8.0	5.4	7.0	11	6.1	197	13	4.4	0.11	4.0
18	3.4	1.8	e7.7	4.9	6.5	11	6.8	92	11	4.0	0.20	3.5
19	3.4	1.8	8.0	5.0	41	49	7.3	56	9.2	3.6	0.01	2.9
20	3.5	1.8	7.8	5.2	34	59	26	73	10	3.4	0.00	2.8
21	3.6	1.7	8.0	5.0	31	48	15	53	10	3.2	0.00	2.7
22	3.4	1.7	8.2	4.5	140	34	11	39	5.2	3.7	0.00	2.6
23	3.1	1.6	11	3.8	76	28	9.5	30	3.6	e3.6	0.00	2.5
24	2.9	1.6	33	3.4	59	24	19	26	3.5	e3.3	0.13	2.6
25	3.1	1.5	30	3.7	42	20	17	27	5.3	3.1	0.15	2.3
26	3.0	1.5	25	3.7	37	18	13	23	10	2.6	0.05	2.2
27	2.8	1.5	24	3.3	36	16	11	19	9.0	2.0	0.03	2.3
28	3.2	1.6	25	3.6	36	18	8.8	16	7.3	1.7	0.00	2.2
29	6.9	1.5	26	3.9	---	18	7.6	11	6.7	1.5	0.97	2.1
30	4.7	1.5	79	3.7	---	16	6.7	11	6.3	1.9	2.5	2.3
31	3.6	---	86	3.6	---	15	---	10	---	1.8	2.6	---
TOTAL	122.3	66.6	461.7	294.2	623.7	676	317.2	1348.5	805.8	152.9	26.27	125.1
MEAN	3.95	2.22	14.9	9.49	22.3	21.8	10.6	43.5	26.9	4.93	0.85	4.17
MAX	6.9	4.1	86	39	140	59	26	328	270	23	2.6	11
MIN	2.8	1.5	1.4	3.3	3.1	11	6.1	4.5	3.5	1.5	0.00	2.1
AC-FT	243	132	916	584	1240	1340	629	2670	1600	303	52	248
CFSM	0.10	0.05	0.37	0.23	0.55	0.54	0.26	1.07	0.66	0.12	0.02	0.10
IN.	0.11	0.06	0.42	0.27	0.57	0.62	0.29	1.24	0.74	0.14	0.02	0.11

ARKANSAS RIVER BASIN

07196900 BARON FORK AT DUTCH MILLS--CONTINUED

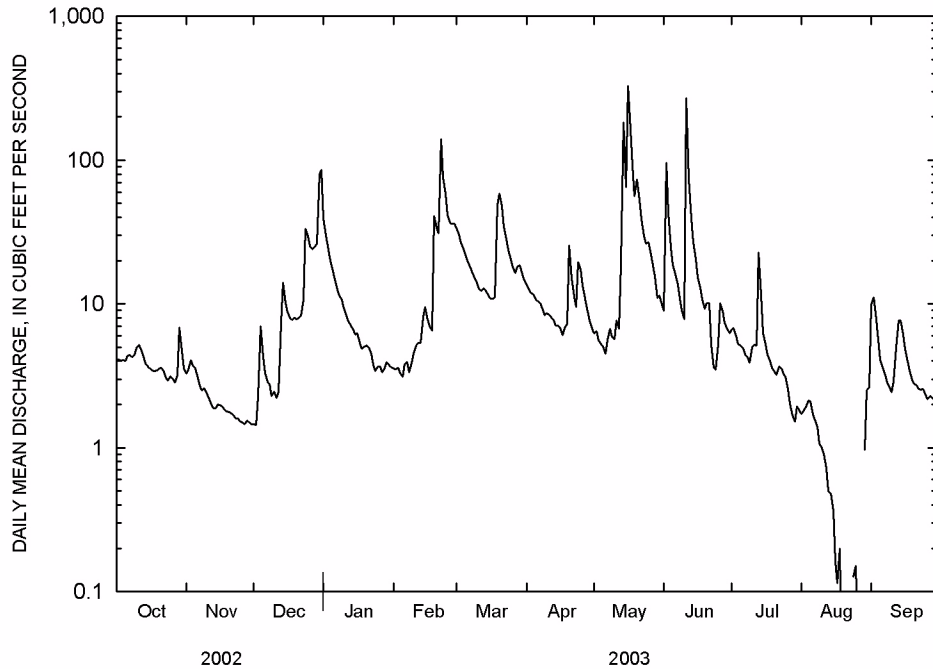
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

MEAN	25.5	55.7	52.8	47.4	56.9	76.5	76.8	68.5	41.1	16.6	7.42	17.9
MAX	218	347	221	258	163	205	310	307	366	131	62.0	242
(WY)	1971	1986	1988	1998	1975	1973	1990	1990	2000	1958	1992	1974
MIN	0.094	0.51	0.55	0.53	2.16	5.98	6.71	3.25	0.35	0.22	0.000	0.080
(WY)	1964	1964	1964	1964	1964	1967	1963	1977	1963	1963	1980	1980

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003	
ANNUAL TOTAL	12725.37		5020.27			
ANNUAL MEAN	34.9		13.8		44.8	
HIGHEST ANNUAL MEAN					104 1993	
LOWEST ANNUAL MEAN					3.99 1963	
HIGHEST DAILY MEAN	1220	Mar 19	328	May 16	4660	Jun 21 2000
LOWEST DAILY MEAN	0.79	Sep 24	0.00	Aug 20	0.00	Jul 23 1963
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 4	0.04	Aug 19	0.00	Sep 20 1963
MAXIMUM PEAK FLOW			1730	Jun 11	¹ 20900	Nov 18 1985
MAXIMUM PEAK STAGE			5.63	Jun 11	14.81	Nov 18 1985
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	25240		9960		32460	
ANNUAL RUNOFF (CFSM)	0.86		0.34		1.10	
ANNUAL RUNOFF (INCHES)	11.66		4.60		15.00	
10 PERCENT EXCEEDS	58		30		85	
50 PERCENT EXCEEDS	8.3		5.4		12	
90 PERCENT EXCEEDS	1.5		1.7		0.90	

¹From rating curve extended above 2,900 ft³/s on basis of contracted-opening measurements at 12,900 ft³/s and 19,500 ft³/s

^eEstimated



ARKANSAS RIVER BASIN

07196900 BARON FORK AT DUTCH MILLS--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1960 to September 1961, October 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 22...	0900	80513	81213	3.6	736	8.1	82	7.7	330	14.3	150	53.0	3.20
JAN 09...	1300	80513	81213	1.9	728	8.4	75	8.3	345	8.4	160	59.0	3.70
MAR 05...	0945	80513	81213	14	749	10.4	87	8.1	301	6.9	130	48.0	3.30
APR 29...	1130	80513	81213	6.9	735	8.9	101	8.2	296	19.5	140	49.0	3.30
JUN 25...	0930	80513	81213	6.6	736	6.5	82	7.6	330	25.5	150	55.0	3.40
AUG 27...	0900	80513	81213	.10	740	8.3	106	7.5	285	26.4	130	45.0	3.10

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
OCT 22...	2.90	.3	7.7	10	12.0	15.0	182	<.20	--	<.01	--	--	1.10
JAN 09...	2.80	.2	6.2	8	10.0	24.0	210	.30	.01	.01	--	--	4.00
MAR 05...	2.40	.2	5.5	8	8.90	19.0	183	<.20	--	<.01	14.6	3.29	3.30
APR 29...	2.70	.2	5.6	8	7.40	18.0	178	1.4	.03	.02	1.90	.43	.45
JUN 25...	3.10	.2	5.5	7	7.50	16.0	185	.20	.04	.03	5.22	1.18	1.20
AUG 27...	3.40	.2	5.7	9	8.50	7.20	161	.40	.03	.02	--	--	.10

Date	Nitrite, water, fltrd, mg/L (71856)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT 22...	--	<.010	--	.031	.01	<.02	<.02	--	54	78	89	44	5
JAN 09...	--	<.010	.29	.092	.03	.03	.04	4.3	74	88	42	100	.0
MAR 05...	.033	.010	--	.092	.03	.04	.04	--	31	51	28	85	2
APR 29...	.066	.020	1.4	.123	.04	.04	.05	1.8	120	120	130	84	8
JUN 25...	.066	.020	.17	.123	.04	.04	.04	1.4	66	76	99	86	39
AUG 27...	--	<.010	.38	.123	.04	.04	.06	.50	E9	21	130	97	41

Date	Suspended sediment load, tons/d (80155)
OCT 22...	.05
JAN 09...	.00
MAR 05...	.08
APR 29...	.15
JUN 25...	.69
AUG 27...	.01

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

07247000 POTEAU RIVER AT CAUTHRON

LOCATION.--Lat 34°55'08", long 94°17'58", in NW₁/₄SW₁/₄ sec.16, T.3 N., R.31 W., Scott County, Hydrologic Unit 11110105, on right bank at downstream side of Scott County Road No. 56 bridge at Cauthron, 200 ft south of junction with State Hwy 28, 2.9 mi downstream from Cross Creek, 7.8 mi downstream from Jones Creek, and at mile 109.0.

DRAINAGE AREA.--203 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1939 to current year.

REVISED RECORDS.--WSP 1037: 1939(M). WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 569.53 ft above NGVD of 1929. Prior to May 2, 1939, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. As of September 1974, flow from 92.2 mi² upstream from this station is controlled by 16 floodwater-detention reservoirs that have a total combined capacity of 39,082 acre-ft below the flood spillway crests, of which 33,524 acre-ft is flood detention capacity, 2,100 acre-ft is water-supply storage, and 3,458 acre-ft is sediment storage capacity. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1935 reached a stage of 27.4 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	5.9	3.3	1100	14	593	e41	12	4.3	6.6	1.6	3.5
2	1.7	5.6	3.1	668	13	454	e40	25	5.6	22	3.7	3.2
3	2.6	6.9	3.0	387	12	329	39	26	7.8	52	4.4	2.1
4	3.4	12	194	277	11	262	37	18	15	36	4.2	1.5
5	3.5	7.9	88	217	11	217	35	14	15	20	3.6	0.97
6	3.6	17	22	171	12	177	36	12	112	11	3.0	0.70
7	4.1	7.5	12	133	13	147	43	12	106	7.0	2.5	19
8	4.2	3.5	9.2	110	15	125	55	11	61	5.3	2.1	31
9	5.0	2.0	7.8	94	15	108	43	9.6	36	4.2	1.9	31
10	4.6	0.98	6.8	78	18	92	36	8.2	23	36	1.7	31
11	6.1	0.56	6.7	65	33	80	32	6.9	19	145	1.7	32
12	4.7	0.26	6.7	55	37	73	29	5.9	16	34	1.8	50
13	3.6	0.03	544	49	33	92	26	5.5	18	14	1.8	76
14	3.0	0.05	436	45	1530	117	23	6.1	20	9.8	1.5	43
15	2.2	0.37	104	41	746	89	20	6.0	16	7.0	1.3	33
16	1.9	0.38	56	38	379	77	17	8.9	19	5.3	1.2	30
17	2.3	0.44	39	37	260	69	15	84	75	4.5	1.00	31
18	2.4	0.84	31	31	206	65	14	67	60	3.8	0.98	30
19	2.8	0.98	26	28	172	438	13	32	138	3.3	0.95	29
20	3.2	1.4	31	26	147	250	15	18	85	3.1	0.87	28
21	4.4	1.9	26	25	137	186	13	14	47	2.9	0.84	28
22	3.1	2.4	19	25	1160	147	13	12	32	2.8	0.83	28
23	1.5	2.9	42	22	783	120	12	11	23	2.6	0.76	26
24	1.1	2.9	1140	20	433	102	23	9.9	16	2.3	0.70	25
25	2.1	3.2	441	18	337	88	46	9.4	13	2.1	0.71	24
26	3.4	3.4	180	17	361	85	35	8.5	13	2.0	0.72	24
27	4.9	3.1	122	16	488	80	24	7.4	11	1.9	0.79	23
28	4.4	3.5	93	15	703	67	18	6.5	8.4	1.8	0.95	22
29	4.7	3.9	77	15	---	57	14	5.8	7.3	1.7	1.4	21
30	4.8	3.6	575	15	---	e50	13	5.2	6.7	1.7	2.2	21
31	6.5	---	2890	15	---	43	---	4.8	---	1.6	3.3	---
TOTAL	107.0	105.39	7234.6	3853	8079	4879	820	482.6	1029.1	453.3	55.00	747.97
MEAN	3.45	3.51	233	124	289	157	27.3	15.6	34.3	14.6	1.77	24.9
MAX	6.5	17	2890	1100	1530	593	55	84	138	145	4.4	76
MIN	1.1	0.03	3.0	15	11	43	12	4.8	4.3	1.6	0.70	0.70
AC-FT	212	209	14350	7640	16020	9680	1630	957	2040	899	109	1480

ARKANSAS RIVER BASIN

07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	100	272	371	304	410	438	337	444	208	54.8	18.2	21.7
MAX	1423	1900	1078	1075	1298	1185	1092	2080	846	314	93.7	166
(WY)	1985	1997	1983	1998	2001	2002	1991	1990	1986	1981	1996	1996
MIN	0.015	2.09	2.02	14.1	35.6	59.9	27.3	13.6	2.36	0.41	0.81	0.19
(WY)	1979	1996	1990	1981	1996	1986	2003	1977	1988	1980	1976	1980

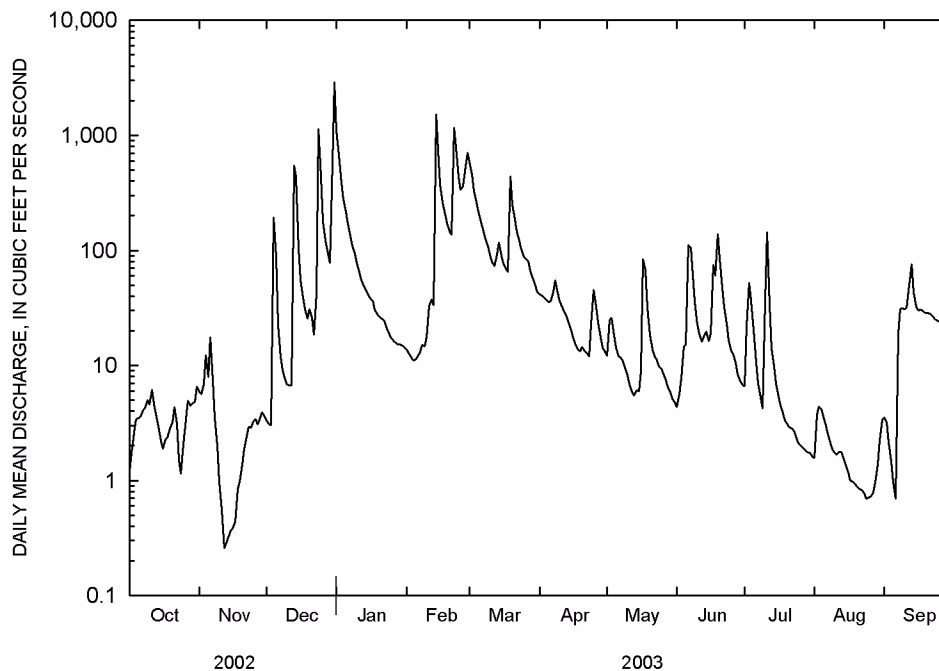
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	120300.72		27845.96			
ANNUAL MEAN	330		76.3		¹ 248	
HIGHEST ANNUAL MEAN					432 1985	
LOWEST ANNUAL MEAN					48.7 1976	
HIGHEST DAILY MEAN	9820	Mar 19	2890	Dec 31	16900	May 3 1990
LOWEST DAILY MEAN	0.03	Nov 13	0.03	Nov 13	0.00	Aug 30 1976
ANNUAL SEVEN-DAY MINIMUM	0.30	Nov 11	0.30	Nov 11	0.00	Oct 7 1978
MAXIMUM PEAK FLOW			4670	Dec 31	² 24000	May 3 1990
MAXIMUM PEAK STAGE			12.12	Dec 31	³ 22.17	May 3 1990
INSTANTANEOUS LOW FLOW			0.00	Nov 13-14	0.00	at times
ANNUAL RUNOFF (AC-FT)	238600		55230		179300	
10 PERCENT EXCEEDS	844		157		601	
50 PERCENT EXCEEDS	36		15		50	
90 PERCENT EXCEEDS	1.9		1.7		1.9	

¹Prior to regulation, water years 1940-74, 218 ft³/s

²Maximum discharge for period of record, 32,200 ft³/s May 20, 1960

³Maximum gage height for period of record, 23.76 May 20, 1960

^eEstimated



ARKANSAS RIVER BASIN

07247000 POTEAU RIVER AT CAUTHRON--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 27, 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, unfltrd water, mg/L as CaCO3 (00900)	Calcium, unfltrd water, mg/L (00915)	Magnesium, unfltrd water, mg/L (00925)
OCT 29...	1000	80513	81213	5.6	740	6.8	70	7.5	538	14.8	36	6.80	4.70
JAN 14...	1030	80513	81213	48	756	10.5	82	8.1	76	4.7	16	2.90	2.10
MAR 03...	1440	80513	81213	306	761	11.8	99	7.4	62	8.0	13	2.40	1.80
MAY 07...	1030	80513	81213	13	744	4.2	50	7.3	126	23.4	23	4.10	3.20
JUN 24...	1000	80513	81213	17	748	5.7	74	7.2	109	28.3	22	3.60	3.10
AUG 25...	0930	80513	81213	.72	751	5.5	72	7.1	154	28.9	24	3.40	3.70

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)
OCT 29...	16.0	6	84.0	76	69.0	73.0	304	.80	.01	.01	<.02	<.010	.79
JAN 14...	2.10	.7	6.3	42	6.10	8.80	44	.40	.05	.04	.32	<.010	.36
MAR 03...	1.40	.6	4.9	41	4.90	8.20	44	.40	--	<.01	.23	<.010	--
MAY 07...	4.10	1	12.0	48	11.0	12.0	74	.50	.08	.06	.14	<.010	.44
JUN 24...	4.80	.9	10.0	44	10.0	9.40	69	.80	.04	.03	.23	<.010	.77
AUG 25...	6.70	2	17.0	53	15.0	11.0	88	.60	.08	.06	<.02	<.010	.54

Date	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, fltrd, mg/L (00666)	Phosphorus, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC, col/100 mL (31625)	Fecal streptococci, KF, col/100 mL (31673)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 29...	.061	.02	.03	.13	--	55	56	130	67	5	.08
JAN 14...	.092	.03	.03	.06	.72	28	43	26	100	5	.65
MAR 03...	.061	.02	.02	.06	.63	21	24	22	93	9	7.4
MAY 07...	.123	.04	.05	.10	.64	50	110	190	90	11	.39
JUN 24...	.307	.10	.09	.18	1.0	79	68	77	79	11	.50
AUG 25...	.061	.02	.02	.05	--	E19	22	120	88	29	.06

Remark codes used in this report:

< -- Less than
E -- Estimated value

ARKANSAS RIVER BASIN

265

07249400 JAMES FORK NEAR HACKETT

LOCATION.--Lat 35°09'45", long 94°24'25", in NW1/4NW1/4 sec.34, T.6 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, near left bank on downstream side of bridge on State Highway 45, 1.7 mi south of Hackett, 2.0 mi downstream from Elder Branch, 2.0 mi upstream from small tributary, and 3.6 mi upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--147 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1958 to current year.

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 457.71 ft above NGVD of 1929. Prior to Oct. 1, 1990, at datum 2.00 ft higher.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.8	3.1	206	2.6	211	37	8.5	7.1	8.8	4.7	4.5
2	1.3	1.8	3.7	130	2.2	169	37	8.7	8.6	8.5	5.8	4.8
3	1.3	2.2	4.4	118	2.1	133	31	23	14	e17	6.6	4.8
4	1.3	3.0	23	87	1.6	111	27	13	12	e31	6.7	4.4
5	1.2	4.2	40	71	1.1	97	23	11	10	e20	6.2	4.0
6	1.4	4.3	31	58	2.1	83	24	22	31	e14	5.6	3.8
7	1.7	3.4	14	47	2.8	73	38	15	69	e10	4.9	3.8
8	2.0	2.8	9.8	41	2.9	67	47	112	42	7.5	4.5	3.8
9	2.1	1.9	7.4	38	4.1	58	32	163	23	6.2	4.3	3.8
10	2.2	1.6	6.2	34	5.6	51	25	59	15	6.9	4.2	3.6
11	2.2	1.7	5.5	28	13	45	21	34	16	7.8	4.3	3.7
12	2.2	2.0	5.2	23	18	42	19	25	50	8.2	4.2	4.7
13	2.0	2.6	48	20	17	110	17	16	68	7.3	4.5	5.9
14	1.7	2.9	130	19	575	151	15	13	119	6.4	4.2	7.8
15	1.5	3.1	57	16	278	90	14	12	601	6.1	4.2	8.7
16	1.4	3.4	35	14	147	70	12	24	238	5.8	4.0	7.1
17	1.3	3.6	25	13	99	59	11	329	155	5.3	4.0	6.1
18	1.2	3.5	20	11	80	58	13	150	112	5.3	4.0	5.5
19	1.2	3.4	17	9.8	70	599	11	86	341	5.2	3.9	5.1
20	1.4	3.4	15	9.3	63	289	13	54	142	5.1	3.8	4.8
21	1.4	3.3	13	8.3	69	205	19	42	81	5.0	3.8	4.6
22	1.6	3.4	11	7.3	1220	146	15	33	54	5.1	3.8	4.4
23	1.6	3.4	12	5.7	470	113	11	24	37	5.1	3.8	4.4
24	1.6	3.4	129	4.8	254	94	15	19	27	4.9	3.6	4.3
25	1.9	3.5	156	4.0	191	83	16	17	20	4.8	3.6	4.2
26	1.8	3.5	80	3.7	212	93	14	15	17	4.7	3.5	4.0
27	1.7	3.2	54	3.5	303	85	11	12	15	4.6	3.4	3.8
28	1.7	3.1	42	3.5	304	72	9.6	9.9	12	4.5	3.6	3.8
29	2.3	3.1	35	3.5	---	55	9.2	9.1	10	4.3	3.7	3.8
30	2.6	3.1	41	3.1	---	45	8.7	8.3	9.5	4.2	3.7	3.7
31	2.2	---	577	2.8	---	41	---	7.6	---	4.3	3.9	---
TOTAL	52.4	89.6	1650.3	1043.3	4410.1	3598	595.5	1375.1	2356.2	243.9	135.0	141.7
MEAN	1.69	2.99	53.2	33.7	158	116	19.9	44.4	78.5	7.87	4.35	4.72
MAX	2.6	4.3	577	206	1220	599	47	329	601	31	6.7	8.7
MIN	1.2	1.6	3.1	2.8	1.1	41	8.7	7.6	7.1	4.2	3.4	3.6
AC-FT	104	178	3270	2070	8750	7140	1180	2730	4670	484	268	281
CFSM	0.01	0.02	0.36	0.23	1.07	0.79	0.14	0.30	0.53	0.05	0.03	0.03
IN.	0.01	0.02	0.42	0.26	1.12	0.91	0.15	0.35	0.60	0.06	0.03	0.04

ARKANSAS RIVER BASIN

07249400 JAMES FORK NEAR HACKETT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

MEAN	69.8	152	204	164	220	280	233	274	99.8	38.5	10.7	19.1
MAX	867	915	760	820	727	996	1047	1203	342	430	81.7	159
(WY)	1985	1997	1972	1998	2001	2002	1973	1990	1989	1961	1981	1996
MIN	0.000	0.000	0.40	0.50	1.08	0.92	19.9	20.5	3.14	1.69	0.015	0.000
(WY)	1964	1964	1967	1964	1967	1967	2003	2000	1966	1964	1980	1963

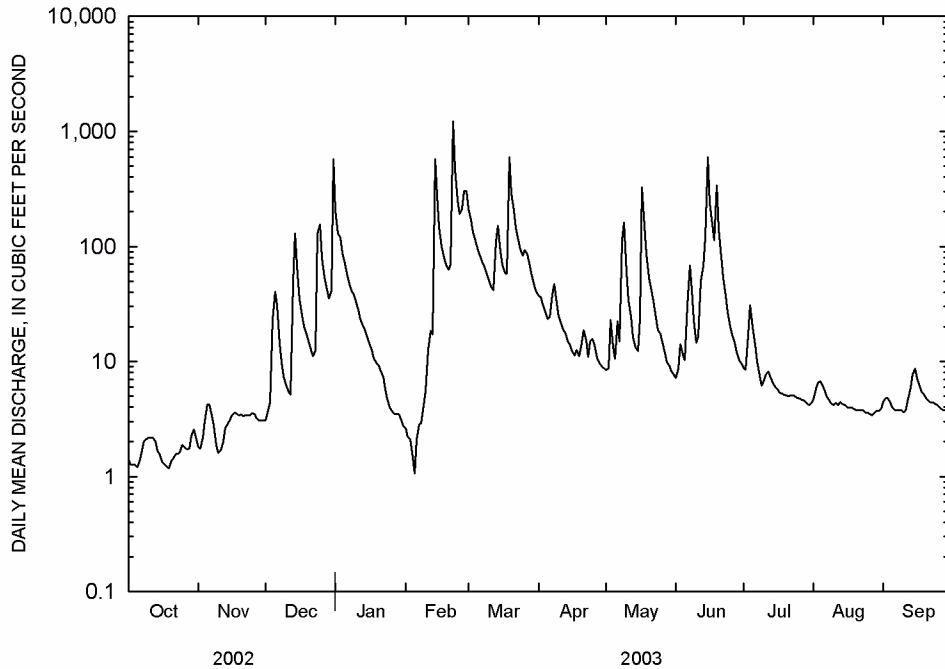
SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1958 - 2003

ANNUAL TOTAL	81861.86		15691.1				
ANNUAL MEAN	224		43.0		145		
HIGHEST ANNUAL MEAN					308 1973		
LOWEST ANNUAL MEAN					29.5 1976		
HIGHEST DAILY MEAN	9960	Apr 8	1220	Feb 22	17100	May 14 1968	
LOWEST DAILY MEAN	0.67	Sep 11	1.1	Feb 5	0.00	Aug 17 1963	
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 7	1.3	Oct 15	0.00	Aug 17 1963	
MAXIMUM PEAK FLOW			2100	Feb 22	¹ 30000	May 14 1968	
MAXIMUM PEAK STAGE			13.48	Feb 22	² 25.00	May 14 1968	
INSTANTANEOUS LOW FLOW			0.90	Feb 5	0.00	at times	
ANNUAL RUNOFF (AC-FT)	162400		31120		105400		
ANNUAL RUNOFF (CFSM)	1.53		0.29		0.99		
ANNUAL RUNOFF (INCHES)	20.72		3.97		13.45		
10 PERCENT EXCEEDS	352		112		276		
50 PERCENT EXCEEDS	22		8.8		30		
90 PERCENT EXCEEDS	1.8		2.2		1.6		

¹From rating curve extended above 20,000 ft³/s

²At present datum

^eEstimated



ARKANSAS RIVER BASIN

267

07249400 JAMES FORK NEAR HACKETT--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1960 to September 1971, October 1975 to September 1978, October 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)
OCT 29...	1400	80513	81213	2.3	744	5.8	59	7.6	306	15.1	120	17.0	18.0
JAN 14...	1400	80513	81213	19	758	11.2	90	8.2	257	5.7	98	16.0	14.0
MAR 03...	1640	80513	81213	127	761	11.0	96	7.6	159	9.3	48	8.30	6.60
MAY 07...	1500	80513	81213	13	746	5.4	65	7.4	292	23.8	100	16.0	15.0
JUN 24...	1330	80513	81213	26	748	4.8	62	7.1	188	27.7	59	10.0	8.30
AUG 25...	1230	80513	81213	3.6	750	7.1	95	7.5	365	29.5	110	16.0	18.0

Date	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chlor-ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, unfltrd mg/L (00605)
OCT 29...	3.10	.6	16.0	22	4.80	64.0	186	.40	.03	.02	<.02	<.010	.38
JAN 14...	2.00	.6	13.0	22	7.40	49.0	149	<.20	.01	.01	.30	<.010	--
MAR 03...	1.80	.6	9.7	30	6.80	29.0	97	.40	--	<.01	.42	<.010	--
MAY 07...	2.20	.6	14.0	23	6.90	60.0	177	.30	.06	.05	.03	<.010	.25
JUN 24...	2.80	.7	12.0	29	5.90	30.0	113	.60	.08	.06	.20	<.010	.54
AUG 25...	2.80	1	31.0	36	8.30	58.0	213	.40	--	<.01	<.02	<.010	--

Date	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Fecal strep-tococci MF, col/ 100 mL (31673)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
OCT 29...	--	<.01	<.02	<.02	--	72	64	150	76	9	.06
JAN 14...	.031	.01	<.02	<.02	--	32	52	75	95	5	.26
MAR 03...	.061	.02	<.02	.06	.82	46	43	43	96	13	4.5
MAY 07...	--	<.01	<.02	<.02	.33	53	70	99	83	16	.56
JUN 24...	.061	.02	<.02	.07	.80	52	84	140	84	52	3.7
AUG 25...	--	<.01	<.02	.02	--	E15	E17	52	86	53	.52

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

ARKANSAS RIVER BASIN

07249800 LEE CREEK AT SHORT, OKLAHOMA

LOCATION.--Lat 35°33'57", long 94°31'56", in SE₁/₄ on line between secs. 27 and 34, T.13 N., R.26 E., Indian Meridian, Sequoyah County, Oklahoma, Hydrologic Unit 11110104, on right bank at right downstream end of bridge on State Highway 101, 0.5 mi west of Short, Oklahoma.

DRAINAGE AREA.--236 mi².

PERIOD OF RECORD.--October 1999 to current year. Occasional low-flow measurements water years 1958-63 and 1987-89.

REVISED RECORDS.--WDR Ark. 2002: 2000(M)

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.32	0.16	398	15	247	113	86	58	22	4.1	39
2	0.00	0.32	0.16	224	15	219	100	72	941	22	5.1	108
3	0.00	0.32	0.24	156	15	187	91	61	817	24	8.5	74
4	0.00	0.32	1.9	120	15	161	83	52	401	20	7.4	54
5	0.00	0.16	1.6	96	15	142	75	46	256	16	5.4	40
6	0.00	0.16	1.5	80	17	125	68	40	188	14	4.8	25
7	0.00	0.16	1.8	67	17	108	64	187	147	12	4.0	18
8	0.00	0.16	2.1	57	16	95	56	247	112	11	3.4	14
9	0.00	0.16	2.1	50	17	85	50	137	84	9.0	3.6	12
10	0.00	0.16	2.0	44	17	75	46	107	63	9.1	4.9	10
11	0.00	0.27	2.0	39	17	67	41	156	141	8.3	6.5	9.7
12	0.00	0.32	2.2	35	16	61	38	213	602	7.3	8.2	11
13	0.00	0.32	e5.1	32	17	72	35	145	300	22	9.4	15
14	0.00	0.32	e7.4	31	22	94	32	1080	193	119	10	19
15	0.00	0.28	e3.6	29	57	102	30	1270	191	69	10	27
16	0.00	0.24	e5.5	27	90	91	28	2400	165	35	10	20
17	0.00	0.16	e6.3	25	80	82	25	5120	122	23	10	16
18	0.00	0.16	e9.6	23	65	78	24	1690	154	17	10	13
19	0.00	0.16	e9.6	22	78	422	24	1050	200	14	10	11
20	0.00	0.16	e8.5	21	282	929	44	874	173	12	9.9	9.6
21	0.00	0.16	e7.3	20	320	963	92	893	154	10	9.2	8.6
22	0.00	0.16	e6.8	19	1300	692	90	649	131	9.0	8.5	8.6
23	0.00	0.16	e8.2	18	1140	525	68	494	88	7.5	7.7	7.4
24	0.00	0.16	e13	17	744	414	249	371	64	6.4	6.8	6.7
25	0.00	0.16	e13	17	526	330	497	309	53	5.6	6.0	6.0
26	0.00	0.16	e24	16	395	266	320	266	47	4.7	5.1	5.1
27	0.00	0.16	e18	16	317	216	225	209	43	4.1	4.2	4.5
28	0.02	0.16	13	15	270	190	169	158	43	3.3	3.4	4.0
29	0.32	0.16	9.6	15	---	171	132	121	34	3.1	6.2	4.2
30	0.32	0.16	14	15	---	150	105	95	27	3.6	9.2	6.6
31	0.32	---	479	15	---	128	---	75	---	3.9	29	---
TOTAL	1.15	6.23	679.26	1759	5895	7487	3014	18673	5992	546.9	240.5	607.0
MEAN	0.037	0.21	21.9	56.7	211	242	100	602	200	17.6	7.76	20.2
MAX	0.32	0.32	479	398	1300	963	497	5120	941	119	29	108
MIN	0.00	0.16	0.16	15	15	61	24	40	27	3.1	3.4	4.0
AC-FT	2.3	12	1350	3490	11690	14850	5980	37040	11890	1080	477	1200
CFSM	0.00	0.00	0.09	0.24	0.89	1.02	0.43	2.55	0.85	0.07	0.03	0.09
IN.	0.00	0.00	0.11	0.28	0.93	1.18	0.48	2.94	0.94	0.09	0.04	0.10

ARKANSAS RIVER BASIN

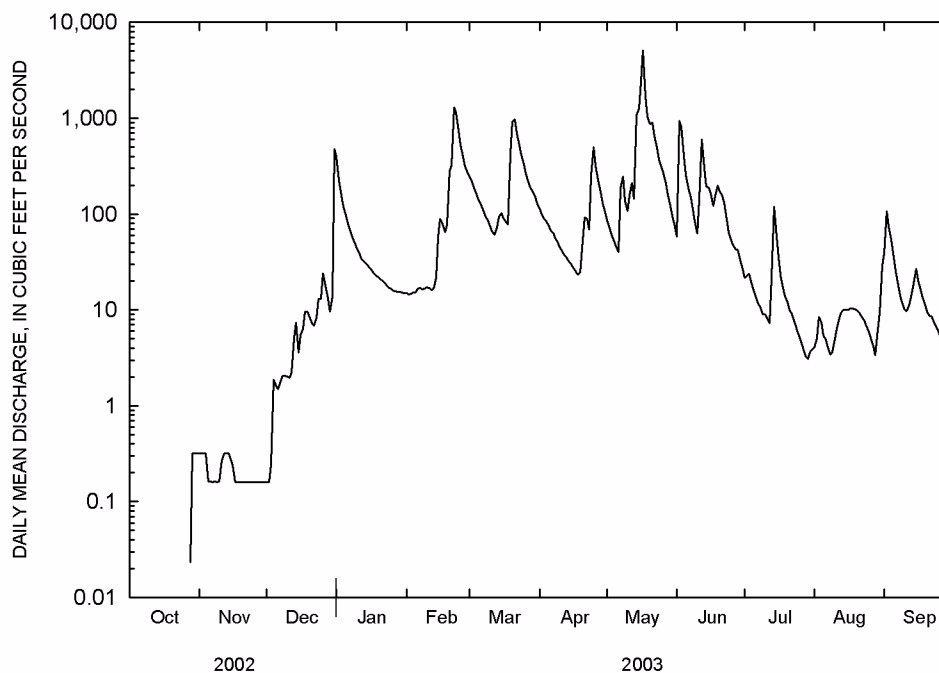
07249800 LEE CREEK AT SHORT, OKLAHOMA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	46.1	144	334	229	603	561	407	393	554	51.6	17.3	6.32
MAX	127	530	887	459	1488	1286	1218	724	1851	175	55.7	20.2
(WY)	2002	2001	2002	2001	2001	2002	2002	2000	2000	2000	2002	2003
MIN	0.037	0.21	21.9	56.7	65.9	242	100	88.6	80.5	6.97	1.00	0.27
(WY)	2003	2003	2003	2003	2000	2003	2003	2002	2001	2002	2001	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	113478.90		44901.04			
ANNUAL MEAN	311		123		276	
HIGHEST ANNUAL MEAN					398 2002	
LOWEST ANNUAL MEAN					123 2003	
HIGHEST DAILY MEAN	13500	Apr 8	5120	May 17	25600	Jun 21 2000
LOWEST DAILY MEAN	0.00	Sep 18	0.00	Oct 2	0.00	Sep 16 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 2	0.00	Oct 2	0.00	Oct 15 1999
MAXIMUM PEAK FLOW			8910	May 17	¹ 59200	Jun 21 2000
MAXIMUM PEAK STAGE			12.70	May 17	25.07	Jun 21 2000
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	225100		89060		200300	
ANNUAL RUNOFF (CFSM)	1.32		0.52		1.17	
ANNUAL RUNOFF (INCHES)	17.89		7.08		15.92	
10 PERCENT EXCEEDS	657		275		612	
50 PERCENT EXCEEDS	20		18		44	
90 PERCENT EXCEEDS	0.16		0.16		0.58	

¹From rating curve extended above 17,000 ft³/s on basis of HEC-RAS V. 3.0 measurement of peak flow
^eEstimated



ARKANSAS RIVER BASIN

07249870 LITTLE LEE CREEK NEAR GREASY, OKLAHOMA

LOCATION.--Lat 35°39'07", long 94°37'18", in NE₁/₄NW₁/₄ sec.35, T.14 N., R.25 E., Adair County, Oklahoma, Hydrologic Unit 11110104, on right bank downstream from bridge on graveled county road, 4.6 mi southeast of Greasy, Oklahoma, 5.9 mi northwest of Nicut, Oklahoma, and 8.3 mi west of the Oklahoma-Arkansas State Line.

DRAINAGE AREA.--51.3 mi².

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except discharges above 200 ft³/s, which are fair and estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	1.6	0.41	56	3.8	39	21	15	121	72	5.9	13
2	0.00	2.0	0.35	36	3.8	34	20	13	850	59	6.9	18
3	0.00	2.0	0.52	26	3.7	29	18	11	398	50	9.4	14
4	0.00	2.2	2.6	20	3.5	27	17	10	287	43	6.4	11
5	0.00	2.4	1.8	17	3.5	24	16	9.0	240	38	5.4	8.3
6	0.00	2.1	1.3	14	4.3	21	15	19	211	34	4.6	6.8
7	0.00	1.8	0.98	12	4.1	19	14	88	186	31	4.0	5.6
8	0.00	1.9	0.76	11	3.6	18	13	31	164	28	3.4	5.1
9	0.00	2.3	0.68	10	4.0	16	12	21	147	26	2.7	4.6
10	0.00	2.2	0.68	9.2	4.2	15	11	20	134	26	2.4	4.2
11	0.00	2.1	0.67	8.4	4.3	14	11	48	176	23	2.5	6.7
12	0.00	2.1	0.93	7.7	4.5	13	10	29	176	23	2.5	7.0
13	0.00	1.8	3.3	7.3	5.4	23	9.4	21	147	96	2.0	8.9
14	0.00	1.9	3.6	6.9	20	30	8.6	20	135	78	1.6	9.6
15	0.00	1.8	2.7	6.5	30	27	8.3	20	123	49	1.4	8.0
16	0.00	1.5	2.3	6.5	24	24	8.0	453	110	36	0.98	6.9
17	0.00	1.5	2.3	5.9	19	22	7.6	1190	103	28	0.60	5.8
18	0.00	1.5	2.4	5.6	17	22	7.4	494	100	24	0.31	5.3
19	0.00	1.3	2.3	5.5	45	144	9.6	357	97	21	0.04	4.8
20	e0.00	1.3	2.5	5.3	60	144	28	290	89	19	0.00	4.4
21	e0.00	1.2	2.4	5.2	74	109	24	257	82	17	e0.00	4.1
22	0.00	0.96	2.2	5.0	328	78	19	235	74	15	e0.00	3.9
23	0.00	0.90	4.1	4.7	156	61	18	209	66	14	0.00	3.7
24	0.01	0.90	8.1	4.5	111	50	96	194	61	13	0.00	3.4
25	e0.59	0.70	9.0	4.4	78	42	69	185	56	11	0.00	3.3
26	e1.3	0.66	8.2	4.3	63	35	47	174	78	10	0.00	3.3
27	e2.3	0.65	7.0	4.1	55	30	34	161	70	9.3	e0.00	3.1
28	e6.0	0.51	6.1	4.1	46	30	27	151	61	8.3	0.00	2.8
29	4.2	0.43	5.4	4.2	---	28	22	143	54	7.8	13	2.9
30	3.0	0.35	75	4.0	---	25	18	135	53	8.5	16	2.9
31	2.0	---	133	3.8	---	23	---	127	---	7.0	9.6	---
TOTAL	19.40	44.56	293.58	325.1	1178.7	1216	638.9	5130.0	4649	924.9	101.63	191.4
MEAN	0.63	1.49	9.47	10.5	42.1	39.2	21.3	165	155	29.8	3.28	6.38
MAX	6.0	2.4	133	56	328	144	96	1190	850	96	16	18
MIN	0.00	0.35	0.35	3.8	3.5	13	7.4	9.0	53	7.0	0.00	2.8
AC-FT	38	88	582	645	2340	2410	1270	10180	9220	1830	202	380

ARKANSAS RIVER BASIN

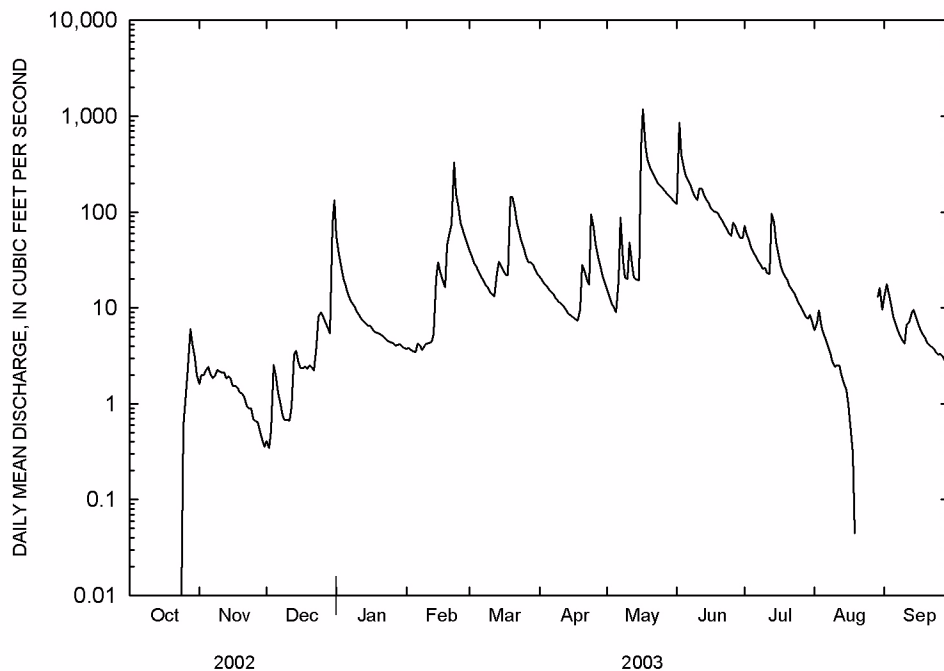
07249870 LITTLE LEE CREEK NEAR GREASY, OKLAHOMA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	11.7	34.6	58.1	44.1	117	95.5	78.8	76.1	64.6	13.4	6.34	3.51
MAX	27.3	85.3	123	64.6	211	209	197	165	155	29.8	15.5	6.38
(WY)	2002	2001	2002	2001	2001	2002	2002	2003	2003	2003	2002	2003
MIN	0.63	1.49	9.47	10.5	42.1	38.3	18.7	28.3	12.3	4.70	0.26	1.20
(WY)	2003	2003	2003	2003	2003	2001	2001	2002	2002	2002	2001	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	19161.34		14713.17			
ANNUAL MEAN	52.5		40.3		49.8	
HIGHEST ANNUAL MEAN					65.7 2002	
LOWEST ANNUAL MEAN					40.3 2003	
HIGHEST DAILY MEAN	1650	Mar 19	1190	May 17	1650	Mar 19 2002
LOWEST DAILY MEAN	0.00	Sep 18	0.00	Oct 1	0.00	Aug 13 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00	Oct 1	0.00	Aug 18 2001
MAXIMUM PEAK FLOW			2850	May 17	4180	Apr 7 2002
MAXIMUM PEAK STAGE			8.12	May 17	9.38	Apr 7 2002
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	38010		29180		36100	
10 PERCENT EXCEEDS	124		115		116	
50 PERCENT EXCEEDS	8.2		8.6		15	
90 PERCENT EXCEEDS	0.19		0.35		0.98	

^eEstimated



ARKANSAS RIVER BASIN

07249910 LITTLE LEE CREEK NEAR SHORT, OKLAHOMA

LOCATION.--Lat 35°34'32", long 94°33'20", in SW_{1/4}NW_{1/4} sec.28, T.13 N., R.26 W., Sequoyah County, Oklahoma, Hydrologic Unit 11110104, on downstream right abutment of bridge on Oklahoma State Road 101, 500 ft southeast of junction of Oklahoma State Roads 101 and 64B, approximately 2 mi northwest of Short, Oklahoma, and 6.9 mi west of the Arkansas-Oklahoma State Line.

DRAINAGE AREA.--97.5 mi².

PERIOD OF RECORD.--October 2000 to current year.

REVISED RECORDS.--WDR Ark. 2002: (M) 2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	1.4	53	6.0	e82	52	48	25	14	2.4	6.3
2	0.00	0.90	1.4	37	6.0	e71	50	44	913	16	2.9	9.1
3	0.00	2.3	1.6	29	5.8	e65	48	41	289	14	4.6	9.0
4	0.00	2.2	3.4	24	5.6	e61	46	38	136	12	4.6	7.6
5	0.00	2.6	3.2	21	5.5	56	43	36	92	11	3.6	6.3
6	0.00	2.3	4.0	18	6.1	53	42	34	74	9.6	3.0	5.2
7	0.00	2.1	4.0	16	6.2	50	40	88	61	8.9	2.4	4.5
8	0.00	2.0	3.8	15	6.1	46	38	57	49	8.3	2.0	4.1
9	0.00	1.9	3.7	14	6.2	44	37	46	41	7.7	1.6	4.0
10	0.00	1.7	3.5	13	6.3	42	36	42	35	7.5	1.2	3.5
11	0.00	1.3	3.3	12	6.3	40	35	57	37	7.1	1.0	3.8
12	0.00	1.2	3.2	11	6.4	39	34	54	50	6.6	1.1	5.6
13	0.00	1.2	5.0	11	6.7	46	33	47	39	16	0.74	6.5
14	0.00	1.4	5.5	10	15	55	32	46	33	28	0.71	6.0
15	0.00	1.6	5.9	9.7	33	55	31	45	31	15	0.60	6.0
16	0.00	1.5	5.7	9.4	31	52	30	701	27	11	0.38	5.5
17	0.00	1.5	5.4	9.0	26	50	29	2140	25	9.3	0.10	5.1
18	0.00	1.7	5.3	8.6	23	50	28	512	24	8.0	0.00	4.6
19	0.00	1.5	5.0	8.4	41	250	29	263	23	7.2	0.00	4.3
20	0.00	1.5	5.0	8.0	63	295	47	187	21	6.8	0.00	4.1
21	0.00	1.6	4.9	7.7	84	229	55	147	19	6.1	0.00	4.0
22	0.00	1.5	4.9	7.4	624	165	51	112	17	5.3	0.00	4.0
23	0.00	1.5	6.0	7.0	317	130	47	83	16	4.8	0.00	3.6
24	0.00	1.5	9.4	6.8	214	107	172	67	14	4.3	0.00	3.4
25	0.00	1.4	9.7	6.8	153	89	156	59	13	3.9	0.00	3.1
26	0.00	1.4	11	6.6	124	77	108	52	15	3.5	0.00	2.8
27	0.00	1.4	10	6.6	107	69	82	45	15	3.2	0.00	2.4
28	0.00	1.4	9.4	6.4	e95	65	68	39	14	2.7	0.00	2.1
29	0.00	1.4	9.1	6.4	---	63	59	34	13	2.5	0.73	1.8
30	0.00	1.4	27	6.3	---	e60	53	31	11	2.9	6.0	2.1
31	0.00	---	173	6.1	---	e56	---	28	---	2.6	6.6	---
TOTAL	0.00	46.90	353.7	411.2	2029.2	2612	1611	5223	2172	265.8	46.26	140.4
MEAN	0.000	1.56	11.4	13.3	72.5	84.3	53.7	168	72.4	8.57	1.49	4.68
MAX	0.00	2.6	173	53	624	295	172	2140	913	28	6.6	9.1
MIN	0.00	0.00	1.4	6.1	5.5	39	28	28	11	2.5	0.00	1.8
AC-FT	0.00	93	702	816	4020	5180	3200	10360	4310	527	92	278

ARKANSAS RIVER BASIN

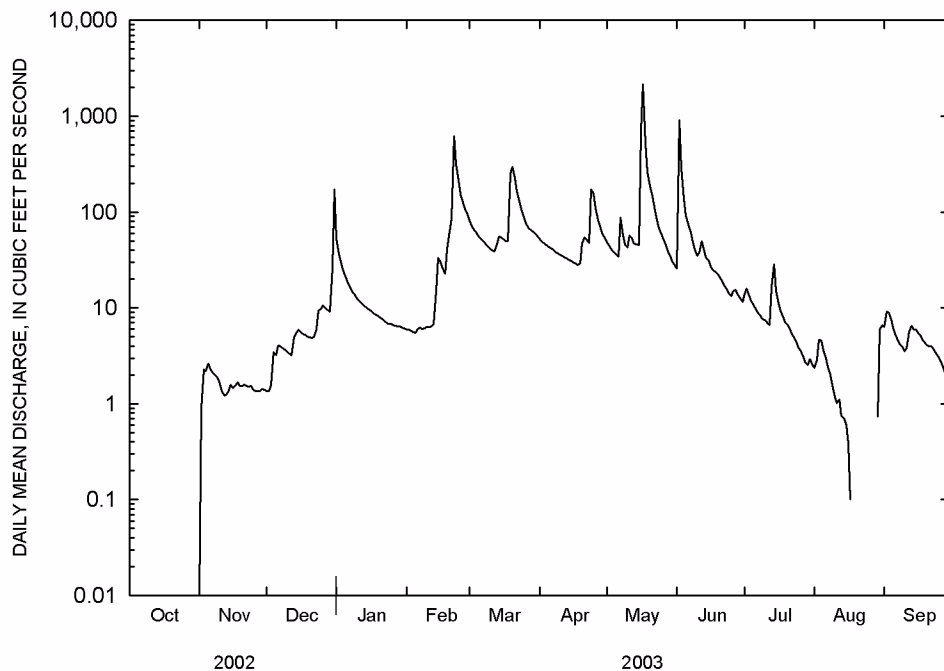
07249910 LITTLE LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	28.0	92.6	140	87.6	238	181	131	104	42.2	5.98	4.28	2.22
MAX	61.7	241	288	159	505	362	295	168	72.4	8.57	11.3	4.68
(WY)	2002	2001	2002	2001	2001	2002	2002	2003	2003	2003	2002	2003
MIN	0.000	1.56	11.4	13.3	72.5	84.3	43.3	30.0	17.4	2.46	0.075	0.84
(WY)	2003	2003	2003	2003	2003	2003	2001	2002	2002	2001	2001	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	29200.81		14911.46			
ANNUAL MEAN	80.0		40.9		87.1	
HIGHEST ANNUAL MEAN					111 2002	
LOWEST ANNUAL MEAN					40.9 2003	
HIGHEST DAILY MEAN	3560	Mar 19	2140	May 17	3670	Dec 16 2001
LOWEST DAILY MEAN	0.00	Aug 7	0.00	Oct 1	0.00	Oct 2 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 14	0.00	Oct 1	0.00	Oct 2 2000
MAXIMUM PEAK FLOW			4700	May 17	9120	Apr 7 2002
MAXIMUM PEAK STAGE			8.91	May 17	10.99	Apr 8 2002
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	57920		29580		63100	
10 PERCENT EXCEEDS	125		72		159	
50 PERCENT EXCEEDS	12		7.7		24	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

^eEstimated



ARKANSAS RIVER BASIN

07249985 LEE CREEK NEAR SHORT, OKLAHOMA

LOCATION.--Lat 35°31'02", long 94°27'51", in NW₁/₄NE₁/₄ sec.17, T.12 N., R.27 E., Indian Meridian, Sequoyah County, Oklahoma, Hydrologic Unit 11110104, on left bank 0.5 mi west of Arkansas-Oklahoma State line, 500 ft downstream from Webbers Creek, 4.1 mi south of Short, Oklahoma, 7.5 mi southwest of Uniontown, Arkansas, and at mile 11.0.

DRAINAGE AREA.--420 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to June 1937, October 1950 to current year. Prior to October 1992, published as "07250000 Lee Creek near Van Buren".

REVISED RECORDS.--WSP 1211: 1931(M). WSP 1441: 1935(M). WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 429.44 ft above NGVD of 1929. Prior to October 1992 recording gage 3.2 mi downstream at datum 21.40 ft lower. September 1930 to June 1937, nonrecording gage at former site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORDS.--Flood of Apr. 15, 1945, reached a stage of about 35.0 ft, from floodmarks at former site and datum, discharge about 112,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.50	0.94	1.5	638	19	436	214	211	106	45	4.3	51
2	0.43	1.0	1.5	390	19	391	194	190	1610	50	7.0	114
3	0.39	1.1	1.6	281	18	342	176	163	1530	51	13	141
4	0.31	1.2	2.8	219	18	300	163	143	731	45	15	96
5	0.19	1.2	2.4	177	17	269	147	133	494	38	11	82
6	0.16	1.1	2.2	144	20	238	140	e210	393	29	8.8	55
7	0.15	1.0	2.1	122	20	213	132	e326	321	22	6.9	40
8	0.14	1.0	2.2	104	19	191	121	408	262	20	5.7	29
9	0.30	1.1	2.3	92	21	171	112	248	218	18	4.8	23
10	0.48	1.1	2.3	81	21	155	105	197	185	16	4.3	17
11	0.55	1.1	2.2	70	20	143	99	248	192	16	4.0	16
12	0.56	1.1	2.3	62	22	138	96	340	879	14	4.1	23
13	0.42	1.1	3.5	57	25	211	90	258	527	31	3.7	40
14	0.35	1.2	3.3	51	107	246	84	1230	385	169	3.5	44
15	0.32	1.2	3.5	48	188	245	79	1910	e339	134	3.2	56
16	0.27	1.1	4.9	45	240	219	72	4090	e292	78	2.7	51
17	0.25	1.1	7.0	42	207	200	66	8980	e228	55	2.7	39
18	0.22	1.1	13	39	172	189	61	3550	e270	42	2.6	31
19	0.24	1.1	12	36	193	1060	64	1950	e341	32	2.6	25
20	0.27	1.1	12	35	465	1770	430	1390	e309	28	2.4	20
21	0.26	1.1	9.6	33	592	1670	277	1430	e263	23	2.3	17
22	0.27	1.2	8.7	31	2620	1140	247	978	e208	19	2.0	16
23	0.30	1.3	11	29	2160	844	203	737	135	15	2.0	15
24	0.39	1.3	20	27	1280	667	898	572	98	12	2.2	13
25	0.74	1.3	24	26	891	545	995	487	80	10	2.0	11
26	0.66	1.3	47	25	688	451	666	424	78	8.9	1.8	9.9
27	0.65	1.4	51	23	569	379	485	350	74	7.7	1.6	8.6
28	0.80	1.4	42	22	488	339	375	277	71	6.5	1.6	7.3
29	1.4	1.5	35	21	---	306	302	226	61	5.2	3.2	6.3
30	1.3	1.5	62	21	---	e269	250	187	50	4.8	4.6	5.9
31	1.1	---	828	20	---	239	---	135	---	4.8	8.2	---
TOTAL	14.37	35.24	1222.9	3011	11119	13976	7343	31978	10730	1049.9	143.8	1103.0
MEAN	0.46	1.17	39.4	97.1	397	451	245	1032	358	33.9	4.64	36.8
MAX	1.4	1.5	828	638	2620	1770	995	8980	1610	169	15	141
MIN	0.14	0.94	1.5	20	17	138	61	133	50	4.8	1.6	5.9
AC-FT	29	70	2430	5970	22050	27720	14560	63430	21280	2080	285	2190
CFSM	0.00	0.00	0.09	0.23	0.95	1.07	0.58	2.46	0.85	0.08	0.01	0.09
IN.	0.00	0.00	0.11	0.27	0.98	1.24	0.65	2.83	0.95	0.09	0.01	0.10

ARKANSAS RIVER BASIN

07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

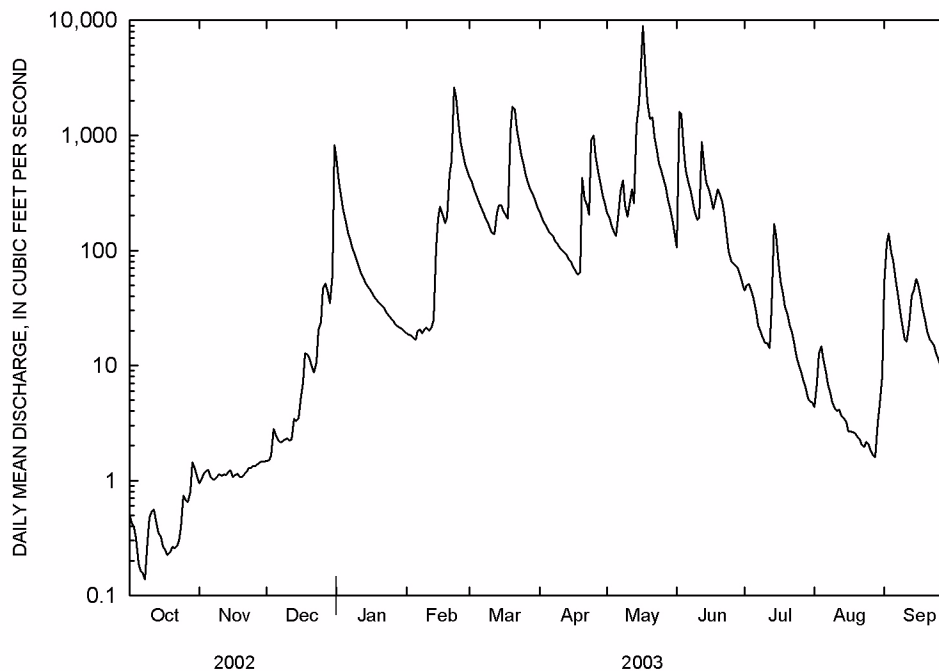
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-37, 1951-03, BY WATER YEAR (WY)

MEAN	227	536	567	558	764	1068	1063	918	460	126	45.3	127
MAX	2837	3572	2378	2831	2824	3100	3657	3516	4450	1909	583	1678
(WY)	1971	1974	1988	1998	1989	1973	1957	1957	1935	1958	1958	1974
MIN	0.000	0.13	1.95	3.31	18.8	25.2	94.6	41.3	7.00	0.19	0.000	0.000
(WY)	1957	1957	1967	1956	1967	1967	1954	1977	1936	1936	1934	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1931-37, 1952-03	
ANNUAL TOTAL	194738.91		81726.21			
ANNUAL MEAN	534		224		537	
HIGHEST ANNUAL MEAN					1090 1935	
LOWEST ANNUAL MEAN					92.5 1954	
HIGHEST DAILY MEAN	23500	Apr 8	8980	May 17	41100	Jun 21 2000
LOWEST DAILY MEAN	0.00	Jul 30	0.14	Oct 8	0.00	Sep 8 1932
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 5	0.23	Oct 3	0.00	Sep 8 1932
MAXIMUM PEAK FLOW			13300	May 17	80600	May 6 1960
MAXIMUM PEAK STAGE			11.49	May 17	¹ 30.30	May 6 1960
INSTANTANEOUS LOW FLOW			0.00	Oct 6-9	0.00	at times
ANNUAL RUNOFF (AC-FT)	386300		162100		388700	
ANNUAL RUNOFF (CFSM)	1.27		0.53		1.28	
ANNUAL RUNOFF (INCHES)	17.25		7.24		17.36	
10 PERCENT EXCEEDS	1040		490		1220	
50 PERCENT EXCEEDS	44		36		130	
90 PERCENT EXCEEDS	0.16		1.1		2.1	

¹At former site and datum

^eEstimated



ARKANSAS RIVER BASIN

07249985 LEE CREEK NEAR SHORT, OKLAHOMA--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1992 to current year.

REMARKS.--Water-quality data for this station for the period October 1995 to September 1997 published under station number 07250085.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 23...	0930	80513	81213	.30	755	7.7	79	7.8	101	16.1	36	11.0	2.10
JAN 15...	1030	80513	81213	45	758	9.9	80	8.5	114	6.1	42	14.0	1.80
MAR 04...	1310	80513	81213	273	765	11.3	95	7.6	75	7.8	25	7.20	1.60
MAY 06...	1000	80513	81213	111	743	6.3	76	8.4	93	23.2	34	11.0	1.60
JUN 23...	0930	80513	81213	142	748	6.6	84	7.8	93	26.5	40	13.0	1.80
AUG 19...	0900	80513	81213	.95	753	9.3	124	7.7	112	29.8	43	14.0	2.00

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)
OCT 23...	1.50	.3	3.6	17	5.00	4.80	53	.20	.03	.02	<.02	<.010	.18
JAN 15...	.80	.3	4.1	17	7.80	6.90	61	<.20	--	<.01	.15	<.010	--
MAR 04...	.80	.3	3.4	22	5.90	6.10	45	<.20	--	<.01	.58	<.010	--
MAY 06...	1.10	.2	3.3	17	4.10	5.90	55	<.20	.03	.02	.04	<.010	--
JUN 23...	1.20	.2	3.1	14	3.40	4.80	54	<.20	--	<.01	.02	<.010	--
AUG 19...	1.40	.2	3.5	14	4.20	4.00	62	.20	.03	.02	<.02	<.010	.18

Date	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC, col/100 mL (31625)	Fecal streptococci, KF, col/100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 23...	--	<.01	<.02	<.02	5	E13	150	1.4	82	6	--
JAN 15...	.031	.01	<.02	<.02	E16	E9	58	<.1	100	3	.36
MAR 04...	--	<.01	<.02	<.02	E4	E3	E5	<.1	83	5	3.7
MAY 06...	--	<.01	<.02	<.02	E8	E12	360	--	86	8	2.4
JUN 23...	--	<.01	<.02	<.02	44	84	E25	<.1	78	19	7.3
AUG 19...	--	<.01	<.02	<.02	E18	26	44	1.5	88	17	.04

Remark codes used in this report:

< -- Less than
E -- Estimated value

ARKANSAS RIVER BASIN

277

07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN

LOCATION.--Lat 35°29'02", long 94°42'33", in SE1/4SW1/4, sec.3, T.9 N., R.32 W., Crawford County, Hydrologic Unit 11110104, in control house at dam on left bank, 2.8 mi northwest of Van Buren, and at mile 3.5.

DRAINAGE AREA.--432 mi².

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above NGVD of 1929.

REMARKS.--Water-discharge records good. Records given herein represent spillway flow and power releases and do not include water diverted for municipal water supply of Fort Smith. Flow regulated by storage in Lee Creek Reservoir, capacity 7,118 acre-ft, and power releases. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	2.2	304	148	144	76	37	0.00	0.00
2	0.00	0.00	0.00	144	9.5	296	134	116	1050	22	0.00	0.00
3	0.00	0.00	0.00	191	5.2	249	116	95	1160	23	0.00	0.00
4	0.00	0.00	0.00	155	0.00	214	113	91	514	16	0.00	0.00
5	0.00	0.00	0.00	136	0.00	195	92	72	335	17	0.00	0.00
6	0.00	0.00	0.00	113	0.00	198	99	62	243	10	0.00	0.00
7	0.00	0.00	0.00	83	0.00	116	87	94	211	5.2	0.00	0.00
8	0.00	0.00	0.00	74	0.00	111	65	289	174	0.00	0.00	0.00
9	0.00	0.00	0.00	67	7.6	112	65	172	123	0.00	0.00	0.00
10	0.00	0.00	0.00	47	8.1	103	38	133	96	0.00	0.00	0.00
11	0.00	0.00	0.00	45	4.4	69	48	136	91	0.00	0.00	0.00
12	0.00	0.00	0.00	40	5.3	77	52	207	425	0.00	0.00	0.00
13	0.00	0.00	0.00	37	10	125	49	169	301	0.00	0.00	0.00
14	0.00	0.00	0.00	33	88	143	44	523	211	21	0.00	0.00
15	0.00	0.00	0.00	26	148	179	36	1620	192	65	0.00	0.00
16	0.00	0.00	0.00	15	186	182	34	2960	190	31	0.00	0.00
17	0.00	0.00	0.00	6.4	166	150	18	8680	133	14	0.00	0.00
18	0.00	0.00	0.00	11	139	135	22	2960	174	1.0	0.00	0.00
19	0.00	0.00	0.00	14	151	691	43	1500	222	0.00	0.00	0.00
20	0.00	0.00	e0.00	19	358	1270	426	991	192	0.00	0.00	0.00
21	0.00	0.00	e0.00	25	552	1260	198	1120	159	0.00	0.00	0.00
22	0.00	0.00	e0.00	25	1700	890	158	758	158	0.00	0.00	0.00
23	0.00	0.00	e0.00	1.7	1690	654	140	566	101	0.00	0.00	0.00
24	0.00	0.00	e0.00	3.4	934	496	640	508	70	0.00	0.00	0.00
25	0.00	0.00	e0.00	11	640	399	724	499	57	0.00	0.00	0.00
26	0.00	0.00	e0.00	8.1	485	322	506	391	47	0.00	0.00	0.00
27	0.00	0.00	e0.00	4.5	394	268	372	224	41	0.00	0.00	0.00
28	0.00	0.00	0.00	6.8	332	228	266	198	44	0.00	0.00	0.00
29	0.00	0.00	0.00	3.6	---	220	226	161	38	0.00	0.00	0.00
30	0.00	0.00	0.00	0.11	---	204	187	143	32	0.00	0.00	0.00
31	0.00	---	0.00	4.0	---	164	---	102	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	1349.61	8015.30	10024	5146	25684	6860	262.20	0.00	0.00
MEAN	0.000	0.000	0.000	43.5	286	323	172	829	229	8.46	0.000	0.000
MAX	0.00	0.00	0.00	191	1700	1270	724	8680	1160	65	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	69	18	62	32	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	2680	15900	19880	10210	50940	13610	520	0.00	0.00

ARKANSAS RIVER BASIN

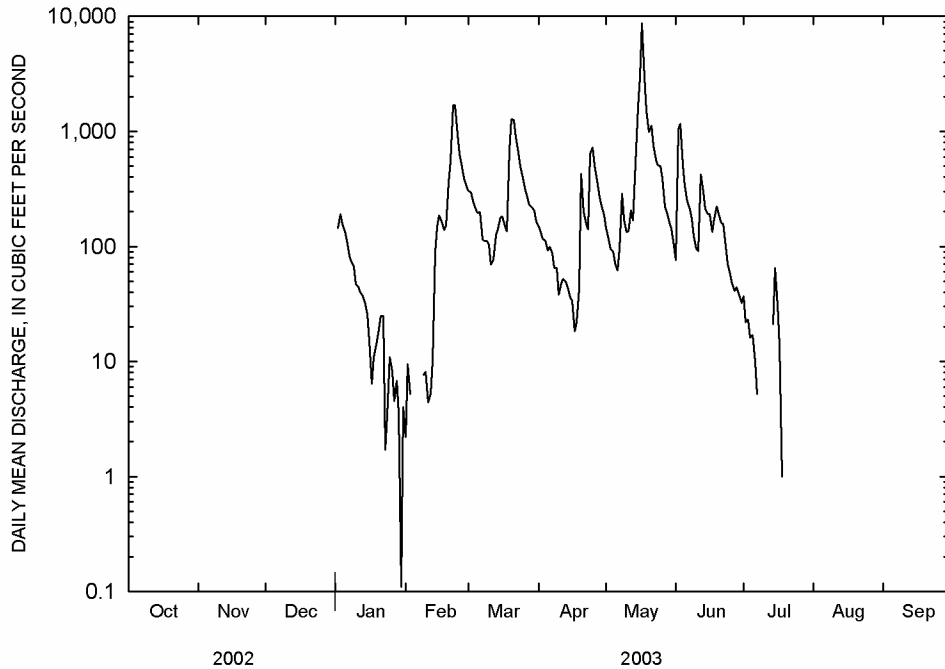
07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

MEAN	102	766	655	673	822	943	984	699	521	91.8	11.9	53.5
MAX	454	3274	1666	2661	2339	1906	2178	1732	2754	481	54.6	307
(WY)	1994	1997	1993	1998	2001	2002	1993	1995	2000	1999	1994	1996
MIN	0.000	0.000	0.000	43.5	94.0	199	122	75.6	33.1	0.000	0.000	0.000
(WY)	1993	2000	2003	2003	1996	1996	2001	1997	1998	1998	1993	1995

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1993 - 2003	
ANNUAL TOTAL	161543.20		57341.11			
ANNUAL MEAN	443		157		524	
HIGHEST ANNUAL MEAN					833 1993	
LOWEST ANNUAL MEAN					157 2003	
HIGHEST DAILY MEAN	25300	Apr 8	8680	May 17	37800	Jun 21 2000
LOWEST DAILY MEAN	0.00	Jun 22	0.00	Oct 1	0.00	Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 22	0.00	Oct 1	0.00	Oct 1 1992
MAXIMUM PEAK FLOW			12500	May 17	72400	Jun 21 2000
MAXIMUM PEAK STAGE			22.38	May 17	26.99	Jun 21 2000
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	320400		113700		379600	
10 PERCENT EXCEEDS	759		364		1150	
50 PERCENT EXCEEDS	2.1		3.4		108	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

^eEstimated



ARKANSAS RIVER BASIN

279

07250550 ARKANSAS RIVER AT JAMES W. TRIMBLE LOCK AND DAM NEAR VAN BUREN

LOCATION.--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W.,Sebastian County, Hydrologic Unit 11110104, in metal shelter on dam and at mile 308.9.

DRAINAGE AREA.--150,547 mi², of which 22,241 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as "07250500 Arkansas River at Van Buren", and October 1969 to September 1988, published as "at Dam No. 13", near Van Buren. Gage-height records collected from 1879 to December 1955 at Fort Smith, 16.3 mi upstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1211: 1934-36. WSP 1561: 1554. WDR Ark. 1970: Drainage area.

GAGE.--Water-stage and gate position recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1934, nonrecording gage, and Oct. 1, 1934, to Dec. 20, 1969, recording gage at site 7.9 mi upstream at datum 372.36 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records fair. Beginning Apr. 26, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct. 19, 1988, the Arkansas Electric Cooperative Corporation hydroplant began operation, and discharges at the hydroplant are added to flows from the lock and dam. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1833, that of Apr. 16, 1945, and maximum discharge since at least 1833, that of May 12, 1943. Flood in June 1833 reached a stage of 38.0 ft on Fort Smith gage, from records collected by National Weather Service. Flood of Apr. 16, 1927, reached a stage of 35.0 ft, former site and datum, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6470	20000	508	11500	2770	16200	55500	38700	43700	22800	5470	34500
2	5420	27700	697	15500	3070	9610	50300	41400	49600	29400	11600	28800
3	6360	26300	398	9800	11800	13700	43000	42500	57400	15400	26000	34700
4	7290	25000	2420	16400	730	8960	40300	48300	49000	15700	14100	28700
5	5100	17900	11200	6210	2240	11800	40700	41300	42700	10700	9540	24600
6	24600	4990	7890	15900	15100	12400	22100	45200	32400	7070	19900	28200
7	29300	8550	4280	13600	15700	8540	25300	43800	23600	13400	14200	30000
8	30900	7670	6890	9630	2400	11700	31000	45200	32900	17100	14500	30200
9	31200	9600	5110	13700	9320	12700	26600	48400	38000	19000	10200	32200
10	39900	6710	7130	11300	8820	836	29800	30700	40700	11100	7590	26400
11	30800	8610	5930	16700	8890	8170	29300	33700	54900	7880	7330	30300
12	5440	8610	6340	10100	4640	21400	22700	29400	59500	5620	6380	25500
13	9060	5970	11400	17700	6090	2750	9220	26400	54500	8750	6520	31900
14	4110	4340	6950	9460	4960	14900	10300	26000	49900	21600	14500	22800
15	7470	5960	5120	16500	12300	9350	14000	27200	45800	11000	7860	14500
16	6180	2680	5720	25200	8930	5130	20700	39700	44500	8250	9990	24800
17	9360	2810	3390	9380	7950	14700	19800	91800	43200	10300	11200	16300
18	8740	6690	5770	4180	8190	11900	8000	60200	38000	14900	22900	22600
19	9140	3530	6050	7780	14600	55700	6840	47400	33500	11100	18500	19300
20	15000	4770	7860	6770	15400	87500	22200	47200	17400	10500	12400	8720
21	2920	9220	2380	12200	13600	65500	18500	51000	30400	10100	14700	8170
22	1410	7610	1960	5410	19300	46000	18000	61700	17100	6280	10300	17600
23	8480	9240	9450	17100	21100	47000	18600	65000	13200	6670	6910	10500
24	9140	7880	13200	4940	20400	57300	39400	66200	28000	6330	2070	10800
25	7960	6200	6820	12500	10100	60100	38200	58200	34100	6980	7530	20300
26	4260	9290	5850	8650	22000	55700	38100	50300	35400	4880	10800	8310
27	5490	1080	4140	9170	23300	63400	36900	46600	22100	8200	17400	5290
28	9390	1840	2120	4840	23300	72400	35500	32500	14800	12800	11100	5830
29	23600	2140	2580	2830	---	69300	37800	33600	13300	8780	12400	4080
30	11200	5870	8060	10600	---	67400	37900	44200	8510	3550	5920	6100
31	19800	---	13800	9280	---	54300	---	38800	---	5470	19600	---
TOTAL	395490	268760	181413	344830	317000	996346	846560	1402600	1068110	351610	369410	612000
MEAN	12760	8959	5852	11120	11320	32140	28220	45250	35600	11340	11920	20400
MAX	39900	27700	13800	25200	23300	87500	55500	91800	59500	29400	26000	34700
MIN	1410	1080	398	2830	730	836	6840	26000	8510	3550	2070	4080
AC-FT	784500	533100	359800	684000	628800	1976000	1679000	2782000	2119000	697400	732700	1214000

ARKANSAS RIVER BASIN

07250550 ARKANSAS RIVER AT JAMES W. TRIMBLE LOCK AND DAM NEAR VAN BUREN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	25900	36910	36100	32490	34530	58640	59440	65190	60610	31510	16170	15250
MAX	224500	161200	139700	127000	87650	147200	164300	187500	191500	104800	62670	54130
(WY)	1987	1975	1993	1998	1993	1987	1973	1990	1995	1999	1992	1989
MIN	1446	1329	3187	696	2656	5658	2910	12160	4688	4457	4378	3341
(WY)	1981	1981	1981	1981	1981	1981	1981	1971	1988	1988	1991	1983

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	9262762		7154129		139390	
ANNUAL MEAN	25380		19600		87670	
HIGHEST ANNUAL MEAN					7737	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	151000	Apr 8	91800	May 17	397000	May 5 1990
LOWEST DAILY MEAN	398	Dec 3	398	Dec 3	2.00	Nov 2 1975
ANNUAL SEVEN-DAY MINIMUM	1790	Nov 27	1790	Nov 27	364	Jan 14 1981
MAXIMUM PEAK FLOW			127000	May 17	401000	May 5 1990
MAXIMUM PEAK STAGE			383.79	May 17	5401.75	May 5 1990
ANNUAL RUNOFF (AC-FT)	18370000		14190000		28540000	
10 PERCENT EXCEEDS	61800		45400		108000	
50 PERCENT EXCEEDS	14800		12800		23100	
90 PERCENT EXCEEDS	4080		4810		3540	

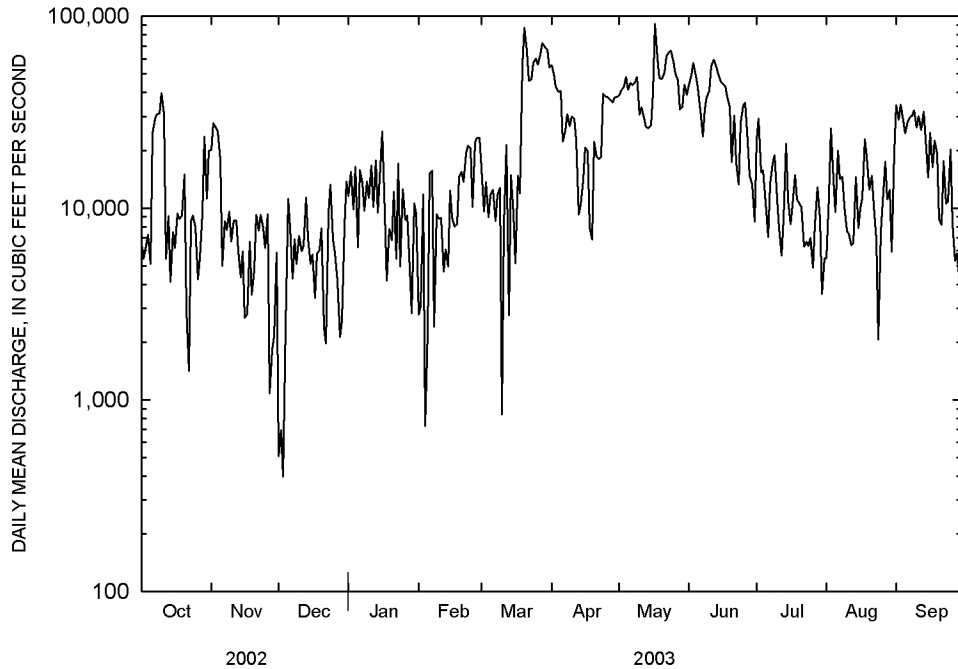
¹Prior to regulation, water years 1928-69, 30,200 ft³/s

²Also minimum daily discharge for period of record

³Also Feb. 1, 1981; Oct. 17, 1987; Dec. 9, 1989; Nov. 11-12, 1993; and Jan. 9, 13, 1994

⁴Maximum discharge for period of record 850,000 ft³/s May 12, 1943

⁵Maximum gage height for period of record, 38.10 ft Apr. 16, 1945, at former site and datum



ARKANSAS RIVER BASIN

07250550 ARKANSAS RIVER AT JAMES W. TRIMBLE LOCK AND DAM NEAR VAN BUREN--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as "07250500 Arkansas River at Van Buren", and October 1969 to September 1988, published as "at Dam No. 13", near Van Buren.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 23...	1130	80513	81213	7200	756	7.1	74	7.8	1060	17.2	160	44.0	11.0
JAN 15...	1300	80513	81213	16600	756	11.2	91	8.6	1400	6.1	170	48.0	12.0
MAR 04...	0950	80513	81213	11600	764	11.6	94	8.3	1100	6.4	150	41.0	12.0
MAY 13...	1230	80513	81213	23000	750	7.9	92	8.3	715	22.1	160	44.0	11.0
JUN 23...	1300	80513	81213	14800	750	8.9	114	8.0	518	27.3	130	38.0	8.60
AUG 19...	1030	80513	81213	15600	755	8.4	113	8.2	859	30.0	160	46.0	12.0

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
OCT 23...	5.50	5	150	67	220	59.0	587	<.20	.03	.02	--	--	.77
JAN 15...	4.30	7	210	72	330	82.0	789	.90	.03	.02	--	--	.53
MAR 04...	3.60	5	150	68	220	70.0	590	.50	.08	.06	1.37	.31	.32
MAY 13...	4.40	3	80.0	52	110	58.0	407	.50	.04	.03	2.52	.57	.59
JUN 23...	4.00	2	48.0	44	66.0	42.0	293	.70	.01	.01	1.68	.38	.39
AUG 19...	4.80	3	100	56	150	61.0	477	.60	.03	.02	--	--	<.02

Date	Nitrite, water, fltrd, mg/L (71856)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
OCT 23...	--	<.010	--	.245	.08	.09	.11	--	44	81	110	5.3	70
JAN 15...	--	<.010	.88	.092	.03	.04	.12	1.4	E7	E16	41	15.0	92
MAR 04...	.033	.010	.44	.061	.02	.03	.06	.82	E5	E7	E7	5.4	87
MAY 13...	.066	.020	.47	.184	.06	.07	.12	1.1	E19	E16	E14	--	93
JUN 23...	.033	.010	.69	.123	.04	.04	.10	1.1	E27	E9	110	8.7	84
AUG 19...	--	<.010	.58	.184	.06	.06	.12	--	22	E17	28	18.0	86

Date	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 23...	28	544
JAN 15...	244	10900
MAR 04...	14	438
MAY 13...	36	2240
JUN 23...	102	4080
AUG 19...	123	5180

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

07250935 JONES CREEK AT WINFREY

LOCATION.--Lat 35°44'12", long 94°06'11", in SE_{1/4}SW_{1/4} sec.5, T.12 N., R.29 W., Crawford County, Hydrologic Unit 11110201, near left bank in pasture 300 ft upstream of bridge on Winfrey Valley Cutoff, 3 mi northeast of junctions of U.S. Highway 71 and Winfrey Valley Cutoff, and 10.6 mi northeast of Mountainburg.

DRAINAGE AREA.--19.8 mi².

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	20	0.59	20	13	34	6.6	0.75	0.00	0.00
2	0.00	0.00	0.00	14	0.55	18	12	30	64	0.87	0.00	0.04
3	0.00	0.00	0.00	10	0.54	16	11	27	38	0.95	0.00	0.90
4	0.00	0.00	0.00	8.1	0.49	15	9.9	25	23	0.70	0.00	0.61
5	0.00	0.00	0.00	6.6	0.49	13	8.7	23	17	0.55	0.00	0.87
6	0.00	0.00	0.00	5.4	0.61	12	8.3	22	15	0.45	0.00	0.66
7	0.00	0.00	0.00	4.7	0.56	10	7.7	27	12	0.36	0.00	0.46
8	0.00	0.00	0.00	4.2	0.52	9.5	6.6	21	9.3	0.27	0.00	0.34
9	0.00	0.00	0.00	3.8	0.56	8.6	5.9	19	7.1	0.17	0.00	0.23
10	0.00	0.00	0.00	3.4	0.57	7.8	5.4	20	5.7	0.13	0.00	0.11
11	0.00	0.00	0.00	3.1	0.54	7.2	5.0	28	29	0.03	0.00	0.10
12	0.00	0.00	0.00	2.8	0.54	6.8	4.7	e8.2	23	0.04	0.00	14
13	0.00	0.00	0.11	2.5	0.62	8.4	4.4	e34	15	0.02	0.00	20
14	0.00	0.00	0.15	2.2	1.8	8.3	4.1	e374	15	0.00	0.00	8.7
15	0.00	0.00	0.16	2.0	6.6	7.8	3.8	164	18	0.00	0.00	4.5
16	0.00	0.00	0.24	1.9	8.0	7.3	3.5	578	12	0.00	0.00	3.1
17	0.00	0.00	0.36	1.6	6.6	7.0	3.3	299	9.2	0.00	0.00	2.2
18	0.00	0.00	0.74	1.5	5.7	7.1	3.1	150	8.8	0.00	0.00	1.6
19	0.00	0.00	1.2	1.5	15	74	3.5	103	8.1	0.00	0.00	1.1
20	0.00	0.00	1.2	1.4	21	128	21	296	6.7	0.00	0.00	0.88
21	0.00	0.00	1.1	1.3	30	91	20	150	5.5	0.00	0.00	0.71
22	0.00	0.00	1.2	1.2	112	62	19	105	4.1	0.00	0.00	0.56
23	0.00	0.00	1.5	1.0	67	48	22	e63	3.2	0.00	0.00	0.42
24	0.00	0.00	2.0	1.0	45	39	114	e52	2.6	0.00	0.00	0.32
25	0.00	0.00	2.0	0.98	32	33	90	e47	2.1	0.00	0.00	0.24
26	0.00	0.00	2.3	0.91	27	27	70	e36	2.4	0.00	0.00	0.16
27	0.00	0.00	2.7	0.83	23	24	57	e27	1.9	0.00	0.00	0.10
28	0.00	0.00	2.5	0.82	21	22	48	e21	1.4	0.00	0.00	0.02
29	0.00	0.00	2.3	0.81	---	18	42	e13	1.0	0.00	0.00	0.00
30	0.00	0.00	18	0.70	---	e17	37	12	0.84	0.00	0.00	0.00
31	0.00	---	52	0.65	---	e15	---	8.7	---	0.00	0.00	---
TOTAL	0.00	0.00	91.76	110.90	428.88	787.8	663.9	2816.9	367.54	5.29	0.00	62.93
MEAN	0.000	0.000	2.96	3.58	15.3	25.4	22.1	90.9	12.3	0.17	0.000	2.10
MAX	0.00	0.00	52	20	112	128	114	578	64	0.95	0.00	20
MIN	0.00	0.00	0.00	0.65	0.49	6.8	3.1	8.2	0.84	0.00	0.00	0.00
AC-FT	0.00	0.00	182	220	851	1560	1320	5590	729	10	0.00	125

ARKANSAS RIVER BASIN

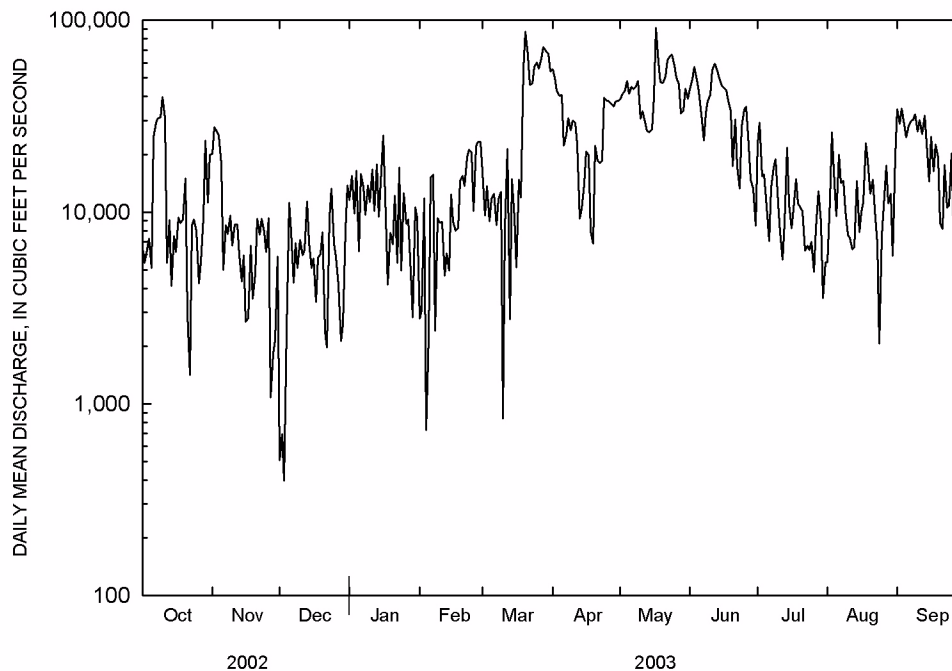
07250935 JONES CREEK AT WINFREY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	2.12	11.6	20.8	17.1	56.4	44.3	49.4	35.2	9.29	0.73	1.23	1.28
MAX	4.96	33.4	42.4	26.5	111	89.3	119	90.9	13.4	1.56	3.69	2.10
(WY)	2002	2001	2002	2001	2001	2002	2002	2003	2002	2001	2002	2003
MIN	0.000	0.000	2.96	3.58	15.3	18.2	7.29	4.35	2.25	0.17	0.000	0.000
(WY)	2003	2003	2003	2003	2003	2001	2001	2001	2001	2003	2001	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	9125.52		5335.90			
ANNUAL MEAN	25.0		14.6		20.5	
HIGHEST ANNUAL MEAN					28.9 2002	
LOWEST ANNUAL MEAN					14.6 2003	
HIGHEST DAILY MEAN	1070	Apr 8	578	May 16	1070	Apr 8 2002
LOWEST DAILY MEAN	0.00	Jul 11	0.00	Oct 1	0.00	Oct 7 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 1	0.00	Oct 1	0.00	Oct 7 2000
MAXIMUM PEAK FLOW			1960	May 16	5070	Apr 7 2002
MAXIMUM PEAK STAGE			5.44	May 16	9.02	Apr 7 2002
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	18100		10580		14870	
10 PERCENT EXCEEDS	46		31		45	
50 PERCENT EXCEEDS	1.1		0.95		3.3	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

^eEstimated



ARKANSAS RIVER BASIN

07250965 FROG BAYOU NEAR WINFREY

LOCATION.--Lat 35°43'37", long 94°06'26", in NW_{1/4}SW_{1/4} sec.8, T.12 N., R.29 W., Crawford County, Hydrologic Unit 11110201, near right bank in pasture, 4.0 mi southeast of junction of U.S. Hwy 71 and Winfrey Valley Cutoff, and 11.6 mi northeast of Mountainburg.

DRAINAGE AREA.--54.2 mi².

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.00	0.00	137	3.3	59	45	55	20	5.6	0.36	0.17
2	0.09	0.00	0.00	89	3.6	50	42	49	125	4.8	0.35	0.31
3	0.02	0.00	0.00	63	3.5	51	38	40	104	4.5	0.31	0.37
4	0.00	0.00	0.01	48	3.1	37	35	33	62	4.5	0.26	0.35
5	0.00	0.00	0.00	38	3.0	33	31	27	45	4.1	0.26	0.38
6	0.00	0.00	0.00	29	3.4	27	28	24	39	3.7	0.16	0.50
7	0.00	0.00	0.00	24	3.1	24	26	33	31	3.4	0.10	0.75
8	0.00	0.00	0.00	20	2.9	20	23	28	24	3.2	0.06	0.81
9	0.00	0.00	0.02	18	3.0	17	20	22	19	2.9	0.02	0.87
10	0.00	0.00	0.03	16	3.1	14	19	21	16	2.9	0.00	0.92
11	0.00	0.00	0.03	14	3.2	13	18	46	65	2.5	0.15	1.1
12	0.00	0.00	0.04	13	3.3	11	17	38	110	2.4	0.20	14
13	0.00	0.00	0.13	11	3.4	14	17	40	81	2.2	0.14	26
14	0.00	0.00	0.11	10	6.3	15	16	1280	64	1.9	0.10	13
15	0.00	0.00	0.13	9.0	28	14	15	587	69	1.8	0.04	9.7
16	0.00	0.00	0.10	8.5	36	13	15	2200	50	1.6	0.00	9.0
17	0.00	0.00	0.14	7.5	32	13	15	1390	43	1.4	0.00	6.9
18	0.00	0.00	0.16	6.9	28	14	15	571	43	1.3	0.00	5.4
19	0.00	0.00	0.17	6.6	61	256	16	344	45	1.2	0.00	4.5
20	0.00	0.00	0.49	6.4	96	489	92	872	38	1.0	0.00	3.5
21	0.00	0.00	1.9	5.3	121	395	87	486	30	0.97	0.00	3.0
22	0.00	0.00	1.9	4.9	403	267	64	323	22	0.97	0.00	2.5
23	0.00	0.00	2.1	4.5	293	200	55	219	18	0.77	0.00	2.1
24	0.00	0.00	2.4	4.4	191	160	470	168	15	0.65	0.00	1.8
25	0.00	0.00	2.5	4.1	131	131	290	144	13	0.55	0.00	1.6
26	0.00	0.00	2.6	3.9	101	107	191	112	13	0.48	0.00	1.2
27	0.00	0.00	2.4	3.7	82	94	138	82	10	0.47	0.00	1.1
28	0.00	0.00	2.2	3.6	69	81	106	60	8.2	0.45	0.00	0.83
29	0.02	0.00	2.1	3.5	---	66	83	46	6.8	0.54	0.00	0.75
30	0.00	0.00	175	3.1	---	56	66	34	5.8	0.44	0.00	0.61
31	0.00	---	380	3.2	---	49	---	26	---	0.41	0.00	---
TOTAL	0.30	0.00	576.66	619.1	1720.2	2790	2093	9400	1234.8	63.60	2.51	114.02
MEAN	0.010	0.000	18.6	20.0	61.4	90.0	69.8	303	41.2	2.05	0.081	3.80
MAX	0.17	0.00	380	137	403	489	470	2200	125	5.6	0.36	26
MIN	0.00	0.00	0.00	3.1	2.9	11	15	21	5.8	0.41	0.00	0.17
AC-FT	0.6	0.00	1140	1230	3410	5530	4150	18640	2450	126	5.0	226

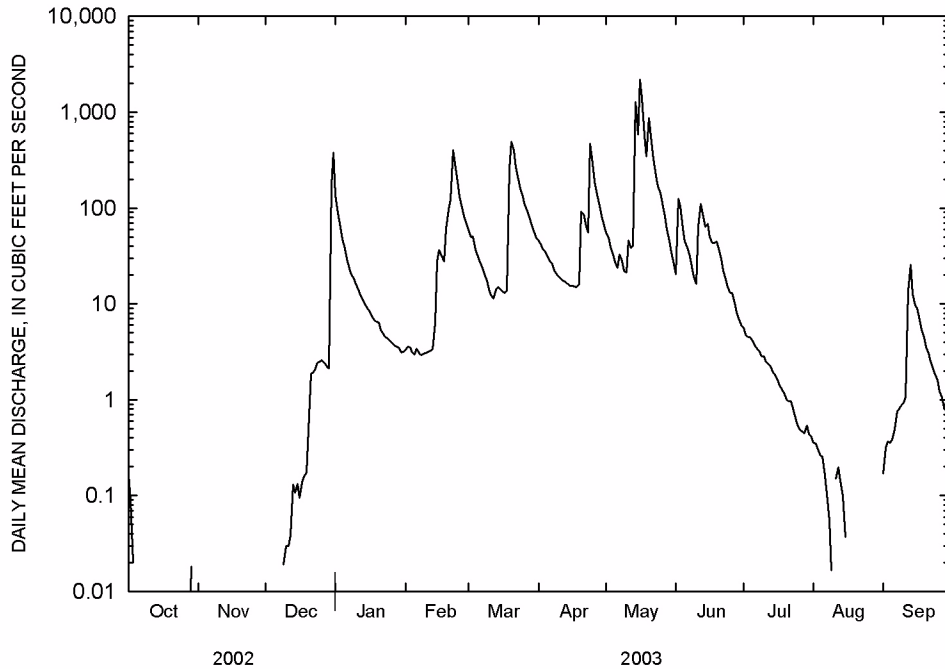
ARKANSAS RIVER BASIN

07250965 FROG BAYOU NEAR WINFREY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	8.71	30.1	51.1	46.2	120	108	53.0	163	26.3	3.00	0.20	4.65
MAX	24.4	81.9	94.8	67.6	189	168	69.8	303	41.2	3.94	0.32	5.50
(WY)	2002	2001	2002	2001	2001	2002	2003	2003	2003	2001	2001	2001
MIN	0.010	0.000	18.6	20.0	61.4	65.9	36.3	23.6	11.5	2.05	0.081	3.80
(WY)	2003	2003	2003	2003	2003	2001	2001	2001	2001	2003	2003	2003

SUMMARY STATISTICS	FOR 2003 WATER YEAR	WATER YEARS 2001 - 2003
ANNUAL TOTAL	18614.19	
ANNUAL MEAN	51.0	46.9
HIGHEST ANNUAL MEAN		51.0 2003
LOWEST ANNUAL MEAN		42.8 2001
HIGHEST DAILY MEAN	2200 May 16	2200 May 16 2003
LOWEST DAILY MEAN	0.00 Oct 4	0.00 Sep 1 2001
ANNUAL SEVEN-DAY MINIMUM	0.00 Oct 4	0.00 Sep 1 2001
MAXIMUM PEAK FLOW	6490 May 16	6490 May 16 2003
MAXIMUM PEAK STAGE	17.40 May 16	17.40 May 16 2003
INSTANTANEOUS LOW FLOW	0.00 at times	0.00 at times
ANNUAL RUNOFF (AC-FT)	36920	33980
10 PERCENT EXCEEDS	105	109
50 PERCENT EXCEEDS	3.5	13
90 PERCENT EXCEEDS	0.00	0.00



ARKANSAS RIVER BASIN

07250974 JACK CREEK NEAR WINFREY

LOCATION.--Lat 35°42'19", long 94°05'21", in NW_{1/4}NW_{1/4} sec.21, T.12 N., R.29 W., Crawford County, Hydrologic Unit 11110201, 2100 ft upstream of mouth at Lake Shepherd Springs, 8.7 mi northeast of junction of U.S. Hwy 71 and State Hwy 282, and 11.3 mi northeast of Mountainburg.

DRAINAGE AREA.--19.4 mi².

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	e0.00	e0.00	11	e0.00	6.0	3.3	6.1	1.1	0.48	e0.00	e0.00
2	e0.00	e0.00	e0.00	8.0	e0.00	5.0	2.9	5.0	7.3	0.47	e0.00	e0.00
3	e0.00	e0.00	e0.00	5.2	e0.00	4.0	2.6	3.7	5.4	0.48	e0.00	e0.00
4	e0.00	e0.00	e0.00	3.3	e0.00	3.5	2.3	3.4	2.6	0.46	e0.00	e0.00
5	e0.00	e0.00	e0.00	2.2	e0.00	3.2	2.0	2.9	1.8	e0.42	e0.00	e0.00
6	e0.00	e0.00	e0.00	1.6	e0.00	2.5	1.6	2.3	1.7	e0.38	e0.00	e0.00
7	e0.00	e0.00	e0.00	e0.48	e0.00	2.1	1.4	3.4	1.3	e0.33	e0.00	e0.00
8	e0.00	e0.00	e0.00	e0.41	e0.00	1.8	1.2	2.3	0.90	e0.29	e0.00	e0.00
9	e0.00	e0.00	e0.00	e0.36	e0.00	1.5	0.93	1.8	0.68	e0.23	e0.00	e0.00
10	e0.00	e0.00	e0.00	e0.31	e0.00	1.3	0.78	3.7	0.59	e0.19	e0.00	e0.00
11	e0.00	e0.00	e0.00	e0.25	e0.00	1.1	0.72	12	4.7	e0.14	e0.00	e0.00
12	e0.00	e0.00	e0.00	e0.21	e0.00	1.00	0.68	7.0	16	e0.10	e0.00	e5.0
13	e0.00	e0.00	e0.00	e0.18	e0.00	1.6	0.64	12	11	e0.05	e0.00	e11
14	e0.00	e0.00	e0.00	e0.13	e4.7	1.8	0.62	74	12	e0.00	e0.00	e4.5
15	e0.00	e0.00	e0.00	e0.10	7.2	1.5	0.59	46	15	e0.00	e0.00	e1.3
16	e0.00	e0.00	e0.00	e0.05	4.8	1.3	0.58	101	11	e0.00	e0.00	e0.55
17	e0.00	e0.00	e0.00	e0.02	3.2	1.3	0.56	73	9.3	e0.00	e0.00	e0.37
18	e0.00	e0.00	e0.00	e0.00	2.4	1.5	0.54	44	11	e0.00	e0.00	e0.29
19	e0.00	e0.00	e0.00	e0.00	8.8	24	0.54	32	12	e0.00	e0.00	e0.23
20	e0.00	e0.00	e0.00	e0.00	11	34	21	31	8.8	e0.00	e0.00	e0.19
21	e0.00	e0.00	e0.00	e0.00	14	30	13	25	6.3	e0.00	e0.00	e0.14
22	e0.00	e0.00	e0.00	e0.00	28	23	9.0	20	3.9	e0.00	e0.00	e0.10
23	e0.00	e0.00	e0.00	e0.00	23	18	7.5	15	2.4	e0.00	e0.00	e0.05
24	e0.00	e0.00	e0.00	e0.00	16	14	44	13	1.6	e0.00	e0.00	e0.00
25	e0.00	e0.00	e0.65	e0.00	12	12	30	12	1.1	e0.00	e0.00	e0.00
26	e0.00	e0.00	e0.64	e0.00	10	9.7	21	9.1	1.0	e0.00	e0.00	e0.00
27	e0.00	e0.00	e0.50	e0.00	8.7	8.5	16	6.4	0.78	e0.00	e0.00	e0.00
28	e0.00	e0.00	e0.43	e0.00	7.1	7.4	12	4.2	0.61	e0.00	e0.00	e0.00
29	e0.00	e0.00	e0.37	e0.00	---	5.6	9.3	2.9	0.56	e0.00	e0.00	e0.00
30	e0.00	e0.00	e19	e0.00	---	e4.2	7.1	2.1	0.51	e0.00	e0.00	e0.00
31	e0.00	---	27	e0.00	---	3.6	---	1.5	---	e0.00	e0.00	---
TOTAL	0.00	0.00	48.59	33.80	160.90	236.00	214.38	577.8	152.93	4.02	0.00	23.72
MEAN	0.000	0.000	1.57	1.09	5.75	7.61	7.15	18.6	5.10	0.13	0.000	0.79
MAX	0.00	0.00	27	11	28	34	44	101	16	0.48	0.00	11
MIN	0.00	0.00	0.00	0.00	0.00	1.0	0.54	1.5	0.51	0.00	0.00	0.00
MED	0.00	0.00	0.00	0.05	2.8	3.6	2.2	7.0	2.5	0.00	0.00	0.00
AC-FT	0.00	0.00	96	67	319	468	425	1150	303	8.0	0.00	47

ARKANSAS RIVER BASIN

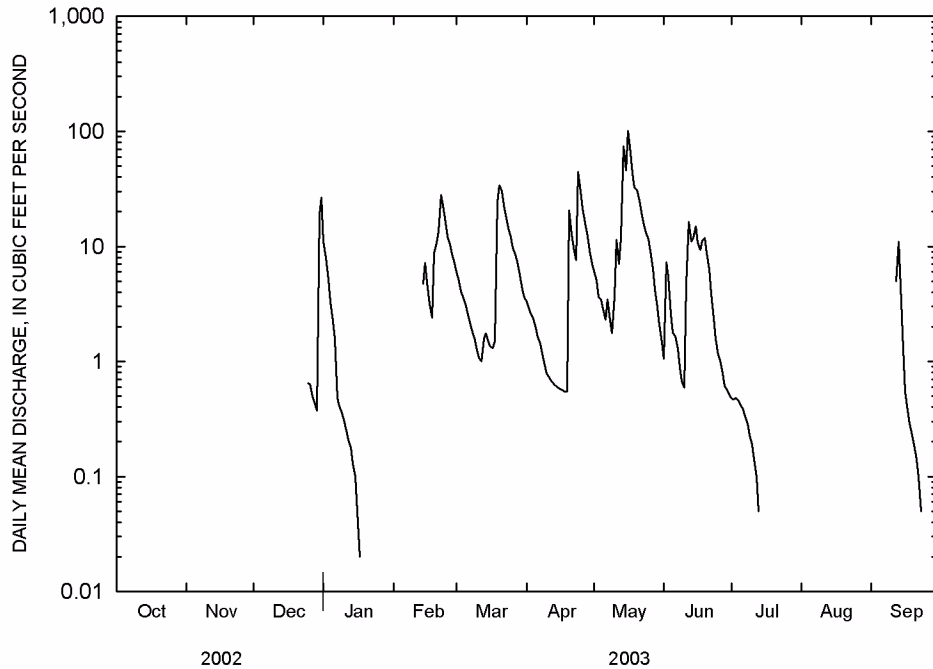
07250974 JACK CREEK NEAR WINFREY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	1.55	0.66	7.94	3.73	9.65	16.6	15.8	10.6	4.56	0.31	0.52	0.58
MAX	3.10	1.32	14.3	6.37	13.6	25.7	24.4	18.6	5.10	0.49	1.05	0.79
(WY)	2002	2002	2002	2002	2002	2002	2002	2003	2003	2002	2002	2003
MIN	0.000	0.000	1.57	1.09	5.75	7.61	7.15	2.55	4.02	0.13	0.000	0.37
(WY)	2003	2003	2003	2003	2003	2003	2003	2002	2002	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	2411.10		1452.14			
ANNUAL MEAN	6.61		3.98		6.02	
HIGHEST ANNUAL MEAN					8.06 2002	
LOWEST ANNUAL MEAN					3.98 2003	
HIGHEST DAILY MEAN	223	Apr 7	101	May 16	223	Apr 7 2002
LOWEST DAILY MEAN	0.00	Oct 1	0.00	Oct 1	0.00	Oct 1 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00	Oct 1	0.00	Oct 1 2002
MAXIMUM PEAK FLOW			460	May 16	2180	Apr 7 2002
MAXIMUM PEAK STAGE			4.84	May 16	7.40	Apr 7 2002
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	4780		2880		4360	
10 PERCENT EXCEEDS	15		12		14	
50 PERCENT EXCEEDS	0.75		0.05		0.75	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

^eEstimated



ARKANSAS RIVER BASIN

07252000 MULBERRY RIVER NEAR MULBERRY

LOCATION.--Lat 35°34'38", long 94°00'56", in SE₁/₄SW₁/₄ sec.31, T.11 N., R.28 W., Franklin County, Hydrologic Unit 11110201, on left bank 0.6 mi upstream from Mill Creek, 5.7 mi north of Mulberry, and at mile 11.3.

DRAINAGE AREA.--373 mi².

PERIOD OF RECORD.--June 1938 to January 1995, October 1998 to current year. Annual maximum, water years 1995-98.

REVISED RECORDS.--WSP 1007: 1943. WSP 1211: 1941-42. WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 432.75 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 19, 1940, nonrecording gage at site 500 ft downstream at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	14	12	787	52	551	389	449	281	176	10	7.9
2	4.1	15	12	540	53	507	358	458	317	345	10	7.9
3	4.4	15	12	438	52	457	331	408	864	329	9.8	8.0
4	4.1	15	17	362	51	423	310	360	610	302	12	5.9
5	3.8	15	16	311	e51	398	284	326	484	221	13	5.7
6	3.2	15	16	269	e50	364	268	297	431	174	13	7.6
7	3.1	15	17	236	e50	331	265	338	397	145	13	7.4
8	2.9	16	18	207	e50	303	252	368	345	123	12	6.4
9	3.2	16	17	190	49	279	233	432	291	108	11	5.4
10	3.4	16	17	174	49	257	213	413	257	93	9.9	4.9
11	4.3	15	19	159	48	240	201	1280	283	80	9.1	4.4
12	5.2	16	19	142	47	227	191	1080	375	73	8.8	7.7
13	5.4	16	23	128	47	234	182	837	343	69	8.5	15
14	5.0	16	25	118	96	270	173	2620	314	62	7.6	30
15	5.0	16	24	109	699	286	161	3130	483	56	8.5	30
16	4.5	15	27	102	635	272	148	3840	465	53	8.9	20
17	4.2	16	31	e93	517	266	140	5420	426	49	7.4	15
18	4.1	16	32	e87	437	263	133	3050	490	46	6.0	12
19	4.1	15	33	e79	418	823	131	2010	488	37	5.2	9.1
20	3.8	16	31	73	538	1840	466	2410	410	31	4.6	8.0
21	3.9	15	29	69	543	1950	864	2550	334	30	4.1	7.4
22	e4.0	15	27	66	1070	1430	656	1700	276	28	3.7	7.5
23	e3.9	15	28	62	1400	1130	553	1270	235	25	3.9	6.9
24	e3.8	15	31	58	1080	943	1390	1010	200	22	4.7	6.7
25	6.0	14	34	56	856	809	1340	943	186	20	4.5	6.6
26	5.2	13	45	e54	744	767	1000	792	162	18	3.7	6.2
27	5.2	13	50	e51	674	706	811	659	142	15	3.3	5.1
28	7.2	12	48	e49	607	630	682	544	124	15	2.8	4.2
29	12	12	44	50	---	548	585	458	108	13	3.1	3.7
30	13	12	54	52	---	e497	505	392	90	12	4.0	3.3
31	13	---	1080	53	---	424	---	335	---	11	6.3	---
TOTAL	159.3	445	1888	5224	10963	18425	13215	40179	10211	2781	232.4	275.9
MEAN	5.14	14.8	60.9	169	392	594	440	1296	340	89.7	7.50	9.20
MAX	13	16	1080	787	1400	1950	1390	5420	864	345	13	30
MIN	2.9	12	12	49	47	227	131	297	90	11	2.8	3.3
AC-FT	316	883	3740	10360	21750	36550	26210	79700	20250	5520	461	547
CFSM	0.01	0.04	0.16	0.45	1.05	1.59	1.18	3.47	0.91	0.24	0.02	0.02
IN.	0.02	0.04	0.19	0.52	1.09	1.84	1.32	4.01	1.02	0.28	0.02	0.03

ARKANSAS RIVER BASIN

07252000 MULBERRY RIVER NEAR MULBERRY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938-95, 1999-03, BY WATER YEAR (WY)

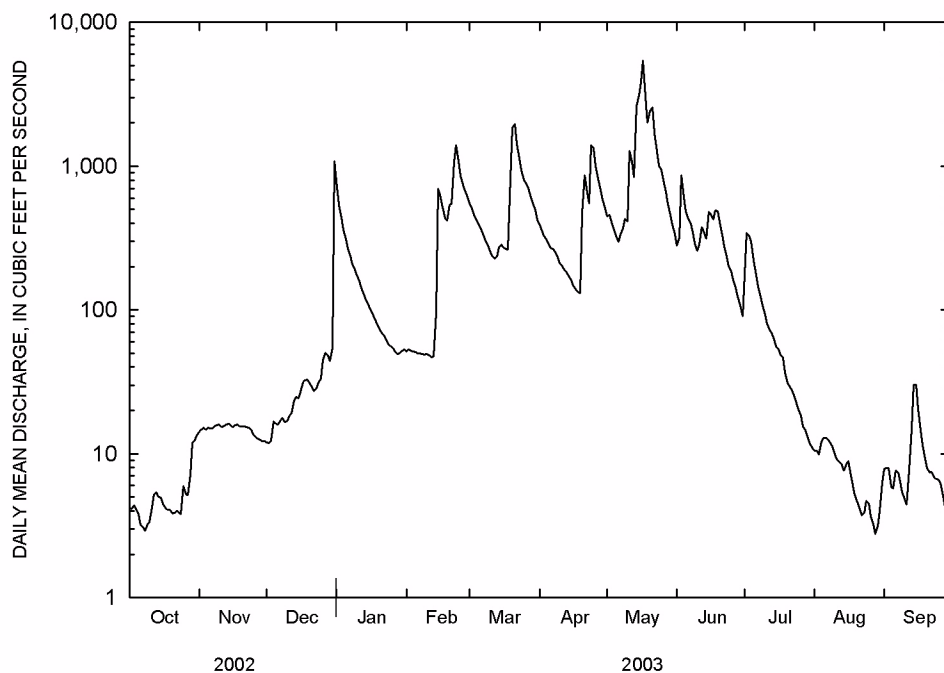
MEAN	166	533	651	613	885	1074	1107	968	415	117	63.5	79.5
MAX	1566	2280	2997	3083	2873	4124	3576	4233	2592	908	952	1497
(WY)	1985	1974	1983	1949	1951	1945	1945	1990	2000	1950	1950	1974
MIN	0.000	0.033	2.45	5.34	47.0	75.7	263	88.7	9.68	2.72	0.061	0.000
(WY)	1954	1954	1990	1964	1967	1967	1971	1977	1977	1963	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938-95, 1999-03	
ANNUAL TOTAL	216203.3		103998.6			
ANNUAL MEAN	592		285		551	
HIGHEST ANNUAL MEAN					1226 1945	
LOWEST ANNUAL MEAN					185 1954	
HIGHEST DAILY MEAN	25500	Apr 8	5420	May 17	40900	May 3 1990
LOWEST DAILY MEAN	2.9	Oct 8	2.8	Aug 28	0.00	Sep 24 1939
ANNUAL SEVEN-DAY MINIMUM	3.4	Oct 4	3.4	Oct 4	0.00	Aug 25 1943
MAXIMUM PEAK FLOW			9000	May 16	¹ 70200	Dec 3 1982
MAXIMUM PEAK STAGE			9.18	May 16	23.66	Dec 3 1982
INSTANTANEOUS LOW FLOW			2.4	² Oct 24	0.00	at times
ANNUAL RUNOFF (AC-FT)	428800		206300		399500	
ANNUAL RUNOFF (CFSM)	1.59		0.76		1.48	
ANNUAL RUNOFF (INCHES)	21.56		10.37		20.08	
10 PERCENT EXCEEDS	1340		753		1320	
50 PERCENT EXCEEDS	109		53		181	
90 PERCENT EXCEEDS	6.8		5.0		3.8	

¹From rating curve extended above 38,000 ft³/s

²Also August 28-29

^eEstimated



ARKANSAS RIVER BASIN

07257006 BIG PINEY CREEK AT HWY 164 NEAR DOVER

LOCATION.--Lat 35°30'21", long 93°10'53", in SE₁/4NW₁/4 sec.25, T.10 N., R.21 W., Pope County, Hydrologic Unit 11110202, on right bank 11.9 mi downstream from Indian Creek, 7.2 mi north of Dover, and at mile 23.3.

DRAINAGE AREA.--297 mi².

PERIOD OF RECORD.--October 1950 to September 1995, October 1998 to current year. Annual maximum, water years 1996-1998. Prior to October 1967, published as "Piney Creek near Dover". Prior to October 1992, published as "07257000 Big Piney Creek near Dover".

REVISED RECORDS.--WDR Ark. 1972: 1949(M), 1953(M), 1957(M), 1961(M), 1966(M), 1968-69(M).

GAGE.--Water-stage recorder. Datum of gage is 439.75 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.6	7.5	706	53	350	297	260	174	84	13	2.7
2	1.5	3.8	7.2	460	51	331	273	302	352	77	15	3.0
3	1.4	5.1	8.3	369	50	309	252	276	1130	73	14	2.7
4	1.4	6.1	15	303	48	289	234	236	619	138	12	2.3
5	1.1	13	19	257	46	274	217	211	432	105	11	4.5
6	0.94	14	43	221	48	257	200	198	351	78	35	6.1
7	0.87	17	38	190	50	234	207	249	313	61	30	7.2
8	0.79	21	34	166	49	215	202	749	266	49	23	5.8
9	1.2	20	30	152	47	200	181	834	220	41	19	4.9
10	1.1	17	27	141	46	185	166	556	184	37	15	3.7
11	1.0	16	25	129	46	170	157	1480	160	35	13	3.8
12	1.2	14	24	116	47	161	151	1030	160	32	11	5.4
13	1.5	12	30	106	54	192	145	700	208	30	10	6.8
14	0.85	11	34	97	563	279	138	1060	175	28	10	7.0
15	0.73	11	61	90	837	284	130	1200	231	28	9.4	6.7
16	0.67	12	68	84	626	267	124	2380	268	27	7.3	7.3
17	0.69	11	61	79	476	255	120	8160	259	25	6.2	14
18	0.68	11	54	74	390	244	116	3910	460	22	5.6	13
19	0.93	11	50	69	339	930	112	2130	434	28	5.2	10
20	0.84	11	46	65	324	1250	313	2590	345	24	5.2	7.9
21	0.72	11	43	62	323	1190	581	2900	267	21	4.1	6.4
22	0.70	10	41	60	429	913	416	1690	214	20	3.3	5.6
23	0.63	9.8	42	57	698	719	339	1130	176	21	2.6	5.0
24	0.71	9.2	50	53	597	597	568	796	148	33	2.2	4.3
25	2.4	9.3	81	49	488	509	831	721	128	44	1.7	3.6
26	1.3	9.2	94	46	431	638	613	601	113	34	1.3	2.9
27	1.4	9.1	87	44	399	608	483	470	98	27	0.91	2.4
28	2.2	8.5	78	43	369	520	398	372	84	22	0.66	1.9
29	4.8	8.1	70	44	---	450	342	299	72	18	1.3	1.3
30	4.1	8.0	73	51	---	364	296	247	61	16	2.7	1.1
31	4.5	---	1270	55	---	327	---	207	---	15	2.3	---
TOTAL	44.55	332.8	2611.0	4438	7924	13511	8602	37944	8102	1293	292.97	159.3
MEAN	1.44	11.1	84.2	143	283	436	287	1224	270	41.7	9.45	5.31
MAX	4.8	21	1270	706	837	1250	831	8160	1130	138	35	14
MIN	0.63	3.6	7.2	43	46	161	112	198	61	15	0.66	1.1
AC-FT	88	660	5180	8800	15720	26800	17060	75260	16070	2560	581	316

ARKANSAS RIVER BASIN

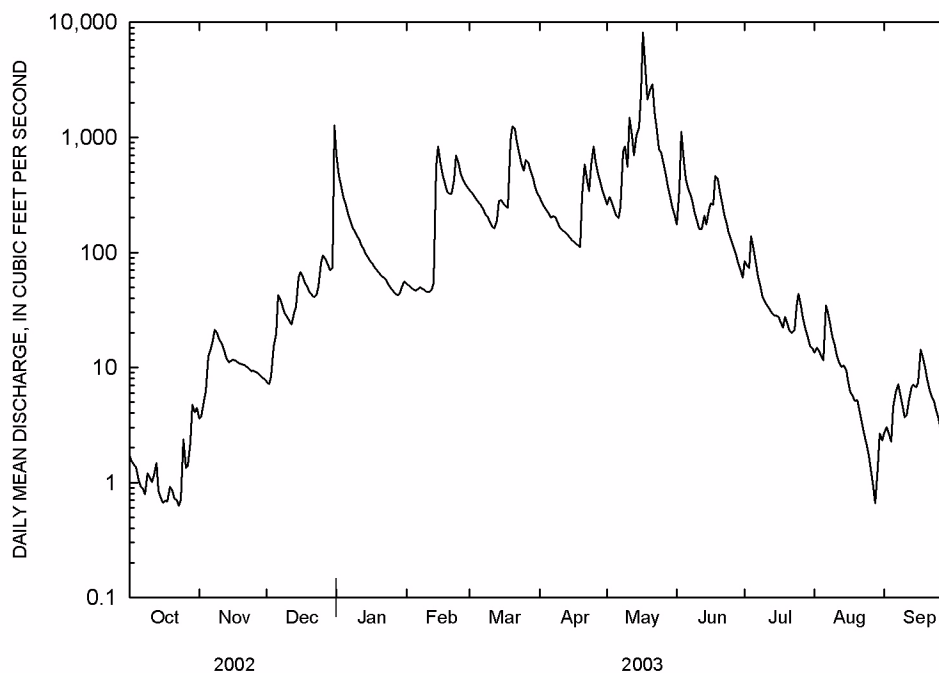
07257006 BIG PINEY CREEK AT HWY 164 NEAR DOVER--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-95, 1999-03, BY WATER YEAR (WY)

MEAN	123	409	543	448	642	854	842	689	280	73.1	37.7	44.8
MAX	1467	2419	3325	1663	2107	2763	2937	2528	1836	342	413	499
(WY)	1985	1995	1983	1993	2001	2002	1957	1990	2000	1961	1958	1970
MIN	0.000	0.000	5.86	7.03	47.9	125	120	67.1	14.0	0.76	0.000	0.000
(WY)	1954	1954	1990	1964	1963	1967	1963	1988	1977	1985	1980	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951-95, 1999-03	
ANNUAL TOTAL	202893.45		85254.62			
ANNUAL MEAN	556		234		417	
HIGHEST ANNUAL MEAN					823 1973	
LOWEST ANNUAL MEAN					141 1963	
HIGHEST DAILY MEAN	14300	Mar 20	8160	May 17	43500	Dec 3 1982
LOWEST DAILY MEAN	0.63	Oct 23	0.63	Oct 23	0.00	Oct 2 1952
ANNUAL SEVEN-DAY MINIMUM	0.74	Oct 17	0.74	Oct 17	0.00	Sep 12 1953
MAXIMUM PEAK FLOW			10900	May 17	¹ 111000	Dec 3 1982
MAXIMUM PEAK STAGE			10.16	May 17	² 33.87	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.59	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	402400		169100		301900	
10 PERCENT EXCEEDS	1190		587		980	
50 PERCENT EXCEEDS	104		51		127	
90 PERCENT EXCEEDS	2.2		2.3		2.7	

¹From rating curve extended above 45,000 ft³/s on basis of contracted-opening measurement of peak flow
²At site and datum then in use



ARKANSAS RIVER BASIN

07257200 LITTLE PINEY CREEK NEAR LAMAR

LOCATION.--Lat 35°26'60", long 93°20'16", in SW₁/₄NE₁/₄ sec.9, T.9 N., R.22 W., Johnson County, Hydrologic Unit 11110202, on left bank 600 ft upstream from State Highway 359 bridge, 3.0 mi east of Lamar.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--October 2001 to current year. Annual maximum 1978-2001

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	5.8	21	347	22	225	131	94	79	54	3.5	0.89
2	1.2	6.5	19	273	23	207	120	99	323	58	3.5	0.94
3	0.97	9.6	20	222	23	188	109	86	521	57	4.0	1.7
4	0.61	9.1	38	185	21	175	102	72	315	67	3.8	0.63
5	0.37	11	33	158	21	164	91	64	240	52	3.7	0.51
6	0.11	11	24	135	24	150	89	56	215	42	3.0	0.07
7	0.06	12	21	115	25	136	101	54	183	34	2.2	0.00
8	0.09	10	21	102	24	124	86	91	146	29	1.6	0.00
9	0.55	10	21	92	24	114	77	286	118	24	1.5	0.00
10	1.3	9.6	22	80	25	102	71	214	96	22	1.2	0.00
11	1.9	9.7	22	70	24	94	65	471	84	20	1.1	0.02
12	1.6	9.6	23	63	24	88	60	350	181	18	1.3	0.42
13	2.1	9.8	40	56	26	118	56	328	128	18	1.3	2.8
14	1.6	11	40	51	462	132	52	910	104	16	1.8	3.3
15	1.1	15	41	46	607	129	47	890	102	14	1.6	1.7
16	0.77	16	44	43	412	124	42	897	177	13	1.1	0.58
17	0.48	16	43	40	318	118	40	2430	312	11	0.61	0.10
18	0.84	16	43	36	264	116	38	1640	529	10	0.22	0.00
19	1.7	16	42	35	234	933	37	1020	438	9.7	0.08	0.00
20	2.2	17	39	33	212	906	48	926	305	9.5	0.06	0.00
21	2.1	17	36	31	205	760	129	875	228	8.2	0.00	0.00
22	2.1	18	34	29	335	573	104	606	176	8.3	0.00	0.00
23	1.8	18	35	26	384	454	89	439	140	8.3	0.00	0.00
24	2.0	19	51	25	345	378	171	351	113	7.2	0.00	0.00
25	5.4	21	49	24	297	318	241	345	92	6.1	0.00	0.00
26	6.3	21	50	24	281	277	202	265	80	5.6	0.00	0.00
27	6.4	20	50	22	263	240	171	210	68	5.0	0.00	0.00
28	6.0	20	48	22	243	214	146	170	57	4.3	0.00	0.00
29	8.2	20	46	23	---	187	127	141	47	3.8	0.00	0.00
30	8.0	20	59	23	---	e163	108	116	40	3.7	0.00	0.00
31	6.6	---	561	22	---	145	---	96	---	5.8	0.12	---
MEAN	2.45	14.2	52.8	79.1	185	260	98.3	471	188	20.8	1.20	0.46
MAX	8.2	21	561	347	607	933	241	2430	529	67	4.0	3.3
MIN	0.06	5.8	19	22	21	88	37	54	40	3.7	0.00	0.00
AC-FT	151	842	3250	4870	10250	15970	5850	28940	11180	1280	74	27
CFSM	0.02	0.09	0.34	0.51	1.20	1.69	0.64	3.06	1.22	0.14	0.01	0.00
IN.	0.02	0.10	0.40	0.59	1.25	1.95	0.71	3.52	1.36	0.16	0.01	0.00

07257200 LITTLE PINEY CREEK NEAR LAMAR--CONTINUED

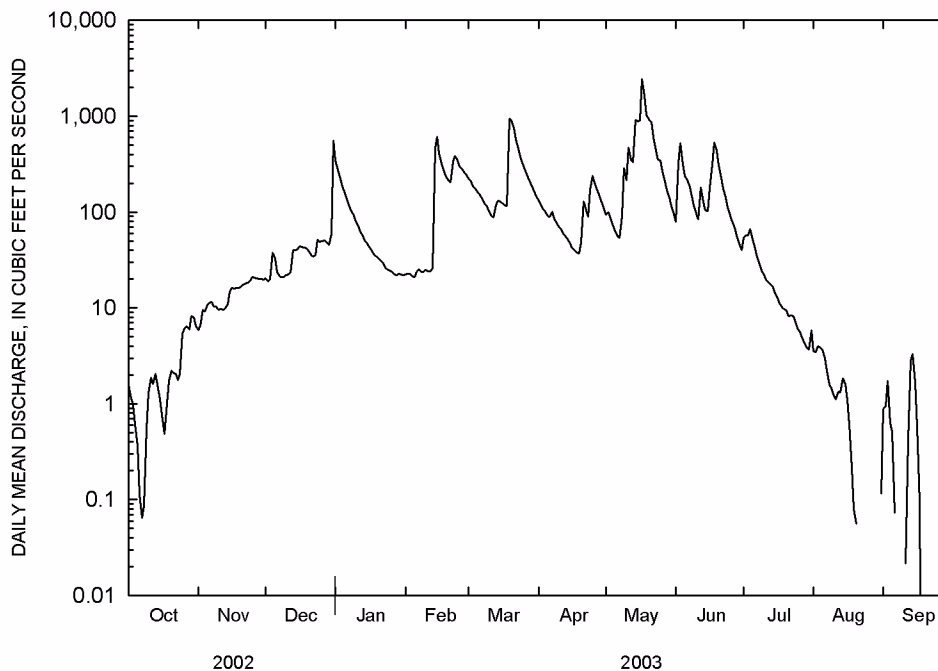
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	15.8	13.3	311	264	305	823	358	312	127	68.8	19.9	4.34
MAX	29.1	14.2	570	449	424	1387	617	471	188	117	38.5	8.22
(WY)	2002	2003	2002	2002	2002	2002	2002	2003	2003	2002	2002	2002
MIN	2.45	12.4	52.8	79.1	185	260	98.3	153	65.7	20.8	1.20	0.46
(WY)	2003	2002	2003	2003	2003	2003	2003	2002	2002	2003	2003	2003

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	277		114		219	
HIGHEST ANNUAL MEAN					323	2002
LOWEST ANNUAL MEAN					114	2003
HIGHEST DAILY MEAN	7670	Jan 31	2430	May 17	7670	Jan 31 2002
LOWEST DAILY MEAN	0.06	Oct 7	0.00	Aug 21	0.00	Aug 21 2003
ANNUAL SEVEN-DAY MINIMUM	0.39	Oct 3	0.00	Aug 21	0.00	Aug 21 2003
MAXIMUM PEAK FLOW			2920	May 17	¹ 13300	Dec 3 1982
MAXIMUM PEAK STAGE			7.79	May 17	15.35	Dec 3 1983
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	200800		82680		158500	
ANNUAL RUNOFF (CFSM)	1.80		0.74		1.42	
ANNUAL RUNOFF (INCHES)	24.45		10.07		19.30	
10 PERCENT EXCEEDS	650		313		485	
50 PERCENT EXCEEDS	46		34		47	
90 PERCENT EXCEEDS	6.6		0.18		2.1	

¹Occurred during period of computation of annual maximum only, water years 1978-2001

^eEstimated



ARKANSAS RIVER BASIN

07257500 ILLINOIS BAYOU NEAR SCOTTSVILLE

LOCATION.--Lat 35°27'58", long 93°02'28", in SE₁/₄SW₁/₄ sec.31, T.10 N., R.19 W., Pope County, Hydrologic Unit 11110202, on downstream side of bridge on State Highway 164, 1.3 mi north of Scottsville, and 3.1 mi downstream from North Fork Illinois Bayou.

DRAINAGE AREA.--242 mi².

PERIOD OF RECORD.--October 1947 to September 1970, October 1999 to current year. Annual maximum water years 1971-99.

GAGE.--Water-stage recorder. Datum of gage is 447.54 ft above NGVD of 1929. Prior to Mar. 25, 1948, non-recording gage at same site and datum.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 10, 1943, reached a stage of 24.6 ft, from floodmark set by local residents (discharge, 77,000 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.94	2.5	12	943	36	379	189	124	75	22	3.4	1.3
2	0.92	2.9	12	656	35	350	177	210	389	26	5.8	1.5
3	0.91	4.1	12	522	34	316	164	187	721	24	5.5	1.4
4	0.91	3.7	26	396	33	293	152	159	393	19	4.8	1.4
5	0.88	5.3	27	317	32	274	138	154	276	16	4.4	1.4
6	0.87	5.0	33	256	35	247	133	140	230	13	4.2	1.4
7	0.86	5.3	36	213	35	222	151	192	197	11	4.6	1.3
8	0.86	5.7	34	187	34	203	150	1330	155	9.3	4.6	1.3
9	1.2	6.1	31	170	34	186	131	1280	113	7.9	3.9	1.2
10	1.1	6.8	29	148	34	168	121	709	82	7.4	3.2	1.1
11	0.96	10	28	127	34	150	114	1630	81	6.3	3.2	1.3
12	0.95	11	27	110	35	141	109	812	300	6.6	3.4	2.1
13	0.97	12	34	97	42	182	101	554	326	6.5	2.9	3.3
14	1.1	12	35	86	1500	225	91	928	221	6.4	3.2	2.6
15	0.98	13	46	76	1270	204	83	878	326	5.9	2.6	2.2
16	0.94	13	51	71	835	193	76	2250	403	5.3	2.1	1.8
17	0.93	13	46	62	614	186	72	5980	504	4.8	1.8	1.6
18	0.94	13	42	57	481	182	68	2180	406	4.3	1.6	1.5
19	1.3	13	40	52	410	476	63	1280	319	6.2	1.3	1.8
20	1.5	14	37	50	359	640	65	1430	236	6.6	1.1	1.9
21	1.6	13	34	48	348	674	62	1380	179	6.6	0.95	1.8
22	1.6	13	31	45	587	570	56	920	134	6.8	0.93	1.9
23	1.6	13	35	43	670	486	51	650	100	6.2	1.1	1.8
24	1.7	13	51	41	551	423	207	491	75	5.4	0.91	1.7
25	2.4	14	105	38	456	373	345	501	58	5.1	0.88	1.5
26	2.1	14	95	36	432	358	270	382	60	5.5	0.84	1.4
27	2.0	13	74	34	400	323	224	293	52	5.3	0.84	1.2
28	2.2	13	61	33	400	298	192	227	38	4.8	0.83	1.1
29	3.2	13	54	34	---	260	167	180	30	4.5	0.91	0.95
30	2.8	12	129	36	---	e225	140	139	25	4.1	1.3	0.92
31	2.5	---	1750	36	---	202	---	104	---	3.8	1.3	---
TOTAL	43.72	302.4	3057	5020	9766	9409	4062	27674	6504	272.6	78.39	47.67
MEAN	1.41	10.1	98.6	162	349	304	135	893	217	8.79	2.53	1.59
MAX	3.2	14	1750	943	1500	674	345	5980	721	26	5.8	3.3
MIN	0.86	2.5	12	33	32	141	51	104	25	3.8	0.83	0.92
AC-FT	87	600	6060	9960	19370	18660	8060	54890	12900	541	155	95
CFSM	0.01	0.04	0.41	0.67	1.45	1.26	0.56	3.70	0.90	0.04	0.01	0.01
IN.	0.01	0.05	0.47	0.77	1.51	1.45	0.63	4.27	1.00	0.04	0.01	0.01

ARKANSAS RIVER BASIN

07257500 ILLINOIS BAYOU NEAR SCOTTSVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948-70, 2000-03, BY WATER YEAR (WY)

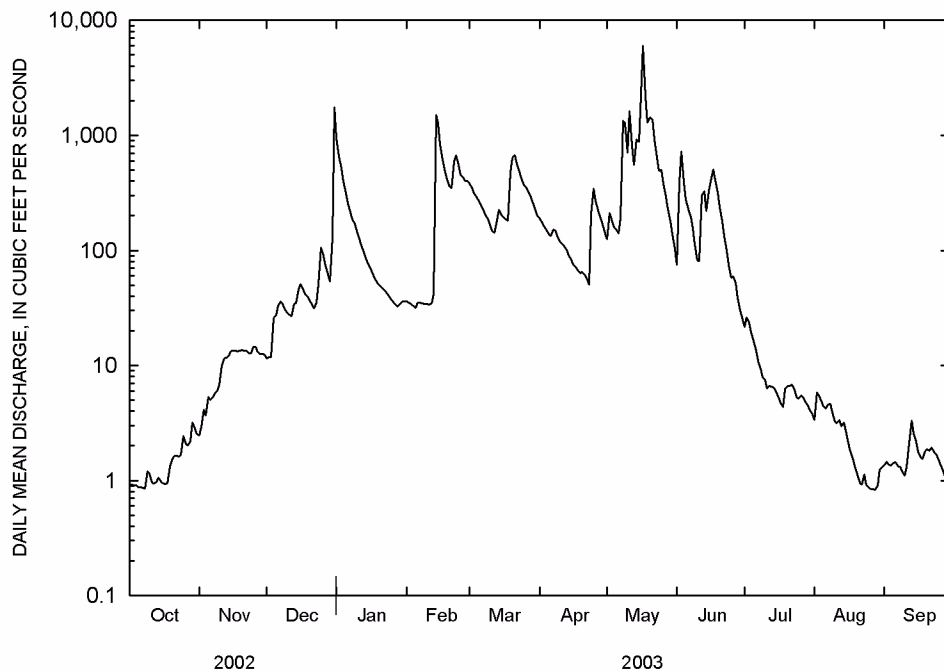
MEAN	78.6	210	386	519	657	740	691	607	183	87.9	63.3	55.9
MAX	627	1252	1513	2918	1666	2075	2116	1828	929	499	576	634
(WY)	1950	1952	1969	1949	2001	2002	1957	1961	1957	1950	1950	1970
MIN	0.002	0.043	0.68	16.3	51.9	147	105	83.4	15.8	1.21	0.56	0.000
(WY)	2000	1954	1954	1964	1963	1956	1963	2001	1966	1953	1952	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948-70, 2000-03	
ANNUAL TOTAL	163475.93		66236.78			
ANNUAL MEAN	448		181		355	
HIGHEST ANNUAL MEAN					693 1950	
LOWEST ANNUAL MEAN					142 1954	
HIGHEST DAILY MEAN	10400	Jan 31	5980	May 17	38500	Jan 24 1949
LOWEST DAILY MEAN	0.86	Oct 7	0.83	Aug 28	0.00	Sep 17 1953
ANNUAL SEVEN-DAY MINIMUM	0.88	Sep 12	0.89	Oct 2	0.00	Sep 17 1953
MAXIMUM PEAK FLOW			9250	May 17	^{1,2} 130000	Dec 3 1982
MAXIMUM PEAK STAGE			12.55	May 17	27.49	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.82	Aug 28,29	0.00	at times
ANNUAL RUNOFF (AC-FT)	324300		131400		257200	
ANNUAL RUNOFF (CFSM)	1.86		0.75		1.47	
ANNUAL RUNOFF (INCHES)	25.23		10.22		20.02	
10 PERCENT EXCEEDS	1030		478		812	
50 PERCENT EXCEEDS	75		35		97	
90 PERCENT EXCEEDS	1.1		1.3		1.4	

¹From rating curve extended above 56,100 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow

²Occurred during period of computation of annual maximum only, water years 1971-99

^eEstimated



ARKANSAS RIVER BASIN

07258000 ARKANSAS RIVER AT DARDANELLE

LOCATION.--Lat 35°13'34", long 93°08'58", in SW₁/₄ sec.29, T.7 N., R.20 W., Pope County, Hydrologic Unit 11110203, near left bank on upstream side of bridge pier on State Highway 7 at Dardanelle, 1.0 mi upstream from Whig Creek, 2.0 mi downstream from Dardanelle Dam, 4.7 mi downstream from Illinois Bayou, and at mile 219.5.

DRAINAGE AREA.--153,670 mi², of which 22,241 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1937 to September 1994, October 2000 to current year. Annual maximum 1995-2000. Gage-height records collected at same site since 1886 are contained in reports of National Weather Service.

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 280.16 ft above NGVD of 1929. Prior to Jan. 11, 1939, nonrecording gage at same site at datum 10.0 ft higher. Jan. 11, 1939, to Dec. 10, 1970, water-stage recorder at same site at datum 10.0 ft higher. Feb. 13, 1969, to May 16, 1985, totalizing flow meters on each turbine in Dardanelle Dam, 2.0 mi upstream.

REMARKS.--No estimated daily discharges. Water-discharge records good except for those below 10,000 ft³/s, which are fair. Flow regulated upstream by many locks, dams, and reservoirs. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 19, 1927, reached a stage of 43.0 ft, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8300	17500	4610	11100	1860	28600	51000	44500	37700	21600	8440	31000
2	4320	18800	1380	20900	2960	16500	54200	36800	45600	33900	4680	17800
3	4390	26600	957	18900	7880	4660	45200	36400	51500	18100	14600	35200
4	10300	26900	1130	20300	4120	13000	39200	53300	58200	2810	23300	32700
5	6880	25100	9030	2690	50.0	17300	39300	55200	46200	10700	8830	27500
6	24500	7640	7800	18300	9750	13900	38100	41900	37600	7590	20400	22900
7	26900	5160	5420	18700	21200	11100	28400	46300	32200	12000	8350	24200
8	26800	5420	2340	8070	4490	13500	20200	49700	23100	13300	16500	31800
9	27900	12100	9840	14900	3640	18600	24900	36600	25500	19100	11400	29600
10	27600	5910	5370	13700	11500	3320	30200	42900	32200	10400	5520	27000
11	29900	9330	3260	14000	8270	1400	33400	33600	45500	7640	3860	27400
12	16600	9700	6990	13600	7540	21700	26600	22300	62200	8080	5230	26800
13	4610	2890	19400	16700	6430	14800	9460	25300	55800	773	9490	34400
14	7410	8850	6120	11600	6360	14600	14500	24200	53800	24800	12600	34100
15	8350	4980	4800	15000	17200	13100	9240	34700	45400	20600	6120	4450
16	5660	3430	4290	20300	23100	7720	14800	42800	39300	1380	9990	16600
17	3980	1160	6320	13100	7520	16100	24400	79200	49500	4800	14200	21600
18	8450	1070	5480	3240	9970	11500	10200	104000	38600	10400	25300	16700
19	7750	8460	5570	7770	13600	37100	1340	60000	36100	16000	21000	14200
20	14800	3410	5160	4880	26100	69100	18500	46500	31300	6610	14900	16200
21	1920	11400	1390	15600	11400	82700	25600	54600	21900	10200	12700	1410
22	2280	4170	2620	12000	17600	62900	22400	59600	21400	3620	4950	20500
23	6990	3980	11500	15300	32200	51000	18000	59900	18300	5560	4920	10700
24	8030	11000	15200	6540	37200	51900	27200	59600	23000	3320	553	12000
25	10800	5760	11200	3900	15700	55300	48400	58900	17600	7500	50.0	10800
26	7260	7550	7210	8700	15500	56700	45900	56000	37100	3340	3150	11200
27	2330	50	5560	6370	29200	57200	40900	53200	30400	6400	18200	3340
28	9950	4000	1400	11000	28100	60900	40700	39600	8970	10200	15400	4390
29	19300	2260	1260	4480	---	63900	25700	30600	15900	10300	13400	4910
30	14500	583	10100	2520	---	63900	43900	28900	3940	9140	8030	4850
31	16800	---	23800	18600	---	59800	---	43300	---	10300	20200	---
TOTAL	375560	255163	206507	372760	380440.0	1013800	871840	1460400	1045810	330463	346263.0	576250
MEAN	12110	8505	6662	12020	13590	32700	29060	47110	34860	10660	11170	19210
MAX	29900	26900	23800	20900	37200	82700	54200	104000	62200	33900	25300	35200
MIN	1920	50	957	2520	50	1400	1340	22300	3940	773	50	1410
AC-FT	744900	506100	409600	739400	754600	2011000	1729000	2897000	2074000	655500	686800	1143000

ARKANSAS RIVER BASIN

07258000 ARKANSAS RIVER AT DARDANELLE

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970-94, 2001-03, BY WATER YEAR (WY)

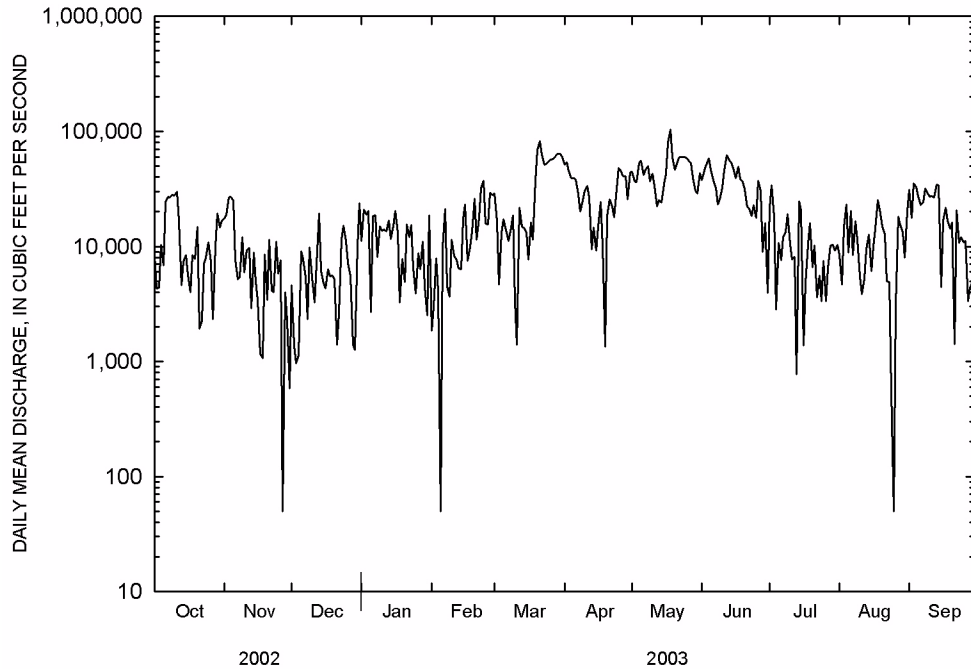
MEAN	26640	37960	40700	34780	40280	64200	64120	64700	57640	25520	14110	15500
MAX	218900	166600	145500	123700	101000	158200	184700	211100	127800	58700	59480	49900
(WY)	1987	1975	1993	1993	2001	1987	1973	1990	1982	1993	1992	1989
MIN	1334	1207	3612	946	4213	8587	4520	16140	5117	5252	3990	3818
(WY)	1981	1981	1990	1981	1981	1972	1981	1981	1988	1991	1991	1983

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970-94, 2001-03	
ANNUAL TOTAL	11226053		7235256.0			
ANNUAL MEAN	30760		19820		140480	
HIGHEST ANNUAL MEAN					88010 1993	
LOWEST ANNUAL MEAN					9312 1981	
HIGHEST DAILY MEAN	240000	Mar 20	104000	May 18	419000	May 4 1990
LOWEST DAILY MEAN	50	Sep 8	50	Nov 27	40	Sep 18 1982
ANNUAL SEVEN-DAY MINIMUM	1720	Sep 7	1980	Nov 27	540	Nov 6 1980
MAXIMUM PEAK FLOW			108000	May 18	2433000	May 4 1990
MAXIMUM PEAK STAGE			18.56	May 18	342.14	May 4 1990
ANNUAL RUNOFF (AC-FT)	22270000		14350000		29330000	
10 PERCENT EXCEEDS	75500		46200		106000	
50 PERCENT EXCEEDS	17100		14500		24600	
90 PERCENT EXCEEDS	3420		3340		3060	

¹Prior to regulation, water years 1938-69, 34,760 ft³/s

²Maximum discharge for period of record, 683,000 ft³/s, May 13, 1943

³Maximum gage height, 43.60 ft, in gage well, 44.1 ft from outside gage, May 25, 1943, at present datum



ARKANSAS RIVER BASIN

07258500 PETIT JEAN RIVER NEAR BOONEVILLE

LOCATION.--Lat 35°06'25", long 93°55'25", in NW₁/₄NW₁/₄ sec.18, T.5 N., R.27 W., Logan County, Hydrologic Unit 11110204, on right bank at downstream side of bridge on State Highway 23, 0.5 mi downstream from Fletcher Creek, 2.3 mi south of Booneville.

DRAINAGE AREA.--241 mi².

PERIOD OF RECORD.--November 1938 to September 1984, October 1999 to current year. Annual maximum water years 1985-99. Prior to October 1965, published as "Petit Jean Creek near Booneville".

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 423.39 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.27	0.77	7.7	793	18	507	66	24	5.5	61	0.40	0.23
2	0.22	0.80	7.5	483	17	439	58	21	8.8	38	0.31	0.24
3	0.22	2.7	8.1	370	16	354	52	20	13	12	2.5	0.24
4	0.17	5.8	102	278	15	294	49	21	11	7.0	6.0	0.21
5	0.12	6.5	191	221	14	251	45	24	9.4	5.0	2.5	0.20
6	0.10	9.7	80	173	15	208	43	36	33	3.6	20	0.18
7	0.07	8.1	39	133	18	177	76	31	108	2.8	29	0.17
8	0.01	5.9	26	110	20	152	63	31	65	2.3	14	0.15
9	0.03	5.7	20	98	22	129	48	68	35	1.9	6.0	0.15
10	0.11	14	17	83	29	108	42	35	22	1.8	2.4	0.13
11	0.13	14	16	67	49	93	38	24	18	1.7	1.8	0.13
12	0.11	13	15	57	51	85	35	18	30	1.4	1.3	0.16
13	0.07	11	287	52	61	175	32	15	31	1.0	0.38	0.21
14	0.04	11	522	49	1690	217	29	14	30	1.2	0.36	0.19
15	0.03	10	234	45	821	159	26	12	e53	26	13	0.18
16	0.01	8.9	129	42	461	129	23	102	e188	34	20	0.16
17	0.00	8.7	87	38	321	110	21	334	e128	33	14	0.15
18	0.00	9.0	66	34	252	100	18	177	e69	32	10	0.15
19	0.00	9.2	56	32	209	656	19	110	120	32	6.9	0.15
20	0.01	8.9	55	31	186	453	41	70	85	29	3.2	0.13
21	0.03	8.8	47	31	205	337	48	48	55	18	1.4	0.12
22	0.03	8.4	39	28	1750	262	31	36	30	12	0.87	0.12
23	0.02	7.8	68	25	1100	211	23	28	20	9.2	0.40	0.09
24	0.00	7.6	606	22	646	179	105	22	14	5.5	0.32	0.09
25	0.11	7.9	481	20	456	e169	110	19	10	3.3	0.30	0.09
26	0.17	8.1	272	20	431	e199	64	17	8.6	1.6	0.27	0.06
27	0.15	7.9	186	20	505	169	49	13	6.9	0.65	0.25	0.06
28	0.15	7.8	134	20	557	131	40	11	5.5	0.32	0.24	0.05
29	0.25	8.0	103	20	---	105	33	e8.9	5.0	0.37	0.22	0.03
30	0.50	7.7	282	20	---	86	28	e7.2	4.2	1.7	0.21	0.03
31	0.71	---	1980	19	---	74	---	6.4	---	1.1	0.20	---
TOTAL	3.84	243.67	6163.3	3434	9935	6718	1355	1403.5	1221.9	380.44	158.73	4.25
MEAN	0.12	8.12	199	111	355	217	45.2	45.3	40.7	12.3	5.12	0.14
MAX	0.71	14	1980	793	1750	656	110	334	188	61	29	0.24
MIN	0.00	0.77	7.5	19	14	74	18	6.4	4.2	0.32	0.20	0.03
AC-FT	7.6	483	12220	6810	19710	13330	2690	2780	2420	755	315	8.4
CFSM	0.00	0.03	0.82	0.46	1.47	0.90	0.19	0.19	0.17	0.05	0.02	0.00
IN.	0.00	0.04	0.95	0.53	1.53	1.04	0.21	0.22	0.19	0.06	0.02	0.00

ARKANSAS RIVER BASIN

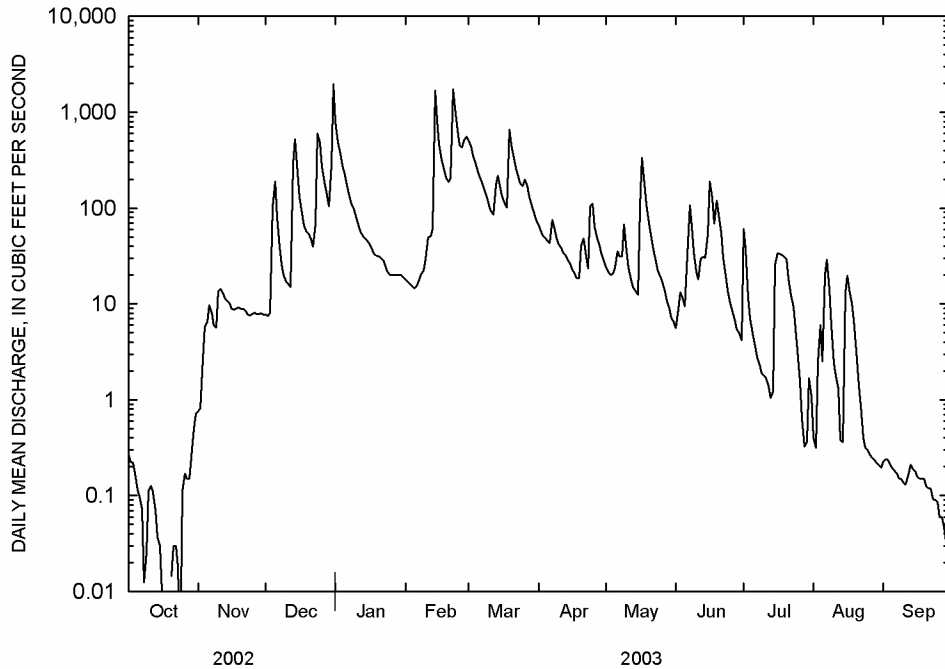
07258500 PETIT JEAN RIVER NEAR BOONEVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-84, 2000-03, BY WATER YEAR (WY)

MEAN	58.7	175	285	293	427	515	460	460	142	61.5	30.8	42.2
MAX	465	1576	1615	1854	1587	2610	1913	1779	1053	730	567	401
(WY)	1968	1973	1983	1949	1945	1945	1957	1968	1945	1961	1957	1945
MIN	0.000	0.000	0.013	0.000	8.81	21.1	43.3	15.6	1.76	0.13	0.000	0.000
(WY)	1947	1964	1964	1956	1967	1940	1982	1977	1972	1954	1980	1939

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939-84, 2000-03	
ANNUAL TOTAL	128318.03		31021.63			
ANNUAL MEAN	352		85.0		245	
HIGHEST ANNUAL MEAN					657 1945	
LOWEST ANNUAL MEAN					46.2 1956	
HIGHEST DAILY MEAN	13100	Mar 19	1980	Dec 31	28600	Apr 16 1939
LOWEST DAILY MEAN	0.00	Oct 17	0.00	Oct 17	0.00	Aug 19 1939
ANNUAL SEVEN-DAY MINIMUM	0.01	Oct 15	0.01	Oct 15	0.00	Aug 31 1939
MAXIMUM PEAK FLOW			2850	Dec 31	43200	Apr 16 1939
MAXIMUM PEAK STAGE			10.25	Dec 31	23.42	Apr 16 1939
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	Aug 1 2000
ANNUAL RUNOFF (AC-FT)	254500		61530		177200	
ANNUAL RUNOFF (CFSM)	1.46		0.35		1.01	
ANNUAL RUNOFF (INCHES)	19.81		4.79		13.79	
10 PERCENT EXCEEDS	586		213		474	
50 PERCENT EXCEEDS	33		20		33	
90 PERCENT EXCEEDS	0.35		0.15		0.20	

^eEstimated



ARKANSAS RIVER BASIN

07260000 DUTCH CREEK AT WALTREAK

LOCATION.--Lat 34°59'15", long 93°36'47", in SE_{1/4}NW_{1/4} sec.24, T.4 N., R.25 W., Yell County, Hydrologic Unit 11110204, on left bank 0.2 mi north of Waltreak and 21.0 mi upstream from mouth.

DRAINAGE AREA.--81.4 mi².

PERIOD OF RECORD.--October 1945 to November 1975, October 1999 to current year. Annual maximum 1976-99. Monthly discharge only for some periods published in WSP1311.

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 371.48 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1927 reached a stage of 19.5 ft, discharge about 14,600 ft³/s, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	2.6	26	409	8.3	277	29	12	1.5	4.6	0.08	0.07
2	0.03	3.5	25	263	8.5	259	26	11	1.8	4.0	0.08	0.07
3	0.03	6.9	25	201	8.0	204	24	11	2.6	3.5	0.13	0.07
4	0.03	8.9	149	180	7.4	165	22	12	2.5	3.2	0.16	0.07
5	0.03	25	148	158	7.1	137	20	12	3.1	3.8	0.18	0.06
6	0.03	70	84	128	7.3	114	20	11	13	4.3	0.17	0.06
7	0.04	59	62	96	7.5	98	20	11	78	3.1	0.21	0.05
8	0.04	45	46	64	7.6	84	19	9.9	33	2.6	0.29	0.05
9	0.07	42	37	55	7.4	74	18	8.6	17	2.1	0.28	0.04
10	0.10	43	32	49	7.5	65	17	7.9	12	1.9	0.23	0.03
11	0.11	35	28	43	8.1	56	15	7.7	14	2.0	0.21	0.03
12	0.09	29	25	38	8.3	51	14	6.3	159	1.8	0.38	0.04
13	0.09	23	290	35	9.5	51	12	5.3	126	1.9	0.34	0.06
14	0.08	22	304	33	679	60	11	4.8	71	1.7	0.25	0.07
15	0.08	21	153	29	383	55	12	4.5	73	1.3	e0.19	0.08
16	0.07	19	101	25	236	47	11	8.0	96	1.0	0.15	0.08
17	0.07	17	76	22	174	42	12	17	245	0.91	0.12	0.07
18	0.07	16	60	21	135	38	15	13	136	0.74	0.12	0.07
19	0.09	20	48	19	113	106	16	9.8	171	0.62	0.17	0.06
20	0.12	20	39	18	100	129	17	8.2	109	0.49	0.11	0.05
21	0.13	20	35	16	100	104	15	8.0	68	0.39	0.10	0.05
22	0.13	25	29	14	352	87	13	7.7	42	0.33	0.09	0.05
23	0.15	27	47	13	319	75	12	6.8	27	0.26	0.08	0.04
24	0.17	27	395	13	214	66	21	5.8	18	0.19	0.07	0.03
25	0.19	28	251	12	174	58	24	5.0	13	0.17	0.07	0.03
26	0.19	31	156	11	161	64	20	4.3	12	0.15	0.06	0.03
27	0.19	31	112	11	160	55	16	3.4	10	0.12	0.06	0.02
28	0.23	34	86	11	209	47	15	3.0	7.9	0.10	0.05	0.02
29	0.68	32	69	9.7	---	39	14	2.6	6.3	0.09	0.05	0.02
30	1.5	28	90	9.2	---	35	12	2.2	5.5	0.09	0.08	0.01
31	2.2	---	1040	8.8	---	32	---	1.8	---	0.08	0.07	---
TOTAL	7.06	810.9	4068	2014.7	3611.5	2774	512	241.6	1574.2	47.53	4.63	1.48
MEAN	0.23	27.0	131	65.0	129	89.5	17.1	7.79	52.5	1.53	0.15	0.049
MAX	2.2	70	1040	409	679	277	29	17	245	4.6	0.38	0.08
MIN	0.03	2.6	25	8.8	7.1	32	11	1.8	1.5	0.08	0.05	0.01
AC-FT	14	1610	8070	4000	7160	5500	1020	479	3120	94	9.2	2.9
CFSM	0.00	0.33	1.61	0.80	1.58	1.10	0.21	0.10	0.64	0.02	0.00	0.00
IN.	0.00	0.37	1.86	0.92	1.65	1.27	0.23	0.11	0.72	0.02	0.00	0.00

ARKANSAS RIVER BASIN

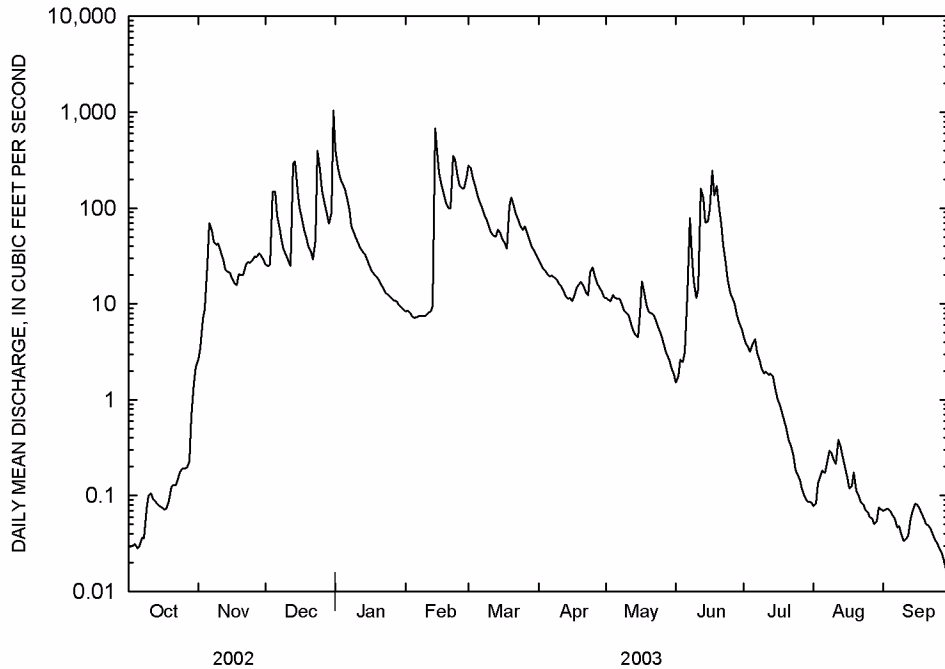
07260000 DUTCH CREEK AT WALTREAK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946-76, 2000-03, BY WATER YEAR (WY)

MEAN	20.9	66.0	126	131	158	193	174	153	44.9	29.4	10.1	9.35
MAX	178	366	480	643	494	598	839	587	283	378	126	99.8
(WY)	1974	1973	1972	1949	1950	1973	1957	1968	1974	1969	1957	1950
MIN	0.000	0.000	0.000	0.000	4.69	11.3	17.1	7.79	2.04	0.026	0.000	0.000
(WY)	1947	1954	1954	1964	1967	1972	2003	2003	1964	1954	1954	1946

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946-76, 2000-03	
ANNUAL TOTAL	36347.23		15667.60			
ANNUAL MEAN	99.6		42.9		92.8	
HIGHEST ANNUAL MEAN					225 1973	
LOWEST ANNUAL MEAN					27.2 1963	
HIGHEST DAILY MEAN	4400	Mar 19	1040	Dec 31	9540	Jul 26 1969
LOWEST DAILY MEAN	0.00	Aug 5	0.01	Sep 30	0.00	Aug 24 1946
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 5	0.02	Sep 24	0.00	Aug 24 1946
MAXIMUM PEAK FLOW			1810	Dec 31	24500	Jul 26 1969
MAXIMUM PEAK STAGE			9.00	Dec 31	22.38	Jul 26 1969
INSTANTANEOUS LOW FLOW			0.01	Sep 29-30	0.00	at times
ANNUAL RUNOFF (AC-FT)	72090		31080		67240	
ANNUAL RUNOFF (CFSM)	1.22		0.53		1.14	
ANNUAL RUNOFF (INCHES)	16.61		7.16		15.49	
10 PERCENT EXCEEDS	172		128		174	
50 PERCENT EXCEEDS	23		11		17	
90 PERCENT EXCEEDS	0.00		0.07		0.00	

^eEstimated



ARKANSAS RIVER BASIN

07260500 PETIT JEAN RIVER AT DANVILLE

LOCATION.--Lat 35°03'33", long 93°23'44", in NW_{1/4}SE_{1/4} sec.25, T.5 N., R.23 W., Yell County, Hydrologic Unit 11110204, on right bank 125 ft upstream of bridge on State Highway 10 at Danville, 0.3 mi upstream from old Chicago, Rock Island and Pacific Railroad Co. bridge, 0.5 mi upstream from Spring Creek, 0.6 mi downstream from Dutch Creek, and at mile 48.8.

DRAINAGE AREA.--764 mi².

PERIOD OF RECORD.--June 1916 to current year. Prior to October 1965, published as "Petit Jean Creek at Danville."

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 303.33 ft above NGVD of 1929. June 1, 1916, to Aug. 24, 1934, non-recording gage on railroad bridge 0.3 mi downstream at datum 0.25 ft higher. Aug. 25, 1934, to July 12, 1939, non-recording gage at present site and datum. Since June 18, 1954, auxiliary water-stage recorder 2.2 mi downstream.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Flow regulated since March 1947 by Blue Mountain Lake, 25.6 mi upstream, capacity, 257,900 acre-ft. As of July 1986, flow from 51.6 mi² upstream from this station is controlled by three floodwater-detention reservoirs that have a total combined capacity of 23,737 acre-ft below the spillway crests, of which 16,361 acre-ft is flood-detention capacity, 4,500 acre-ft is water-supply storage, and 2,876 acre-ft is sediment-storage capacity. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	54	14	2680	53	2260	252	98	33	164	4.8	41
2	11	49	14	1360	51	2050	217	96	36	113	5.2	38
3	11	39	14	1600	53	1840	207	96	39	147	8.1	33
4	11	41	167	2490	87	1520	202	89	29	100	29	36
5	11	77	317	2630	118	1050	198	85	27	90	36	44
6	12	80	194	2470	123	866	197	85	32	84	68	43
7	12	79	221	1830	125	606	212	87	32	79	126	42
8	12	93	217	1200	123	318	193	85	63	81	167	42
9	17	78	199	605	125	243	184	83	58	75	166	43
10	17	72	189	497	131	213	181	83	49	44	164	43
11	18	68	183	409	134	174	176	85	62	16	170	34
12	41	65	176	369	95	153	143	79	1260	16	90	24
13	42	62	496	353	64	142	127	73	622	17	20	28
14	42	60	1030	186	1850	147	127	52	422	16	15	28
15	42	52	600	135	2280	136	108	23	597	17	23	23
16	42	23	429	102	1530	121	76	43	528	15	49	20
17	44	15	856	72	794	112	50	204	956	12	44	19
18	44	14	888	63	656	113	47	116	971	12	38	19
19	50	15	842	62	2470	302	45	66	976	12	38	19
20	50	15	534	59	3200	730	47	280	871	11	39	21
21	45	15	362	56	2810	966	47	348	375	11	39	27
22	44	13	337	105	2030	1000	41	310	270	13	44	27
23	44	13	366	144	1650	967	38	284	243	16	35	26
24	48	14	850	139	1010	915	99	143	144	14	14	26
25	49	14	846	94	2700	581	98	83	96	10	9.8	26
26	50	14	515	60	2970	606	64	75	85	8.2	10	26
27	49	14	834	57	2760	553	55	68	79	7.3	27	26
28	49	15	836	56	2760	510	49	62	173	6.1	36	26
29	56	15	791	55	---	479	71	55	209	5.2	82	25
30	53	15	792	55	---	e465	101	49	211	5.9	154	26
31	52	---	2330	55	---	429	---	38	---	5.2	57	---
TOTAL	1079	1193	16439	20048	32752	20567	3652	3423	9548	1222.9	1807.9	901
MEAN	34.8	39.8	530	647	1170	663	122	110	318	39.4	58.3	30.0
MAX	56	93	2330	2680	3200	2260	252	348	1260	164	170	44
MIN	11	13	14	55	51	112	38	23	27	5.2	4.8	19
AC-FT	2140	2370	32610	39770	64960	40790	7240	6790	18940	2430	3590	1790

ARKANSAS RIVER BASIN

07260500 PETIT JEAN RIVER AT DANVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

MEAN	184	574	1211	1166	1358	1499	1353	1392	734	311	168	102
MAX	3261	3296	4004	3920	4941	3233	3821	6142	2801	2268	2101	1108
(WY)	1985	1973	1983	1998	1949	1973	1957	1990	1957	1957	1957	1950
MIN	1.03	1.27	3.84	3.82	25.2	82.5	106	46.4	26.9	2.49	4.07	3.75
(WY)	1947	1996	1966	1964	1967	1967	1963	1977	1966	1985	1947	2002

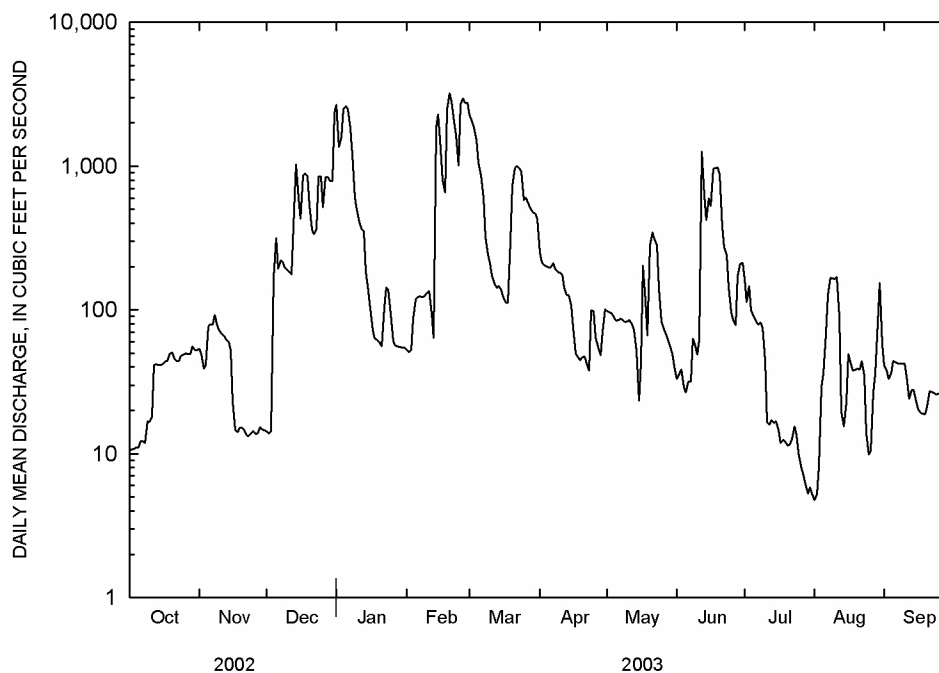
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1947 - 2003	
ANNUAL TOTAL	434855.77		112632.8			
ANNUAL MEAN	1191		309		1835	
HIGHEST ANNUAL MEAN					1920 1973	
LOWEST ANNUAL MEAN					187 1976	
HIGHEST DAILY MEAN	14800	Mar 20	3200	Feb 20	26400	Dec 3 1982
LOWEST DAILY MEAN	0.87	Sep 18	4.8	Aug 1	0.00	Aug 11 1956
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 13	5.7	Jul 27	0.01	Oct 24 1999
MAXIMUM PEAK FLOW			3260	Feb 20	247500	Dec 3 1982
MAXIMUM PEAK STAGE			17.86	Jan 1	29.36	Dec 3 1982
INSTANTANEOUS LOW FLOW			4.5	Aug 2	0.00	Jan 1 1982
ANNUAL RUNOFF (AC-FT)	862500		223400		605200	
10 PERCENT EXCEEDS	3100		899		2530	
50 PERCENT EXCEEDS	221		75		181	
90 PERCENT EXCEEDS	8.5		14		10	

¹Prior to regulation, water years 1917-46, 845 ft³/s

²Maximum discharge for period of record, 70,800 ft³/s April 17, 1939

³Maximum gage height for period of record, 31.82 ft April 17, 1939

^eEstimated



ARKANSAS RIVER BASIN

07260673 WEST FORK POINT REMOVE CREEK NEAR HATTIEVILLE

LOCATION.--Lat 35°19'29", long 92°52'23", in NE_{1/4}SE_{1/4} sec.24, T.8 N., R.18 W., Pope County, Hydrologic Unit 11110203, on right bank about 300 ft upstream from State Highway 247 bridge, 5.5 mi northwest of Hattievville, and 7.8 mi northeast of Atkins.

DRAINAGE AREA.--222 mi².

PERIOD OF RECORD.--October 2001 to September 2003. Annual maximum 1978-2001.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	3.2	4.4	798	34	400	129	92	28	17	3.6	6.1
2	0.00	3.2	4.4	638	33	365	117	110	31	17	3.7	6.8
3	0.00	4.4	4.6	528	33	328	106	121	38	15	6.9	4.8
4	0.00	2.9	8.6	448	30	297	100	118	33	13	5.0	3.7
5	0.00	4.4	9.4	372	29	271	93	134	29	12	4.0	2.8
6	0.00	4.1	5.1	300	31	240	85	124	29	11	3.7	2.4
7	0.13	2.9	8.0	244	32	213	84	114	28	9.5	4.0	1.9
8	0.24	1.7	6.0	206	32	190	79	103	22	8.3	3.4	1.5
9	0.76	2.5	4.9	179	32	171	73	93	18	7.2	2.7	1.5
10	0.98	2.5	4.0	155	33	155	69	85	15	6.2	2.3	1.4
11	0.57	2.5	3.3	133	34	139	65	110	29	5.4	3.1	1.4
12	0.65	2.3	2.9	118	33	127	61	101	37	5.4	12	4.1
13	2.1	2.2	5.9	105	34	156	57	101	41	5.7	6.0	11
14	2.1	2.2	7.9	94	651	163	53	294	37	5.5	4.3	9.1
15	1.9	3.1	8.2	86	965	160	50	452	38	4.9	3.3	5.2
16	1.7	3.6	11	79	1010	157	47	783	71	4.5	2.8	3.6
17	1.6	3.6	12	69	824	151	45	2320	119	4.0	2.3	2.6
18	1.5	3.7	12	64	666	142	42	1780	119	3.7	2.3	2.2
19	2.0	3.9	13	60	562	286	41	1390	255	13	2.0	2.0
20	2.5	4.0	14	58	482	404	42	1160	160	11	1.8	1.7
21	2.3	4.0	13	55	434	407	39	1020	109	6.8	1.6	1.7
22	2.1	4.1	11	51	585	368	37	857	78	8.3	1.4	1.8
23	1.9	4.2	14	47	621	329	35	712	59	9.3	2.6	1.6
24	1.8	4.2	31	44	526	296	99	601	48	7.1	2.1	1.5
25	1.9	4.7	47	42	460	268	168	525	39	6.0	1.5	1.3
26	2.1	4.9	46	41	433	246	166	419	35	5.4	1.3	1.1
27	2.0	4.8	48	39	427	220	154	270	31	5.0	1.2	1.0
28	2.0	4.6	48	39	423	199	134	142	27	4.6	1.1	1.1
29	2.6	4.7	47	38	---	181	114	78	22	4.1	1.1	2.5
30	2.8	4.6	55	37	---	160	99	53	19	4.0	1.3	3.6
31	2.5	---	405	36	---	145	---	38	---	3.9	4.7	---
TOTAL	42.73	107.7	914.6	5203	9489	7334	2483	14300	1644	243.8	99.1	93.0
MEAN	1.38	3.59	29.5	168	339	237	82.8	461	54.8	7.86	3.20	3.10
MAX	2.8	4.9	405	798	1010	407	168	2320	255	17	12	11
MIN	0.00	1.7	2.9	36	29	127	35	38	15	3.7	1.1	1.0
AC-FT	85	214	1810	10320	18820	14550	4930	28360	3260	484	197	184
CFSM	0.01	0.02	0.13	0.76	1.53	1.07	0.37	2.08	0.25	0.04	0.01	0.01
IN.	0.01	0.02	0.15	0.87	1.59	1.23	0.42	2.40	0.28	0.04	0.02	0.02

ARKANSAS RIVER BASIN

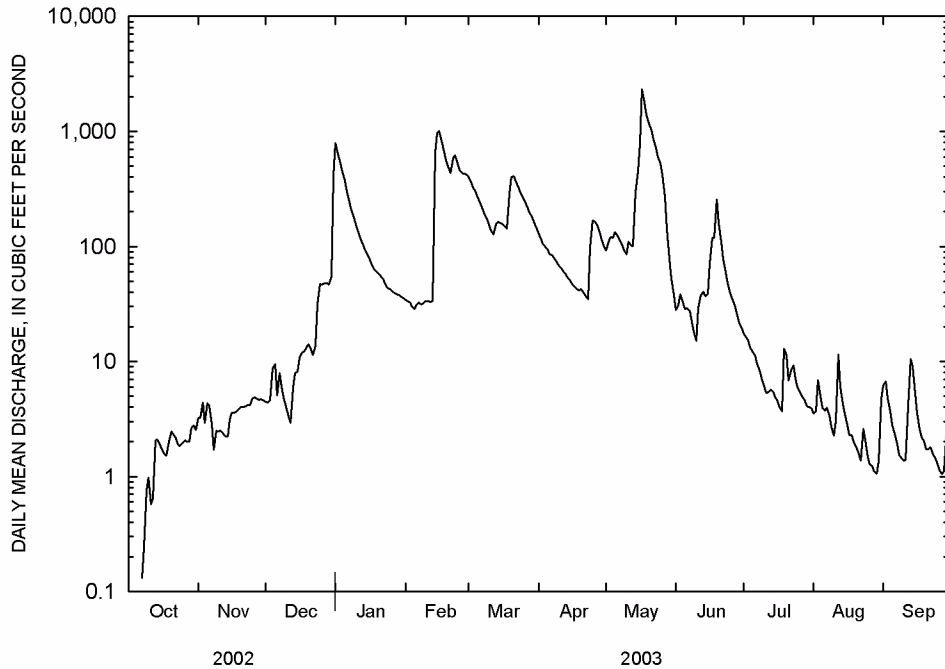
07260673 WEST FORK POINT REMOVE CREEK NEAR HATTIEVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	20.2	11.4	440	268	503	686	363	312	51.9	16.6	9.64	1.85
MAX	38.9	19.1	850	368	668	1135	644	461	54.8	25.3	16.1	3.10
(WY)	2002	2002	2002	2002	2002	2002	2002	2003	2003	2002	2002	2003
MIN	1.38	3.59	29.5	168	339	237	82.8	162	49.1	7.86	3.20	0.59
(WY)	2003	2003	2003	2003	2003	2003	2003	2002	2002	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	93440.52		41953.93			
ANNUAL MEAN	256		115		223	
HIGHEST ANNUAL MEAN					330 2002	
LOWEST ANNUAL MEAN					115 2003	
HIGHEST DAILY MEAN	2900	Mar 20	2320	May 17	4300	Dec 17 2001
LOWEST DAILY MEAN	0.00	Sep 13	0.00	Oct 1	0.00	Sep 13 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 13	0.02	Oct 1	0.00	Sep 13 2002
MAXIMUM PEAK FLOW			2720	May 17	¹ 64100	Dec 3 1982
MAXIMUM PEAK STAGE			15.74	May 17	26.62	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.00 at times		0.00	at times
ANNUAL RUNOFF (AC-FT)	185300		83220		161200	
ANNUAL RUNOFF (CFSM)	1.15		0.52		1.00	
ANNUAL RUNOFF (INCHES)	15.66		7.03		13.62	
10 PERCENT EXCEEDS	882		370		703	
50 PERCENT EXCEEDS	35		28		38	
90 PERCENT EXCEEDS	1.3		1.8		1.8	

¹Occurred during computation of annual maximum only, water years 1978-2001.



ARKANSAS RIVER BASIN

07261000 CADRON CREEK NEAR GUY

LOCATION.--Lat 35°17'55", long 92°24'14", in NW₁/₄SE₁/₄ sec.29, T.8 N., R.13 W., Faulkner County, Hydrologic Unit 11110205, on left bank on downstream side of bridge on U.S. Highway 65, 4.3 mi southwest of Guy, 10.5 mi upstream from Cove Creek, and at mile 48.3.

DRAINAGE AREA.--169 mi².

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as "North Fork Cadron Creek near Guy."

REVISED RECORDS.--WDR Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 371.68 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.45	2.7	7.3	1710	50	762	123	56	65	189	19	2.8
2	0.36	2.9	7.1	969	48	679	113	61	61	144	36	3.7
3	0.29	8.5	6.8	799	46	564	103	80	93	97	33	13
4	0.32	11	25	558	44	487	98	95	86	79	30	21
5	0.25	42	138	434	40	431	98	1370	66	65	42	20
6	0.19	87	102	337	41	366	91	679	59	52	57	17
7	0.25	66	77	271	45	311	120	410	57	43	41	12
8	0.18	52	66	239	45	278	140	346	53	36	35	8.0
9	0.44	39	58	212	43	251	104	243	45	31	29	5.6
10	0.56	31	51	182	47	219	92	180	37	26	23	4.3
11	0.54	27	47	152	53	198	87	606	53	23	19	3.5
12	0.53	24	44	132	e77	187	82	424	75	20	16	4.5
13	0.42	20	56	120	e86	183	77	273	72	18	15	8.5
14	0.24	17	158	112	e145	205	72	282	58	17	14	12
15	0.20	14	146	102	e518	173	67	490	48	14	12	16
16	e0.14	13	114	94	e955	158	62	2020	45	13	10	16
17	e0.10	13	96	89	e1010	149	60	13100	54	11	9.1	12
18	0.08	12	121	81	e760	141	58	3460	53	9.7	7.7	7.6
19	0.46	11	437	78	e654	314	54	1540	53	42	6.5	5.2
20	1.1	9.5	390	76	525	462	53	975	45	169	6.2	3.7
21	1.4	9.0	264	73	460	364	53	757	38	71	5.4	2.9
22	1.4	8.5	199	69	1030	302	49	549	31	50	5.0	2.3
23	0.94	8.9	176	63	1300	260	43	397	25	144	4.6	1.9
24	0.85	8.1	776	55	887	231	67	293	21	107	3.4	1.4
25	0.90	8.6	639	54	712	207	176	332	17	67	2.9	0.95
26	0.82	9.3	398	54	661	351	108	257	133	49	2.3	1.7
27	e1.00	8.6	295	53	620	256	86	177	260	39	4.5	2.3
28	e1.9	8.3	235	50	677	211	74	134	114	31	5.0	2.1
29	2.6	8.0	196	52	---	178	66	109	77	25	3.6	1.7
30	2.5	7.6	183	55	---	151	60	88	67	22	2.9	1.9
31	2.8	---	824	55	---	134	---	76	---	19	3.3	---
TOTAL	24.21	587.5	6332.2	7380	11579	9163	2536	29859	1961	1722.7	503.4	215.55
MEAN	0.78	19.6	204	238	414	296	84.5	963	65.4	55.6	16.2	7.18
MAX	2.8	87	824	1710	1300	762	176	13100	260	189	57	21
MIN	0.08	2.7	6.8	50	40	134	43	56	17	9.7	2.3	0.95
AC-FT	48	1170	12560	14640	22970	18170	5030	59230	3890	3420	998	428
CFSM	0.00	0.12	1.21	1.41	2.45	1.75	0.50	5.70	0.39	0.33	0.10	0.04
IN.	0.01	0.13	1.39	1.62	2.55	2.02	0.56	6.57	0.43	0.38	0.11	0.05

ARKANSAS RIVER BASIN

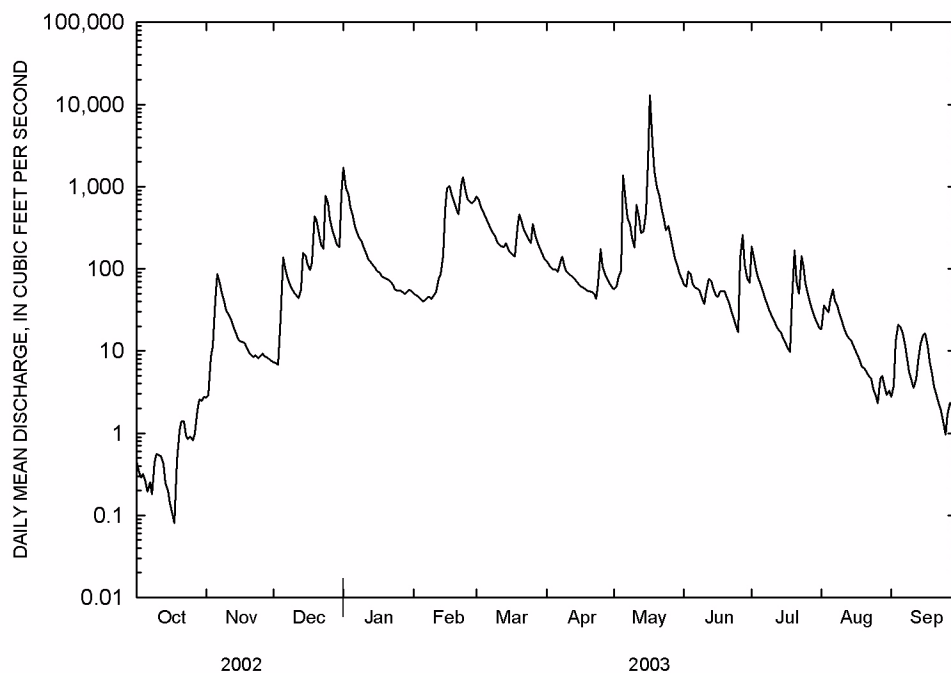
07261000 CADRON CREEK NEAR GUY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2003, BY WATER YEAR (WY)

MEAN	70.0	263	411	384	479	552	455	370	136	39.3	40.5	51.3
MAX	872	1318	1875	1679	1498	1542	1818	1606	867	333	1145	523
(WY)	1985	1958	1983	1991	1956	1975	1973	1968	1974	1960	1957	1977
MIN	0.000	0.000	6.97	21.0	49.6	91.8	81.1	21.3	5.25	0.78	0.031	0.000
(WY)	1955	1955	1955	1955	1963	1972	1960	2001	1988	1998	1999	1999

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1955 - 2003	
ANNUAL TOTAL	83968.97		71863.56			
ANNUAL MEAN	230		197		270	
HIGHEST ANNUAL MEAN					566 1973	
LOWEST ANNUAL MEAN					120 1996	
HIGHEST DAILY MEAN	5790	Mar 20	13100	May 17	14800	Dec 4 1982
LOWEST DAILY MEAN	0.08	Oct 18	0.08	Oct 18	0.00	Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	0.23	Oct 13	0.23	Oct 13	0.00	Oct 1 1954
MAXIMUM PEAK FLOW			16200	May 17	24200	Dec 4 1982
MAXIMUM PEAK STAGE			21.17	May 17	29.29	Dec 4 1982
INSTANTANEOUS LOW FLOW			0.07	Oct 16-18	0.00	at times
ANNUAL RUNOFF (AC-FT)	166600		142500		195600	
ANNUAL RUNOFF (CFSM)	1.36		1.17		1.60	
ANNUAL RUNOFF (INCHES)	18.48		15.82		21.70	
10 PERCENT EXCEEDS	624		461		640	
50 PERCENT EXCEEDS	74		54		86	
90 PERCENT EXCEEDS	1.4		2.3		1.0	

^eEstimated



ARKANSAS RIVER BASIN

07261500 FOURCHE LAFAVE RIVER NEAR GRAVELLY

LOCATION.--Lat 34°52'21", long 93°39'24", in NW_{1/4}NW_{1/4} sec.34, T.3 N., R.25 W., Yell County, Hydrologic Unit 11110206, near left bank on downstream side of bridge on State Highway 28, 1.2 mi downstream from Garner Creek, 1.9 mi east of Gravelly, 6.4 mi upstream from Gaffords Creek, and at mile 103.7.

DRAINAGE AREA.--410 mi².

PERIOD OF RECORD.--March 1939 to September 1994, October 1999 to current year. Annual maximum water years 1995-99.

GAGE.--Water-stage recorder. Datum of gage is 410.50 ft above NGVD of 1929. Prior to May 11, 1939, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	38	39	3160	60	1510	172	97	48	93	11	2.7
2	0.01	47	38	1730	58	1690	155	90	51	146	14	3.7
3	0.01	59	37	1170	56	1380	144	92	53	132	16	3.9
4	0.01	62	382	875	53	1090	135	96	107	99	16	3.4
5	0.00	103	1230	701	51	890	130	254	248	80	16	3.2
6	0.00	234	711	561	54	730	131	426	713	80	14	2.9
7	0.01	230	462	456	55	609	148	265	1150	87	15	2.5
8	0.01	169	341	386	53	522	156	196	633	62	12	2.2
9	1.6	139	268	343	56	452	163	158	408	50	12	1.8
10	2.8	114	225	305	59	389	149	133	303	45	9.7	1.6
11	2.8	97	199	263	61	346	137	117	726	e140	11	1.6
12	2.9	84	180	229	65	313	129	99	2740	e188	13	3.1
13	2.9	75	898	204	71	304	122	86	1370	e205	11	7.9
14	3.3	70	2080	182	748	330	114	79	817	143	11	7.0
15	2.6	66	1130	163	1370	323	106	73	618	102	8.9	5.7
16	2.3	60	714	147	1430	294	99	158	604	79	6.7	4.6
17	2.4	55	516	134	1120	265	91	e1680	918	63	6.0	3.6
18	3.6	57	399	124	824	248	85	774	896	51	5.2	2.8
19	11	55	330	116	669	e522	82	467	1060	42	5.2	2.1
20	19	52	293	109	567	e755	80	333	757	37	5.2	2.0
21	18	49	255	104	520	e654	76	258	523	32	4.6	2.0
22	18	45	215	98	1440	567	75	215	390	28	4.1	1.9
23	16	43	271	91	2120	479	74	179	308	25	3.3	1.8
24	15	42	3340	84	1390	413	92	154	247	22	2.8	1.6
25	15	47	2250	80	1080	366	121	131	201	19	2.7	1.6
26	25	47	1290	76	938	337	195	110	163	16	2.7	1.4
27	29	43	890	73	896	301	164	94	135	15	3.1	1.2
28	28	42	674	70	1070	269	137	80	113	14	4.6	0.80
29	32	43	536	69	---	239	121	70	97	15	4.5	0.52
30	36	41	515	67	---	e210	107	62	87	17	3.9	0.54
31	39	---	6460	63	---	191	---	55	---	14	3.0	---
TOTAL	328.26	2308	27168	12233	16934	16988	3690	7081	16484	2141	258.2	81.66
MEAN	10.6	76.9	876	395	605	548	123	228	549	69.1	8.33	2.72
MAX	39	234	6460	3160	2120	1690	195	1680	2740	205	16	7.9
MIN	0.00	38	37	63	51	191	74	55	48	14	2.7	0.52
AC-FT	651	4580	53890	24260	33590	33700	7320	14050	32700	4250	512	162
CFSM	0.03	0.19	2.14	0.96	1.48	1.34	0.30	0.56	1.34	0.17	0.02	0.01
IN.	0.03	0.21	2.46	1.11	1.54	1.54	0.33	0.64	1.50	0.19	0.02	0.01

ARKANSAS RIVER BASIN

07261500 FOURCHE LAFAVE RIVER NEAR GRAVELLY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-94, 2000-03, BY WATER YEAR (WY)

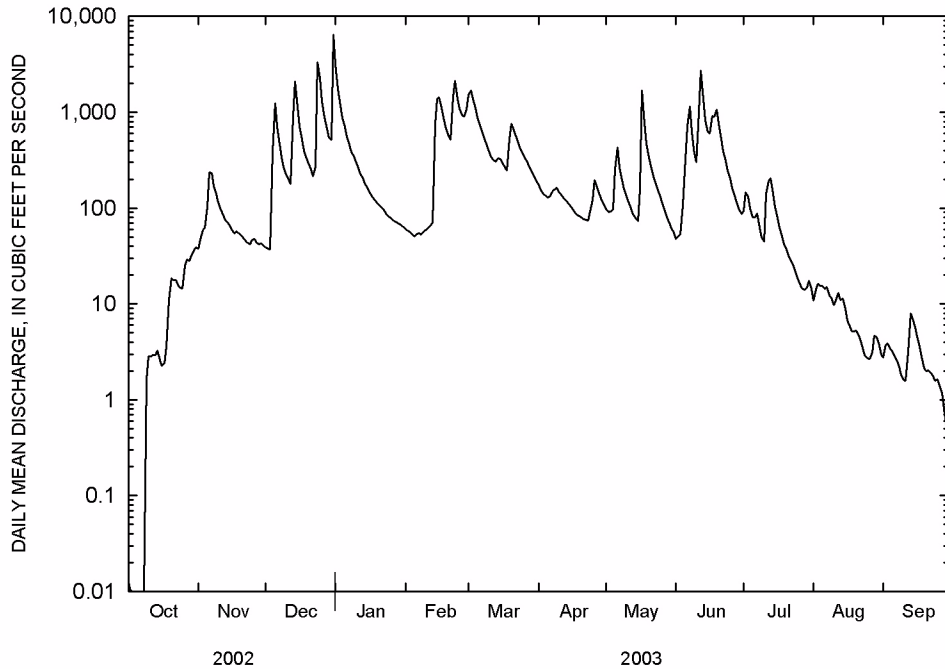
MEAN	193	447	769	678	902	1060	977	951	395	119	37.4	78.0
MAX	3507	2441	3611	3272	2989	5736	4080	4932	2416	1956	439	812
(WY)	1985	1973	1983	1949	1945	1945	1957	1990	1974	1969	1950	1950
MIN	0.000	0.000	0.000	0.019	27.4	65.7	123	51.3	5.78	0.65	0.000	0.000
(WY)	1953	1957	1964	1964	1963	1940	2003	1977	1972	1964	1954	1943

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939-94, 2000-03	
ANNUAL TOTAL	239364.46		105695.12			
ANNUAL MEAN	656		290		548	
HIGHEST ANNUAL MEAN					1269 1945	
LOWEST ANNUAL MEAN					115 1940	
HIGHEST DAILY MEAN	25300	Mar 20	6460	Dec 31	67000	Dec 3 1982
LOWEST DAILY MEAN	0.00	Sep 7	0.00	Oct 5	0.00	Sep 22 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 7	0.01	Oct 1	0.00	Sep 22 1939
MAXIMUM PEAK FLOW			10700	Dec 31	¹ 162000	Dec 3 1982
MAXIMUM PEAK STAGE			13.97	Dec 31	² 32.45	Dec 3 1982
INSTANTANEOUS LOW FLOW			0.00	Oct 5-6	0.00	at times
ANNUAL RUNOFF (AC-FT)	474800		209600		397100	
ANNUAL RUNOFF (CFSM)	1.60		0.71		1.34	
ANNUAL RUNOFF (INCHES)	21.72		9.59		18.17	
10 PERCENT EXCEEDS	1220		820		1160	
50 PERCENT EXCEEDS	124		92		127	
90 PERCENT EXCEEDS	0.85		2.9		1.9	

¹From rating curve extended above 47,000 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow

²From floodmark

^eEstimated



ARKANSAS RIVER BASIN

07263012 FOURCHE LAFAVE RIVER NEAR APLIN

LOCATION.--Lat 34°57'23", long 92°59'06", in E_{1/2}NE_{1/4} sec.35, T.4 N., R.19 W., Perry County, Hydrologic Unit 11110206, on right bank 30 ft upstream from State Highway 155 bridge, 1.0 mi south of Aplin.

DRAINAGE AREA.--957 mi².

PERIOD OF RECORD.--October 2002 to current year. Annual maximum water years 1980-2002.

GAGE.--Water-stage recorder. Datum of gage is 269.09 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage for the period of record 36.10 ft December 3, 1982, discharge not determined (occurred during period of computation of annual maximum, water years 1980-2002).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	7.7	45	4590	107	2380	292	71	187	289	62	27
2	12	8.0	48	2350	106	2530	273	64	197	276	65	28
3	13	12	48	3380	106	3030	307	66	253	278	63	29
4	13	14	334	5600	102	3800	416	117	298	260	73	37
5	13	17	1120	5640	101	3590	412	6050	269	246	241	50
6	13	111	1030	5540	108	2830	411	3540	1050	243	233	49
7	13	137	860	5520	318	1450	526	2090	1540	238	140	47
8	12	249	763	4850	701	965	613	2240	788	226	169	47
9	23	244	922	2910	112	908	446	1440	880	219	153	48
10	28	233	1210	1400	148	903	222	836	1590	218	128	49
11	20	224	1190	895	372	955	205	671	2190	207	117	40
12	16	216	1170	863	376	832	194	520	8240	166	87	38
13	14	211	1580	838	401	640	182	453	6080	161	86	36
14	14	209	2330	824	1400	623	175	463	2290	203	110	32
15	11	195	1640	723	2550	606	161	419	1340	355	94	30
16	8.9	115	1550	469	2510	580	115	1880	1740	348	81	29
17	9.1	103	1610	306	1660	562	81	12400	4900	313	71	30
18	9.6	98	1570	298	2090	557	72	7130	5450	160	66	33
19	13	93	1760	291	4590	1790	69	2680	6090	134	62	34
20	16	70	1790	288	4560	1560	72	917	4180	123	59	82
21	16	45	1700	260	3720	1610	69	1630	3400	120	57	62
22	14	40	1590	184	2620	1450	60	4300	3070	116	56	46
23	12	40	1220	179	2270	1240	55	4320	2400	87	54	43
24	11	40	2250	175	2200	311	72	4230	1200	78	54	42
25	11	45	2400	173	4220	241	196	3930	427	76	52	41
26	9.7	45	2130	169	3310	610	174	3380	442	60	41	40
27	8.8	42	2450	163	3190	1680	129	2780	510	50	27	33
28	8.8	40	2310	115	3060	1610	109	1760	694	49	24	25
29	9.0	39	2220	112	---	1550	90	616	671	48	24	23
30	8.4	39	2190	110	---	e1240	79	209	585	59	23	23
31	7.7	---	4500	108	---	606	---	197	---	66	25	---
TOTAL	401.0	2981.7	47530	49323	47008	43239	6277	71399	62951	5472	2597	1173
MEAN	12.9	99.4	1533	1591	1679	1395	209	2303	2098	177	83.8	39.1
MAX	28	249	4500	5640	4590	3800	613	12400	8240	355	241	82
MIN	7.7	7.7	45	108	101	241	55	64	187	48	23	23
MED	13	58	1580	469	1530	1240	175	1630	1270	166	65	37
AC-FT	795	5910	94280	97830	93240	85760	12450	141600	124900	10850	5150	2330
IN.	0.02	0.12	1.85	1.92	1.83	1.68	0.24	2.78	2.45	0.21	0.10	0.05

ARKANSAS RIVER BASIN

07263012 FOURCHE LAFAVE RIVER NEAR APLIN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	12.9	99.4	1533	1591	1679	1395	209	2303	2098	177	83.8	39.1
MAX	12.9	99.4	1533	1591	1679	1395	209	2303	2098	177	83.8	39.1
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
MIN	12.9	99.4	1533	1591	1679	1395	209	2303	2098	177	83.8	39.1
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003

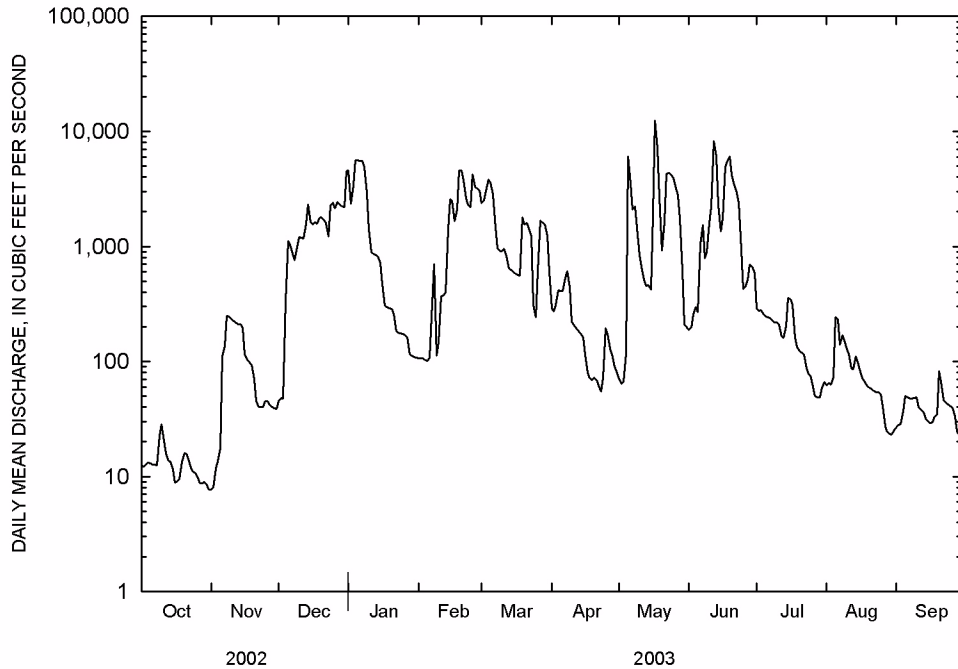
SUMMARY STATISTICS

FOR 2003 WATER YEAR

ANNUAL TOTAL	340351.7
ANNUAL MEAN	932
HIGHEST DAILY MEAN	12400 May 17
LOWEST DAILY MEAN	7.7 Oct 31
ANNUAL SEVEN-DAY MINIMUM	8.3 Oct 27
MAXIMUM PEAK FLOW	14500 May 17
MAXIMUM PEAK STAGE	28.14 May 17
INSTANTANEOUS LOW FLOW	7.3 ¹ Oct 31
ANNUAL RUNOFF (AC-FT)	675100
ANNUAL RUNOFF (INCHES)	13.23
10 PERCENT EXCEEDS	2860
50 PERCENT EXCEEDS	216
90 PERCENT EXCEEDS	23

¹Also November 1-2

^eEstimated



ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION

LOCATION.--Lat 34°52'34", long 92°46'28", in SE₁/4NE₁/4 sec.26, T.3 N., R.17 W., Perry County, Hydrologic Unit 11110207, near left bank on downstream side of State Highway 9 bridge 0.4 mi south of Williams Junction.

DRAINAGE AREA.--46.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 386.45 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records good, except discharges below 2.0 ft³/s, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	1.3	638	1.8	235	32	6.2	5.9	15	0.47	0.15
2	0.00	0.00	1.4	269	1.7	256	27	5.5	6.7	9.4	0.45	0.31
3	0.00	0.00	1.5	169	1.7	235	22	7.7	12	6.0	0.39	0.69
4	0.00	0.00	85	120	1.5	177	21	11	15	3.9	0.29	0.63
5	0.00	1.0	65	86	1.3	135	22	1030	14	5.3	0.29	0.38
6	0.00	11	28	61	1.7	105	20	277	26	3.4	0.49	0.26
7	0.00	5.4	16	45	2.0	85	44	980	43	2.4	0.59	0.20
8	0.00	2.7	9.4	38	1.7	71	38	311	28	2.0	0.47	0.18
9	0.00	2.1	5.8	31	1.8	58	30	153	18	1.6	0.37	0.17
10	0.00	1.9	4.3	24	2.2	47	26	96	12	1.4	0.30	0.16
11	0.00	1.9	3.2	18	2.4	41	23	67	131	1.1	0.25	0.30
12	0.00	1.7	2.6	14	2.4	37	20	47	1750	1.0	0.26	1.3
13	0.00	1.4	156	11	4.0	37	17	35	352	0.87	0.48	17
14	0.00	1.4	156	9.5	386	33	14	40	159	0.95	0.96	20
15	0.00	1.4	64	7.6	701	28	11	42	103	0.68	0.70	11
16	0.00	1.3	37	6.5	653	24	9.6	300	74	0.44	0.47	5.7
17	0.00	1.3	25	5.4	295	21	7.9	1330	200	0.33	0.24	3.6
18	0.00	1.1	293	4.9	184	22	6.3	430	424	0.20	0.19	2.6
19	0.00	1.1	543	4.3	135	141	6.3	220	521	18	0.15	2.0
20	0.00	1.2	187	4.0	109	102	8.8	137	179	12	0.00	1.7
21	0.00	1.1	98	3.6	132	76	8.1	107	96	3.7	0.00	1.5
22	0.00	0.99	61	3.0	853	61	6.6	84	56	2.5	0.00	1.4
23	0.00	1.0	187	2.7	445	50	5.7	60	35	2.1	0.69	1.2
24	0.00	0.85	664	2.5	234	42	25	45	23	1.4	0.56	1.1
25	0.00	1.5	266	2.3	177	39	36	43	15	1.1	0.54	0.97
26	0.00	1.7	138	2.2	154	108	23	35	127	0.75	0.36	0.80
27	0.00	1.6	90	1.9	138	87	17	25	66	0.59	0.26	0.69
28	0.00	1.6	63	1.9	171	68	13	18	32	0.43	0.17	0.62
29	0.00	1.5	47	2.1	---	52	10	14	19	0.33	0.14	0.58
30	0.00	1.4	105	2.1	---	42	7.8	11	14	0.47	0.15	0.49
31	0.00	---	1190	2.0	---	36	---	8.4	---	0.50	0.15	---
TOTAL	0.00	51.14	4593.5	1592.5	4793.2	2551	558.1	5975.8	4556.6	99.84	10.83	77.68
MEAN	0.000	1.70	148	51.4	171	82.3	18.6	193	152	3.22	0.35	2.59
MAX	0.00	11	1190	638	853	256	44	1330	1750	18	0.96	20
MIN	0.00	0.00	1.3	1.9	1.3	21	5.7	5.5	5.9	0.20	0.00	0.15
AC-FT	0.00	101	9110	3160	9510	5060	1110	11850	9040	198	21	154
CFSM	0.00	0.04	3.21	1.11	3.71	1.79	0.40	4.18	3.29	0.07	0.01	0.06
IN.	0.00	0.04	3.71	1.29	3.87	2.06	0.45	4.82	3.68	0.08	0.01	0.06

ARKANSAS RIVER BASIN

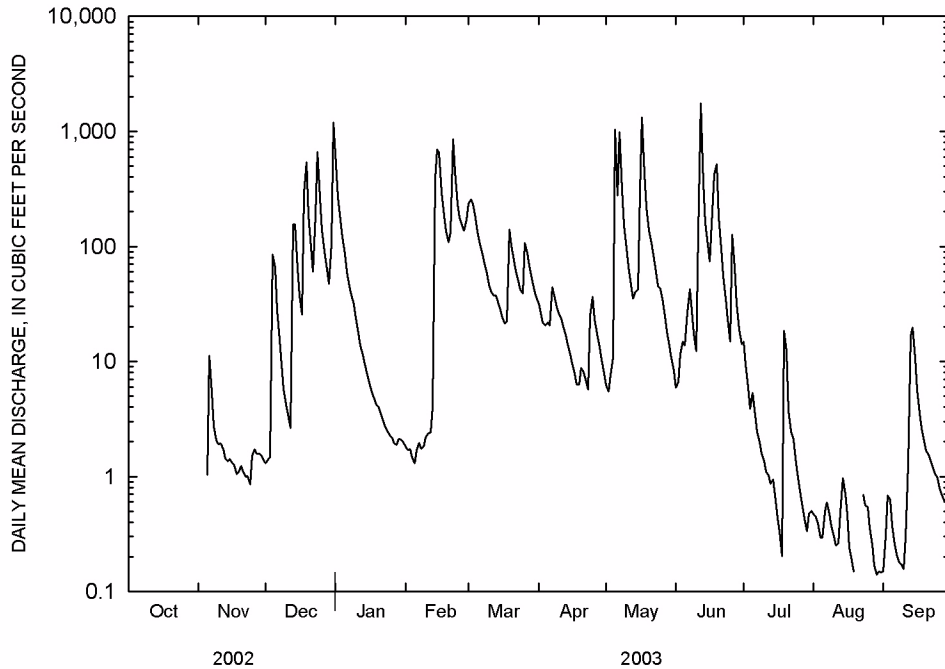
07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

MEAN	17.4	57.0	110	108	118	128	96.5	67.4	29.0	7.62	1.60	1.93
MAX	85.9	265	222	228	284	256	247	257	152	47.3	12.9	10.7
(WY)	1991	1997	1992	1991	2001	1990	1991	1990	2003	1994	1992	1991
MIN	0.000	1.70	3.53	44.6	13.9	39.4	8.26	1.20	0.68	0.016	0.000	0.000
(WY)	1993	2003	1990	1996	1996	1996	1992	1992	1998	1990	1990	1993

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1989 - 2003

ANNUAL TOTAL	20204.34		24860.19		61.6		
ANNUAL MEAN	55.4		68.1		91.9		
HIGHEST ANNUAL MEAN					23.8		
LOWEST ANNUAL MEAN					1990		
HIGHEST DAILY MEAN	1590	Mar 20	1750	Jun 12	2620	Dec 3	1993
LOWEST DAILY MEAN	0.00	Jul 8	0.00	Oct 1	0.00	Jul 4	1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 20	0.00	Oct 1	0.00	Jul 4	1990
MAXIMUM PEAK FLOW			4290	Jun 12	6450	Dec 3	1993
MAXIMUM PEAK STAGE			9.81	Jun 12	12.19	Dec 3	1993
INSTANTANEOUS LOW FLOW					0.00	at times	
ANNUAL RUNOFF (AC-FT)	40080		49310		44650		
ANNUAL RUNOFF (CFSM)	1.20		1.48		1.34		
ANNUAL RUNOFF (INCHES)	16.30		20.06		18.16		
10 PERCENT EXCEEDS	155		173		144		
50 PERCENT EXCEEDS	2.7		6.0		11		
90 PERCENT EXCEEDS	0.00		0.00		0.00		



ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Color, water, ftrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
DEC													
13...	1345	80513	81213	204	80	18	762	3.1	13.6	112	6.5	27	7.0
17...	0930	80513	81213	26	30	6.9	758	3.5	7.2	64	6.3	24	10.3
31...	0930	80513	81213	1040	60	16	757	3.5	10.5	94	6.2	20	10.4
FEB													
14...	1815	80513	81213	588	40	15	749	3.9	8.2	67	6.3	26	6.0
18...	1145	80513	81213	186	20	6.1	768	5.5	12.0	99	6.0	20	7.3
MAY													
05...	1500	80513	81213	929	120	29	754	3.3	8.0	87	6.5	22	18.8
JUN													
17...	1010	80513	80020	65	10	5.7	769	2.2	7.6	85	6.7	23	20.8
Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
DEC													
13...	8	1.30	1.20	.80	.2	1.3	24	5	2.20	<.1	4.80	3.40	18
17...	7	1.10	.98	.60	.2	1.4	29	4	2.10	<.1	6.40	3.00	18
31...	6	.98	.84	.50	.2	1.1	27	3	1.40	<.1	5.80	2.80	15
FEB													
14...	7	1.10	.96	.50	.3	1.9	36	4	2.60	<.1	5.10	3.10	18
18...	5	.83	.80	.40	.2	1.2	31	3	1.60	<.1	6.20	3.00	16
MAY													
05...	7	1.30	.85	1.00	.2	.9	20	5	1.00	<.1	5.00	2.60	16
JUN													
17...	6	1.10	.87	.50	.2	1.2	27	6	1.40	<.1	7.20	2.00	18
Date	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L (00618)	Nitrite + nitrate water, fltrd, mg/L (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)
DEC													
13...	.04	17.1	31	.50	.01	.004	.168	.04	.041	.010	.003	.50	.006
17...	.03	1.54	22	.20	--	<.002	--	--	.028	--	<.001	--	--
31...	.04	75.8	27	.40	.01	.006	--	--	.019	--	<.001	.39	.003
FEB													
14...	.03	34.9	22	.40	.01	.004	.115	.03	.027	.003	.001	.40	--
18...	.02	7.03	14	.30	.003	--	--	--	.019	--	<.001	.30	--
MAY													
05...	.06	113	45	.70	.08	.060	.460	.10	.107	.010	.003	.64	--
JUN													
17...	.03	3.69	21	<.20	.003	--	--	--	.036	--	<.001	--	--
Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF MF, col/100 mL (31673)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	2,4-D water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)
DEC													
13...	.002	.028	.54	5.8	6.1	470	750	136	513	17	42	--	--
17...	<.001	.008	.23	2.9	2.8	43	110	106	197	7	7	--	--
31...	.001	.024	.42	5.7	5.8	140	E1100	112	410	9	28	--	--
FEB													
14...	<.001	.019	.43	4.9	4.9	230	590	141	491	13	30	--	--
18...	<.001	.005	.32	2.3	2.3	<18	49	79	172	3	6	--	--
MAY													
05...	<.001	.044	.81	9.7	9.3	E1500	3900	219	840	50	81	--	--
JUN													
17...	<.001	<.002	--	3.0	2.9	E160	E270	120	317	9	15	<.009	<.02
Date	2,4-DB water, fltrd, ug/L (38746)	2,6-Diethyl-aniline water, CIAT, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluor-fen, water, fltrd, ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone, fltrd, ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd, ug/L (49312)	
JUN													
17...	<.02	<.006	<.006	<.04	<.008	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04

ARKANSAS RIVER BASIN

315

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd, 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Carbaryl, water, fltrd, 0.7u GF ug/L (49310)	Carbaryl, water, fltrd, 0.7u GF ug/L (82680)
JUN 17...	<.005	<.007	<.050	<.03	<.010	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
Date	Carbofuran, water, fltrd, 0.7u GF ug/L (49309)	Carbofuran, water, fltrd, 0.7u GF ug/L (82674)	Chlorambenmethyl, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorothalonil, water, fltrd, 0.7u GF ug/L (49306)	Chlorpyrifos, water, fltrd, ug/L (38933)	cis-Permethrin, water, fltrd, 0.7u GF ug/L (82687)	Clopyralid, water, fltrd, ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd, ug/L (49304)	DCPA, water, fltrd, ug/L (82682)	Desulf-inyl-fipro-nil, water, fltrd, ug/L (62170)
JUN 17...	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003	<.004
Date	Diazinon, water, fltrd, ug/L (39572)	Dicamba, water, fltrd, 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd, 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb, water, fltrd, 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd, 0.7u GF ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron, water, fltrd, 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil, water, fltrd, 0.7u GF ug/L (62169)
JUN 17...	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.009
Date	Fipronil sulfide, water, fltrd, ug/L (62167)	Fipronil sulfone, water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluometuron, water, fltrd, 0.7u GF ug/L (38811)	Fonofos, water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid, water, fltrd, ug/L (61695)	Lindane, water, fltrd, ug/L (39341)	Linuron, water, fltrd, 0.7u GF ug/L (38478)	Linuron, water, fltrd, 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)
JUN 17...	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007	<.004	<.01	<.035	<.027
Date	MCPA, water, fltrd, 0.7u GF ug/L (38482)	MCPB, water, fltrd, 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd, 0.7u GF ug/L (38501)	Meth-omy, water, fltrd, 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd, ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd, 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl)-N'-methyl-urea, water, fltrd, ug/L (61692)	Naprop-amide, water, fltrd, 0.7u GF ug/L (82684)	Neburon, water, fltrd, 0.7u GF ug/L (49294)
JUN 17...	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007	<.01
Date	Nicosulfuron, water, fltrd, ug/L (50364)	Norflur-azon, water, fltrd, 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd, 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd, 0.7u GF ug/L (82683)	Phorate, water, fltrd, 0.7u GF ug/L (82664)	Pic-loram, water, fltrd, 0.7u GF ug/L (49291)	Prome-ton, water, fltrd, 0.7u GF ug/L (04037)	Pron-amide, water, fltrd, 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)
JUN 17...	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.010
Date	Propanil, water, fltrd, 0.7u GF ug/L (82679)	Propar-gite, water, fltrd, 0.7u GF ug/L (82685)	Propham, water, fltrd, 0.7u GF ug/L (49236)	Propi-conazole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd, 0.7u GF ug/L (38538)	Siduron, water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron, water, fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fofos, water, fltrd, 0.7u GF ug/L (82675)	Thio-bencarb, water, fltrd, 0.7u GF ug/L (82681)
JUN 17...	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.005

ARKANSAS RIVER BASIN

07263295 MAUMELLE RIVER AT WILLIAMS JUNCTION--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
DEC						
13...	--	--	--	89	17	9.4
17...	--	--	--	91	4	.28
31...	--	--	--	84	17	48
FEB						
14...	--	--	--	89	24	38
18...	--	--	--	100	6	3.0
MAY						
05...	--	--	--	98	37	93
JUN						
17...	<.002	<.02	<.009	93	6	1.1

Remark codes used in this report:

< -- Less than
E -- Estimated value

ARKANSAS RIVER BASIN

317

072632962 BRINGLE CREEK AT MARTINDALE

LOCATION.--Lat 34°52'52, long 92°40'51", in SE1/4SW1/4 sec.23, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, on State Highway 10 at Martindale.

PERIOD OF RECORD.--1999 to 2001, 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
FEB 14...	1345	80513	81213	99	70	25	749	3.4	9.5	78	6.2	25	6.0
MAY 05...	1400	80513	81213	31	120	36	757	2.2	9.2	99	6.7	28	18.4

Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
FEB 14...	6	.95	1.00	.60	.3	1.6	32	3	2.20	<.1	5.70	3.50	18
MAY 05...	8	1.10	1.20	.70	.3	1.7	30	6	1.70	<.1	7.00	2.80	22

Date	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)
FEB 14...	.04	7.48	28	.40	.01	.009	.589	.13	.134	.003	.001	.39	.006
MAY 05...	.05	2.93	35	.40	.01	.006	1.44	.33	.329	.010	.003	.39	.003

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci, KF MF, col/100 mL (31673)	Iron, water, fltrd, ug/L (01046)	Iron, water, recoverable, fltrd, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, recoverable, fltrd, ug/L (01055)	Suspnd. sediment, sieve percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
FEB 14...	.002	.029	.53	3.8	4.1	E120	970	108	495	13	30	92	25
MAY 05...	.001	.021	.73	4.3	4.2	2400	E19000	117	651	13	24	81	35

Date	Suspended sediment load, tons/d (80155)
FEB 14...	6.7
MAY 05...	2.9

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

072632965 LAKE MAUMELLE WEST OF HWY 10 BRIDGE NEAR WYE

LOCATION.--Lat 34°54'24, long 92°39'26", in NE1/4SE1/4 sec.25, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, at on right bank 250 ft upstream from State Hwy 10 bridge, 4.1 mi south of Wye.

PERIOD OF RECORD.--July 1991 to October 1992, February 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	
FEB	20...	80513	80513	18.0	1.70	--	772	11.4	94	6.2	20	7.7
	20...	80513	81213	18.0	3.00	.91	772	11.1	91	6.2	20	7.7
	20...	80513	80513	18.0	10.0	--	772	11.0	91	6.2	20	7.7
	20...	80513	80513	18.0	15.0	--	772	10.9	91	6.2	20	7.7
	20...	80513	80513	18.0	17.6	--	772	10.8	89	6.2	20	7.7
JUN	24...	80513	80513	11.0	.50	--	765	6.9	91	6.3	25	29.4
	24...	80513	81213	11.0	3.00	2.00	765	6.8	87	6.2	25	28.3
	24...	80513	80513	11.0	5.00	--	765	6.7	85	6.1	25	28.1
	24...	80513	80513	11.0	7.00	--	765	6.0	76	6.0	25	27.7
	24...	80513	80513	11.0	9.00	--	765	5.3	65	5.7	24	25.5
	24...	80513	80513	11.0	10.8	--	765	5.1	60	5.7	23	24.1
SEP	04...	80513	80513	7.0	.10	--	765	5.6	72	6.2	27	27.9
	04...	80513	81213	7.0	3.00	1.20	765	5.6	71	6.2	28	27.8
	04...	80513	80513	7.0	5.00	--	765	5.6	72	6.2	28	27.8
	04...	80513	80513	7.0	7.00	--	765	5.5	69	6.2	28	27.8

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Carbon dioxide water, unfltrd mg/L (00405)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)
FEB	20...	40	9.6	4.8	6	.96	.99	.50	.2	1.2	27	4	1.60
JUN	24...	20	7.0	5.6	8	1.20	1.20	.60	.2	1.3	25	5	1.90
SEP	04...	5	3.3	4.7	9	1.30	1.40	.70	.2	1.4	24	4	2.00

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap, at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)
FEB	20...	<.1	5.70	3.30	17	.02	.20	.01	.006	.332	.07	.076	.003
JUN	24...	<.1	1.10	2.90	13	.01	.50		.003	--	--	<.002	--
SEP	04...	<.1	1.40	2.80	13	.02	.30	--	A.021	--	--	<.002	--

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci, KF MF, col/100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, water, recoverable, unfltrd, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	
FEB	20...	.001	.19	<.001	.007	.28	2.8	2.9	E8	41	<.1	106	311	10
JUN	24...	<.001	.50	<.001	.024	--	3.1	3.1	E1	E4	4.7	41	367	4
SEP	04...	<.001	--	<.001	.010	--	3.0	3.2	E4	E12	6.9	35	308	4

Date	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury, water, unfltrd recoverable, ug/L (71900)	
FEB	20...	15	--
JUN	24...	59	<.1
	24...	--	--
SEP	04...	65	<.1

Remark codes used in this report:

- < -- Less than
- A -- Average value
- E -- Estimated value

ARKANSAS RIVER BASIN

319

072632966 LAKE MAUMELLE AT STATE HWY 10 NEAR WYE

LOCATION.--Lat 34°52'30, long 92°39'13", in SE1/4NE1/4 sec.25, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, at left bank on downstream side of bridge on State Hwy 10, 4.1 mi south of Wye.

DRAINAGE AREA.--89.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2002 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	23	-16	1080	69	467	127	16	-8.6	67	11	8.8
2	5.2	9.7	21	546	68	480	96	10	84	56	74	-4.1
3	-7.6	29	62	360	99	444	46	22	15	89	69	-41
4	61	-0.22	534	277	52	335	116	59	50	-4.3	8.6	-68
5	-43	94	239	217	74	302	83	1030	101	102	-9.6	-81
6	17	72	126	176	71	233	145	395	43	-29	43	-85
7	-2.8	7.3	99	145	58	205	140	1540	32	-115	57	-88
8	-40	82	97	133	52	178	150	606	-21	-118	24	-53
9	5.7	92	78	131	75	178	94	240	15	-132	54	-51
10	-0.26	125	73	88	61	158	68	133	-45	-35	-16	-73
11	-72	70	29	88	56	126	80	37	3.6	-34	61	6.5
12	-2.9	33	68	108	69	90	22	100	1980	32	-31	41
13	55	1.4	533	84	77	176	-7.5	153	532	78	-2.6	93
14	-56	25	410	69	911	107	-60	130	313	-40	-27	26
15	-75	76	207	103	1370	86	-40	75	133	-95	-33	-89
16	-90	22	156	113	1080	94	78	679	27	-81	61	-91
17	-52	4.2	138	64	531	52	41	2120	222	-73	95	-83
18	12	32	541	92	368	78	-21	803	413	-15	38	-90
19	102	-36	1010	75	312	286	54	606	789	74	-50	-20
20	82	2.0	422	60	269	249	6.4	283	322	8.1	-3.7	-62
21	18	12	269	107	305	179	-19	174	54	-36	41	7.6
22	-36	18	188	63	1450	120	-0.06	139	-3.1	11	36	27
23	-20	-0.64	670	71	815	62	66	115	-19	57	74	-42
24	28	9.2	1220	88	419	9.8	71	47	16	-39	-61	-1.7
25	32	86	519	56	385	59	106	9.5	-93	-74	-49	-33
26	-4.0	28	331	49	400	205	133	14	281	-30	41	-16
27	22	0.11	236	69	306	152	87	75	77	-67	38	30
28	12	5.6	171	55	397	117	-31	-80	39	-90	33	-9.0
29	78	1.3	156	72	---	e110	-49	-69	97	-14	47	-86
30	-10	1.6	240	69	---	e115	-80	-26	76	39	48	-42
31	1.4	---	1880	49	---	113	---	-79	---	99	29	---
TOTAL	61.74	924.55	10707	4757	10199	5565.8	1501.84	9356.5	5524.9	-409.2	699.7	-968.9
MEAN	1.99	30.8	345	153	364	180	50.1	302	184	-13.2	22.6	-32.3
MAX	102	125	1880	1080	1450	480	150	2120	1980	102	95	93
MIN	-90	-36	-16	49	52	9.8	-80	-80	-93	-132	-61	-91
MED	1.4	20	207	88	287	152	67	115	52	-29	36	-41
AC-FT	122	1830	21240	9440	20230	11040	2980	18560	10960	-812	1390	-1920

ARKANSAS RIVER BASIN

072632966 LAKE MAUMELLE AT STATE HWY 10 NEAR WYE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

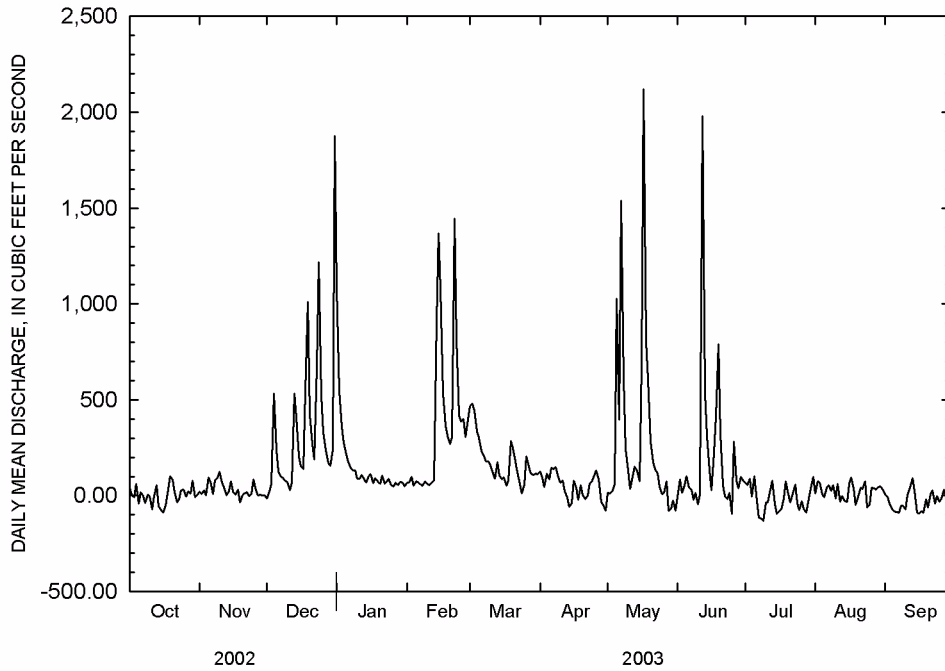
MEAN	1.99	30.8	345	153	364	180	50.1	302	184	-13.2	22.6	-32.3
MAX	1.99	30.8	345	153	364	180	50.1	302	184	-13.2	22.6	-32.3
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
MIN	1.99	30.8	345	153	364	180	50.1	302	184	-13.2	22.6	-32.3
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003

SUMMARY STATISTICS

FOR 2003 WATER YEAR

ANNUAL TOTAL	47919.93
ANNUAL MEAN	131
HIGHEST DAILY MEAN	2120 May 17
MAXIMUM PEAK FLOW	5840 May 7
MAXIMUM PEAK STAGE	17.34 Feb 23
ANNUAL RUNOFF (AC-FT)	95050

^eEstimated



ARKANSAS RIVER BASIN

321

072632966 LAKE MAUMELLE AT STATE HWY 10 NEAR WYE--CONTINUED

WATER-QUALITY RECORDS

DRAINAGE AREA.--89.4 mi².

PERIOD OF RECORD.--July 1991 to October 1992, February 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
DEC													
13...	1440	80513	81213	786	60	16	762	2.9	14.0	114	6.5	33	6.7
17...	1430	80513	81213	.00	60	16	758	2.7	11.0	95	6.5	29	8.9
31...	1030	80513	81213	1610	80	30	760	3.5	10.0	89	6.5	27	10.2
MAY													
05...	1000	80513	81213	1540	60	20	757	1.9	7.5	87	7.0	32	22.2
07...	1200	80513	81213	2340	160	59	764	16	7.9	87	5.7	25	20.2

Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd end pt, field, CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
DEC													
13...	10	1.40	1.50	.70	.2	1.6	25	5	2.70	<.1	5.20	3.40	20
17...	9	1.20	1.40	.70	.2	1.5	25	4	2.30	<.1	5.20	3.40	19
31...	8	1.30	1.20	.70	.2	1.3	24	6	1.90	<.1	4.90	3.30	19
MAY													
05...	10	1.50	1.40	.70	.2	1.5	24	9	2.20	<.1	1.50	2.60	17
07...	8	1.50	1.10	1.10	.2	1.0	18	4	1.20	<.1	4.00	2.50	16

Date	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat fltrd, mg/L (70300)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd, mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)
DEC													
13...	.04	57.3	27	.40	.01	.005	.744	.17	.169	.003	.001	.40	--
17...	.03	--	24	.30	.02	.012	--	--	.175	--	<.001	.29	.003
31...	.04	143	33	.50	.01	.008	--	--	.143	--	<.001	.49	.015
MAY													
05...	.04	116	28	.30	.05	.036	.159	.04	.037	.003	.001	.26	--
07...	.05	234	37	.70	.02	.019	.708	.16	.164	.013	.004	.68	.015

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	Fecal coliform, M-FC, col/100 mL (31625)	Fecal streptococci, KF, col/100 mL (31673)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd, recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd, recoverable, ug/L (01055)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration, mg/L (80154)
DEC													
13...	<.001	.020	.57	3.9	4.1	210	590	146	491	24	33	74	16
17...	.001	.025	.47	4.4	4.5	53	100	218	363	21	23	90	20
31...	.005	.004	.64	6.5	6.8	150	2800	160	552	16	32	93	26
MAY													
05...	<.001	.022	.34	2.9	2.8	580	980	206	973	62	113	99	23
07...	.005	.006	.86	9.3	8.6	E7600	E13000	242	1600	76	125	96	80

Date	Suspended sediment load, tons/d (80155)
DEC	
13...	34
17...	--
31...	113
MAY	
05...	96
07...	505

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

ARKANSAS RIVER BASIN

07263297 LAKE MAUMELLE EAST OF HWY 10 BRIDGE NEAR WYE

LOCATION.--Lat 34°52'31", long 92°38'53", in SW1/4NW1/4 sec.30, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, downstream from bridge on State Highway 10, 4.3 mi south of Wye.

PERIOD OF RECORD.--May 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)
FEB												
20...	0901	80513	80513	16.0	1.90	--	772	11.1	92	6.2	22	8.1
20...	0902	80513	81213	16.0	3.00	.36	772	11.0	92	6.2	22	8.1
20...	0903	80513	80513	16.0	10.0	--	772	10.9	91	6.2	22	8.1
20...	0904	80513	80513	16.0	15.8	--	772	10.9	91	6.2	22	8.1
JUN												
24...	1117	80513	80513	21.0	.40	--	765	7.4	96	6.9	26	29.1
24...	1118	80513	80020	21.0	3.00	2.00	765	7.2	94	6.9	26	29.1
24...	1119	80513	80513	21.0	5.00	--	765	7.2	94	6.8	26	28.9
24...	1120	80513	80513	21.0	10.0	--	765	7.2	93	6.8	26	28.7
24...	1121	80513	80513	21.0	13.0	--	765	6.2	79	6.2	25	28.0
24...	1123	80513	80513	21.0	15.0	--	765	5.0	61	5.8	24	25.5
24...	1124	80513	80513	21.0	16.1	--	765	4.8	58	5.7	24	25.3
24...	1125	80513	81213	21.0	17.0	--	765	4.8	58	5.7	24	25.2
24...	1126	80513	80513	21.0	20.0	--	765	5.0	60	5.7	24	24.6
24...	1127	80513	80513	21.0	21.4	--	765	5.0	60	5.7	24	24.6
SEP												
04...	0908	80513	80513	14.0	.00	--	765	5.7	73	6.2	28	28.3
04...	0909	80513	81213	14.0	3.00	1.50	765	5.7	73	6.2	28	28.3
04...	0910	80513	80513	14.0	5.00	--	765	5.6	71	6.2	28	28.3
04...	0911	80513	80513	14.0	10.0	--	765	5.3	68	6.1	28	28.2
04...	0912	80513	81213	14.0	11.0	--	765	4.8	61	6.0	28	27.9
04...	0913	80513	80513	14.0	14.5	--	765	4.6	59	6.0	28	27.9

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Carbon dioxide, water, unfltrd mg/L (00405)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)
FEB													
20...	0902	70	16	7.0	7	.99	.99	.60	.2	1.1	25	4	1.50
JUN													
24...	1118	5	2.2	1.1	8	1.20	1.30	.70	.2	1.3	23	4	2.00
24...	1125	30	15	15	8	1.20	1.10	.50	.2	1.3	26	4	1.60
SEP													
04...	0909	5	2.3	7.3	8	1.20	1.30	.70	.2	1.3	23	6	2.00
04...	0912	<5	4.1	10	9	1.30	1.40	.70	.2	1.4	24	5	2.00

Date	Time	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap, at 180degC, wat fltrd mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate, water, fltrd, mg/L (71851)	Nitrate, water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L (71856)
FEB														
20...	<.1	4.10	3.00	16	.03	21	.30	.01	.007	.412	.09	.095	.007	
JUN														
24...	<.1	.13	3.00	12	.02	17	.30	.01	.004	--	--	<.002	.003	
24...	<.1	5.30	2.40	16	.03	21	.30	.04	.030	.049	.01	.012	.003	
SEP														
04...	<.1	1.30	2.90	14	.03	19	.20	--	A.021	--	--	<.002	--	
04...	<.1	1.50	2.80	14	.03	19	.20	--	A.038	--	--	A.008	--	

Date	Time	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci, KF 100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)
FEB														
20...	.002	.29	<.001	<.002	.40	4.1	4.2	75	216	<.1	133	432	11	
JUN														
24...	.001	.30	<.001	.002	--	3.0	3.0	<1	<1	2.8	10	97	1	
24...	.001	.27	<.001	.020	.31	2.8	2.8	--	--	--	125	958	54	
SEP														
04...	<.001	--	<.001	.012	--	3.1	2.9	57	24	4.9	15	210	3	
04...	A.002	--	<.001	.006	--	2.9	3.2	--	--	--	26	286	10	

ARKANSAS RIVER BASIN

323

07263297 LAKE MAUMELLE EAST OF HWY 10 BRIDGE NEAR WYE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury, water, unfltrd recover-able, ug/L (71900)	2,4-D water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF ug/L (38746)	2,6-Di-ethyl-aniline water, fltrd, ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt, 0.7u GF ug/L (49308)	3-Keto-carbo-furan, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd, 0.7u GF ug/L (49315)
FEB 20...	22	--	--	--	--	--	--	--	--	--	--	--	--
JUN 24...	31	<.1	<.009	<.02	<.02	<.006	E.005	<.04	E.004	<.006	<2	<.006	<.007
JUN 24...	98	--	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	66	<.1	<.009	<.02	<.02	<.006	E.003	<.04	E.004	<.006	<2	<.006	<.007
SEP 04...	75	--	--	--	--	--	--	--	--	--	--	--	--
Date	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd, 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt, 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd, 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Chlor-phenyl, water, fltrd, 0.7u GF ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)	Bensul-furon, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd, 0.7u GF ug/L (49311)
JUN 24...	<.004	<.02	<.008	<.04	<.005	.020	<.050	<.03	<.010	<.02	<.01	<.03	<.02
SEP 04...	<.004	<.02	<.008	<.04	<.005	.012	<.050	<.03	<.010	<.02	<.01	<.03	<.02
Date	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd, 0.7u GF ug/L (49310)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-thalo-nil, water, fltrd, 0.7u GF ug/L (49306)	Chlor-pyri-fos, water, fltrd, ug/L (38933)	cis-Per-methrin, fltrd, 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd, 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)
JUN 24...	<.002	E.004	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018
SEP 04...	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018
Date	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF ug/L (49304)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water, fltrd, 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd, 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd, 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)
JUN 24...	<.01	<.01	<.003	<.004	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002
SEP 04...	<.01	<.01	<.003	<.004	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002
Date	Ethal-flur-alin, water, fltrd, 0.7u GF ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron water, fltrd, 0.7u GF ug/L (49297)	Desulf-inyl fipro-nil amide, wat flt, ug/L (62169)	Fipro-nil sulfide, water, fltrd, ug/L (62167)	Fipro-nil sulfone, water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon, water, fltrd, 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid, water, fltrd, ug/L (61695)
JUN 24...	<.009	<.005	<.03	<.009	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007
SEP 04...	<.009	<.005	<.03	<.009	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007
Date	Lindane water, fltrd, ug/L (39341)	Linuron water, fltrd, 0.7u GF ug/L (38478)	Linuron water, fltrd, 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd, ug/L (38482)	MCPB, water, fltrd, ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd, ug/L (38501)	Meth-omyl, water, fltrd, ug/L (49296)	Methyl para-thion, water, fltrd, ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)
JUN 24...	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03
SEP 04...	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03
Date	Moli-nate, water, fltrd, 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl)-N'-methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd, 0.7u GF ug/L (82684)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur-azon, water, fltrd, ug/L (49293)	Ory-zalin, water, fltrd, ug/L (49292)	Oxamyl, water, fltrd, ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd, 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd, 0.7u GF ug/L (82683)	Phorate water, fltrd, 0.7u GF ug/L (82664)
JUN 24...	<.002	<.02	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011
SEP 04...	<.002	<.02	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011

ARKANSAS RIVER BASIN

07263297 LAKE MAUMELLE EAST OF HWY 10 BRIDGE NEAR WYE--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Picloram, water, fltrd 0.7u GF (49291)	Prometon, water, fltrd ug/L (04037)	Pronamide, water, fltrd 0.7u GF (82676)	Propachlor, water, fltrd ug/L (04024)	Propanil, water, fltrd 0.7u GF (82679)	Propargite, water, fltrd ug/L (82685)	Propham, water, fltrd ug/L (49236)	Propiconazole, water, fltrd ug/L (50471)	Proxur, water, fltrd ug/L (38538)	Siduron, water, fltrd ug/L (38548)	Simazine, water, fltrd ug/L (04035)	Sulfometuron, water, fltrd ug/L (50337)	Tebuthiuron, water, fltrd 0.7u GF (82670)
JUN 24...	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	.009	<.009	<.02
SEP 04...	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	.007	<.009	<.02

Date	Terbacil, water, fltrd 0.7u GF (82665)	Terbacil, water, fltrd ug/L (04032)	Terbufos, water, fltrd 0.7u GF (82675)	Thiobencarb, water, fltrd ug/L (82681)	Triallate, water, fltrd ug/L (82678)	Tri-clopyr, water, fltrd ug/L (49235)	Tri-fluralin, water, fltrd 0.7u GF (82661)
JUN 24...	<.034	<.010	<.02	<.005	<.002	<.02	<.009
SEP 04...	<.034	<.010	<.02	<.005	<.002	<.02	<.009

Remark codes used in this report:
 < -- Less than
 A -- Average value
 E -- Estimated value

ARKANSAS RIVER BASIN

325

072632971 YOUNT CREEK NEAR MARTINDALE

LOCATION.--Lat 34°53'23, long 92°38'48", in SE1/4NW1/4 sec.19, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, at bridge on State Highway 113, 2.5 mi northeast of Martindale.

PERIOD OF RECORD.--1999 to 2001, 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Tur-bidity, NTU (00076)	Baro-metric pres-sure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf 25 degC (00095)	Temper-ature, water, deg C (00010)
FEB 14...	1240	80513	81213	36	80	17	749	4.2	9.8	79	6.1	26	5.5
MAY 05...	1300	80513	81213	8.9	140	38	758	2.9	8.0	89	6.7	32	20.1

Date	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)
FEB 14...	7	1.00	1.00	.80	.3	1.6	31	3	2.40	<.1	5.50	3.60	18
MAY 05...	9	1.30	1.30	1.20	.3	2.0	30	7	2.70	<.1	6.40	2.90	23

Date	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, wat flt tons/d (70302)	Residue on evap. at 180degC mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, unfltrd mg/L (00605)	Ortho-phos-phate, water, fltrd, mg/L (00660)
FEB 14...	.03	2.32	24	.50	.003	.363	.08	.084	.007	.002	.50	.006	
MAY 05...	.07	1.18	49	.50	.01	.009	.208	.05	.051	.013	.004	.49	.012

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coli-form, M-FC 0.7u MF 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Iron, water, fltrd, ug/L (01046)	Iron, water, recover-able, fltrd, ug/L (01045)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, fltrd, ug/L (01055)	Suspnd. sedi-ment, sieve percent diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
FEB 14...	.002	.026	.58	5.6	5.6	370	170	125	359	34	44	94	28
MAY 05...	.004	.011	.55	6.2	5.9	E6400	7100	241	909	50	74	93	31

Date	Sus-pended sedi-ment load, tons/d (80155)
FEB 14...	2.7
MAY 05...	.75

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

072632982 REECE CREEK AT LITTLE ITALY

LOCATION.--Lat 34°55'47, long 92°35'36", in NE1/4SW1/4 sec.3, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, 0.6 mi southwest of Little Italy.

PERIOD OF RECORD.--1999to 2, 2001, 2003 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, field, std units (00400)	Specific conductance, uS/cm, 25 degC (00095)	Temperature, water, deg C (00010)
FEB 14...	1115	80513	81213	44	50	15	749	6.7	10.1	88	6.0	24	8.5
MAY 05...	1145	80513	81213	23	140	50	750	1.7	9.4	102	6.8	25	18.4
Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
FEB 14...	6	.94	.86	.90	.3	1.6	33	4	2.10	<.1	6.30	2.80	18
MAY 05...	6	1.10	.79	1.60	.2	1.4	27	6	1.60	<.1	5.30	2.30	19
Date	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)
FEB 14...	.03	2.63	22	.60	--	.002	.328	.07	.076	.007	.002	.60	.006
MAY 05...	.05	2.25	36	.80	.01	.010	.367	.08	.088	.016	.005	.79	.025
Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Iron, water, recoverable, fltrd, ug/L (01046)	Iron, water, unfltrd, recoverable, fltrd, ug/L (01045)	Manganese, water, recoverable, fltrd, ug/L (01056)	Manganese, water, unfltrd, recoverable, fltrd, ug/L (01055)	Suspended sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
FEB 14...	.002	.029	.68	3.8	3.8	2900	2500	132	554	19	52	91	27
MAY 05...	.008	.049	.89	6.8	6.3	E12000	E25000	341	1610	86	154	97	55
Date	Suspended sediment load, tons/d (80155)												
FEB 14...	3.2												
MAY 05...	3.4												

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

327

07263299 LAKE MAUMELLE NEAR LITTLE ITALY

LOCATION.--Lat 34°43'34", long 92°34'34", in SW1/4NW1/4 sec.26, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, on Lake Maumelle 4.0 mi southwest of Little Italy.

PERIOD OF RECORD.--May 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
FEB												
20...	0830	80513	80513	32.0	1.70	--	772	11.9	96	6.5	24	6.7
20...	0831	80513	81213	32.0	3.00	1.30	772	11.8	95	6.5	24	6.7
20...	0832	80513	80513	32.0	9.90	--	772	11.7	94	6.6	24	6.7
20...	0833	80513	80513	32.0	15.0	--	772	11.7	94	6.5	24	6.7
20...	0834	80513	80513	32.0	20.0	--	772	11.7	94	6.5	24	6.7
20...	0835	80513	80513	32.0	24.9	--	772	11.7	94	6.5	24	6.7
20...	0836	80513	80513	32.0	30.0	--	772	11.7	94	6.5	24	6.7
20...	0837	80513	80513	32.0	31.6	--	772	10.9	88	6.5	24	6.7

JUN												
24...	0934	80513	80513	30.0	.40	--	765	7.6	96	7.0	26	27.8
24...	0935	80513	80020	30.0	3.00	2.10	765	7.5	94	7.0	26	27.7
24...	0936	80513	80513	30.0	5.10	--	765	7.4	93	7.0	26	27.6
24...	0937	80513	80513	30.0	10.0	--	765	7.2	90	6.8	26	27.4
24...	0938	80513	80513	30.0	13.0	--	765	7.2	90	6.7	26	27.2
24...	0939	80513	80513	30.0	15.0	--	765	7.0	89	6.7	26	27.2
24...	0941	80513	80513	30.0	18.0	--	765	5.5	67	5.9	26	25.2
24...	0942	80513	81213	30.0	20.0	--	765	2.6	31	5.6	26	23.1
24...	0943	80513	80513	30.0	21.1	--	765	1.7	20	5.5	27	22.3
24...	0944	80513	80513	30.0	22.0	--	765	1.1	12	5.5	28	21.6
24...	0945	80513	80513	30.0	25.0	--	765	.2	2	5.5	30	20.5
24...	0947	80513	81213	30.0	27.1	--	765	.1	1	5.8	38	19.9
24...	0948	80513	80513	30.0	30.2	--	765	.1	1	6.0	47	18.5

SEP												
04...	1006	80513	80513	30.0	.10	--	765	6.5	83	6.4	27	28.3
04...	1007	80513	81213	30.0	.10	2.60	765	6.5	83	6.4	27	28.3
04...	1008	80513	80513	30.0	3.00	--	765	6.5	83	6.4	27	28.3
04...	1009	80513	80513	30.0	5.10	--	765	6.3	81	6.4	27	28.2
04...	1010	80513	80513	30.0	10.0	--	765	6.3	81	6.5	27	28.2
04...	1011	80513	80513	30.0	15.0	--	765	6.4	81	6.5	27	28.1
04...	1012	80513	80513	30.0	20.0	--	765	6.3	81	6.4	27	28.1
04...	1014	80513	81213	30.0	21.1	--	765	2.9	37	5.8	28	27.2
04...	1015	80513	80513	30.0	22.1	--	765	.1	1	5.7	31	25.1
04...	1016	80513	80513	30.0	23.1	--	765	.1	.0	6.0	47	23.2
04...	1017	80513	80513	30.0	24.0	--	765	.1	.0	6.4	64	22.5
04...	1018	80513	80513	30.0	25.0	--	765	.1	.0	6.4	70	21.9
04...	1019	80513	80513	30.0	25.9	--	765	.1	.0	6.5	72	21.2
04...	1021	80513	80513	30.0	27.3	--	765	.1	.0	6.4	69	20.6
04...	1022	80513	81213	30.0	30.2	--	765	.1	.0	6.6	79	20.2

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Carbon dioxide water, unfltrd, mg/L (00405)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)
FEB													
20...	0831	10	4.9	2.2	7	1.00	1.20	.70	.2	1.4	27	4	2.10
JUN													
24...	0935	5	1.8	1.6	8	1.20	1.30	.70	.2	1.3	23	9	2.00
24...	0942	10	5.0	35	9	1.30	1.30	.70	.2	1.3	23	8	1.80
24...	0947	30	6.4	44	10	1.60	1.50	.70	.2	1.3	20	14	2.00
SEP													
04...	1007	<5	1.0	4.3	8	1.20	1.30	.70	.2	1.4	25	6	2.10
04...	1014	<5	1.3	18	9	1.30	1.30	.70	.2	1.4	24	6	2.10
04...	1022	120	5.2	13	13	2.40	1.60	.80	.2	1.4	18	27	2.30

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents, mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap. at 180degC, wat flt, mg/L (70300)	Ammonia + org-N, water, unfltrd, mg/L (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)
FEB													
20...	<.1	3.00	3.20	15	.03	21	.30	.01	.006	--	--	.037	--
JUN													
24...	<.1	.11	3.00	15	.03	21	.20	.01	.004	--	--	<.002	.003
24...	<.1	2.00	2.80	16	.03	25	.30	.01	.006	.053	.01	.014	.007
24...	<.1	3.90	2.40	25	.05	34	.40	.21	.163	--	--	<.002	.007
SEP													
04...	<.1	.86	2.90	14	.03	19	.20	--	A.006	--	--	<.002	--
04...	<.1	.88	2.90	14	.02	18	.20	--	<.002	--	--	A.003	--
04...	<.1	8.60	.20	46	.07	52	.90	--	A.597	--	--	A.008	--

ARKANSAS RIVER BASIN

07263299 LAKE MAUMELLE NEAR LITTLE ITALY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci KF col/100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, water, recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)
FEB 20...	<.001	.29	<.001	.004	.34	2.8	2.9	E5	20	2.3	51	214	10
JUN 24...	.001	.20	<.001	.003	--	2.8	3.0	3	<1	3.5	7	70	1
24...	.002	.29	<.001	.005	.31	3.6	3.5	--	--	--	50	272	32
24...	.002	.24	<.001	.009	--	3.1	3.3	--	--	--	1060	1620	2050
SEP 04...	A.002	--	<.001	.012	--	3.1	3.1	E6	<1	3.4	9	65	2
04...	<.001	--	<.001	.011	--	2.9	3.0	--	--	--	11	120	6
04...	A.003	--	A.014	<.002	--	4.2	5.2	--	--	--	7920	8180	4440
Date	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury, water, unfltrd recoverable, ug/L (71900)	2,4-D water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, 0.7u GF fltrd, ug/L (38746)	2,6-Diethyl-aniline water, 0.7u GF fltrd, ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy-carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluor-fen, water, fltrd, 0.7u GF ug/L (49315)
FEB 20...	20	--	--	--	--	--	--	--	--	--	--	--	--
JUN 24...	27	<.1	<.009	<.02	<.02	<.006	E.005	<.04	E.004	<.006	<2	<.006	<.007
24...	160	--	--	--	--	--	--	--	--	--	--	--	--
24...	2150	--	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	43	<.1	<.009	<.02	<.02	<.006	E.004	<.04	E.004	<.006	<2	<.006	<.007
04...	84	--	--	--	--	--	--	--	--	--	--	--	--
04...	4540	--	--	--	--	--	--	--	--	--	--	--	--
Date	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone, water, fltrd, 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd, 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd, 0.7u GF ug/L (49311)
JUN 24...	<.004	<.02	<.008	<.04	<.005	.020	<.050	<.03	<.010	<.02	<.01	<.03	<.02
SEP 04...	<.004	<.02	<.008	<.04	<.005	.013	<.050	<.03	<.010	<.02	<.01	<.03	<.02
Date	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd, 0.7u GF ug/L (49310)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-amben-methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-thalo-nil, water, fltrd, 0.7u GF ug/L (49306)	Chlor-pyri-fos, water, fltrd, ug/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd, 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, 0.7u GF ug/L (04041)
JUN 24...	<.002	.020	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018
SEP 04...	<.002	E.007	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018
Date	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF ug/L (49304)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba, water, fltrd, 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd, ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb, water, fltrd, 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd, 0.7u GF ug/L (82677)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	EPTC, water, fltrd, 0.7u GF ug/L (82668)
JUN 24...	<.01	<.01	<.003	<.004	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002
SEP 04...	<.01	<.01	<.003	<.004	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002
Date	Ethal-flur-alin, water, fltrd, 0.7u GF ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF ug/L (82672)	Fenuron, water, fltrd, 0.7u GF ug/L (49297)	Desulf-inyl fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide, water, fltrd, ug/L (62167)	Fipro-nil sulfone, water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon, water, fltrd, 0.7u GF ug/L (38811)	Fonofos, water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid, water, fltrd, ug/L (61695)
JUN 24...	<.009	<.005	<.03	<.009	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007
SEP 04...	<.009	<.005	<.03	<.009	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007

ARKANSAS RIVER BASIN

329

07263299 LAKE MAUMELLE NEAR LITTLE ITALY--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Metsul- furon, water, fltrd, ug/L (61697)
JUN 24...	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03
SEP 04...	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03
Date	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	N-(4- Chloro- phenyl) -N'- methyl- urea, water, fltrd 0.7u GF ug/L (61692)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd 0.7u GF ug/L (50364)	Norflur- azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'- DDE, water, fltrd 0.7u GF ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
JUN 24...	<.002	<.02	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011
SEP 04...	<.002	<.02	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011
Date	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Prome- ton, water, fltrd 0.7u GF ug/L (04037)	Pron- amide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi- cona- zole, water, fltrd, ug/L (50471)	Pro- poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
JUN 24...	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	.009	<.009	<.02
SEP 04...	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	.009	<.009	<.02
Date				Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terba- cil, water, fltrd, ug/L (04032)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)			
JUN 24...				<.034	<.010	<.02	<.005	<.002	<.02	<.009			
SEP 04...				<.034	<.010	<.02	<.005	<.002	<.02	<.009			

Remark codes used in this report:
 < -- Less than
 A -- Average value
 E -- Estimated value

ARKANSAS RIVER BASIN

072632995 LAKE MAUMELLE AT NATURAL STEPS

LOCATION.--Lat 34°51'39", long 92°30'07", in NE1/4NW1/4 sec.33, T.3 N., R.14 W., Pulaski County, Hydrologic Unit 11110207, at dam on Lake Maumelle, at Natural Steps.

PERIOD OF RECORD.--May 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
DEC												
17...	1334	80513	80513	26.0	.60	--	758	11.1	100	7.7	23	10.2
17...	1335	80513	81213	26.0	3.30	.85	758	10.8	97	7.8	23	10.2
17...	1336	80513	80513	26.0	5.10	--	758	11.2	100	7.7	23	10.1
17...	1337	80513	80513	26.0	10.1	--	758	11.4	101	7.6	23	10.1
17...	1338	80513	80513	26.0	15.0	--	758	10.8	96	7.5	23	10.0
17...	1339	80513	80513	26.0	20.0	--	758	11.0	98	7.5	23	10.0
17...	1340	80513	80513	26.0	25.0	--	758	11.1	99	7.4	24	10.0
17...	1341	80513	80513	26.0	26.2	--	758	11.9	106	7.3	32	9.9
FEB												
20...	0751	80513	80513	32.0	1.00	--	772	11.9	95	6.3	23	6.4
20...	0752	80513	81213	32.0	3.00	1.60	772	12.1	97	6.4	23	6.4
20...	0753	80513	80513	32.0	10.0	--	772	11.8	95	6.4	23	6.4
20...	0754	80513	80513	32.0	14.9	--	772	11.9	95	6.4	23	6.4
20...	0755	80513	80513	32.0	20.0	--	772	11.8	95	6.4	23	6.4
20...	0756	80513	80513	32.0	25.0	--	772	11.6	93	6.4	23	6.4
20...	0757	80513	80513	32.0	30.0	--	772	11.7	94	6.5	23	6.4
20...	0758	80513	80513	32.0	31.9	--	772	11.6	93	6.5	23	6.4
JUN												
24...	0742	80513	80513	30.0	.20	--	765	7.4	91	6.7	26	26.2
24...	0743	80513	81213	30.0	3.20	2.10	765	7.5	92	6.8	26	26.2
24...	0744	80513	80513	30.0	5.00	--	765	7.6	93	6.8	26	26.2
24...	0745	80513	80513	30.0	10.1	--	765	7.3	90	6.8	26	26.1
24...	0746	80513	80513	30.0	15.0	--	765	6.7	81	6.4	26	25.5
24...	0747	80513	80513	30.0	18.1	--	765	5.1	61	5.9	26	24.3
24...	0749	80513	80513	30.0	19.0	--	765	3.1	36	5.7	26	22.9
24...	0750	80513	81213	30.0	20.0	--	765	2.6	30	5.6	27	22.3
24...	0751	80513	80513	30.0	21.9	--	765	1.6	17	5.6	28	21.5
24...	0752	80513	80513	30.0	23.1	--	765	1.1	12	5.5	28	21.0
24...	0753	80513	80513	30.0	25.0	--	765	.2	2	5.7	33	19.9
24...	0754	80513	81213	30.0	26.1	--	765	.1	2	5.8	39	19.1
24...	0755	80513	80513	30.0	28.0	--	765	.1	1	5.8	41	18.8
24...	0756	80513	80513	30.0	29.9	--	765	.1	1	5.9	44	18.4
SEP												
04...	1119	80513	80513	33.0	.00	--	765	6.6	84	6.3	27	28.1
04...	1120	80513	81213	33.0	3.00	3.10	765	6.7	85	6.3	27	28.1
04...	1121	80513	80513	33.0	5.00	--	765	6.6	84	6.3	27	28.0
04...	1122	80513	80513	33.0	10.0	--	765	6.6	84	6.3	27	27.9
04...	1123	80513	80513	33.0	14.9	--	765	6.6	84	6.3	27	27.8
04...	1124	80513	80513	33.0	20.0	--	765	6.4	81	6.3	27	27.8
04...	1126	80513	80513	33.0	23.0	--	765	1.5	18	5.7	30	25.4
04...	1127	80513	80513	33.0	24.0	--	765	.4	5	5.8	35	23.0
04...	1128	80513	80513	33.0	25.0	--	765	.2	3	6.1	49	21.9
04...	1129	80513	80513	33.0	26.1	--	765	.2	2	6.2	53	21.1
04...	1130	80513	80513	33.0	27.0	--	765	.1	1	6.4	65	20.3
04...	1131	80513	80513	33.0	28.0	--	765	.1	.0	6.5	68	20.0
04...	1132	80513	81213	33.0	30.0	--	765	.1	.0	6.5	72	19.7
04...	1133	80513	80513	33.0	32.6	--	765	.1	.0	6.6	74	19.5

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Carbon dioxide, water, unfltrd mg/L (00405)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)
DEC													
17...	1335	10	1.1	.2	7	.81	1.30	.60	.2	1.4	27	--	2.20
FEB													
20...	0752	10	3.5	9.9	8	.95	1.30	.70	.2	1.4	26	12	2.10
JUN													
24...	0743	5	1.5	1.6	8	1.20	1.30	.70	.2	1.4	25	5	2.00
24...	0750	10	2.1	23	9	1.30	1.40	.70	.2	1.4	24	5	2.00
24...	0754	20	3.4	35	11	1.60	1.60	.70	.2	1.4	21	11	2.10
SEP													
04...	1120	5	.90	5.3	8	1.20	1.30	.70	.2	1.3	23	6	2.00
04...	1126	5	.97	20	8	1.20	1.30	.70	.2	1.4	25	5	2.00
04...	1132	80	4.5	14	13	2.40	1.80	.80	.2	1.5	18	24	2.30

ARKANSAS RIVER BASIN

331

072632995 LAKE MAUMELLE NEAR NATURAL STEPS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents, mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap. at 180degC, wat flt (70300)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (00613)	Organic nitrogen, water, unfltrd, mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)
DEC 17...	<.1	2.70	3.10	16	.02	14	.40	.01	.004	.003	<.001	.40	<.001
FEB 20...	<.1	2.70	3.10	20	.03	22	.30	.01	.005	.019	<.001	.29	<.001
JUN 24...	<.1	.10	3.00	13	.03	25	.20		.002	<.002	<.001	.20	<.001
24...	<.1	1.50	3.00	14	.04	28	.30	.01	.005	<.002	<.001	.29	<.001
24...	<.1	3.20	2.80	22	.02	18	.30	.06	.046	<.002	<.001	.25	<.001
SEP 04...	<.1	.76	2.90	14	.03	21	.20	--	A.002	<.002	<.001	--	<.001
04...	<.1	.78	2.90	13	.03	19	.20	--	A.003	<.002	<.001	--	<.001
04...	<.1	8.10	.60	42	.08	57	1.0	--	A.434	<.002	A.001	--	A.032

Date	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	Fecal coliform, M-FC, 0.7u MF, col/100 mL (31625)	Fecal streptococci, MF, col/100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd, recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd, recoverable, ug/L (01055)	Mercury, water, unfltrd, recoverable, ug/L (71900)	2,4-D water, fltrd, ug/L (50470)
DEC 17...	.008	.40	2.6	2.7	E8	E2	2.1	4	76	<1	36	--	--
FEB 20...	.009	.32	2.7	2.8	E2	E7	2.9	38	173	10	23	--	--
JUN 24...	.003	--	2.8	2.9	E1	<1	--	4	51	<1	25	<.1	<.009
24...	.008	--	2.7	2.7	--	--	--	9	94	63	173	--	--
24...	.012	--	2.7	2.7	--	--	--	281	454	1630	1700	--	--
SEP 04...	.028	--	2.9	3.1	<1	<1	3.5	8	45	4	26	<.1	<.009
04...	.010	--	2.9	3.0	--	--	--	12	71	5	31	--	--
04...	<.002	--	4.0	5.2	--	--	--	5580	5930	4550	4660	--	--

Date	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd, 0.7u GF, ug/L (38746)	2,6-Di-ethyl-aniline water, fltrd, 0.7u GF, ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt, 0.7u GF, ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd, 0.7u GF, ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd, 0.7u GF, ug/L (49313)	Aldi-carb sulfide, wat flt, 0.7u GF, ug/L (49314)
JUN 24...	<.02	<.02	<.006	E.005	<.04	E.004	<.006	<2	<.006	<.007	<.004	<.02	<.008
SEP 04...	<.02	<.02	<.006	E.003	<.04	E.004	<.006	<2	<.006	<.007	<.004	<.02	<.008

Date	Aldi-carb, water, fltrd, 0.7u GF, ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos methyl, water, fltrd, 0.7u GF, ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd, 0.7u GF, ug/L (82673)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd, 0.7u GF, ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd, 0.7u GF, ug/L (49310)
JUN 24...	<.04	<.005	.019	<.050	<.03	<.010	<.02	<.01	<.03	<.02	<.002	<.010	<.03
SEP 04...	<.04	<.005	.013	<.050	<.03	<.010	<.02	<.01	<.03	<.02	<.002	.011	<.03

Date	Car-baryl, water, fltrd, 0.7u GF, ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF, ug/L (49309)	Carbo-furan, water, fltrd, 0.7u GF, ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-thalo-nil, water, fltrd, 0.7u GF, ug/L (49306)	Chlor-pyrifos, water, fltrd, ug/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF, ug/L (82687)	Clopyr-alid, water, fltrd, 0.7u GF, ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, 0.7u GF, ug/L (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF, ug/L (49304)	DCPA, water, fltrd, 0.7u GF, ug/L (82682)
JUN 24...	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003
SEP 04...	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.006	<.01	<.018	<.01	<.01	<.003

Date	Desulf-fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba, water, fltrd, 0.7u GF, ug/L (38442)	Di-chlor-prop, water, fltrd, 0.7u GF, ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb, water, fltrd, 0.7u GF, ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd, ug/L (82677)	Diuron, water, fltrd, 0.7u GF, ug/L (49300)	EPTC, water, fltrd, 0.7u GF, ug/L (82668)	Ethal-alin, water, fltrd, 0.7u GF, ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF, ug/L (82672)	Fenuron, water, fltrd, 0.7u GF, ug/L (49297)
JUN 24...	<.004	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
SEP 04...	<.004	<.005	<.01	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03

ARKANSAS RIVER BASIN

072632995 LAKE MAUMELLE NEAR NATURAL STEPS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water, fltrd 0.7u GF ug/L (38811)	Ponofos water, fltrd, ug/L (04095)	Imaza- quin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)
JUN 24...	<.009	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007	<.004	<.01	<.035
SEP 04...	<.009	<.005	<.005	<.007	<.01	<.03	<.003	<.02	<.02	<.007	<.004	<.01	<.035
Date	Mala- thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Metsul- furon, water, fltrd, ug/L (61697)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)
JUN 24...	<.027	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007
SEP 04...	<.027	<.02	<.01	<.02	<.008	<.004	<.006	<.013	<.006	<.03	<.002	<.02	<.007
Date	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur- azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Prome- ton, water, fltrd, ug/L (04037)	Pron- amide, water, fltrd 0.7u GF ug/L (82676)
JUN 24...	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004
SEP 04...	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004
Date	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi- cona- zole, water, fltrd, ug/L (50471)	Pro- poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima- zine, water, fltrd, ug/L (04035)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terba- cil, water, fltrd, ug/L (04032)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)
JUN 24...	<.010	<.011	<.02	<.010	<.02	<.008	<.02	.009	<.009	<.02	<.034	<.010	<.02
SEP 04...	<.010	<.011	<.02	<.010	<.02	<.008	<.02	.008	<.009	<.02	<.034	<.010	<.02
Date					Thio- bencarb water, fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)					
JUN 24...					<.005	<.002	<.02	<.009					
SEP 04...					<.005	<.002	<.02	<.009					

Remark codes used in this report:
 < -- Less than
 A -- Average value
 E -- Estimated value

ARKANSAS RIVER BASIN

333

07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS

LOCATION.--Lat 34°51'47", long 92°29'07", in SW1/4SE1/4 sec.27, T.3 N., R.14 W., Pulaski County, Hydrologic Unit 11110207, at right bank 100 ft upstream from spillway, 0.5 mi west of Natural Steps.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--September 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	42	0.00	623	99	0.00	53	97	0.00	0.00
2	0.00	0.00	0.00	141	0.00	633	85	0.00	43	53	0.00	0.00
3	0.00	0.00	0.00	182	0.85	e669	77	0.00	40	38	0.00	0.00
4	0.00	0.00	0.00	197	0.00	e617	74	0.00	28	26	0.00	0.00
5	0.00	0.00	0.00	203	0.00	e561	64	43	24	14	0.00	0.00
6	0.00	0.00	0.00	192	0.00	e479	62	115	26	7.0	0.00	0.00
7	0.00	0.00	0.00	181	0.00	e418	86	435	25	1.5	0.00	0.00
8	0.00	0.00	0.00	164	0.00	e370	86	609	21	0.00	0.00	0.00
9	0.00	0.00	0.00	147	0.00	e329	67	570	11	0.00	0.00	0.00
10	0.00	0.00	0.00	131	0.00	e286	54	482	6.4	0.00	0.00	0.00
11	0.00	0.00	0.00	112	0.00	e281	46	420	13	0.00	0.00	0.00
12	0.00	0.00	0.00	94	0.00	228	43	320	162	0.00	0.00	0.00
13	0.00	0.00	0.00	84	0.00	226	39	248	302	0.00	0.00	0.00
14	0.00	0.00	0.00	73	82	206	32	237	299	0.00	0.00	0.00
15	0.00	0.00	0.00	57	373	188	26	213	280	0.00	0.00	0.00
16	0.00	0.00	0.00	70	755	175	18	224	246	0.00	0.00	0.00
17	0.00	0.00	0.00	45	784	166	16	924	248	0.00	0.00	0.00
18	0.00	0.00	0.00	33	709	143	3.6	1080	297	0.00	0.00	0.00
19	0.00	0.00	0.00	24	644	199	2.8	962	351	0.00	0.00	0.00
20	0.00	0.00	0.00	18	578	225	12	817	353	0.00	0.00	0.00
21	0.00	0.00	0.00	12	531	206	9.6	678	311	0.00	0.00	0.00
22	0.00	0.00	0.00	9.5	813	193	1.6	565	266	0.00	0.00	0.00
23	0.00	0.00	0.00	5.8	983	185	0.50	458	228	0.00	0.00	0.00
24	0.00	0.00	0.00	0.43	925	171	14	366	198	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	857	163	20	338	174	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	771	194	7.4	275	225	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	684	187	3.4	223	211	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	626	192	2.1	185	183	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	166	0.43	146	163	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	138	0.00	110	128	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	e111	---	83	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	2217.73	10115.85	8928	1051.43	11126.00	4915.4	236.50	0.00	0.00
MEAN	0.000	0.000	0.000	71.5	361	288	35.0	359	164	7.63	0.000	0.000
MAX	0.00	0.00	0.00	203	983	669	99	1080	353	97	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	111	0.00	0.00	6.4	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	4400	20060	17710	2090	22070	9750	469	0.00	0.00

ARKANSAS RIVER BASIN

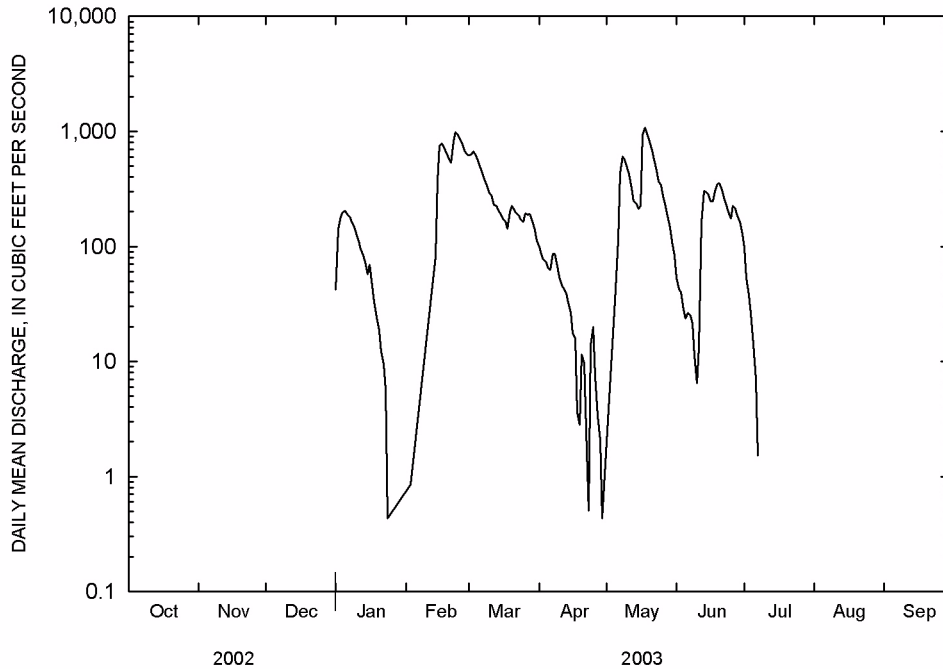
07263300 MAUMELLE RIVER AT MAUMELLE DAM AT NATURAL STEPS--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

MEAN	0.000	54.0	195	177	304	377	246	191	52.1	10.9	3.91	0.000
MAX	0.000	435	840	836	881	947	642	546	198	86.3	53.1	0.000
(WY)	1990	1997	1992	1991	2001	1997	1991	1990	1992	1994	1992	1989
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1990	1990	1990	1990	1996	1996	1996	1992	1998	1990	1990	1989

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003	
ANNUAL TOTAL	31958.83		38590.91			
ANNUAL MEAN	87.6		106		133	
HIGHEST ANNUAL MEAN					274 1997	
LOWEST ANNUAL MEAN					7.84 2000	
HIGHEST DAILY MEAN	1780	Mar 21	1080	May 18	3770	Feb 17 2001
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Aug 17 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Aug 17 1989
MAXIMUM PEAK FLOW			1100	May 18	4210	Feb 16 2001
MAXIMUM PEAK STAGE			91.27	May 18	92.83	Feb 16 2001
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	63390		76550		96640	
10 PERCENT EXCEEDS	280		352		431	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

^eEstimated



ARKANSAS RIVER BASIN

335

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK

LOCATION.--Lat 34°47'27", long 92°21'32", in sec.23, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, in metal shelter on dam and at mile 141.5.

DRAINAGE AREA.--158,030 mi², of which 22,241 mi² is probably noncontributing.

PERIOD OF RECORD.--September 1927 to current year. Prior to October 1969, published as "07263500 Arkansas River at Little Rock." Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at or near former site since 1873 are contained in reports of National Weather Service. Gage-height records collected since 1883 at site 5.5 mi downstream, and intermittent records of discharge since 1885 are contained in reports of Mississippi River Commission.

GAGE.--Water-stage and gate-position recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1934, nonrecording gage, Oct. 1, 1934, to May 9, 1970, recording gage at site 6.2 mi downstream at datum 223.61 ft higher. Sept. 20, 1968, to May 9, 1970, auxiliary water-stage recorder 5.5 mi upstream from former gage.

REMARKS.--No estimated daily discharges. Water-discharge records good except discharges below 10,000 ft³/s, which are fair. Beginning May 10, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated upstream by many locks, dams, and reservoirs. On Oct. 7, 1988, the North Little Rock Electric Department hydroplant began operation, and discharges at the hydroplant are added to flows from the lock and dam. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1833 reached a stage of 34.6 ft, at former site and datum. Flood of Apr. 20, 1927, reached a stage of 33.0 ft, at former site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8860	20000	2060	27500	9710	39700	62400	41600	39700	12300	9110	31000
2	4510	13100	2420	30400	2950	35000	55400	39400	39100	36000	8520	16500
3	29	22400	3240	34000	5460	11600	49300	36900	51500	30800	11200	32200
4	3150	28700	3010	28200	9390	24500	39800	37200	56100	2920	21400	36800
5	7840	28600	7950	22000	1110	20800	41000	58200	62000	7530	10900	27300
6	17600	8910	10400	19700	1550	29300	35500	53700	34700	11000	21200	21700
7	23900	5440	6300	30200	21800	15800	35700	47000	37100	10400	10100	19500
8	23800	7720	4550	19100	11500	15600	19700	52300	29300	10800	13900	27200
9	27000	9300	8240	21700	3510	22400	23100	49700	22900	16600	13800	32000
10	28100	8400	10100	21000	8680	13100	29000	39400	30400	15500	11900	23900
11	27200	8540	3770	15000	12100	4710	31800	41600	34600	7270	4240	26100
12	22700	7600	6220	14600	8880	12800	33600	26700	65800	13800	5880	27400
13	2470	7040	16900	18800	7140	25300	11600	26300	74100	2570	9870	34100
14	28	2340	16000	17800	16200	13700	14400	29100	67800	14400	12400	35800
15	5170	11600	8330	14100	28000	13600	11100	29700	53000	23600	9320	13300
16	6000	351	7110	19700	38100	9620	11900	42100	43400	7860	7420	6570
17	1270	1820	4760	21400	33100	15100	22800	97200	54500	1320	20300	29300
18	1100	3180	13600	1650	23700	13500	19200	138000	55800	3890	18800	17200
19	12700	2090	12000	7960	21900	27700	1330	145000	51100	16300	25200	31500
20	9340	4540	10300	5380	36000	65400	9550	90200	47400	9310	18100	21700
21	8610	9750	9030	10700	31000	85600	25100	75200	29600	10500	15500	18200
22	2010	8100	7550	19800	29100	90000	26000	81700	25500	6910	8160	14800
23	2940	1830	9520	11000	47100	57400	15200	80000	20800	7400	7150	19200
24	11100	8280	22400	13000	46400	52200	24100	79300	23300	9130	4790	16100
25	11000	10400	25400	2670	40600	60600	37600	77000	18600	5450	2340	14700
26	7790	4580	11800	4700	23400	65300	45600	70800	47500	6980	2380	17700
27	2310	4630	13200	10800	41600	64400	38500	66300	49700	4940	11300	6820
28	5090	821	8140	11000	40000	69000	38300	48000	29800	10000	14000	1970
29	16600	2010	7150	5850	---	71700	32200	42200	26600	10000	14100	7530
30	20200	3720	9910	2230	---	73100	28000	25700	18200	10800	9440	2110
31	12200	---	34400	13400	---	72500	---	41900	---	10600	14500	---
TOTAL	332617	255792	315760	495340	599980	1191030	868780	1809400	1239900	346880	367220	630200
MEAN	10730	8526	10190	15980	21430	38420	28960	58370	41330	11190	11850	21010
MAX	28100	28700	34400	34000	47100	90000	62400	145000	74100	36000	25200	36800
MIN	28	351	2060	1650	1110	4710	1330	25700	18200	1320	2340	1970
AC-FT	659700	507400	626300	982500	1190000	2362000	1723000	3589000	2459000	688000	728400	1250000

ARKANSAS RIVER BASIN

07263450 ARKANSAS RIVER AT MURRAY DAM AT LITTLE ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	27860	45280	51500	44460	48480	75530	76000	76910	67640	33610	16120	15400
MAX	215100	176000	155400	161800	116100	169500	215900	234800	191600	117100	62730	51690
(WY)	1987	1975	1993	1998	2001	1987	1973	1990	1995	1999	1992	1989
MIN	1466	2615	3714	1439	9340	9986	7971	18460	4994	4954	4130	3172
(WY)	1979	1981	1990	1981	1981	1972	1981	1977	1988	1991	1991	1983

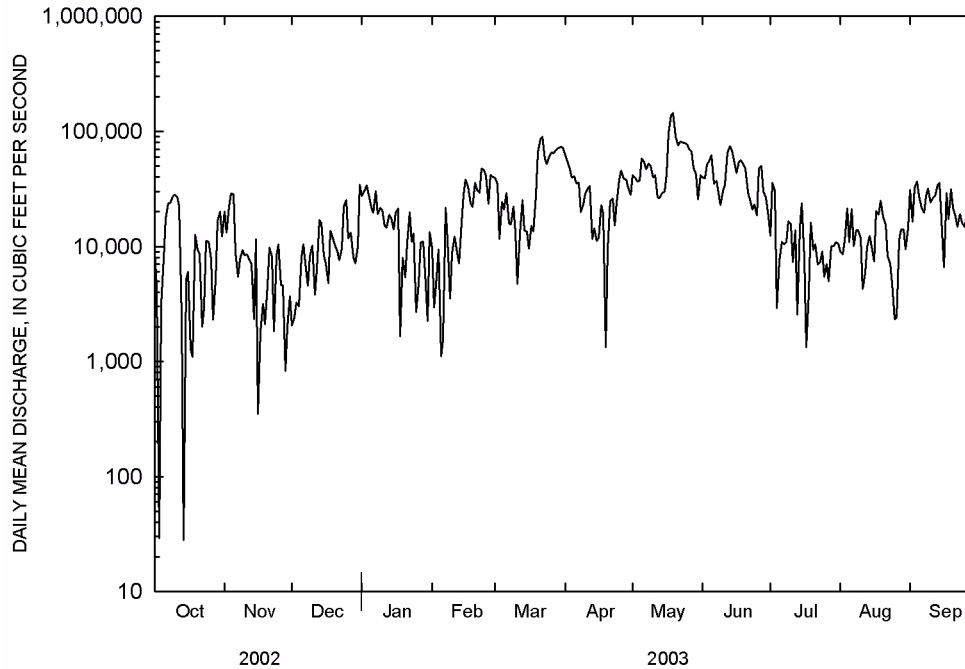
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1970 - 2003	
ANNUAL TOTAL	12547753		8452899			
ANNUAL MEAN	34380		23160		¹ 48200	
HIGHEST ANNUAL MEAN					96810 1993	
LOWEST ANNUAL MEAN					12880 1981	
HIGHEST DAILY MEAN	228000	Mar 21	145000	May 19	404000	May 8 1990
LOWEST DAILY MEAN	28	Oct 14	28	Oct 14	² 14	Oct 25 1978
ANNUAL SEVEN-DAY MINIMUM	1410	Sep 9	2470	Nov 28	432	Oct 15 1982
MAXIMUM PEAK FLOW			157000	May 18	³ 406000	May 7 1990
MAXIMUM PEAK STAGE			239.47	May 19	⁴ 256.97	May 7 1990
ANNUAL RUNOFF (AC-FT)	24890000		16770000		34920000	
10 PERCENT EXCEEDS	79900		51800		130000	
50 PERCENT EXCEEDS	22400		16300		29500	
90 PERCENT EXCEEDS	3150		3640		3960	

¹Prior to regulation, water years 1928-69, 39,920 ft³/s

²Also minimum daily discharge for period of record

³Maximum discharge for period of record, 536,000 ft³/s May 27, 1943

⁴Maximum gage height for period of record, 30.05 ft, May 27, 1943, at site and datum then in use



ARKANSAS RIVER BASIN

337

07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK

LOCATION.--Lat 34°43'14", long 92°21'35", in NW1/4SW1/4 sec.13, T.1 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, at West 36th Street bridge in Little Rock.

DRAINAGE AREA.--20.5 mi².

PERIOD OF RECORD.--October 1996 to current year. Daily stages and results of discharge measurements for March 1970 to March 1978 are in the files of the U.S. Army Corps of Engineers. Annual peak stages and discharges for 1978-88 and 1995-96 are published in the annual reports of the U.S. Geological Survey. Daily stages for the 1989-94 water year are in the files of the U.S. Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 260.00 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 13, 1978, reached a stage of 18.22 ft, discharge, 22,500 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	9.3	2.2	69	3.9	34	6.4	4.1	2.6	4.0	2.3	24
2	0.99	23	2.3	44	3.7	24	6.0	4.2	17	3.5	4.1	32
3	0.98	104	12	27	3.8	18	5.8	8.6	7.5	2.7	2.4	48
4	3.1	36	250	20	3.4	15	6.1	3.9	5.0	2.3	1.5	13
5	0.66	60	41	16	4.0	13	6.8	7.7	19	2.2	1.6	4.5
6	0.58	25	19	e12	20	11	11	4.6	26	2.0	2.1	2.5
7	6.9	15	13	e11	13	9.6	9.9	31	9.6	1.8	2.1	2.0
8	0.86	10	10	9.9	7.5	9.2	6.9	7.2	5.8	1.7	2.0	1.7
9	62	8.4	7.8	8.6	8.2	8.2	6.1	4.8	4.7	1.5	1.7	1.5
10	192	7.2	8.5	7.4	7.9	7.5	5.8	11	4.5	3.1	1.5	1.4
11	20	5.7	7.9	6.3	6.3	7.3	5.5	16	90	2.2	1.5	60
12	7.5	4.8	7.1	6.0	5.7	7.2	5.9	4.9	83	1.6	3.3	77
13	5.1	3.7	182	5.9	29	31	5.2	15	15	4.7	3.7	71
14	2.6	3.5	46	5.5	137	12	4.7	12	8.2	3.4	4.1	11
15	1.7	5.6	24	5.3	61	9.3	4.5	6.6	15	2.7	1.9	5.1
16	1.2	3.3	17	5.2	65	8.1	4.2	e13	8.0	2.9	1.6	3.3
17	0.93	3.1	14	4.9	26	7.8	5.1	e40	419	3.1	1.4	2.7
18	0.79	2.8	95	4.6	18	17	4.9	16	82	2.8	86	2.2
19	130	2.5	75	e4.4	19	61	17	9.4	19	118	19	1.8
20	51	3.0	30	e4.5	18	18	20	8.3	10	10	5.7	1.6
21	16	2.8	19	e4.5	47	13	7.0	7.4	7.9	4.4	3.5	2.0
22	9.2	2.2	14	e4.5	138	11	5.2	7.2	5.7	3.1	2.8	3.9
23	6.7	2.7	208	e4.0	39	9.2	4.4	6.9	5.2	2.5	2.1	2.1
24	5.3	1.7	156	3.7	23	8.6	79	5.1	4.0	1.8	1.7	1.8
25	4.7	22	44	e3.7	29	26	13	9.2	3.0	1.6	1.6	1.8
26	4.3	10	25	e3.7	35	25	7.9	5.1	55	1.5	1.5	1.6
27	25	4.9	19	e4.2	33	12	6.1	4.4	8.6	1.4	1.6	1.5
28	41	3.5	15	e4.5	39	10	5.4	4.0	5.1	1.2	1.2	1.3
29	96	2.9	13	e5.6	---	e9.6	4.7	3.6	3.5	1.2	1.2	1.2
30	24	2.6	48	4.7	---	e7.4	4.7	3.3	4.7	21	1.2	1.2
31	13	---	229	4.2	---	e7.1	---	3.1	---	4.8	1.4	---
TOTAL	735.19	391.2	1653.8	324.8	843.4	467.1	285.2	287.6	953.6	220.7	169.3	384.7
MEAN	23.7	13.0	53.3	10.5	30.1	15.1	9.51	9.28	31.8	7.12	5.46	12.8
MAX	192	104	250	69	138	61	79	40	419	118	86	77
MIN	0.58	1.7	2.2	3.7	3.4	7.1	4.2	3.1	2.6	1.2	1.2	1.2
AC-FT	1460	776	3280	644	1670	926	566	570	1890	438	336	763
CFSM	1.16	0.64	2.60	0.51	1.47	0.74	0.46	0.45	1.55	0.35	0.27	0.63
IN.	1.33	0.71	3.00	0.59	1.53	0.85	0.52	0.52	1.73	0.40	0.31	0.70

ARKANSAS RIVER BASIN

07263580 ROCK CREEK AT 36TH STREET AT LITTLE ROCK--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

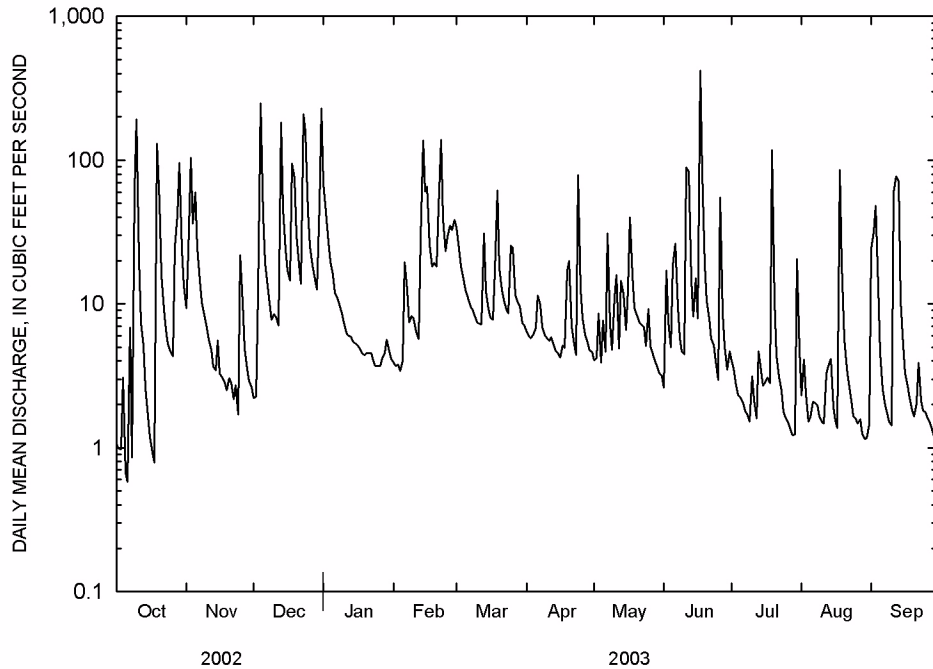
MEAN	25.9	37.7	40.9	31.6	43.2	48.0	24.0	14.0	19.5	11.1	9.37	17.6
MAX	42.8	92.2	67.4	89.7	83.5	106	69.8	18.1	45.3	19.1	22.5	32.4
(WY)	1997	1997	2002	1998	1998	1997	1997	2002	1997	2001	1998	1997
MIN	5.59	5.71	19.0	5.76	14.2	15.1	7.22	9.28	2.87	1.82	1.48	4.27
(WY)	2001	2000	2000	2000	1999	2003	2002	2003	2002	2000	2000	1999

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1997 - 2003

ANNUAL TOTAL		8360.55		6716.59								
ANNUAL MEAN		22.9		18.4					26.8			
HIGHEST ANNUAL MEAN									46.8			1997
LOWEST ANNUAL MEAN									11.8			2000
HIGHEST DAILY MEAN		466	Sep 20	419	Jun 17				738	Dec 16		2001
LOWEST DAILY MEAN		0.58	Oct 6	0.58	Oct 6				0.05	Oct 19		1996
ANNUAL SEVEN-DAY MINIMUM		1.0	Aug 30	1.4	Aug 25				0.08	Oct 14		1996
MAXIMUM PEAK FLOW				2300	Jun 17				¹ 4650	Oct 27		1996
MAXIMUM PEAK STAGE				4.58	Jun 17				7.47	Oct 27		1996
INSTANTANEOUS LOW FLOW					0.55	Oct 1, 5-6			0.05	Oct 18		1996
ANNUAL RUNOFF (AC-FT)		16580		13320					19420			
ANNUAL RUNOFF (CFSM)		1.12		0.90					1.31			
ANNUAL RUNOFF (INCHES)		15.17		12.19					17.76			
10 PERCENT EXCEEDS		51		44					60			
50 PERCENT EXCEEDS		4.6		6.1					6.4			
90 PERCENT EXCEEDS		1.2		1.6					1.3			

¹From rating curve extended above 1,400 ft³/s

^eEstimated



ARKANSAS RIVER BASIN

339

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK

(National radiochemical station)

(National stream-quality accounting network)

LOCATION.--Lat 34°40'07", long 92°09'18", in sec.35, T.1 N., R.11 W., Pulaski County, Hydrologic Unit 11110207, at upper end of upstream wall at David D. Terry Lock and Dam, 10.7 mi downstream from Main Street bridge at Little Rock, and at mile 124.2.

DRAINAGE AREA.--158,288 mi², of which 22,241 mi² is probably noncontributing.

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

INSTRUMENTATION.--Water-quality monitor October 1969 to September 1981.

REMARKS.--Discharge figures are for station 07263450, 16.8 mi upstream.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Turbidity, wat unfltrd lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat fltrd units /cm (50624)	UV absorbance, 280 nm, wat fltrd units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
NOV 08...	0830	80513	80020	9350	8.3	.097	.070	771	8.5	82	8.2	905	13.9
DEC 03...	0920	80513	80020	3200	4.9	.093	.068	786	10.1	89	7.9	940	10.6
JAN 28...	1030	80513	80020	11000	6.0	.094	.069	772	14.1	109	7.7	994	4.7
MAR 04...	0900	80513	80020	29000	13	.106	.079	766	11.9	97	7.9	747	6.8
APR 22...	0800	80513	80020	26700	15	.121	.090	771	9.7	103	8.0	742	18.6
MAY 13...	0810	80513	80020	E20000	26	.112	.081	768	6.2	73	7.6	831	24.1
JUN 10...	0900	80513	80020	26400	21	.114	.085	765	7.0	85	7.5	519	24.8
JUL 09...	0900	80513	80020	E9240	9.9	.119	.086	770	6.2	81	7.7	460	30.0
AUG 11...	0730	80513	80020	4620	13	.101	.072	760	6.1	81	8.4	652	30.0
SEP 02...	0745	80513	80020	23300	7.3	.099	.070	760	5.7	76	7.8	743	29.5

Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat fltrd field, mg/L as CaCO3 (00904)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat fltrd inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat fltrd incrm. titr., field, mg/L (00453)	Carbonate, wat fltrd incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
NOV 08...	150	40	43.7	10.3	4.90	4	110	60	113	135	1	174	.26
DEC 03...	160	50	45.1	11.0	4.18	4	128	63	109	131	.0	186	.26
JAN 28...	140	56	38.6	9.56	3.95	5	143	69	80	98	.0	211	.19
MAR 04...	100	39	27.6	8.01	3.03	4	97.3	67	63	76	.0	150	.15
APR 22...	150	50	42.7	10.8	4.36	3	82.5	53	101	123	.0	--	--
MAY 13...	160	51	43.8	11.2	4.25	3	95.2	56	105	128	.0	147	.2
JUN 10...	120	39	36.4	7.74	3.78	2	49.6	46	85	103	.0	73.6	<.2
JUL 09...	120	35	35.1	8.02	3.62	2	41.3	42	86	105	.0	59.6	.2
AUG 11...	150	42	42.6	10.5	4.17	3	75.3	51	109	120	6	108	.2
SEP 02...	170	58	46.7	11.9	4.77	3	81.5	51	108	131	.0	128	.2

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
NOV 08...	5.22	54.8	472	.67	12400	493	.40	.55	.13	.10	.823	.19	.20
DEC 03...	5.41	54.2	503	.69	4400	509	.44	.62	.21	.17	2.75	.62	.64
JAN 28...	4.34	56.4	519	.72	15700	528	.30	.48	--	E.03	--	--	.59
MAR 04...	1.95	44.4	372	.55	31500	403	.38	.60	.05	.04	--	--	.17
APR 22...	.83	--	--	--	--	--	.30	.58	--	<.04	2.08	.47	.48
MAY 13...	2.30	62.7	432	.64	--	467	.36	.59	.07	.05	1.69	.38	.39
JUN 10...	5.25	39.0	268	.40	20700	291	.28	.45	--	<.04	--	--	.45
JUL 09...	5.92	35.8	242	.36	--	266	.47	.65	.14	.11	.438	.10	.11
AUG 11...	2.82	50.5	360	.52	4790	384	.33	.62	--	<.04	--	--	<.06
SEP 02...	4.36	53.1	396	.56	25800	411	.36	.56	--	E.03	--	--	<.06
Date	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro- gen, water, fltrd, mg/L (00607)	Organic nitro- gen, water, unfltrd mg/L (00605)	Ortho- phos- phate, water, fltrd, mg/L (00660)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)
NOV 08...	.033	.010	.29	.45	.193	.063	.18	.076	.113	.59	.75	1.2	<.1
DEC 03...	.059	.018	.28	.46	.205	.067	.16	.086	.110	1.1	1.3	.9	<.1
JAN 28...	--	E.007	--	--	.110	.036	.20	.046	.087	.89	1.1	1.1	<.1
MAR 04...	--	<.008	.34	.56	.061	.020	.16	.032	.075	.55	.77	.9	<.1
APR 22...	.030	.009	--	--	.086	.028	.26	.042	.103	.78	1.1	1.5	<.1
MAY 13...	.039	.012	.31	.53	.147	.048	.10	.059	.098	.76	.98	.7	<.1
JUN 10...	--	<.008	--	--	.156	.051	.14	.067	.113	.73	.90	1.0	<.1
JUL 09...	.026	.008	.36	.54	.150	.049	.15	.065	.098	.58	.75	.8	<.1
AUG 11...	--	E.005	--	--	.190	.062	.26	.077	.121	--	--	1.2	<.1
SEP 02...	--	<.008	--	--	.236	.077	.27	.097	.135	--	--	1.5	<.1
Date	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheo- phytin a, phyto- plank- ton, ug/L (62360)	Chloro- phyll a phyto- plank- ton, fluoro, ug/L (70953)	Alum- inum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)
NOV 08...	1.2	3.9	7.1	4.7	--	--	2.0	--	--	68	--	--	--
DEC 03...	.9	2.9	7.3	15.1	3	<.30	2.0	92	<.06	85	E.02	<.8	.16
JAN 28...	1.1	3.1	8.6	15.1	3	.50	1.0	76	<.06	57	E.03	<.8	.15
MAR 04...	.9	3.7	5.4	13.3	--	--	.8	--	--	49	--	--	--
APR 22...	1.5	3.9	13.2	34.7	8	E.19	1.3	73	<.06	68	<.04	<.8	.19
MAY 13...	.7	4.0	4.5	4.9	--	--	1.4	--	--	56	--	--	--
JUN 10...	1.0	3.7	E4.6	E7.9	--	--	1.4	--	--	39	--	--	--
JUL 09...	.8	4.3	8.3	9.1	--	--	2.1	--	--	49	--	--	--
AUG 11...	1.2	3.7	9.8	18.5	4	E.18	4.1	71	<.06	50	<.04	<.8	.18
SEP 02...	1.5	3.7	10.1	21.0	--	--	4.4	--	--	56	--	--	--

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01145)	Strontium, water, fltrd, ug/L (01075)	Vanadium, water, fltrd, ug/L (01080)	Zinc, water, fltrd, ug/L (01085)	2,6-Diethyl-aniline water fltrd 0.7u GF
NOV 08...	--	<10	--	5.8	--	--	--	E.4	--	356	2.1	--	<.006
DEC 03...	1.8	12	E.07	6.6	2.6	1.9	2.75	.5	<.20	367	2.7	4	<.006
JAN 28...	3.8	E10	E.05	4.7	1.1	1.3	2.72	.5	<.20	305	1.0	16	<.006
MAR 04...	--	30	--	3.9	--	--	--	E.4	--	234	.7	--	<.006
APR 22...	2.1	<10	<.08	5.7	.9	1.4	2.58	E.5	<.20	346	2.1	2	<.006
MAY 13...	--	<10	--	5.8	--	--	--	.6	--	371	2.5	--	<.006
JUN 10...	--	<8	--	3.2	--	--	--	E.3	--	258	2.4	--	<.006
JUL 09...	--	E4	--	3.4	--	--	--	.5	--	265	2.9	--	<.006
AUG 11...	1.4	<8	<.08	4.1	.7	1.4	2.04	E.5	<.20	353	3.7	1	<.006
SEP 02...	--	<8	--	4.6	--	--	--	E.5	--	357	3.1	--	<.006

Date	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	Ben-flur-alin, water, fltrd 0.7u GF (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF (82680)	Carbo-furan, water, fltrd 0.7u GF (82674)	Chlor-pyrifos, water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF (82687)	Cyana-zine, water, fltrd, ug/L (04041)
NOV 08...	E.083	<.006	<.010	<.005	.394	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
DEC 03...	E.073	<.006	.010	<.005	.311	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
JAN 28...	E.034	<.006	<.007	<.005	.135	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
MAR 04...	E.021	<.006	<.004	<.005	.111	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
APR 22...	E.045	<.006	<.004	<.005	.329	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
MAY 13...	E.047	<.006	<.004	<.005	.392	<.050	<.010	<.002	E.004	<.020	<.005	<.006	<.018
JUN 10...	E.058	.007	.014	<.005	.708	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
JUL 09...	E.069	.006	.031	<.005	.525	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
AUG 11...	E.063	<.006	.010	<.005	.522	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018
SEP 02...	E.057	<.006	E.004	<.005	.438	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018

Date	DCPA, water, fltrd 0.7u GF (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF (82677)	EPTC, water, fltrd 0.7u GF (82668)	Ethal-flur-alin, water, fltrd 0.7u GF (82663)	Etho-prop, water, fltrd 0.7u GF (82672)	Desulf-inyl fipro-nil sulfide, amide, wat flt ug/L (62169)	Fipro-nil sulfide, water, fltrd, ug/L (62167)	Fipro-nil sulfone, water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos, water, fltrd, ug/L (04095)
NOV 08...	<.003	<.004	E.004	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
DEC 03...	<.003	<.004	.006	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
JAN 28...	<.003	<.004	.005	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
MAR 04...	<.003	<.004	E.004	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
APR 22...	<.003	<.004	<.005	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
MAY 13...	<.003	<.004	.007	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
JUN 10...	<.003	<.004	.007	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
JUL 09...	<.003	<.004	E.004	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
AUG 11...	<.003	<.004	<.005	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003
SEP 02...	<.003	<.004	<.005	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003

ARKANSAS RIVER BASIN

07263620 ARKANSAS RIVER AT DAVID D. TERRY LOCK AND DAM BELOW LITTLE ROCK--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Lindane water, fltrd, ug/L (39341)	Linuron water, fltrd, 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd, 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd, 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd, 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd, 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd, 0.7u GF ug/L (82683)	Phorate water, fltrd, 0.7u GF ug/L (82664)
NOV 08...	<.004	<.035	<.027	<.006	.122	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
DEC 03...	<.004	<.035	<.027	<.006	.106	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
JAN 28...	<.004	<.035	<.027	<.006	.060	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
MAR 04...	<.004	<.035	<.027	<.006	.021	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
APR 22...	<.004	<.035	<.027	<.006	.041	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
MAY 13...	<.004	<.035	<.027	<.006	.042	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
JUN 10...	<.004	<.035	<.027	<.006	.088	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
JUL 09...	<.004	<.035	<.027	<.006	.145	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
AUG 11...	<.004	<.035	<.027	<.006	.107	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011
SEP 02...	<.004	<.035	<.027	<.006	.088	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011

Date	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd, 0.7u GF ug/L (82676)	Pro-pa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd, 0.7u GF ug/L (82679)	Propar-gite, water, fltrd, 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water, fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, ug/L (82665)	Terbu-fos, water, fltrd, ug/L (82675)	Thio-bencarb, water, fltrd, ug/L (82681)	Tri-allate, water, fltrd, 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd, 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)
NOV 08...	.02	<.004	<.010	<.011	<.02	.061	.04	<.034	<.02	<.005	<.002	<.009	--
DEC 03...	E.01	<.004	<.010	<.011	<.02	.020	.03	<.034	<.02	<.005	<.002	<.009	1.05
JAN 28...	E.01	<.004	<.010	<.011	<.02	.062	E.02	<.034	<.02	<.005	<.002	<.009	.93
MAR 04...	E.01	<.004	<.010	<.011	<.02	.080	E.02	<.034	<.02	<.005	<.002	<.009	--
APR 22...	E.01	<.004	<.010	<.011	<.02	.038	E.01	<.034	<.02	<.005	<.002	<.009	1.31
MAY 13...	E.01	<.004	<.010	<.011	<.02	.035	.05	<.034	<.02	<.005	<.002	<.009	--
JUN 10...	E.01	<.004	<.010	<.011	<.02	.017	.02	<.034	<.02	<.005	<.002	<.009	--
JUL 09...	.02	<.004	<.010	<.011	<.02	.021	.02	<.034	<.02	<.005	<.002	<.009	--
AUG 11...	E.01	<.004	<.010	<.011	<.02	.018	.02	<.034	<.02	<.005	<.002	<.009	1.10
SEP 02...	E.01	<.004	<.010	<.011	<.02	.017	<.02	<.034	<.02	<.005	<.002	<.009	--

Date	Suspn-d. sedi-ment, sieve diametr <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV 08...	94	5	126
DEC 03...	100	3	26
JAN 28...	100	5	148
MAR 04...	96	13	1020
APR 22...	100	15	1080
MAY 13...	97	16	--
JUN 10...	100	22	1570
JUL 09...	100	11	--
AUG 11...	98	7	87
SEP 02...	93	7	440

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

ARKANSAS RIVER BASIN

343

07264000 BAYOU METO NEAR LONOKE

LOCATION.--Lat 34°44'13", long 91°54'58", in SW 1/4 sec.6, T.1 N., R.8 W., Lonoke County, Hydrologic Unit 08020402, near left bank on downstream side of bridge on State Highway 31, 3.0 mi upstream from Brushy Slough, 3.5 mi south of Lonoke, and at mile 106.4.

DRAINAGE AREA.--207 mi².

PERIOD OF RECORD.--October 1954 to current year. Gage-height records and results of discharge measurements since June 1948 at site 4.8 mi upstream are contained in reports of U.S. Army Corps of Engineers, Vicksburg District; published as "Big Bayou Meto near Lonoke".

REVISED RECORDS.--WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 199.11 ft above NGVD of 1929. Prior to Feb. 10, 1955, water-stage recorder at site 4.8 mi upstream at datum 6.97 ft higher. Feb. 10 to June 29, 1955 nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Part of low flow is drainage from areas irrigated with ground water and from large minnow farm supplied with ground water.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	105	43	1080	64	1170	169	74	14	142	231	18
2	2.0	110	41	1020	63	1090	158	58	12	83	206	19
3	3.7	103	43	1030	58	1010	148	49	12	42	134	18
4	4.0	117	101	1080	47	963	132	47	9.9	29	79	23
5	2.9	172	222	1110	38	897	110	65	10	30	52	26
6	2.3	229	363	1090	47	787	93	79	7.5	27	45	20
7	2.2	253	497	1010	55	661	82	154	6.3	16	50	16
8	3.1	244	572	876	58	528	82	218	4.4	6.8	110	14
9	4.5	217	573	712	64	403	84	236	3.3	2.3	178	11
10	8.5	175	491	540	69	316	100	252	7.2	1.9	136	11
11	16	128	350	390	70	264	95	215	10	1.1	82	10
12	56	87	231	293	74	230	79	153	15	0.28	53	13
13	105	51	216	237	78	236	75	111	33	4.0	33	26
14	93	31	305	199	267	243	70	94	83	5.9	31	139
15	56	24	415	169	525	257	61	84	98	3.9	37	207
16	29	17	524	142	710	288	45	169	73	3.5	31	160
17	17	13	581	118	894	294	32	532	48	3.3	27	97
18	13	9.0	572	101	1070	271	24	675	137	0.76	24	50
19	12	5.2	601	83	1210	245	17	716	266	22	16	31
20	14	0.12	604	76	1270	289	18	763	356	91	15	17
21	62	1.4	642	75	1270	411	18	817	372	145	14	10
22	126	6.5	695	68	1360	493	10	839	280	121	11	8.5
23	120	8.1	772	60	1420	485	14	795	154	86	17	7.4
24	82	13	991	54	1360	408	45	662	74	43	19	6.1
25	48	22	1100	50	1320	320	109	458	34	22	16	6.9
26	32	27	1120	42	1310	271	238	268	56	18	9.5	12
27	21	33	1150	39	1270	249	293	175	124	14	6.1	12
28	16	44	1200	40	1230	251	253	125	219	7.0	4.8	11
29	13	43	1210	68	---	247	169	83	238	2.4	12	9.1
30	18	41	1170	80	---	227	107	53	193	4.2	15	7.0
31	53	---	1130	68	---	193	---	33	---	76	19	---
TOTAL	1040.3	2329.32	18525	12000	17271	13997	2930	9052	2949.6	1054.34	1713.4	1016.0
MEAN	33.6	77.6	598	387	617	452	97.7	292	98.3	34.0	55.3	33.9
MAX	126	253	1210	1110	1420	1170	293	839	372	145	231	207
MIN	2.0	0.12	41	39	38	193	10	33	3.3	0.28	4.8	6.1
AC-FT	2060	4620	36740	23800	34260	27760	5810	17950	5850	2090	3400	2020

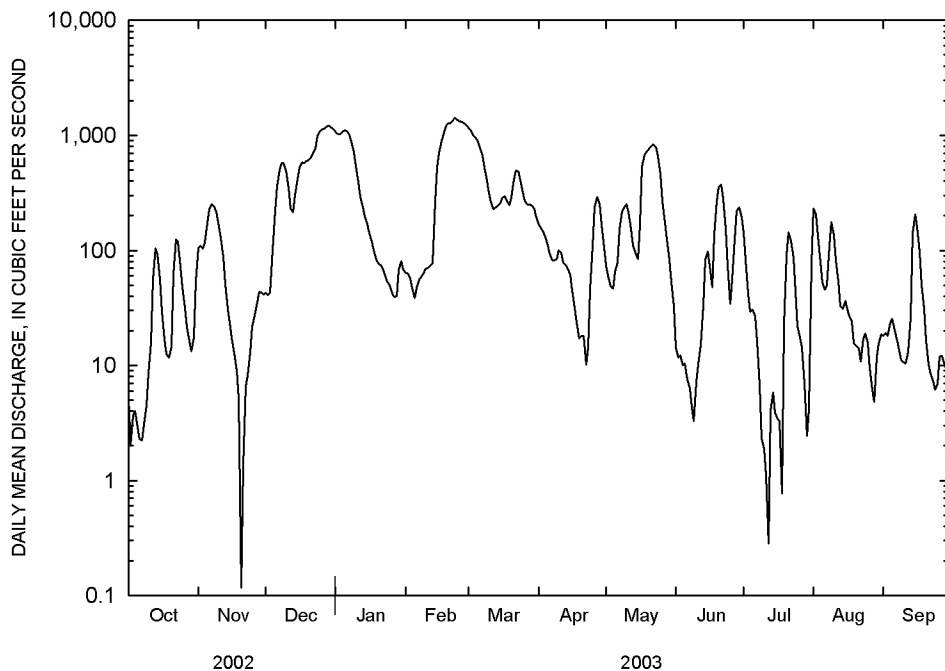
ARKANSAS RIVER BASIN

07264000 BAYOU METO NEAR LONOKE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2003, BY WATER YEAR (WY)

MEAN	60.4	232	474	413	516	562	490	414	150	54.2	46.0	63.4
MAX	775	1394	1451	1515	1680	1283	1517	1698	1191	482	402	391
(WY)	1985	1958	1974	1991	1956	1997	1973	1968	1974	1960	1966	1978
MIN	0.35	0.000	2.87	21.0	65.2	166	64.5	14.7	2.28	1.28	1.09	1.84
(WY)	2000	2000	1955	2000	1972	1972	1960	2001	1988	1980	2000	1999

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1955 - 2003	
ANNUAL TOTAL	103043.58		82956.37			
ANNUAL MEAN	282		227		288	
HIGHEST ANNUAL MEAN					550 1973	
LOWEST ANNUAL MEAN					95.2 1963	
HIGHEST DAILY MEAN	1860	Mar 25	1420	Feb 23	5570	Dec 29 1987
LOWEST DAILY MEAN	0.03	Sep 13	0.12	Nov 20	0.00	Oct 10 1954
ANNUAL SEVEN-DAY MINIMUM	0.51	Jul 8	2.8	Jul 9	0.00	Oct 18 1954
MAXIMUM PEAK FLOW			1420 Feb 23		5750 Dec 29 1987	
MAXIMUM PEAK STAGE			20.08 Feb 23		27.11 Dec 29 1987	
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	204400		164500		209000	
10 PERCENT EXCEEDS	944		790		865	
50 PERCENT EXCEEDS	59		72		82	
90 PERCENT EXCEEDS	1.5		8.8		5.8	



RED RIVER BASIN

345

07337000 RED RIVER AT INDEX

LOCATION.--Lat 33°33'07", long 94°02'28", in NW1/4SW1/4 sec.7, T.14 S., R.28 W., Miller County, Hydrologic Unit 11140106, near right bank on downstream side of southbound bridge on U.S. Highway 71 at Index, 2.2 mi south of Ogden, 20.6 mi upstream from Little River, and at mile 485.3.

DRAINAGE AREA.--48,030 mi², of which 5,936 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1936 to current year. Gage-height records collected at same site since 1917 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft above NGVD of 1929. Prior to Dec. 12, 1939, nonrecording gage, and Dec. 12, 1939, to July 19, 1979, water-stage recorder, at site 500 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Some regulation since Oct. 31, 1943, by Lake Texoma (Texas), 241 mi upstream, capacity, 5,392,900 acre-ft, since Sept. 28, 1967, by Pat Mayse Lake (Texas), capacity, 352,700 acre-ft, and since Jan. 18, 1974, by Hugo Lake (Oklahoma) capacity, 966,700 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2260	3710	1920	14300	5510	16600	6270	2010	3740	12400	4050	4030
2	2190	3210	2640	18500	5540	20700	4550	2350	3210	10500	2910	5000
3	2290	3360	3400	27200	6110	20600	3540	2730	2990	7520	2540	5040
4	2210	3960	3120	26100	6360	17000	3060	2010	2940	5170	3720	5990
5	1860	4550	2840	20200	4970	14200	2800	1860	3190	4350	4180	6830
6	1680	4560	2740	18500	4060	12200	2720	2100	3120	4870	5060	6660
7	2800	4600	2680	19100	3360	10600	2770	3510	3830	4120	5530	5450
8	4340	4530	3000	18600	4470	9900	2750	4180	5220	4360	4850	4690
9	4650	4150	3440	17800	6260	9400	2680	3720	5180	5770	4660	4170
10	4690	3850	5670	16300	5830	10300	2820	3010	4760	5970	5720	3810
11	4000	3680	5920	13600	4850	9300	3140	2460	4110	5510	6000	3550
12	3490	3360	4920	12100	4630	7680	3050	4630	3160	5320	6220	3280
13	3980	3120	4790	11300	4770	6620	2690	5390	2560	5240	5980	3260
14	3460	3010	6940	10600	3970	6070	2840	4700	2200	4800	5170	3670
15	2830	3850	8890	10200	4570	6020	3700	4200	2020	5270	3580	3750
16	2490	4290	8700	9950	5120	7240	4040	4000	2460	5120	3260	3240
17	2360	3330	8810	9810	4750	8320	3350	2970	4600	4830	3730	3280
18	2220	2780	7930	9510	4050	9570	2600	2800	6060	4220	3210	3260
19	2770	2980	6380	8050	3590	9850	2250	3270	6740	4860	2850	2680
20	3350	3110	4770	6770	3410	9750	2120	4000	5780	5050	2760	2140
21	4680	3010	3890	7990	3390	10700	2150	4800	5130	4380	3070	1950
22	7630	2570	4740	9010	5800	11400	2210	4410	5210	4600	2460	2020
23	15400	2200	5990	8030	8510	12500	2220	4460	4310	4860	2050	2050
24	14000	2030	8370	6420	9890	12200	2330	5230	4600	4960	3580	2740
25	9960	2600	10400	5500	10100	11300	2320	5140	4510	4760	3930	3080
26	6990	3010	10500	5990	10500	11400	2150	4790	4740	4010	3750	2530
27	5230	3040	16200	8430	10900	12600	1990	4780	3750	3440	4030	1880
28	4160	2910	19600	9130	11200	12700	1950	4730	2850	2920	4280	2010
29	3900	2480	16700	7640	---	9840	2030	5140	4210	2640	3080	2790
30	4590	2070	14100	7090	---	7750	2020	5980	8890	2710	2570	3060
31	4510	---	13900	7050	---	7020	---	4840	---	3690	3420	---
TOTAL	140970	99910	223890	380770	166470	341330	85110	120200	126070	158220	122200	107890
MEAN	4547	3330	7222	12280	5945	11010	2837	3877	4202	5104	3942	3596
MAX	15400	4600	19600	27200	11200	20700	6270	5980	8890	12400	6220	6830
MIN	1680	2030	1920	5500	3360	6020	1950	1860	2020	2640	2050	1880
AC-FT	279600	198200	444100	755300	330200	677000	168800	238400	250100	313800	242400	214000

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

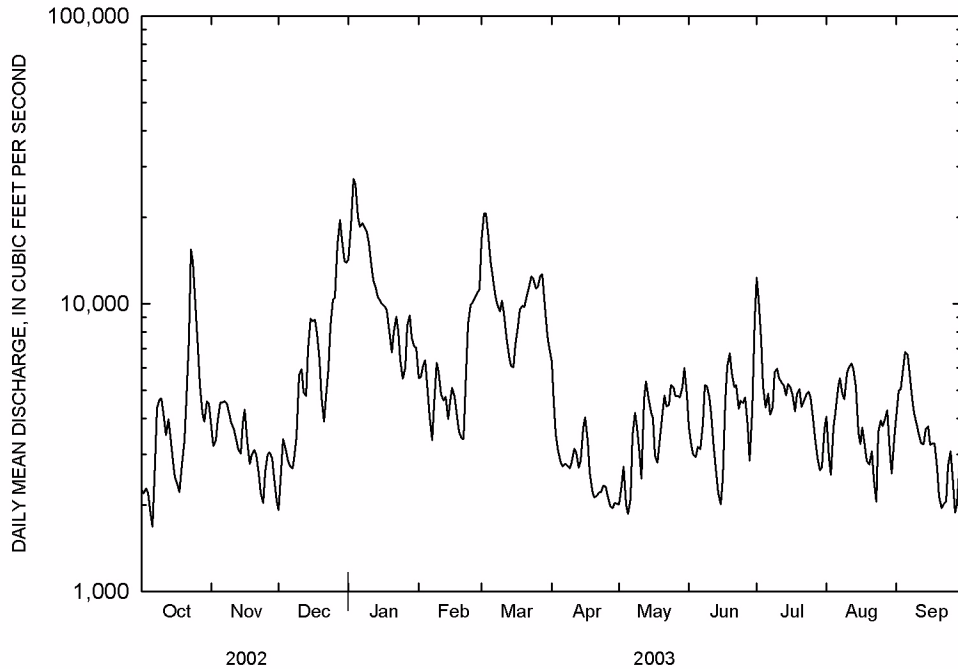
MEAN	8000	10640	12230	11350	14200	17530	17620	23220	21410	9633	5758	5855
MAX	41690	47140	47910	60160	38960	67730	61460	121000	94400	33990	39230	30340
(WY)	1946	1975	1992	1998	1946	1945	1990	1990	1957	1989	1950	1950
MIN	716	642	1206	1360	2127	2233	2096	3877	3098	1162	1025	909
(WY)	1957	1957	1957	1964	1964	1967	1956	2003	1988	1944	1944	1944

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	4798260		2073030			
ANNUAL MEAN	13150		5680		¹ 13100	
HIGHEST ANNUAL MEAN					30420 1990	
LOWEST ANNUAL MEAN					4383 1964	
HIGHEST DAILY MEAN	90700	Mar 23	27200	Jan 3	268000	May 10 1990
LOWEST DAILY MEAN	1680	Oct 6	1680	Oct 6	384	Nov 28 1956
ANNUAL SEVEN-DAY MINIMUM	2150	Sep 30	2070	Apr 25	397	Oct 19 1956
MAXIMUM PEAK FLOW			28500	Jan 3	² 270000	May 10 1990
MAXIMUM PEAK STAGE			8.35	Jan 3	³ 32.30	May 10 1990
INSTANTANEOUS LOW FLOW			1620	Oct 6	378	Nov 28 1956
ANNUAL RUNOFF (AC-FT)	9517000		4112000		9494000	
10 PERCENT EXCEEDS	38500		10800		35000	
50 PERCENT EXCEEDS	6080		4460		5940	
90 PERCENT EXCEEDS	3010		2340		2300	

¹Prior to regulation, water years 1937-43, 11,970 ft³/s

²Maximum discharge for period of record 297,000 ft³/s February 23, 1938

³Maximum gage height for period of record 34.25 ft February 23, 1938, from graph based on gage readings



RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-1956, April 1980 to current year.

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	32.5	21.4	25.6	16.0	14.3	15.1	14.5	4.2	7.7	9.9	9.0	9.5
2	32.6	22.6	26.8	14.3	13.2	13.7	13.3	6.3	9.9	9.7	9.0	9.3
3	26.4	24.1	24.8	13.2	12.7	12.9	10.7	9.3	10.0	9.0	8.4	8.8
4	32.5	22.7	26.6	13.0	12.2	12.6	9.3	7.5	8.3	8.8	8.2	8.5
5	26.8	19.2	22.8	12.5	12.0	12.3	7.5	6.6	7.0	9.1	8.4	8.7
6	34.2	19.6	25.3	12.8	11.3	12.0	9.4	4.9	6.3	9.1	8.4	8.7
7	23.9	21.1	22.8	13.2	11.4	12.2	11.1	3.8	6.9	8.8	8.1	8.5
8	23.2	21.0	21.8	14.1	12.2	13.0	8.1	7.6	7.9	9.0	8.2	8.6
9	21.0	19.4	20.1	16.3	13.7	14.9	8.3	7.7	8.1	9.8	8.8	9.2
10	19.7	19.2	19.4	18.0	16.1	17.0	8.3	7.8	8.1	9.6	9.0	9.3
11	20.3	19.5	19.8	17.4	16.5	16.9	8.2	7.7	8.0	9.0	8.1	8.5
12	21.1	19.2	20.1	16.5	15.3	15.8	8.4	8.1	8.2	8.1	7.0	7.5
13	20.9	19.0	20.0	15.5	14.0	14.8	9.1	8.3	8.7	7.1	6.8	6.9
14	19.0	17.4	17.9	15.1	13.3	14.5	9.3	8.1	8.8	7.0	6.7	6.8
15	18.3	15.1	16.8	14.7	13.8	14.3	9.6	8.2	8.9	6.8	6.4	6.6
16	20.3	13.1	15.7	13.8	12.7	13.1	10.7	9.2	9.9	6.6	6.0	6.4
17	22.3	12.8	16.6	13.3	11.9	12.6	12.6	10.6	11.4	6.0	5.3	5.7
18	23.8	14.3	18.1	14.6	10.6	13.0	14.1	12.6	13.3	5.8	4.8	5.3
19	18.2	16.0	17.5	14.1	11.9	12.9	14.0	13.3	13.8	6.3	4.6	5.5
20	18.1	17.8	18.0	13.4	12.0	12.8	13.3	11.9	12.4	7.9	5.8	6.5
21	17.9	17.2	17.6	13.6	11.8	12.8	12.1	11.0	11.6	9.2	7.8	8.4
22	17.8	17.4	17.6	16.0	9.5	11.7	11.8	10.6	11.1	8.8	7.6	8.1
23	18.0	17.6	17.8	20.2	7.0	11.8	10.6	8.6	9.5	7.6	6.5	7.0
24	17.8	17.4	17.6	20.8	8.9	13.4	8.6	7.0	8.0	6.5	5.3	5.8
25	17.8	17.2	17.5	13.2	10.1	11.6	7.0	6.1	6.6	5.8	5.4	5.6
26	18.1	17.5	17.8	12.1	10.8	11.4	6.4	5.8	6.1	6.4	5.2	5.7
27	---	---	---	11.2	10.1	10.5	6.6	5.7	6.2	6.0	5.0	5.5
28	---	---	---	10.8	8.1	9.7	6.5	5.7	6.1	6.6	5.1	5.6
29	17.1	16.2	16.6	13.6	6.9	10.2	7.4	6.1	6.6	7.9	6.6	7.2
30	17.2	16.0	16.6	18.7	6.7	10.3	9.5	7.4	8.6	8.0	7.3	7.7
31	16.7	16.0	16.3	---	---	---	9.7	9.5	9.6	8.6	7.4	7.9
MONTH	---	---	---	20.8	6.7	13.0	14.5	3.8	8.8	9.9	4.6	7.4
	FEBRUARY			MARCH			APRIL			MAY		
1	9.4	7.5	8.5	6.2	5.4	5.7	16.4	14.0	15.3	27.5	21.6	24.2
2	10.5	8.8	9.5	8.0	5.6	6.9	18.4	15.5	16.9	26.7	21.6	24.4
3	12.0	10.5	11.3	8.0	7.6	7.8	18.4	17.1	17.8	25.6	22.4	23.8
4	11.4	10.2	10.9	8.2	7.5	7.9	19.5	17.5	18.5	24.2	22.0	23.2
5	10.9	9.1	9.8	8.6	8.1	8.3	19.0	15.9	17.9	25.3	22.6	23.7
6	9.1	8.0	8.6	9.2	7.7	8.3	18.3	15.2	17.1	27.7	22.2	24.6
7	8.0	7.1	7.5	10.0	8.2	9.0	18.1	14.5	16.2	26.9	24.2	25.2
8	7.2	6.6	6.9	10.9	9.3	10.1	17.2	12.5	14.9	27.5	25.4	26.4
9	7.0	6.4	6.6	12.5	10.4	11.4	14.6	11.6	12.8	28.4	26.1	27.1
10	7.8	6.2	6.9	12.0	10.8	11.5	18.2	11.5	15.4	27.5	25.9	26.7
11	8.8	6.7	7.7	12.4	10.6	11.4	18.5	15.7	17.1	27.5	21.3	24.2
12	9.8	8.1	8.9	13.8	11.8	12.8	19.9	16.6	18.3	27.2	24.3	26.0
13	9.8	9.5	9.6	15.1	13.3	14.1	24.6	16.2	20.0	26.3	24.5	25.1
14	11.8	9.6	10.7	16.5	14.5	15.5	25.5	18.2	21.4	24.5	23.5	24.1
15	12.7	11.8	12.3	16.6	15.2	16.0	22.6	20.7	21.7	24.9	23.0	23.7
16	12.4	9.5	10.9	17.3	15.9	16.6	22.2	20.3	21.2	25.1	23.8	24.4
17	10.2	8.6	9.4	17.8	15.8	16.8	22.4	19.7	20.9	24.5	22.0	22.9
18	11.1	9.1	10	17.3	16.0	16.5	25.5	18.4	22.3	26.7	21.2	24.2
19	11.5	10.8	11.1	16.6	15.2	15.9	21.9	18.9	20.0	27.5	24.3	25.8
20	11.0	9.9	10.3	16.1	14.6	15.3	21.9	18.0	20.2	27.0	25.2	26.2
21	9.9	9.5	9.7	14.6	13.9	14.1	27.5	15.9	20.7	25.2	23.9	24.5
22	10.9	9.6	10.1	14.8	13.4	14.1	24.0	16.2	20.3	25.7	23.0	24.2
23	10.9	9.6	10.3	16.0	14.0	15.0	19.9	16.0	17.7	26.3	23.9	25.1
24	10.3	8.6	9.5	17.2	15.2	16.1	23.9	17.1	20.5	25.9	24.5	25.3
25	---	---	---	17.6	16.3	16.9	24.7	17.7	20.2	26.1	24.8	25.4
26	6.5	5.6	6.0	17.8	16.6	17.2	24.4	16.5	19.3	25.7	24.1	25.0
27	5.6	5.3	5.4	18.0	16.5	17.2	24.9	15.4	20.7	26.2	23.9	25.0
28	5.6	5.2	5.4	17.2	15.6	16.5	31.5	18.5	24.2	26.7	24.1	25.4
29	---	---	---	15.7	14.7	15.2	32.7	20.8	25.8	27.5	25.0	26.2
30	---	---	---	15.3	13.6	14.5	26.4	21.0	23.8	28.3	25.9	27.2
31	---	---	---	15.5	13.3	14.5	---	---	---	29.3	26.7	27.9
MONTH	---	---	---	18.0	5.4	13.2	32.7	11.5	19.3	29.3	21.2	25.1

RED RIVER BASIN

07337000 RED RIVER AT INDEX--CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	28.4	26.4	27.5	29.5	27.9	28.7	32.4	29.8	31.0	29.0	28.0	28.5
2	27.8	26.0	26.8	30.4	28.1	29.1	31.5	28.1	30.1	28.1	26.8	27.3
3	28.4	25.8	27.2	31.8	29.1	30.3	28.7	26.1	27.5	28.3	26.2	27.2
4	27.4	24.1	26.1	32.5	30.4	31.4	29.0	27.5	28.2	28.7	27.1	27.9
5	26.1	24.0	25.0	31.4	30.0	30.6	29.6	28.2	28.8	28.3	26.5	27.4
6	24.5	23.1	23.9	30.7	29.5	30.0	30.9	28.5	29.6	27.6	25.9	26.9
7	26.9	23.7	25.1	31.4	28.9	30.1	31.3	29.2	30.3	27.4	25.5	26.5
8	26.1	24.7	25.4	32.3	29.9	30.9	31.6	29.8	30.7	27.7	26.1	26.9
9	26.8	24.2	25.4	32.0	30.1	31.1	31.1	29.9	30.5	28.3	26.2	27.2
10	27.6	25.8	26.7	31.4	29.5	30.4	31.3	29.3	30.4	28.6	26.8	27.6
11	28.6	26.0	27.2	31.9	29.3	30.5	31.0	29.0	29.8	28.1	27.1	27.6
12	28.2	24.5	26.7	31.6	29.9	30.8	29.5	28.0	28.8	27.2	25.5	26.3
13	25.7	22.9	24.1	31.2	30.0	30.6	29.0	27.8	28.4	26.7	25.0	25.7
14	26.9	22.5	24.5	31.8	29.3	30.5	29.1	27.5	28.3	25.9	24.6	25.2
15	28.8	22.2	25.2	32.0	29.8	30.9	30.7	27.9	29.1	25.9	23.9	24.8
16	26.4	22.1	23.9	32.6	30.2	31.4	32.0	29.0	30.4	25.9	23.8	24.7
17	26.3	25.2	25.7	33.3	30.9	32.1	32.8	30.1	31.3	26.5	24.0	25.1
18	26.9	25.3	26.0	34.0	31.5	32.6	33.2	30.7	31.8	27.1	24.3	25.5
19	27.8	25.7	26.6	33.0	30.8	31.7	32.7	30.3	31.8	26.2	22.4	24.9
20	29.1	26.8	27.8	31.7	30.5	31.1	33.1	29.3	31.6	25.9	20.7	22.8
21	29.5	27.2	28.3	31.3	29.8	30.6	33.0	30.6	31.8	23.0	20.8	21.8
22	30.2	27.8	29.0	30.8	29.3	29.8	34.3	28.0	30.8	29.3	20.8	23.7
23	31.6	28.8	30.1	30.6	28.4	29.5	36.7	26.8	31.2	31.2	21.1	25.4
24	32.0	29.9	30.9	30.6	28.5	29.6	32.6	30.5	31.5	26.8	23.3	25.3
25	32.5	30.4	31.4	30.4	28.3	29.3	32.6	30.5	31.4	27.0	24.4	25.6
26	31.8	29.5	30.5	30.2	28.6	29.4	32.2	30.3	31.1	29.6	23.1	25.5
27	30.0	28.2	29.1	31.9	29.1	30.3	31.8	29.3	30.4	30.5	21.0	25.0
28	29.6	25.0	27.4	31.8	29.5	30.5	31.2	29.3	30.1	31.9	17.9	22.8
29	30.8	28.0	29.3	31.1	28.6	30.1	30.9	28.3	29.4	23.5	18.5	21.7
30	30.3	28.8	29.6	31.2	26.9	29.6	33.7	26.2	29.3	23.3	21.5	22.3
31	---	---	---	32.0	29.0	30.3	29.9	28.4	29.1	---	---	---
MONTH	32.5	22.1	27.1	34.0	26.9	30.4	36.7	26.1	30.1	31.9	17.9	25.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Depth at sample location, feet (81903)	Sample loc-ation, cross section ft from rt bank (72103)	Sam-pling depth, feet (00003)	Stream width, feet (00004)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unfltrd, uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	
OCT	17...	1445	80513	81213	--	--	--	760	8.8	93	8.2	960	17.9	
DEC	04...	1330	80513	81213	--	--	--	773	9.3	79	8.4	1070	8.4	
FEB	05...	1000	80513	80513	--	690.0	1.00	380	779	--	--	--	9.6	
	05...	1005	80513	80513	--	728.0	1.00	380	779	--	--	--	9.6	
	05...	1008	80513	80513	--	766.0	1.00	380	779	--	--	--	9.6	
	05...	1012	80513	80513	--	804.0	1.00	380	779	--	--	--	9.6	
	05...	1014	80513	80513	--	842.0	1.00	380	779	--	--	--	9.6	
	05...	1016	80513	80513	--	880.0	1.00	380	779	--	--	--	9.6	
	05...	1018	80513	80513	--	918.0	1.00	380	779	--	--	--	9.6	
	05...	1020	80513	80513	--	956.0	1.00	380	779	--	--	--	9.6	
	05...	1022	80513	80513	--	994.0	1.00	380	779	--	--	--	9.6	
	05...	1024	80513	80513	--	1032	1.00	380	779	--	--	--	9.6	
	05...	1030	80513	81213	--	--	--	779	10.7	93	8.5	1370	9.6	
APR	16...	0800	80513	81213	--	--	--	754	7.2	81	7.9	782	20.5	
JUN	25...	1408	80513	80513	3.00	689.0	1.00	380	770	--	--	--	32.2	
	25...	1410	80513	80513	3.00	727.0	1.00	380	770	--	--	--	32.0	
	25...	1414	80513	80513	3.00	765.0	1.00	380	770	--	--	--	31.9	
	25...	1416	80513	80513	5.00	803.0	1.00	380	770	--	--	--	31.9	
	25...	1418	80513	80513	17.0	841.0	1.00	380	770	--	--	--	31.9	
	25...	1420	80513	80513	15.0	879.0	1.00	380	770	--	--	--	31.9	
	25...	1422	80513	80513	12.0	917.0	1.00	380	770	--	--	--	31.9	
	25...	1424	80513	80513	12.0	955.0	1.00	380	770	--	--	--	31.9	
	25...	1426	80513	80513	10.0	993.0	1.00	380	770	--	--	--	31.9	
	25...	1429	80513	80513	8.00	1031	1.00	380	770	--	--	--	31.9	
	25...	1430	80513	81213	--	--	--	770	7.3	100	8.4	1110	31.9	
AUG	27...	1442	80513	80513	2.30	709.0	1.00	380	760	8.1	111	8.2	1530	31.7
	27...	1445	80513	80513	1.40	746.0	1.00	380	760	8.0	108	8.2	1540	31.1
	27...	1447	80513	80513	2.00	783.0	1.00	380	760	7.9	108	8.2	1530	31.6
	27...	1449	80513	80513	6.00	820.0	1.00	380	760	7.7	105	8.3	1530	31.2
	27...	1451	80513	80513	10.0	857.0	1.00	380	760	7.3	100	8.3	1530	31.2
	27...	1454	80513	80513	12.0	894.0	1.00	380	760	7.8	106	8.3	1530	31.2
	27...	1457	80513	80513	14.0	937.0	1.00	380	760	8.0	108	8.3	1530	31.2
	27...	1500	80513	80513	15.0	968.0	1.00	380	760	8.0	110	8.4	1520	31.2
	27...	1503	80513	80513	15.0	1005	1.00	380	760	8.0	109	8.4	1530	31.2
	27...	1506	80513	80513	8.00	1042	1.00	380	760	7.8	106	8.4	1520	31.2
	27...	1545	80513	81213	--	--	--	760	8.0	109	8.3	1530	31.2	

RED RIVER BASIN

349

07337000 RED RIVER AT INDEX--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	
OCT	17...	1445	2390	230	62.0	19.0	4.70	3	100	48	130	120	554	1.2
DEC	04...	1330	3060	270	74.0	21.0	5.40	3	110	46	130	140	624	1.2
FEB	05...	1030	5160	290	76.0	24.0	5.00	4	150	53	220	180	783	.80
APR	16...	0800	4130	220	61.0	16.0	4.20	2	69.0	40	86.0	92.0	463	.90
JUN	25...	1430	4470	250	66.0	21.0	5.00	3	120	50	180	150	662	1.1
AUG	27...	1545	4040	320	82.0	28.0	5.30	4	180	55	270	210	904	.90

Date	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + Nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	
OCT	17...	.04	.03	--	--	<.02	--	<.010	1.2	--	<.01	<.02	.10	--
DEC	04...	.06	.05	--	--	<.02	--	<.010	1.1	--	<.01	<.02	.11	--
FEB	05...	.09	.07	1.20	.27	.28	.033	.010	.73	.031	.01	<.02	.07	1.1
APR	16...	.09	.07	--	--	<.02	--	<.010	.83	--	<.01	<.02	.09	--
JUN	25...	.04	.03	--	--	<.02	--	<.010	1.1	--	<.01	<.02	.11	--
AUG	27...	--	<.01	--	--	<.02	--	<.010	--	--	<.01	<.02	.13	--

Date	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)	
OCT	17...	43	E25	80	87	129	832
DEC	04...	97	E70	140	97	107	884
FEB	05...	E2	E14	E23	97	157	2190
APR	16...	E29	42	E19	93	137	1530
JUN	25...	E31	E22	150	96	205	2470
AUG	27...	E30	E35	96	54	242	2640

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RED RIVER BASIN

07340000 LITTLE RIVER NEAR HORATIO

LOCATION.--Lat 33°55'10", long 94°23'15", in NE1/4 sec.10, T.10 S., R.32 W., Sevier County, Hydrologic Unit 11140109, on left bank, downstream side of bridge on State Highway 41, 0.9 mi downstream from Rolling Fork, 2.0 mi southwest of Horatio, 28.5 mi upstream from Cossatot River, and at mile 72.0.

DRAINAGE AREA.--2,662 mi².

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 858: 1932, 1935-36. WSP 1211: 1931, drainage area. WSP 1561: 1932. WDR Ark. 1978: drainage area.

GAGE.--Water-stage recorder. Datum of gage is 272.89 ft above NGVD of 1929. Prior to Feb. 5, 1935, nonrecording gage, and Feb. 5, 1934, to Sept. 13, 1961, water-stage recorder, at site 50 ft upstream at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Some regulation since Oct. 3, 1968, by Broken Bow Lake (Oklahoma), 31.4 mi upstream, capacity, 1,368,000 acre-ft, and since June 1, 1969, by Pine Creek Lake (Oklahoma), 73.3 mi upstream, capacity, 465,800 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1915, reached a stage of 38.0 ft, discharge, 124,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e402	644	314	11800	606	8030	1710	462	521	640	1490	538
2	e398	633	310	9570	464	6860	917	937	370	736	1710	3600
3	e392	1180	306	8660	456	5970	1140	685	419	849	809	2200
4	e385	2230	807	8600	1720	6650	1130	509	378	1240	549	953
5	e391	1650	2490	6960	2010	6290	978	496	490	817	e855	729
6	e376	2030	2090	5790	2510	6460	783	537	893	681	e1110	574
7	e329	2600	2270	7100	2320	5570	668	609	1940	622	1360	515
8	e319	2550	1500	6400	2150	3880	793	861	1130	901	798	468
9	e316	1970	1180	3720	827	2080	2960	755	719	643	715	439
10	e648	1570	1410	3690	629	1820	2890	1090	704	582	539	423
11	e1160	1450	1310	4100	1730	2820	2230	667	706	539	476	422
12	e818	1360	974	2860	1570	3860	1280	479	802	552	731	543
13	e2480	1220	1700	2790	1400	2880	921	447	764	525	788	1050
14	e2320	779	3190	3300	2640	1440	799	560	862	495	609	1250
15	e3000	549	2890	1960	4160	1180	755	2530	866	556	650	1340
16	e1040	474	2210	1120	3600	1010	742	2970	782	746	1750	899
17	e690	468	2080	1400	2660	909	640	3170	921	1190	2050	638
18	e571	452	3640	1550	3280	902	485	2630	1740	1200	2150	684
19	e467	427	4280	1140	3230	4480	444	2100	3800	1530	2190	732
20	e2140	517	4200	675	3890	6660	434	2310	2920	1140	2260	746
21	e2270	441	2310	575	4670	6420	420	2320	2660	1120	2490	702
22	e1660	365	1240	554	7040	6340	407	2920	2480	2390	2580	661
23	e1190	353	1420	1710	7350	5250	405	1730	2240	1320	2660	640
24	e798	342	6620	3590	5440	4570	482	1680	2340	857	1900	630
25	e728	337	7050	5520	6170	4060	575	1020	2330	903	1810	621
26	e675	331	4930	2410	7350	5160	601	621	1320	1610	2100	579
27	e599	339	5380	1330	7750	4590	582	643	1790	1510	2490	496
28	551	344	6040	2820	7990	2900	556	641	1430	1030	2260	496
29	650	332	5190	1430	---	2570	509	855	1010	836	1970	477
30	892	323	4760	1050	---	e1810	472	788	650	1910	778	475
31	723	---	9250	1090	---	1010	---	958	---	2150	497	---
TOTAL	29378	28260	93341	115264	95612	124431	27708	38980	39977	31820	45124	24520
MEAN	948	942	3011	3718	3415	4014	924	1257	1333	1026	1456	817
MAX	3000	2600	9250	11800	7990	8030	2960	3170	3800	2390	2660	3600
MIN	316	323	306	554	456	902	405	447	370	495	476	422
AC-FT	58270	56050	185100	228600	189600	246800	54960	77320	79290	63110	89500	48640

07340000 LITTLE RIVER NEAR HORATIO--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2003, BY WATER YEAR (WY)

MEAN	2071	4310	6431	4867	5834	6971	5601	5903	4124	1704	1158	1431
MAX	9360	15960	17120	15890	12390	15020	16250	16790	14180	8397	3542	10430
(WY)	1985	1975	1972	1998	1989	1997	1973	1990	1990	1983	1992	1974
MIN	242	232	244	493	669	665	924	530	346	281	411	303
(WY)	2000	2000	1990	1981	1996	1996	2003	1988	1988	1972	1977	1977

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1969 - 2003	
ANNUAL TOTAL	1715881		694415			
ANNUAL MEAN	4701		1903		14192	
HIGHEST ANNUAL MEAN					7523 1973	
LOWEST ANNUAL MEAN					1547 1976	
HIGHEST DAILY MEAN	25800	Mar 21	11800	Jan 1	57700	Dec 12 1971
LOWEST DAILY MEAN	306	Dec 3	306	Dec 3	2121	Oct 5 1972
ANNUAL SEVEN-DAY MINIMUM	324	Nov 27	324	Nov 27	152	Oct 4 1972
MAXIMUM PEAK FLOW			12200	Jan 1	365100	Dec 10 1971
MAXIMUM PEAK STAGE			17.11	Jan 1	32.84	Dec 10 1971
ANNUAL RUNOFF (AC-FT)	3403000		1377000		3037000	
10 PERCENT EXCEEDS	15200		4710		12500	
50 PERCENT EXCEEDS	2090		1120		1820	
90 PERCENT EXCEEDS	547		454		370	

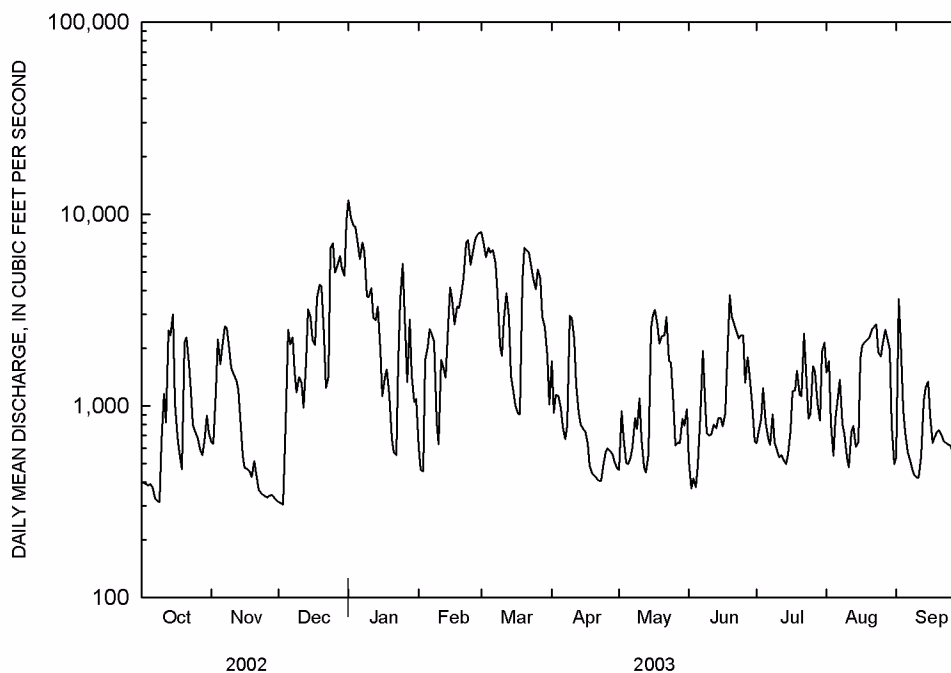
¹Prior to regulation, water years 1931-68, 3,742 ft³/s

²Lowest daily mean for period of record, 1.0 ft³/s August 18 to September 1, 1954

³Maximum discharge for period of record, 120,000 ft³/s March 30, 1945, from rating curve extended above 93,000 ft³/s

⁴Maximum gage height for period of record, 37.70 ft March 30, 1945

^eEstimated



RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT
(Hydrologic benchmark station)

LOCATION.--Lat 34°22'48", long 94°14'11", in SE₁/₄NE₁/₄ sec.30, T.4 S., R.30 W., Polk County, Hydrologic Unit 11140109, on right bank 200 ft upstream from bridge on State Highway 246, 0.3 mi downstream from Brushy Creek, 3.2 mi upstream from Flat Creek, and 7.5 mi east of Vandervoort.

DRAINAGE AREA.--89.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1967 to current year.

REVISED RECORDS.--WDR Ark. 1978: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 771.88 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 6, 1961, reached a stage of about 23.0 ft, from information by local resident; discharge about 48,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	37	19	572	22	304	37	22	27	55	38	43
2	8.9	34	18	304	21	355	e36	22	27	41	30	273
3	9.1	57	19	190	22	282	35	21	29	34	28	133
4	9.4	99	465	140	21	211	36	22	26	32	28	68
5	8.6	114	247	109	20	164	35	49	154	28	26	45
6	10	121	139	86	26	125	32	35	425	27	24	33
7	18	87	97	69	30	101	34	66	227	25	22	26
8	15	65	75	60	27	85	29	65	121	23	20	23
9	331	54	61	57	28	73	27	46	79	21	19	21
10	160	46	64	51	30	63	26	36	60	22	19	19
11	66	38	66	44	31	57	25	42	130	25	22	22
12	42	32	65	39	35	54	25	32	241	22	30	271
13	30	28	534	37	e45	62	24	31	173	21	23	449
14	23	25	393	36	1130	58	23	309	129	22	21	168
15	20	24	215	33	1040	53	22	200	250	20	22	90
16	18	23	145	35	839	52	21	852	280	17	20	58
17	16	21	109	32	406	51	21	1040	453	16	18	42
18	15	20	87	29	249	56	20	398	462	16	17	32
19	383	19	74	29	177	300	20	224	471	15	16	26
20	203	19	61	28	130	215	22	163	243	15	15	22
21	109	18	52	28	134	152	20	123	155	15	14	20
22	74	18	47	27	418	117	18	100	109	15	14	20
23	54	17	644	25	371	97	19	78	85	15	14	18
24	42	17	973	23	241	84	101	66	68	14	14	17
25	37	21	410	23	186	73	75	59	56	13	14	16
26	33	26	240	23	156	64	53	51	54	13	15	15
27	29	22	164	23	149	57	41	44	50	13	134	14
28	28	21	121	23	210	53	34	38	39	13	44	13
29	40	20	96	24	---	47	29	34	34	16	32	12
30	51	20	964	23	---	e41	25	32	36	142	32	12
31	44	---	1990	22	---	38	---	29	---	63	27	---
TOTAL	1936.2	1163	8654	2244	6194	3544	965	4329	4693	829	812	2021
MEAN	62.5	38.8	279	72.4	221	114	32.2	140	156	26.7	26.2	67.4
MAX	383	121	1990	572	1130	355	101	1040	471	142	134	449
MIN	8.6	17	18	22	20	38	18	21	26	13	14	12
AC-FT	3840	2310	17170	4450	12290	7030	1910	8590	9310	1640	1610	4010
CFSM	0.70	0.43	3.12	0.81	2.47	1.28	0.36	1.56	1.75	0.30	0.29	0.75
IN.	0.80	0.48	3.59	0.93	2.57	1.47	0.40	1.80	1.95	0.34	0.34	0.84

07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2003, BY WATER YEAR (WY)

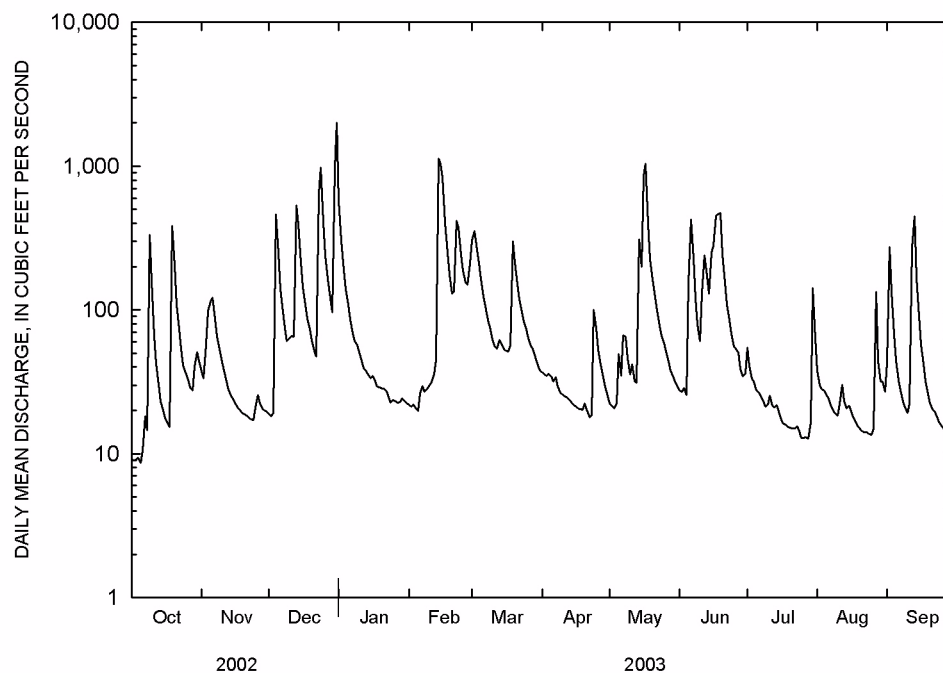
MEAN	123	226	323	220	255	345	271	243	143	79.7	27.4	58.2
MAX	899	878	1105	624	722	860	799	827	426	565	65.1	376
(WY)	1985	1997	1972	1969	2001	1973	1973	1968	1973	1994	1971	1974
MIN	11.2	19.8	25.6	24.2	65.3	61.5	32.2	24.5	11.5	11.4	9.57	10.7
(WY)	1979	1990	1990	1981	1996	1986	2003	1988	1972	1978	1972	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1967 - 2003	
ANNUAL TOTAL	54992.9		37384.2			
ANNUAL MEAN	151		102		193	
HIGHEST ANNUAL MEAN					358 1973	
LOWEST ANNUAL MEAN					86.3 1996	
HIGHEST DAILY MEAN	3180	Mar 20	1990	Dec 31	15800	Dec 9 1971
LOWEST DAILY MEAN	7.9	Sep 7	8.6	Oct 5	5.6	Sep 21 2000
ANNUAL SEVEN-DAY MINIMUM	8.5	Sep 12	10	Oct 1	5.8	Sep 16 2000
MAXIMUM PEAK FLOW			5770	Dec 30	¹ 32000	Dec 2 1982
MAXIMUM PEAK STAGE			9.89	Dec 30	19.50	Dec 2 1982
INSTANTANEOUS LOW FLOW			8.1	Oct 6	5.5	² Sep 17 2000
ANNUAL RUNOFF (AC-FT)	109100		74150		139600	
ANNUAL RUNOFF (CFSM)	1.68		1.14		2.15	
ANNUAL RUNOFF (INCHES)	22.83		15.52		29.23	
10 PERCENT EXCEEDS	310		248		400	
50 PERCENT EXCEEDS	54		36		65	
90 PERCENT EXCEEDS	11		17		15	

¹From rating curve extended above 11,000 ft³/s on basis of step-backwater computations

²Also September 21-22, 2000

^eEstimated



RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-68, 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, unfltrd, mg/L (00915)
OCT 18...	0915	80513	81213	15	760	--	10.1	97	7.2	57	13.6	21	6.00
DEC 05...	0945	80513	81213	253	767	1.3	11.0	90	7.1	29	7.1	9	2.10
FEB 05...	1330	80513	81213	20	760	.5	15.1	124	7.8	52	6.6	20	5.60
APR 16...	1050	80513	81213	21	738	.9	8.2	92	7.6	50	19.1	18	5.00
JUN 26...	0945	80513	81213	53	760	1.6	6.4	78	7.2	40	25.2	14	3.60
AUG 28...	0840	80513	81213	46	748	1.6	7.4	92	7.2	25	25.3	15	4.30

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, CaCO3 mg/L as (00410)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
OCT 18...	1.50	.60	.2	2.0	17	--	2.10	4.00	--	--	--	35	<.20
DEC 05...	.80	.60	.2	1.5	26	9	1.60	3.50	16	.03	14.3	21	.20
FEB 05...	1.40	.50	.2	1.9	17	19	1.90	4.10	27	.05	2.05	38	<.20
APR 16...	1.40	.70	.2	1.9	18	19	1.80	3.80	26	.04	1.53	27	<.20
JUN 26...	1.30	.60	.2	1.7	20	14	1.50	2.90	20	.04	3.72	26	<.20
AUG 28...	1.10	.80	.2	1.4	16	12	1.30	3.80	20	.04	3.60	29	.20

Date	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)
OCT 18...	.01	.01	<.02	<.010	--	<.01	<.02	<.02	--	E20	E12	21	56
DEC 05...	--	<.01	.09	<.010	--	<.01	<.02	<.02	.29	85	E120	510	92
FEB 05...	--	<.01	<.02	<.010	--	<.01	<.02	<.02	--	<1	E1	E2	62
APR 16...	.01	.01	<.02	<.010	--	<.01	<.02	<.02	--	E8	E13	E12	93
JUN 26...	.03	.02	.03	<.010	--	<.01	<.02	<.02	--	49	52	160	100
AUG 28...	.03	.02	.10	<.010	.18	<.01	<.02	<.02	.30	E83	59	240	79

Date	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 18...	1	.04
DEC 05...	4	2.7
FEB 05...	1	.05
APR 16...	10	.57
JUN 26...	9	1.3
AUG 28...	16	2.0

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RED RIVER BASIN

355

07341200 SALINE RIVER NEAR LOCKESBURG

LOCATION.--Lat 33°57'43", long 94°03'40", in NW1/4SE1/4 sec.23, T.9 S., R.29 W., Sevier County, Hydrologic Unit 11140109, on right bank 50 ft upstream of bridge on State Highway 24, 2.0 mi downstream from Brushy Creek, 6.0 mi east of Lockesburg, and at mile 30.0.

DRAINAGE AREA.--256 mi².

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WDR Ark. 1978: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Regulation since May 8, 1975, by Dierks Lake 5.9 mi upstream, capacity 159,500 acre-ft. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 6 or 7, 1961, reached a stage of about 25.6 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	22	13	1120	33	1010	128	78	131	133	34	36
2	15	21	13	427	32	893	123	58	117	124	33	138
3	15	83	13	809	31	810	117	110	117	108	31	317
4	15	189	127	1020	30	971	115	119	144	120	31	84
5	15	113	224	1000	28	e949	121	84	151	100	30	61
6	12	116	113	963	38	904	122	117	208	92	29	707
7	12	85	75	742	86	467	155	86	199	89	27	743
8	12	61	58	458	82	404	155	65	171	85	27	725
9	34	47	48	179	66	395	120	78	156	81	28	387
10	90	40	44	148	71	379	105	123	148	84	29	125
11	39	34	48	137	77	226	98	126	151	93	30	40
12	243	29	56	130	67	204	93	124	162	86	30	55
13	260	25	242	127	64	220	87	123	154	76	28	388
14	257	23	436	125	534	285	81	535	149	72	29	129
15	30	22	190	90	713	236	76	2010	147	69	30	63
16	16	21	132	73	468	215	73	497	195	65	29	119
17	15	20	106	71	317	204	69	1790	213	62	28	246
18	15	20	93	68	252	205	66	1020	248	59	28	99
19	215	20	146	66	954	937	65	761	332	57	28	31
20	290	20	162	64	1060	496	69	1040	287	55	28	27
21	86	20	120	64	1170	505	67	1060	270	53	28	26
22	43	20	95	88	1970	457	56	1020	267	52	30	25
23	29	19	131	98	1190	423	31	816	258	51	28	24
24	23	20	1260	57	427	404	69	453	e253	48	29	24
25	22	21	428	55	993	387	116	348	194	45	29	26
26	22	23	228	56	1170	375	89	342	127	43	29	26
27	20	23	667	55	1290	215	113	336	118	42	33	25
28	21	25	587	54	1120	166	108	332	119	39	33	24
29	24	15	554	50	---	154	106	330	113	37	29	23
30	28	13	542	36	---	e100	104	329	111	36	29	23
31	26	---	1020	34	---	136	---	231	---	38	30	---
TOTAL	1960	1210	7971	8464	14333	13732	2897	14541	5410	2194	914	4766
MEAN	63.2	40.3	257	273	512	443	96.6	469	180	70.8	29.5	159
MAX	290	189	1260	1120	1970	1010	155	2010	332	133	34	743
MIN	12	13	13	34	28	100	31	58	111	36	27	23
AC-FT	3890	2400	15810	16790	28430	27240	5750	28840	10730	4350	1810	9450

RED RIVER BASIN

07341200 SALINE RIVER NEAR LOCKESBURG--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	166	358	674	522	642	800	574	498	352	199	49.5	56.7
MAX	887	1854	2719	1292	1521	1772	1415	1295	1458	1451	236	454
(WY)	1994	1975	1983	1994	1989	1990	1979	1979	1981	1983	1989	1992
MIN	4.88	9.97	14.7	25.2	17.8	36.1	96.6	40.0	22.3	15.8	14.4	8.03
(WY)	1978	1996	1990	1996	1996	1996	2003	1987	1988	1978	2002	1981

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	126869		78392			
ANNUAL MEAN	348		215		¹ 407	
HIGHEST ANNUAL MEAN					733 1983	
LOWEST ANNUAL MEAN					87.0 1996	
HIGHEST DAILY MEAN	9550	Mar 31	2010	May 15	36800	Dec 3 1982
LOWEST DAILY MEAN	10	Jul 10	12	Oct 6	2.3	Oct 16 1977
ANNUAL SEVEN-DAY MINIMUM	11	Jul 6	14	Oct 2	2.4	Oct 14 1977
MAXIMUM PEAK FLOW			2570	May 15	³ 59600	Dec 3 1982
MAXIMUM PEAK STAGE			13.52	May 15	⁴ 20.52	Dec 3 1982
ANNUAL RUNOFF (AC-FT)	251600		155500		294500	
10 PERCENT EXCEEDS	953		683		1010	
50 PERCENT EXCEEDS	114		90		116	
90 PERCENT EXCEEDS	13		23		16	

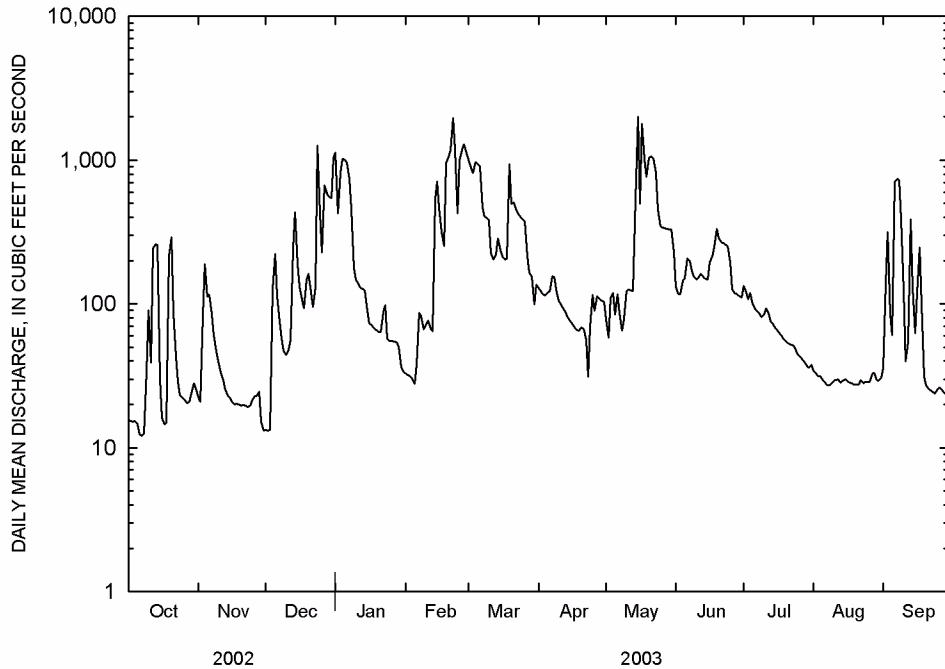
¹Prior to regulation, water years 1963-74, 382 ft³/s

²Lowest daily mean for period of record, 0.20 ft³/s November 6, 1963 and October 29, 1969

³Maximum discharge for period of record 64,700 ft³/s May 14, 1968, from rating extended above 23,000 ft³/s on basis of contracted-opening measurement of peak flow

⁴Maximum gage height for period of record 20.86 ft May 14, 1968

^eEstimated



RED RIVER BASIN

357

07356000 OUACHITA RIVER NEAR MOUNT IDA

LOCATION.--Lat 34°36'36", long 93°41'50", in SE1/4SW1/4 sec.32, T.1 S., R.25 W., Montgomery County, Hydrologic Unit 08040101, on right bank 300 ft upstream from bridge on U.S. Highway 270, 3.1 mi upstream from Fiddler's Creek, 5.2 mi northwest of Mount Ida, and at mile 553.4.

DRAINAGE AREA.--414 mi².

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: 1947(m). WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 655.14 ft above NGVD of 1929. Prior to Dec. 3, 1941, and Mar. 1, 1945, to Apr. 1, 1946, nonrecording gage, Dec. 3, 1941 to Feb. 21, 1945, and Apr. 2, 1946, to Nov. 2, 1949, water-stage recorder, all at site 350 ft downstream at present datum.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. As of August 1977, flow from 34.3 mi² upstream from this station is controlled by one floodwater-detention reservoir that has a capacity of 15,661 acre-ft, of which 9,726 acre-ft is flood-detention, 4,600 acre-ft is water supply, and 1,355 acre-ft is sediment storage. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Dec. 3, 1982, was about 4.0 ft higher than that of 1908 and is the highest since at least that date, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	234	124	3960	131	1600	220	155	126	161	229	52
2	40	210	122	2250	126	1590	204	177	124	424	154	77
3	40	244	121	1550	124	1350	190	193	128	346	112	208
4	39	432	1730	1180	122	1140	184	175	124	238	91	169
5	39	617	1980	940	117	975	183	442	261	217	86	123
6	38	791	1130	771	125	816	177	416	2680	178	83	92
7	42	582	821	644	131	690	219	1110	2020	152	91	77
8	41	450	653	559	134	598	324	803	1100	131	79	70
9	85	372	537	501	139	527	233	502	744	111	69	61
10	421	327	486	443	146	459	199	365	555	197	e67	57
11	371	292	523	384	165	407	184	329	2360	647	e66	55
12	213	255	460	341	186	374	174	271	3810	487	81	59
13	151	220	1740	312	200	377	165	218	2100	323	66	202
14	117	185	2480	292	1380	457	155	359	1350	247	58	519
15	97	168	1470	270	2770	e400	145	619	1110	199	55	289
16	84	155	1070	254	2710	e346	137	3980	1310	162	53	187
17	76	e150	849	242	1850	323	127	7930	2330	135	50	138
18	71	e137	707	229	1340	305	122	2150	2380	117	46	110
19	108	e124	618	212	1040	915	118	1240	2710	101	44	e92
20	394	118	566	199	856	1030	118	854	1630	89	41	e77
21	567	111	481	193	854	819	114	699	1100	81	39	70
22	435	105	411	185	1830	676	109	608	815	74	37	65
23	302	101	945	174	1860	578	107	490	631	70	35	61
24	237	98	5260	163	1390	505	297	396	500	64	35	57
25	204	105	2650	156	1200	447	423	343	408	59	33	54
26	194	123	1740	151	1110	402	328	297	323	55	34	52
27	184	137	1280	147	1120	358	256	252	274	51	35	50
28	170	152	986	144	1380	e327	219	213	238	48	51	46
29	171	139	800	142	---	e296	191	182	203	45	71	43
30	188	130	1030	138	---	e268	171	158	174	66	69	40
31	262	---	7920	136	---	239	---	140	---	157	57	---
TOTAL	5423	7264	41690	17262	24536	19594	5793	26066	33618	5432	2117	3252
MEAN	175	242	1345	557	876	632	193	841	1121	175	68.3	108
MAX	567	791	7920	3960	2770	1600	423	7930	3810	647	229	519
MIN	38	98	121	136	117	239	107	140	124	45	33	40
AC-FT	10760	14410	82690	34240	48670	38860	11490	51700	66680	10770	4200	6450

RED RIVER BASIN

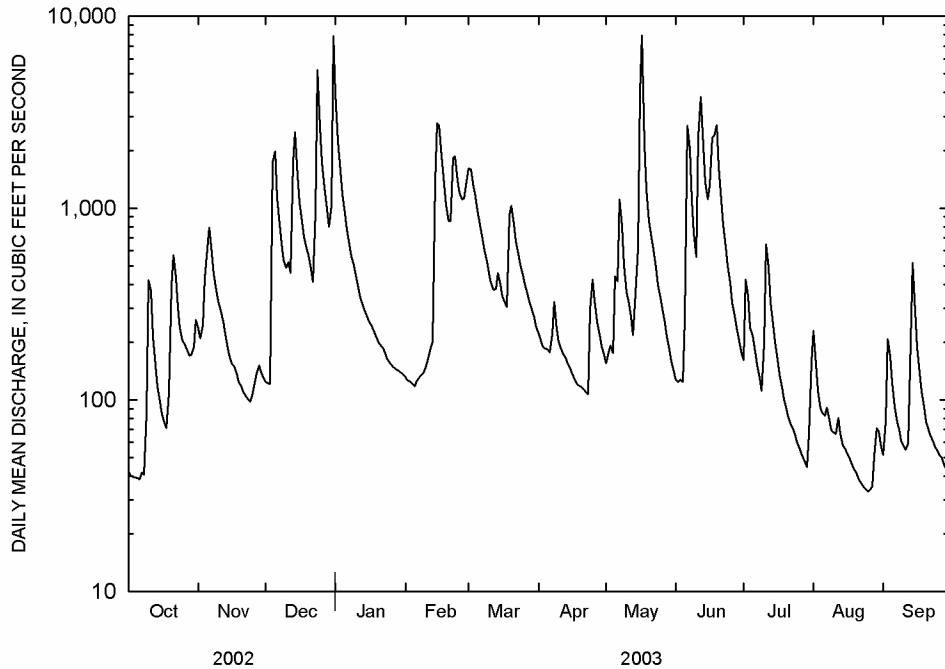
07356000 OUACHITA RIVER NEAR MOUNT IDA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	369	737	1073	892	1139	1333	1103	1098	522	227	90.6	198
MAX	4031	3558	5373	3676	4574	5692	4230	3679	2084	1130	506	1470
(WY)	1985	1997	1983	1949	1945	1945	1957	1990	1974	1951	1950	1974
MIN	7.24	21.9	37.1	34.5	104	197	193	102	28.6	13.9	6.33	5.45
(WY)	1957	1964	1964	1964	1963	1972	2003	1977	1972	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	258014		192047			
ANNUAL MEAN	707		526		730	
HIGHEST ANNUAL MEAN					1499 1945	
LOWEST ANNUAL MEAN					263 1963	
HIGHEST DAILY MEAN	14800	Mar 20	7930	May 17	79800	Dec 3 1982
LOWEST DAILY MEAN	24	Sep 6	33	Aug 25	2.5	Aug 25 1954
ANNUAL SEVEN-DAY MINIMUM	25	Sep 3	35	Aug 21	2.8	Aug 19 1954
MAXIMUM PEAK FLOW			15300	May 17	102000	Dec 3 1982
MAXIMUM PEAK STAGE			15.73	May 17	¹ 39.78	Dec 3 1982
INSTANTANEOUS LOW FLOW			33	Aug 24-26	2.3	Aug 25 1954
ANNUAL RUNOFF (AC-FT)	511800		380900		528700	
10 PERCENT EXCEEDS	1680		1340		1600	
50 PERCENT EXCEEDS	296		210		248	
90 PERCENT EXCEEDS	34		57		32	

¹From floodmark
^eEstimated



RED RIVER BASIN

359

07359002 OUACHITA RIVER AT REMMEL DAM ABOVE JONES MILL

LOCATION.--Lat 34°25'35", long 92°53'27", in SW1/4NW1/4 sec.36, T.3 S., R.18 W., Hot Spring County, Hydrologic Unit 08040102, at right bank 1000 ft downstream from Rempel Dam and 0.8 mi above Jones Mill.

DRAINAGE AREA.--1,550 mi².

PERIOD OF RECORD.--March 1903 to April 1905, June 1922 to September 1924 (fragmentary), October 1925 to April 1927, January 1928 to current year. Published as "at Rempel Dam, near Malvern" January 1925 to March 1937, as "near Malvern (07359500)" April 1937 to September 1991, as "below Rempel Dam at Jones Mill" October 1991 to September 2002.

REVISED RECORDS.--WSP 587: 1923. WSP 857: 1923(M). WSP 977: 1942. WSP 1391: 1903-4. WDR Ark. 1979: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 248.16 ft above NGVD of 1929. March 1903 to April 1905, nonrecording gage 5.8 mi downstream at datum 18.11 ft lower. June 1922 to September 1924, nonrecording gage 5.8 mi downstream at datum 20.11 ft lower. January 1925 to March 1937, water-stage recorder at Rempel Dam at present datum. April 1937 to September 1991 water-stage recorder 5.8 mi downstream at datum 20.11 ft lower. October 1991 to September 2002 water-stage recorder 0.8 mi downstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1925 by Lake Catherine, 0.8 mi upstream, capacity, 35,250 acre-ft, since 1932 by Lake Hamilton, capacity, 190,100 acre-ft, and since 1952 by Lake Ouachita, capacity, 2,768,400 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	453	325	5590	350	6220	422	366	798	1740	2050	2250
2	290	343	323	1390	350	4520	427	459	783	1820	2320	3360
3	418	360	324	3170	2020	4840	427	365	936	1870	1970	1790
4	592	1940	3400	409	3680	3210	426	409	916	1880	2130	960
5	497	3580	1300	2560	3290	3420	427	317	1760	2630	2370	865
6	440	4010	1310	2640	3350	3830	425	395	4240	2600	2370	991
7	245	2660	1470	3090	3430	3140	392	311	2030	2060	1870	256
8	303	2390	316	3300	722	493	421	605	1580	2290	1970	568
9	303	3200	316	3130	365	400	425	316	2030	2200	1990	1010
10	308	2710	316	2420	2640	1100	679	1060	2520	2280	2380	876
11	305	295	316	909	1950	459	1210	342	4360	2040	2480	1250
12	304	291	2490	313	2970	393	397	308	6990	2270	2350	897
13	306	289	2880	2150	554	731	1270	310	6950	2450	1990	1530
14	307	288	1510	2390	3870	428	426	312	6080	2310	2000	1510
15	307	289	321	2580	5530	2480	414	982	6210	1930	2110	868
16	477	289	1730	3140	4950	2000	393	2320	6700	1990	2090	869
17	277	288	1860	2780	1910	2420	383	1210	9960	1960	2260	260
18	316	1760	1180	352	2080	2200	381	301	7980	1970	2080	264
19	1950	2810	3730	345	1230	1540	378	1260	7350	3160	2520	275
20	254	2870	3280	2890	362	1410	374	383	6900	2480	2300	287
21	268	2700	1870	2680	2910	1970	372	400	6630	2270	2130	296
22	383	2670	622	2860	4060	1640	666	345	6500	2200	2110	305
23	312	2610	5300	2420	2080	1440	915	317	5890	2100	2480	345
24	308	2060	7530	3820	1680	1290	1670	963	5750	2020	2030	316
25	310	326	1170	3520	3580	451	643	782	5750	2080	1970	362
26	313	920	2260	377	5590	438	1280	789	6060	1990	1800	681
27	437	326	2680	3090	6120	438	383	340	2890	2370	1820	316
28	388	316	1740	3390	6510	434	383	416	1560	2090	1770	314
29	342	313	708	3650	---	418	416	795	1910	2220	1860	314
30	334	312	2600	3690	---	419	421	742	1710	2410	1910	315
31	407	---	5240	3490	---	421	---	802	---	2040	1890	---
TOTAL	12291	43668	60417	78535	78133	54593	17246	19022	131723	67720	65370	24500
MEAN	396	1456	1949	2533	2790	1761	575	614	4391	2185	2109	817
MAX	1950	4010	7530	5590	6510	6220	1670	2320	9960	3160	2520	3360
MIN	245	288	316	313	350	393	372	301	783	1740	1770	256
MED	310	686	1510	2780	2770	1410	424	400	5050	2100	2080	624
AC-FT	24380	86620	119800	155800	155000	108300	34210	37730	261300	134300	129700	48600

RED RIVER BASIN

07359002 OUACHITA RIVER AT REMMEL DAM ABOVE JONES MILL--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	1308	2158	3218	3721	3414	3414	3585	3395	1857	1237	1135	1135
MAX	6425	9717	13790	13560	11880	17230	13620	12550	9436	3602	2850	4224
(WY)	1985	1985	1983	1949	1950	1945	1952	1946	1974	1967	1966	1950
MIN	126	97.1	395	87.1	417	442	403	263	161	98.2	93.5	95.7
(WY)	1933	1944	1940	1931	1936	1966	1963	1936	1934	1930	1930	1943

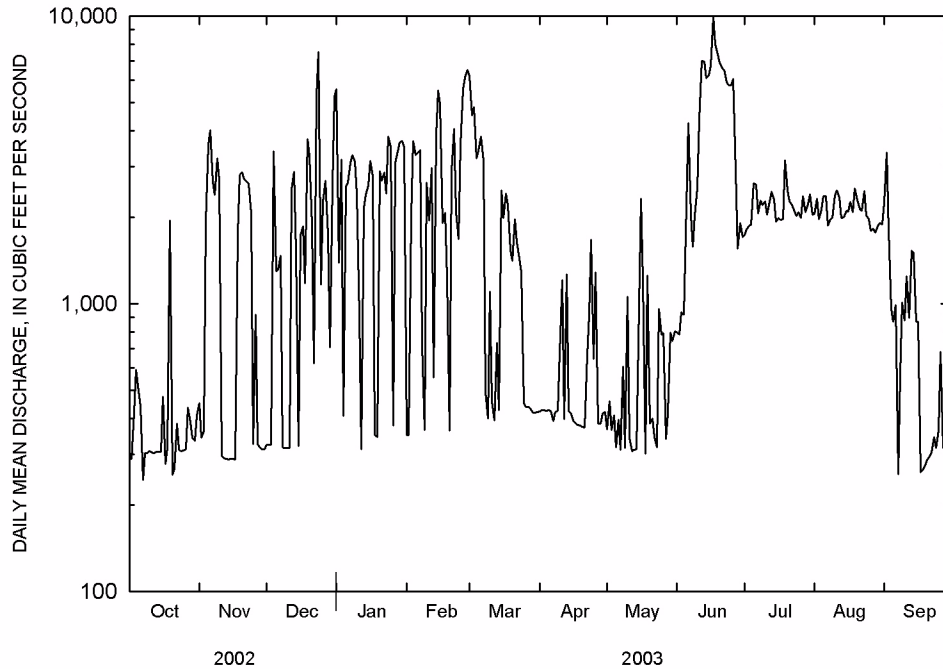
SUMMARY STATISTICS FOR 2003 WATER YEAR WATER YEARS 1929 - 2003

ANNUAL TOTAL	653218	
ANNUAL MEAN	1790	2460
HIGHEST ANNUAL MEAN		5209 1973
LOWEST ANNUAL MEAN		746 1954
HIGHEST DAILY MEAN	9960 Jun 17	104000 Mar 30 1945
LOWEST DAILY MEAN	245 Oct 7	39 Jun 22 1929
ANNUAL SEVEN-DAY MINIMUM	290 Nov 11	58 Nov 13 1943
MAXIMUM PEAK FLOW	16300 Jun 17	¹ 166000 May 20 1990
MAXIMUM PEAK STAGE	13.65 Jun 17	^{2,3} 30.30 May 15 1923
INSTANTANEOUS LOW FLOW	58 Jan 6	6.0 Jan 19 2000
ANNUAL RUNOFF (AC-FT)	1296000	1782000
ANNUAL RUNOFF (CFSM)	1.15	1.59
ANNUAL RUNOFF (INCHES)	15.68	21.56
10 PERCENT EXCEEDS	3680	5660
50 PERCENT EXCEEDS	1530	1450
90 PERCENT EXCEEDS	312	285

¹From rating curve extended above 120,000 ft³/s on basis of computations of peak flow over Remmel Dam, 0.8 mi upstream, adjusted for flow from intervening area

²From floodmark

³Maximum gage height for period of record at different site and datum



RED RIVER BASIN

361

07359610 CADDO RIVER NEAR CADDO GAP

LOCATION.--Lat 34°22'59", long 93°36'21", in SW1/4NE1/4 sec.19, T.4 S., R.24 W., Montgomery County, Hydrologic Unit 08040102, at downstream side of bridge on State Highway 240, 1.3 mi southeast of Caddo Gap.

DRAINAGE AREA.--132 mi².

PERIOD OF RECORD.--October 1988 to current year. Results of discharge measurements April 1975 to September 1978 are contained in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 577.81 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e27	58	54	1400	54	438	81	86	75	186	53	52
2	e28	56	54	639	54	436	78	230	88	120	53	164
3	e28	98	55	418	54	377	77	150	157	89	53	124
4	e28	118	862	325	53	321	78	121	100	75	53	77
5	e28	156	391	266	52	279	80	164	149	68	50	59
6	e28	153	248	221	64	240	79	142	827	75	49	50
7	e27	111	182	184	66	208	86	1200	511	61	49	46
8	e27	90	143	161	60	184	76	461	318	54	44	44
9	e86	78	119	143	62	162	72	296	232	49	41	43
10	93	74	125	124	67	141	70	231	182	116	39	41
11	59	66	121	111	76	128	69	256	193	189	41	54
12	e45	60	110	102	78	121	68	188	976	111	48	95
13	e39	57	595	97	84	131	67	152	582	95	43	302
14	e34	56	462	91	1140	120	66	184	428	87	42	167
15	e37	56	306	85	1370	109	64	185	862	75	43	103
16	e36	54	238	84	1100	103	64	314	577	67	39	78
17	e33	54	194	78	576	100	62	1490	2170	62	37	65
18	e33	54	174	75	399	103	61	538	1210	59	35	57
19	e167	54	194	73	319	252	66	359	808	60	34	52
20	130	54	185	72	269	215	79	283	476	60	32	50
21	83	54	162	71	318	181	67	240	347	54	31	49
22	69	54	142	68	816	157	61	206	267	53	31	51
23	57	54	586	65	593	138	61	166	210	56	30	46
24	e51	54	1030	63	407	126	361	143	172	49	29	44
25	e57	61	513	63	348	117	245	134	143	46	30	44
26	e53	66	354	63	321	118	177	117	144	44	33	43
27	e48	58	279	61	314	106	140	102	124	42	78	42
28	57	55	231	60	377	101	118	92	99	41	48	39
29	75	55	199	63	---	95	103	e86	86	39	42	38
30	77	54	698	59	---	89	92	85	105	72	43	38
31	65	---	3130	55	---	85	---	79	---	72	44	---
TOTAL	1705	2122	12136	5440	9491	5481	2868	8480	12618	2326	1317	2157
MEAN	55.0	70.7	391	175	339	177	95.6	274	421	75.0	42.5	71.9
MAX	167	156	3130	1400	1370	438	361	1490	2170	189	78	302
MIN	27	54	54	55	52	85	61	79	75	39	29	38
AC-FT	3380	4210	24070	10790	18830	10870	5690	16820	25030	4610	2610	4280
CFSM	0.40	0.52	2.88	1.29	2.49	1.30	0.70	2.01	3.09	0.55	0.31	0.53
IN.	0.47	0.58	3.32	1.49	2.60	1.50	0.78	2.32	3.45	0.64	0.36	0.59

RED RIVER BASIN

07359610 CADDO RIVER NEAR CADDO GAP--CONTINUED

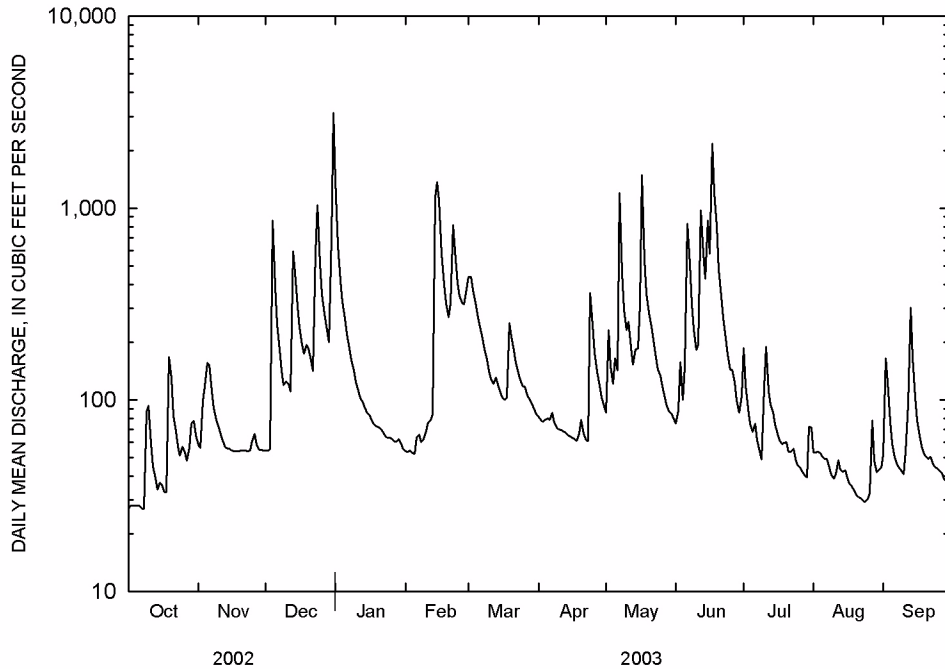
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

MEAN	172	352	466	369	384	413	303	338	196	102	61.8	78.0
MAX	405	1149	1289	799	979	886	578	1176	599	266	203	177
(WY)	1994	1997	1994	1994	2001	1990	1991	1990	2000	1995	1994	1994
MIN	38.3	52.5	50.9	76.4	112	177	95.6	103	80.6	39.0	26.9	35.5
(WY)	2001	1990	1990	2000	1996	2003	2003	1997	1994	1998	2000	1999

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003	
ANNUAL TOTAL	73024		66141			
ANNUAL MEAN	200		181		269	
HIGHEST ANNUAL MEAN					389 1994	
LOWEST ANNUAL MEAN					157 1996	
HIGHEST DAILY MEAN	3600	Mar 20	3130	Dec 31	28600	Dec 3 1993
LOWEST DAILY MEAN	27	Oct 1	27	Oct 1	24	Aug 27 2000
ANNUAL SEVEN-DAY MINIMUM	28	Oct 1	28	Oct 1	24	Sep 16 2000
MAXIMUM PEAK FLOW			6440	Dec 31	¹ 97200	Dec 3 1993
MAXIMUM PEAK STAGE			11.89	Dec 31	26.27	Dec 3 1993
INSTANTANEOUS LOW FLOW					23	at times
ANNUAL RUNOFF (AC-FT)	144800		131200		195000	
ANNUAL RUNOFF (CFSM)	1.47		1.33		1.98	
ANNUAL RUNOFF (INCHES)	19.97		18.09		26.90	
10 PERCENT EXCEEDS	406		394		490	
50 PERCENT EXCEEDS	106		83		116	
90 PERCENT EXCEEDS	34		42		42	

¹From rating curve extended above 10,000 ft³/s on basis of slope-conveyance study

^eEstimated



RED RIVER BASIN

363

07360200 LITTLE MISSOURI RIVER NEAR LANGLEY

LOCATION.--Lat 34°18'41", long 93°53'58", in NW1/4SW1/4 sec.16, T.5 S., R.27 W., Pike County, Hydrologic Unit 08040103, at bridge on State Highway 84, 3.3 mi west of Langley.

DRAINAGE AREA.--68.4 mi².

PERIOD OF RECORD.--October 1998 to current year. Occasional low-flow measurements water years 1958-63, occasional measurements 1974-98, and annual maximum water years 1989-98.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e10	23	21	887	31	263	52	45	35	37	31	37
2	e10	21	20	440	31	312	50	46	45	42	28	213
3	e10	32	21	262	31	303	49	42	56	37	27	114
4	e10	48	366	176	30	241	51	40	40	34	e26	66
5	e10	55	171	128	29	185	52	e84	55	e31	e24	50
6	e10	61	91	98	35	140	48	73	324	e30	e24	41
7	e10	46	66	80	38	116	48	446	207	e31	e25	34
8	e10	37	55	71	35	100	43	286	107	e28	20	30
9	46	32	46	67	36	87	40	158	74	e28	19	28
10	49	27	45	59	38	77	40	108	59	36	19	25
11	27	24	43	53	44	71	38	134	115	40	36	25
12	21	21	41	49	52	67	38	102	534	32	44	155
13	18	19	292	46	58	70	36	126	346	31	29	391
14	16	19	267	44	1110	65	35	619	198	30	25	132
15	15	19	143	42	1190	60	34	388	163	27	23	76
16	14	18	100	43	758	58	33	1180	369	25	23	55
17	14	18	78	41	439	57	32	1580	447	24	23	44
18	14	18	65	39	288	62	31	576	405	23	21	36
19	104	18	59	38	205	247	32	332	383	23	21	31
20	68	18	53	38	146	220	38	209	223	23	19	27
21	43	19	49	38	152	162	31	139	137	22	18	26
22	32	19	46	36	469	129	29	105	97	22	19	25
23	25	19	232	33	435	107	29	82	76	23	18	23
24	21	19	596	32	287	94	243	69	64	22	17	22
25	19	24	305	32	222	86	148	64	57	21	24	21
26	18	27	174	32	179	79	97	57	54	20	34	20
27	16	24	119	31	158	71	77	50	51	20	106	19
28	17	23	90	33	200	68	63	45	43	19	48	17
29	29	21	75	35	---	62	55	41	40	20	37	16
30	34	21	352	33	---	e58	49	38	37	87	32	16
31	28	---	1710	32	---	54	---	36	---	45	33	---
TOTAL	768	790	5791	3068	6726	3771	1641	7300	4841	933	893	1815
MEAN	24.8	26.3	187	99.0	240	122	54.7	235	161	30.1	28.8	60.5
MAX	104	61	1710	887	1190	312	243	1580	534	87	106	391
MIN	10	18	20	31	29	54	29	36	35	19	17	16
AC-FT	1520	1570	11490	6090	13340	7480	3250	14480	9600	1850	1770	3600
CFSM	0.36	0.38	2.73	1.45	3.51	1.78	0.80	3.44	2.36	0.44	0.42	0.88
IN.	0.42	0.43	3.15	1.67	3.66	2.05	0.89	3.97	2.63	0.51	0.49	0.99

RED RIVER BASIN

07360200 LITTLE MISSOURI RIVER NEAR LANGLEY--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

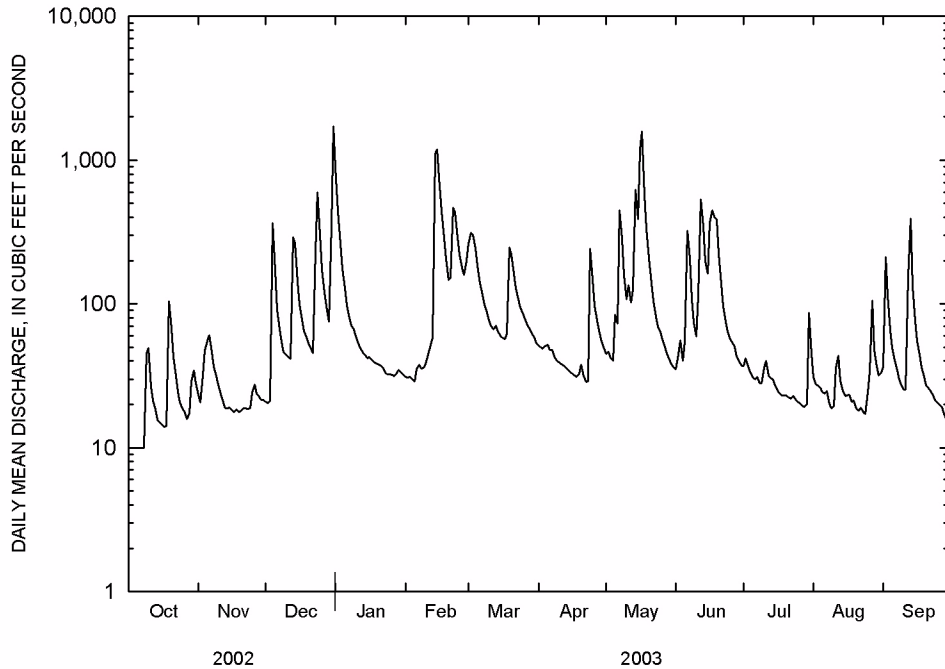
MEAN	82.3	125	287	138	260	226	166	183	143	34.1	18.8	33.8
MAX	177	383	468	231	511	338	313	239	352	50.6	28.8	60.5
(WY)	1999	2001	2002	1999	2001	2002	1999	2001	2000	1999	2003	2003
MIN	19.9	26.3	174	64.0	162	122	54.7	95.2	42.3	21.9	12.5	14.9
(WY)	2001	2003	2001	2000	1999	2003	2003	1999	2002	2001	2000	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	42303		38337			
ANNUAL MEAN	116		105		141	
HIGHEST ANNUAL MEAN					168 2001	
LOWEST ANNUAL MEAN					105 2003	
HIGHEST DAILY MEAN	2080	Mar 20	1710	Dec 31	4680	Dec 16 2001
LOWEST DAILY MEAN	10	Oct 1	10	Oct 1	7.4	Sep 22 2000
ANNUAL SEVEN-DAY MINIMUM	10	Oct 1	10	Oct 1	7.8	Sep 16 2000
MAXIMUM PEAK FLOW			5390	May 16	^{1,2} 23200	Mar 8 1990
MAXIMUM PEAK STAGE			8.86	May 16	17.34	Mar 8 1990
INSTANTANEOUS LOW FLOW					5.4	Aug 30 2000
ANNUAL RUNOFF (AC-FT)	83910		76040		102000	
ANNUAL RUNOFF (CFSM)	1.69		1.54		2.06	
ANNUAL RUNOFF (INCHES)	23.01		20.85		27.96	
10 PERCENT EXCEEDS	284		262		302	
50 PERCENT EXCEEDS	51		42		58	
90 PERCENT EXCEEDS	14		19		17	

¹Occurred during computation of annual maximum only, water years 1989-1998

²From rating curve extended above 2,300 ft³/s on basis of slope-conveyance study

^eEstimated



RED RIVER BASIN

365

07361500 ANTOINE RIVER AT ANTOINE

LOCATION.--Lat 34°02'20", long 93°25'05", in NW1/4NW1/4 sec.24, T.8 S., R.23 W., Pike County, Hydrologic Unit 08040103, near right bank on downstream side of bridge on State Highway 26 at Antoine, 1.6 mi downstream from Brushy Creek, 1.9 mi downstream from Suck Creek, and at mile 8.5.

DRAINAGE AREA.--178 mi².

PERIOD OF RECORD.--October 1954 to current year. Gage-height records collected in this vicinity since November 1950 (published as "Antoine Creek") are contained in reports of U.S. Army Corps of Engineers.

REVISED RECORDS.--WSP 1511: 1955(M). WDR Ark. 1973: 1972. WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 229.33 ft above NGVD of 1929. Prior to Oct. 22, 1954, at site 75 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1905 reached a stage of 29.7 ft, from information by State Highway and Transportation Department, discharge, 40,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	35	8.0	1760	36	745	54	37	11	22	193	0.01
2	0.00	26	6.4	1000	35	621	51	103	15	15	100	3.5
3	0.00	245	6.0	655	34	498	47	117	24	12	67	5.2
4	0.00	409	625	499	32	408	45	69	36	7.6	48	10
5	0.00	298	604	400	30	347	46	67	26	4.9	35	3.8
6	0.00	288	320	321	54	291	42	79	69	689	25	1.8
7	0.58	209	232	266	100	246	42	690	207	290	18	0.95
8	0.61	157	183	240	95	218	41	174	126	187	12	0.62
9	0.82	121	141	220	79	196	37	108	64	112	7.6	0.32
10	6.2	97	132	191	87	165	31	74	39	82	4.9	0.13
11	1.2	74	158	154	91	141	27	65	54	612	3.0	0.00
12	1.9	55	129	133	80	129	25	76	5330	322	1.9	0.01
13	3.0	40	1140	121	84	141	23	76	1530	225	1.2	0.24
14	4.4	28	1040	113	1180	178	20	586	756	167	0.90	0.11
15	6.1	23	550	102	1520	128	16	584	646	110	0.77	75
16	12	19	386	96	1650	109	15	328	1430	69	0.64	59
17	3.5	15	307	91	965	98	12	1060	7180	46	0.55	34
18	2.6	13	253	81	655	107	8.2	604	2300	33	0.49	21
19	117	9.3	1700	75	497	515	11	376	1950	86	0.33	15
20	371	7.1	733	71	404	347	88	279	865	360	0.19	11
21	149	6.4	448	69	500	266	78	245	464	184	0.07	8.2
22	69	6.0	339	65	2590	222	44	202	264	93	0.00	6.9
23	40	6.0	1400	56	1430	190	32	159	155	61	0.00	5.1
24	25	5.3	4300	50	879	159	236	117	103	45	0.00	3.9
25	16	7.1	1400	47	703	134	242	90	71	30	0.00	3.2
26	11	11	845	46	635	120	137	71	245	20	0.00	2.2
27	7.0	9.9	593	45	686	108	93	54	284	13	0.00	2.1
28	6.7	11	448	43	830	93	70	40	102	8.5	0.00	1.6
29	21	11	364	43	---	80	55	30	57	5.5	0.00	1.4
30	40	9.7	477	42	---	67	46	22	34	342	0.00	1.2
31	41	---	2750	40	---	58	---	16	---	343	0.00	---
TOTAL	956.61	2251.8	22017.4	7135	15961	7125	1714.2	6598	24437	4596.5	520.54	277.49
MEAN	30.9	75.1	710	230	570	230	57.1	213	815	148	16.8	9.25
MAX	371	409	4300	1760	2590	745	242	1060	7180	689	193	75
MIN	0.00	5.3	6.0	40	30	58	8.2	16	11	4.9	0.00	0.00
AC-FT	1900	4470	43670	14150	31660	14130	3400	13090	48470	9120	1030	550
CFSM	0.17	0.42	3.99	1.29	3.20	1.29	0.32	1.20	4.58	0.83	0.09	0.05
IN.	0.20	0.47	4.60	1.49	3.34	1.49	0.36	1.38	5.11	0.96	0.11	0.06

RED RIVER BASIN

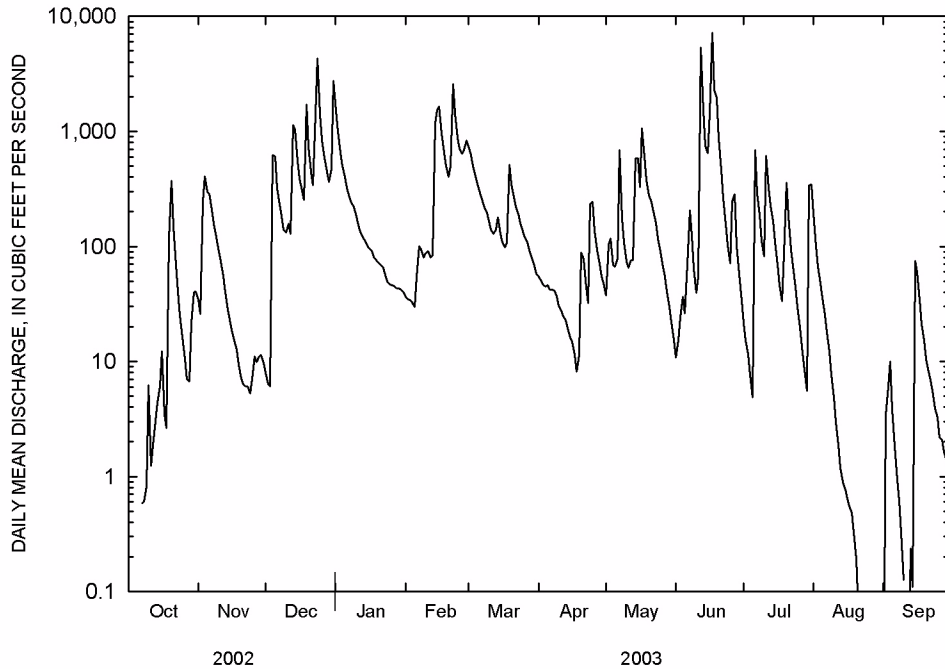
07361500 ANTOINE RIVER AT ANTOINE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2003, BY WATER YEAR (WY)

MEAN	104	291	445	352	459	527	454	403	192	88.5	35.3	36.3
MAX	838	1271	1958	1038	1344	1325	1548	2266	1430	823	598	439
(WY)	1985	1974	1988	1999	1989	1990	1973	1968	1974	1983	1966	1980
MIN	0.000	0.37	1.48	21.4	76.3	74.0	32.7	15.1	3.34	0.13	0.013	0.020
(WY)	1957	1957	1966	1966	1963	1972	1972	1988	1966	1998	1956	1956

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1955 - 2003

ANNUAL TOTAL	98955.22		93590.54			
ANNUAL MEAN	271		256		282	
HIGHEST ANNUAL MEAN					551 1973	
LOWEST ANNUAL MEAN					109 1971	
HIGHEST DAILY MEAN	5730	Mar 20	7180	Jun 17	20500	May 2 1958
LOWEST DAILY MEAN	0.00	Aug 12	0.00	Oct 1	0.00	Aug 4 1956
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 12	0.00	Aug 22	0.00	Aug 4 1956
MAXIMUM PEAK FLOW			15900	Jun 17	35500	May 2 1958
MAXIMUM PEAK STAGE			23.88	Jun 17	28.75	May 2 1958
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	196300		185600		203900	
ANNUAL RUNOFF (CFSM)	1.52		1.44		1.58	
ANNUAL RUNOFF (INCHES)	20.68		19.56		21.49	
10 PERCENT EXCEEDS	586		639		603	
50 PERCENT EXCEEDS	82		69		68	
90 PERCENT EXCEEDS	0.00		1.1		1.4	



RED RIVER BASIN

367

07362000 OUACHITA RIVER AT CAMDEN

LOCATION.--Lat 33°35'47", long 92°49'05", in SE1/4 sec.14, T.13 S., R.17 W., Ouachita County, Hydrologic Unit 08040102, at bridge on U.S. Highway 79B at Camden, 3.4 mi downstream from Ecore Fabre Bayou, 6.2 mi upstream from Two Bayou Creek, and at mile 354.1.

DRAINAGE AREA.--5,357 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 current year. October 1929 to date in reports of U.S. Army Corps of Engineers. Monthly discharge only, October 1929 to September 1960 published in WSP 1311 and WSP 1731. Gage heights collected since 1885 in this vicinity are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 71.69 ft above NGVD of 1929. Aug. 8, 1928, to July 10, 1935, and July 11, 1935, to Jan. 4, 1945, non-recording gage at present site and datum. Jan. 5, 1945, to Oct. 27, 1947, non-recording gage at site 0.4 mi downstream at present datum. Aug. 10, 1938, to May 31, 1949, supplementary non-recording gage, 4.5 mi upstream. Since Jan. 1, 1957, auxiliary water-stage recorder, 3.2 mi downstream.

REMARKS.--No estimated daily discharges. Water-discharge records good. Flow regulated since 1925 by Lake Catherine, 102 mi upstream, capacity, 35,250 acre-ft, since 1932 by Lake Hamilton, capacity, 190,100 acre-ft, since 1949 by Lake Greeson, capacity, 407,900 acre-ft, since 1952 by Lake Ouachita, capacity, 2,768,400 acre-ft, and since August 1969 by DeGray Lake, capacity, 881,900 acre-ft. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	1230	1200	15200	6320	27900	2390	1750	2160	5890	4190	3550
2	1050	1180	1080	20500	4930	27000	2120	1590	3240	5000	3970	3250
3	981	1090	1010	21500	2150	25300	2120	1510	2070	4910	3750	4630
4	1110	1440	1020	19900	1690	21500	2130	1610	2580	5090	3780	4290
5	1110	3210	2300	16800	3460	18600	2070	2070	2740	5100	3380	3790
6	1120	5030	6700	10800	4930	16100	2090	3260	3530	5210	3220	2510
7	1140	6410	4870	8680	5290	14500	2110	6840	3800	5850	3380	2180
8	1110	5950	4140	8830	6630	13100	1920	15000	5330	6100	3710	2240
9	1080	4560	3290	9100	6360	11300	1920	18700	3720	5030	3600	1500
10	1030	3970	1960	8910	3680	8360	1840	17200	2800	4640	3410	1310
11	1550	3990	1620	8170	2910	6970	1750	12200	2920	4570	3010	1900
12	2110	3310	1670	7010	4620	6140	1720	8410	6750	4830	3050	2790
13	1650	1710	1980	4040	4430	4730	2160	5660	20300	4900	3490	2820
14	1360	1300	5940	2980	4920	4340	1740	3950	29500	4660	3650	2470
15	1180	1260	10100	5880	9040	4520	2080	4210	33700	4410	3550	2830
16	1110	1310	8170	6860	17700	4870	1590	7910	29100	4090	3470	2280
17	1100	1290	5180	7010	22600	6600	1420	9510	26300	3800	3380	1190
18	1100	1340	4760	7310	24100	5220	1280	10200	29100	4040	3190	1170
19	1240	1220	5270	6070	22300	6430	1280	9570	36100	3990	2890	1190
20	1890	1600	7360	3070	18800	9880	1280	7210	42300	5180	2770	1520
21	4200	3230	9660	2500	14100	11600	1370	6150	46100	6270	3610	1410
22	3000	3330	7960	5140	13700	10100	1690	5100	45300	5340	3920	1060
23	1970	3150	6410	5370	21200	8940	1760	4090	37700	4620	3480	694
24	1480	3110	8500	5250	27700	7000	1860	3420	26600	4320	3620	918
25	1300	3020	18800	5730	31600	5430	3860	2840	18400	4110	3510	1130
26	1250	2620	23600	6450	32700	4610	5120	2760	15000	3610	2770	1220
27	1170	1370	22300	5010	31300	3910	4110	2370	14100	3580	2630	845
28	1010	1410	19600	3050	28900	3510	3580	2140	13100	3580	3450	963
29	978	1680	16500	5400	---	3260	2330	1830	9060	3600	3580	800
30	969	1430	11000	5930	---	3040	1900	1470	6990	3250	3530	681
31	1080	---	8390	6280	---	2820	---	1540	---	3530	3610	---
TOTAL	43498	76750	232340	254730	378060	307580	64590	182070	520390	143100	106550	59131
MEAN	1403	2558	7495	8217	13500	9922	2153	5873	17350	4616	3437	1971
MAX	4200	6410	23600	21500	32700	27900	5120	18700	46100	6270	4190	4630
MIN	969	1090	1010	2500	1690	2820	1280	1470	2070	3250	2630	681
AC-FT	86280	152200	460800	505300	749900	610100	128100	361100	1032000	283800	211300	117300

RED RIVER BASIN

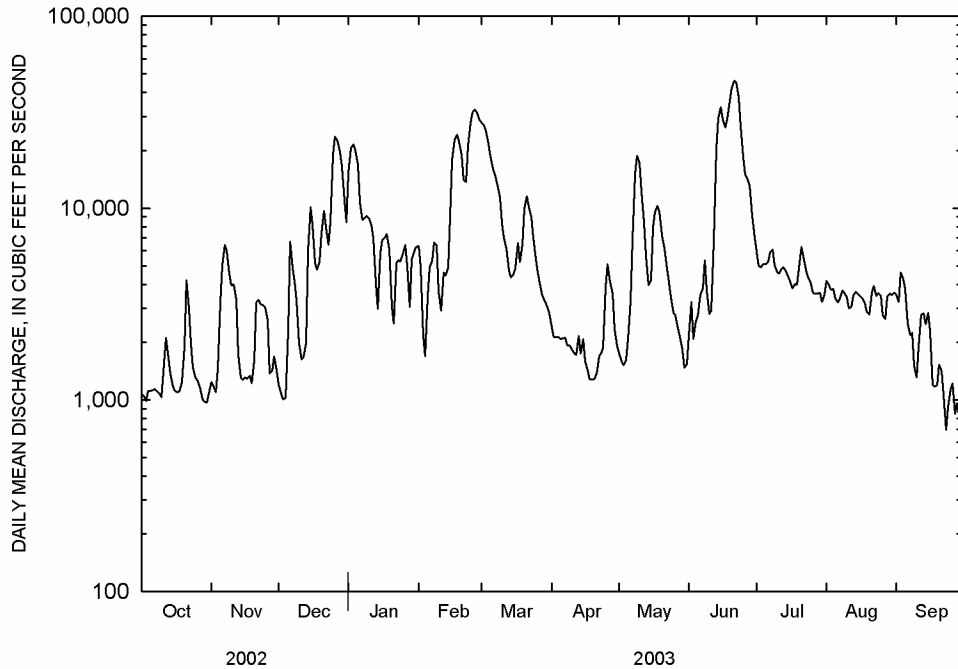
07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	2465	5175	9532	12180	12440	13050	12850	12280	5411	2909	2027	2217
MAX	18200	25370	41930	46610	40110	45110	48110	52200	31090	13640	7469	19410
(WY)	1985	1973	1983	1937	1950	1945	1945	1968	1974	1989	1966	1974
MIN	291	381	740	686	1542	1742	1578	1674	411	260	176	154
(WY)	1933	1933	1940	1940	1936	1954	1930	1932	1936	1930	1930	1943

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1929 - 2003	
ANNUAL TOTAL	2914406		2368789			
ANNUAL MEAN	7985		6490		7689	
HIGHEST ANNUAL MEAN					16120	
LOWEST ANNUAL MEAN					2292	
HIGHEST DAILY MEAN	57300	Mar 24	46100	Jun 21	238000	Apr 3 1945
LOWEST DAILY MEAN	969	Oct 30	681	Sep 30	125	Sep 16 1943
ANNUAL SEVEN-DAY MINIMUM	1070	Sep 25	937	Sep 24	132	Sep 11 1943
MAXIMUM PEAK FLOW			47700	Jun 21	243000	Apr 3 1945
MAXIMUM PEAK STAGE			32.84	Jun 22	44.82	Apr 3 1945
INSTANTANEOUS LOW FLOW			564	Sep 23	125	¹ Sep 16 1943
ANNUAL RUNOFF (AC-FT)	5781000		4698000		5571000	
10 PERCENT EXCEEDS	19500		18000		19300	
50 PERCENT EXCEEDS	4320		3650		3460	
90 PERCENT EXCEEDS	1220		1210		800	

¹Also September 24-26, 1943



RED RIVER BASIN

369

07362000 OUACHITA RIVER AT CAMDEN--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-52, October 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 17...	0935	80513	81213	1120	768	7.5	78	7.1	91	17.9	22	6.50	1.50
DEC 04...	0930	80513	81213	1100	777	10.6	90	7.4	78	9.1	23	6.70	1.50
FEB 04...	1500	80513	81213	1870	780	10.4	89	7.3	68	9.7	21	6.20	1.40
APR 15...	1435	80513	81213	2710	766	9.3	102	7.1	157	20.0	23	6.60	1.50
JUN 25...	0930	80513	81213	23000	778	4.9	57	8.1	61	23.7	22	6.50	1.40
AUG 27...	0905	80513	81213	3090	767	7.0	89	6.5	68	28.0	22	6.30	1.60

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)
OCT 17...	2.00	.6	6.8	37	7.90	8.20	58	.40	.04	.03	.32	<.010	.37
DEC 04...	1.30	.4	4.9	30	4.60	8.00	48	.40	--	<.01	.07	<.010	--
FEB 04...	1.00	.3	3.6	26	4.00	6.80	53	.30	.04	.03	.17	<.010	.27
APR 15...	1.20	.6	7.0	39	5.80	13.0	54	.40	.03	.02	.05	<.010	.38
JUN 25...	1.30	.2	2.5	19	2.40	4.40	56	.50	.04	.03	.09	<.010	.47
AUG 27...	1.00	.3	3.6	25	2.70	6.70	47	.20	.03	.02	.06	<.010	.18

Date	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci, KF MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 17...	--	<.01	.04	.04	.72	46	E10	110	86	15	45
DEC 04...	--	<.01	<.02	.03	.47	E16	E21	E26	98	15	45
FEB 04...	--	<.01	<.02	<.02	.47	260	63	70	98	17	86
APR 15...	--	<.01	<.02	.03	.45	140	89	110	100	21	154
JUN 25...	.031	.01	<.02	.04	.59	42	E26	170	93	25	1550
AUG 27...	--	<.01	<.02	<.02	.26	62	68	94	80	28	234

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

RED RIVER BASIN

07362100 SMACKOVER CREEK NEAR SMACKOVER

LOCATION.--Lat 33°22'33", long 92°46'37", in NW₁/4SE₁/4 sec.32, T.15 S., R.16 W., Union County, Hydrologic Unit 08040201, near right bank on downstream side of bridge on State Highway 7, 0.1 mi downstream from Camp Creek, 3.3 mi northwest of Smackover, and at mile 22.0.

DRAINAGE AREA.--385 mi².

PERIOD OF RECORD.--October 1961 to current year. Gage-height records collected and occasional discharge measurements made by U.S. Army Corps of Engineers at this site since September 1938. Daily stages 1940 to date and results of discharge measurements 1947 to 1960 are published in reports of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR Ark. 1967: 1965. WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 97.56 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 1, 1989, water-stage recorder at site 100 ft downstream at same datum. Mar. 1, 1989 to Sept. 4, 1991, non-recording gage at same site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	25	25	1420	99	2210	245	78	47	94	42	29
2	6.0	21	23	1520	95	1920	209	68	42	73	41	32
3	6.5	23	22	1230	94	1590	189	63	37	61	40	37
4	8.1	50	73	889	96	1320	182	77	34	55	30	37
5	10	168	209	487	95	1040	169	160	31	60	28	33
6	8.6	278	197	293	137	732	167	170	29	87	25	29
7	9.8	180	129	232	348	569	275	216	29	98	27	26
8	16	100	85	200	403	475	362	352	29	94	24	24
9	18	54	62	187	319	389	261	311	29	69	20	22
10	25	33	47	175	384	325	192	182	28	56	16	22
11	33	27	41	162	432	278	159	122	27	47	13	22
12	35	23	38	148	331	245	141	92	454	40	13	215
13	30	21	116	136	241	251	130	74	828	38	43	306
14	21	18	321	129	227	375	118	91	513	39	23	78
15	15	17	309	127	620	384	106	319	372	32	15	15
16	12	17	188	126	1040	302	99	400	197	28	11	4.5
17	10	16	118	122	1320	252	88	474	232	25	10	1.9
18	8.6	15	97	117	1220	264	82	620	466	22	9.3	0.23
19	10	15	1480	114	906	1090	77	631	567	21	9.8	0.00
20	19	15	2500	115	590	1910	72	568	644	26	11	0.00
21	23	16	3070	117	901	2420	72	386	673	25	12	0.00
22	25	16	1930	114	2630	1740	71	215	305	25	13	2.9
23	21	16	1060	108	4450	1150	66	161	135	25	13	6.6
24	16	16	1250	101	4090	564	211	133	99	21	14	4.2
25	15	18	1770	96	2830	327	530	110	80	17	18	1.6
26	19	22	1870	96	2380	637	497	112	154	15	20	0.19
27	19	33	1500	100	2390	898	262	113	472	14	23	0.00
28	18	31	1030	95	2350	877	153	100	476	13	37	0.00
29	21	30	619	95	---	710	110	81	261	11	35	0.00
30	26	27	314	99	---	471	88	65	138	15	29	0.00
31	28	---	876	101	---	303	---	54	---	30	28	---
TOTAL	538.4	1341	21369	9051	31018	26018	5383	6598	7428	1276	693.1	949.12
MEAN	17.4	44.7	689	292	1108	839	179	213	248	41.2	22.4	31.6
MAX	35	278	3070	1520	4450	2420	530	631	828	98	43	306
MIN	5.8	15	22	95	94	245	66	54	27	11	9.3	0.00
AC-FT	1070	2660	42390	17950	61520	51610	10680	13090	14730	2530	1370	1880
CFSM	0.05	0.12	1.79	0.76	2.88	2.18	0.47	0.55	0.64	0.11	0.06	0.08
IN.	0.05	0.13	2.06	0.87	3.00	2.51	0.52	0.64	0.72	0.12	0.07	0.09

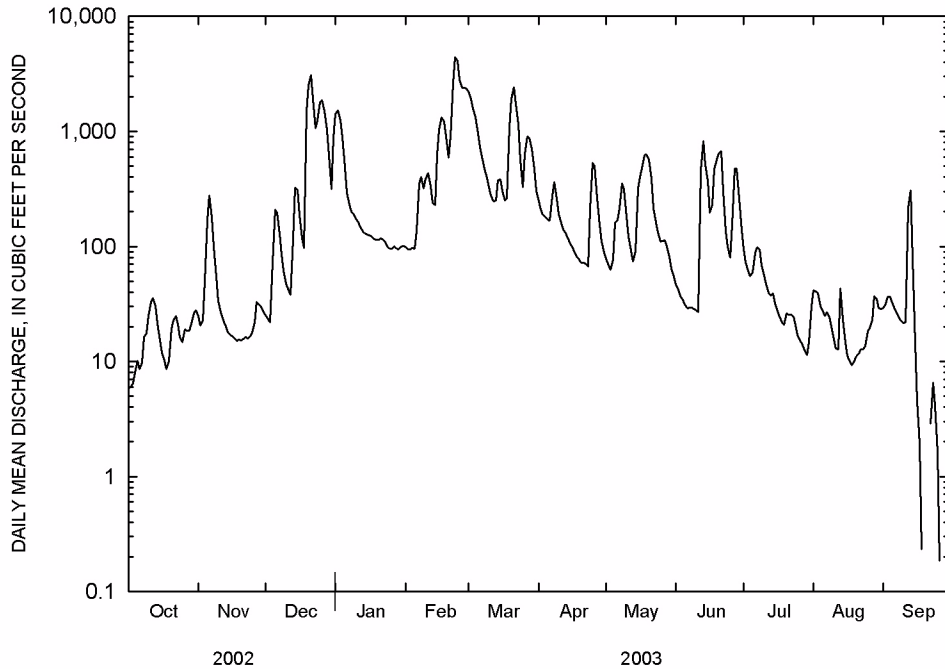
RED RIVER BASIN

07362100 SMACKOVER CREEK NEAR SMACKOVER--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2003, BY WATER YEAR (WY)

MEAN	129	241	610	652	852	884	742	517	425	122	48.7	89.1
MAX	1784	1143	2497	1980	2875	2875	4078	1701	2864	1949	346	2174
(WY)	1985	1975	2002	1962	2001	2001	1991	1966	1974	1989	1971	1974
MIN	1.51	3.66	33.5	38.8	44.6	112	90.6	33.6	8.91	1.81	0.22	1.29
(WY)	1996	1996	1982	2000	1996	1967	1971	1996	1972	1964	2000	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1962 - 2003	
ANNUAL TOTAL	180211.9		111662.62			
ANNUAL MEAN	494		306		440	
HIGHEST ANNUAL MEAN					1074 1974	
LOWEST ANNUAL MEAN					94.4 1963	
HIGHEST DAILY MEAN	7640	May 12	4450	Feb 23	35300	Apr 6 1997
LOWEST DAILY MEAN	2.4	Aug 13	0.00	Sep 19	0.00	Aug 24 1978
ANNUAL SEVEN-DAY MINIMUM	2.9	Aug 9	0.86	Sep 24	0.00	Aug 8 2000
MAXIMUM PEAK FLOW			4880	Feb 23	52700	Jun 8 1974
MAXIMUM PEAK STAGE			15.60	Feb 23	24.97	Jun 8 1974
INSTANTANEOUS LOW FLOW			0.00 at times		0.00 at times	
ANNUAL RUNOFF (AC-FT)	357500		221500		319100	
ANNUAL RUNOFF (CFSM)	1.28		0.79		1.14	
ANNUAL RUNOFF (INCHES)	17.41		10.79		15.55	
10 PERCENT EXCEEDS	1480		893		1240	
50 PERCENT EXCEEDS	136		92		96	
90 PERCENT EXCEEDS	6.3		13		6.0	



RED RIVER BASIN

07362500 MORO CREEK NEAR FORDYCE

LOCATION.--Lat 33°47'32", long 92°20'00", in NW₁/₄NW₁/₄ sec.3, T.11 S., R.12 W., Calhoun-Cleveland County line, Hydrologic Unit 08040201, on downstream side of bridge on State Highway 8, 5.0 mi southeast of Fordyce.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--October 1951 to September 1983, January 1984, March to April 1984, October 2001 to current year. Annual maximum 1984-2001.

GAGE.--Water-stage recorder.

REMARKS.--No estimated daily discharges. Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.23	11	18	933	35	1750	79	29	17	34	7.2	0.02
2	0.08	11	18	918	35	1370	65	23	15	27	6.8	0.03
3	0.02	13	18	768	35	1130	57	18	17	23	6.3	0.00
4	0.16	21	27	761	34	1040	51	15	57	26	5.5	0.00
5	0.26	44	60	760	33	969	46	16	82	26	4.7	0.03
6	0.40	83	54	696	40	883	45	59	76	27	9.4	2.4
7	0.62	66	38	565	77	746	47	135	80	36	10	2.9
8	0.83	49	34	352	102	582	47	277	107	48	13	2.4
9	1.6	35	31	194	107	483	45	387	70	33	13	1.8
10	2.8	32	29	132	114	431	40	550	41	23	10	1.4
11	6.1	35	27	104	112	343	38	792	28	18	9.4	1.0
12	9.9	30	24	90	98	231	35	960	712	15	9.3	0.94
13	11	26	34	78	85	168	32	820	1490	11	8.7	6.7
14	8.4	23	68	70	182	154	30	579	1330	9.6	7.6	17
15	6.4	22	72	64	806	155	27	428	1190	7.8	6.1	14
16	5.6	21	62	60	1230	155	25	376	1940	8.0	5.1	9.0
17	4.9	21	67	56	1440	140	23	303	5820	8.2	3.9	6.6
18	4.3	21	80	53	3550	122	20	247	5610	9.4	3.0	5.1
19	5.5	21	562	51	3170	307	19	287	4500	12	2.5	3.2
20	9.4	20	900	49	2160	603	19	304	3280	14	2.0	2.1
21	15	18	763	48	1750	701	18	304	2680	17	1.5	1.7
22	13	17	621	46	2880	659	17	254	1760	16	1.1	2.5
23	13	17	703	43	3120	597	17	188	1150	18	0.82	2.4
24	11	17	1320	41	3250	547	22	172	847	19	0.59	2.0
25	9.1	16	1820	39	3220	330	46	131	458	17	0.39	1.6
26	8.7	17	1890	38	2520	129	68	81	165	15	0.23	1.2
27	8.4	18	1370	37	2080	88	72	53	110	13	0.14	0.92
28	9.1	19	1070	39	1880	119	77	38	83	11	0.18	0.68
29	10	18	921	38	---	132	57	30	57	9.6	0.11	0.47
30	11	18	839	36	---	122	39	25	42	8.7	0.03	0.32
31	12	---	936	36	---	99	---	21	---	7.8	0.00	---
TOTAL	198.80	780	14476	7195	34145	15285	1223	7902	33814	568.1	148.59	90.41
MEAN	6.41	26.0	467	232	1219	493	40.8	255	1127	18.3	4.79	3.01
MAX	15	83	1890	933	3550	1750	79	960	5820	48	13	17
MIN	0.02	11	18	36	33	88	17	15	15	7.8	0.00	0.00
AC-FT	394	1550	28710	14270	67730	30320	2430	15670	67070	1130	295	179
CFSM	0.03	0.11	1.95	0.97	5.08	2.05	0.17	1.06	4.70	0.08	0.02	0.01
IN.	0.03	0.12	2.24	1.12	5.29	2.37	0.19	1.22	5.24	0.09	0.02	0.01

RED RIVER BASIN

373

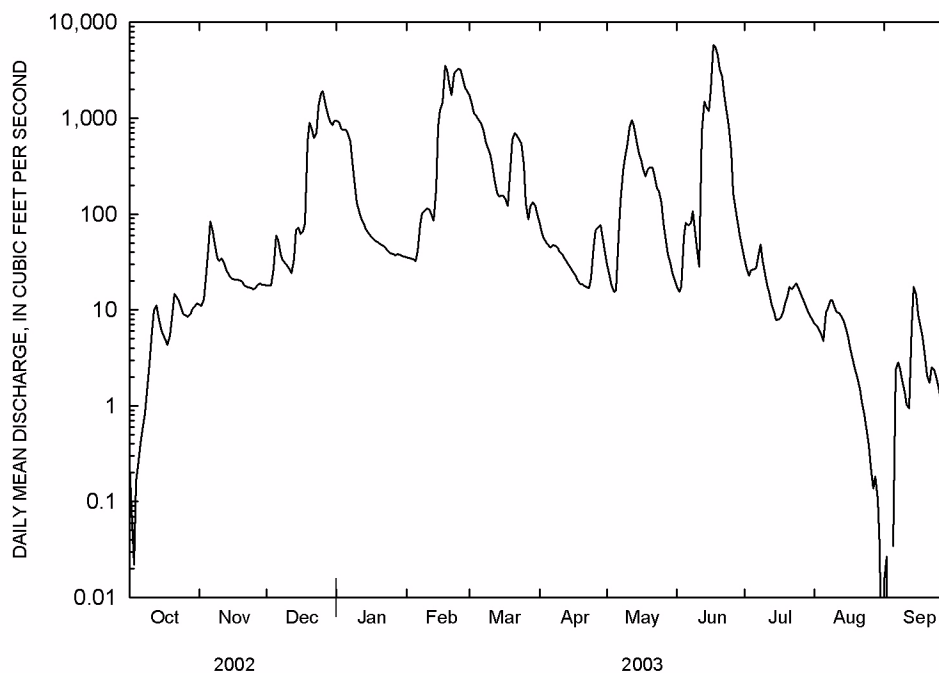
07362500 MORO CREEK NEAR FORDYCE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952-84, 2002-03, BY WATER YEAR (WY)

MEAN	20.0	82.2	317	309	493	566	528	471	153	33.2	15.1	22.9
MAX	275	796	1736	1348	1219	1811	1935	2336	1127	447	249	560
(WY)	2002	1975	2002	1979	2003	2002	1957	1958	2003	1963	1971	1974
MIN	0.000	0.000	0.70	1.34	21.7	19.1	15.6	10.4	0.077	0.006	0.000	0.000
(WY)	1953	1954	1956	1956	1971	1954	1971	1965	1977	1952	1952	1953

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1952-84, 2002-03

ANNUAL TOTAL	135094.66	115825.90	
ANNUAL MEAN	370	317	248
HIGHEST ANNUAL MEAN			594 1979
LOWEST ANNUAL MEAN			41.6 1972
HIGHEST DAILY MEAN	9950 Mar 19	5820 Jun 17	23600 May 2 1958
LOWEST DAILY MEAN	0.00 Aug 11	0.00 Aug 31	0.00 Oct 3 1951
ANNUAL SEVEN-DAY MINIMUM	0.00 Sep 3	0.02 Aug 30	0.00 Oct 3 1951
MAXIMUM PEAK FLOW		6320 Jun 17	26800 May 2 1958
MAXIMUM PEAK STAGE		13.12 Jun 17	16.47 May 2 1958
INSTANTANEOUS LOW FLOW		0.00 at times	0.00 at times
ANNUAL RUNOFF (AC-FT)	268000	229700	179800
ANNUAL RUNOFF (CFSM)	1.54	1.32	1.03
ANNUAL RUNOFF (INCHES)	20.94	17.95	14.05
10 PERCENT EXCEEDS	1060	934	717
50 PERCENT EXCEEDS	50	35	16
90 PERCENT EXCEEDS	0.43	1.9	0.00



RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM

LOCATION.--Lat 34°47'51", long 92°56'00", in NW₁/₄NE₁/₄ sec.29, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, on left bank 100 ft above low-water bridge on forest road, 5.7 mi west of Reform.

DRAINAGE AREA.--27.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	1.6	1.8	213	1.4	130	11	7.3	2.9	9.3	0.00	0.27
2	0.00	1.5	e1.8	111	1.3	142	9.5	6.3	6.1	7.4	0.00	0.91
3	0.00	11	e2.9	73	1.1	124	8.5	8.0	24	6.0	1.3	1.4
4	0.00	12	e149	54	0.95	86	8.3	9.3	13	4.6	0.87	1.0
5	0.00	32	71	41	0.84	63	9.8	84	16	3.6	0.88	0.61
6	0.00	24	39	31	1.4	48	9.4	40	61	2.9	0.76	0.40
7	0.00	16	27	25	1.6	38	23	843	52	2.4	0.78	0.29
8	0.00	11	20	21	1.2	32	18	142	31	1.7	0.43	0.17
9	0.01	8.4	16	18	e1.2	26	15	69	21	1.1	0.30	0.08
10	1.4	6.7	13	14	e2.5	21	14	43	15	0.83	0.17	0.02
11	0.83	5.1	12	11	3.4	19	13	30	143	0.77	0.28	0.05
12	0.42	4.0	9.7	9.7	4.6	17	11	21	1960	0.65	9.5	0.15
13	0.23	3.3	208	8.7	5.9	16	9.6	16	173	0.50	3.4	0.21
14	0.15	3.0	125	7.8	425	14	8.1	17	87	0.37	1.9	0.10
15	0.12	2.8	59	6.9	e327	12	7.1	14	58	0.28	1.5	0.08
16	0.09	2.5	39	6.0	e264	11	6.2	91	251	0.15	0.96	0.02
17	0.07	2.3	29	5.1	e129	9.6	5.6	355	286	0.08	0.73	0.00
18	0.06	2.2	545	4.6	82	11	5.1	162	512	0.01	0.54	0.00
19	0.86	1.9	361	4.2	e72	295	5.4	87	310	1.6	0.37	0.00
20	2.0	1.7	128	4.0	e63	101	9.0	55	107	1.5	0.21	0.00
21	1.7	1.6	67	3.7	e95	61	7.6	42	59	0.83	0.15	0.00
22	1.1	1.4	42	3.3	e413	45	6.1	35	37	0.51	0.19	0.00
23	0.79	1.4	164	2.7	e182	34	5.2	25	25	0.38	0.27	0.00
24	0.61	1.3	385	2.4	e110	28	59	19	17	0.22	0.29	0.00
25	0.50	2.1	137	2.2	e91	23	41	17	12	e0.11	0.20	0.00
26	0.44	2.9	76	2.1	e83	30	27	13	155	0.05	0.21	0.00
27	0.40	2.7	51	1.9	e78	23	20	10	42	0.02	0.54	0.00
28	0.46	2.3	37	1.8	e98	20	15	8.0	24	0.00	0.30	0.00
29	2.9	2.2	29	2.0	---	e17	11	6.4	16	0.00	0.23	0.00
30	2.8	2.0	100	1.8	---	e13	9.0	4.9	11	0.00	0.23	0.00
31	2.1	---	549	1.6	---	12	---	3.7	---	0.00	0.14	---
TOTAL	20.04	172.9	3494.2	694.5	2539.39	1521.6	407.5	2283.9	4527.0	47.86	27.63	5.76
MEAN	0.65	5.76	113	22.4	90.7	49.1	13.6	73.7	151	1.54	0.89	0.19
MAX	2.9	32	549	213	425	295	59	843	1960	9.3	9.5	1.4
MIN	0.00	1.3	1.8	1.6	0.84	9.6	5.1	3.7	2.9	0.00	0.00	0.00
AC-FT	40	343	6930	1380	5040	3020	808	4530	8980	95	55	11
CFSM	0.02	0.21	4.17	0.83	3.36	1.82	0.50	2.73	5.59	0.06	0.03	0.01
IN.	0.03	0.24	4.81	0.96	3.50	2.10	0.56	3.15	6.24	0.07	0.04	0.01

RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

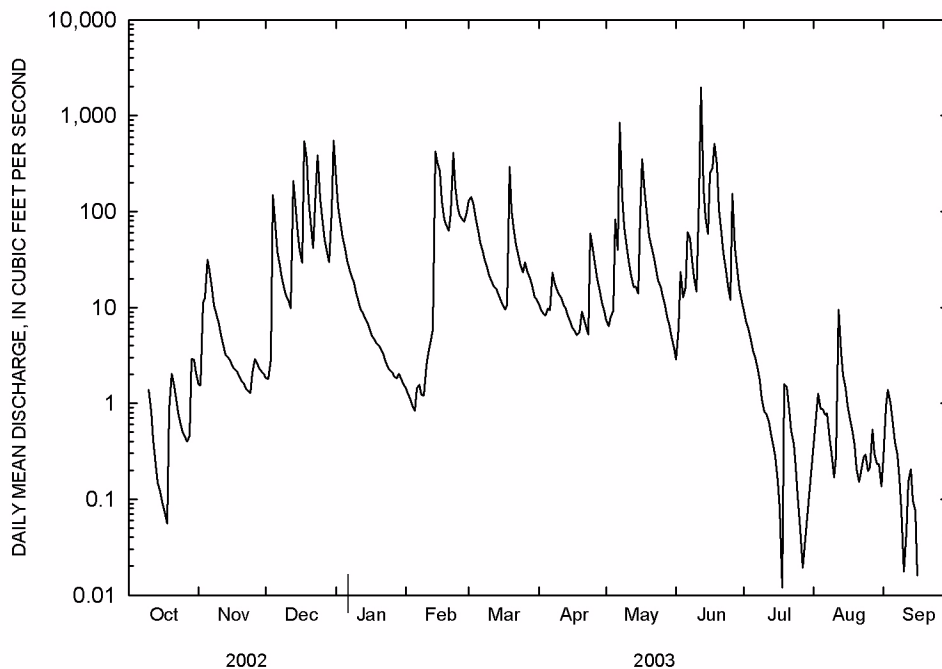
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)

MEAN	20.1	53.9	102	71.1	79.8	94.8	73.4	48.0	32.0	4.09	1.82	1.91
MAX	77.5	222	336	135	228	265	296	157	151	24.0	18.3	10.7
(WY)	1997	1997	1991	1991	2001	1990	1991	1990	2003	1994	1994	1996
MIN	0.000	2.22	1.37	22.4	8.81	37.8	8.10	1.18	1.31	0.024	0.000	0.000
(WY)	2001	1990	1990	2003	1996	1996	1992	1992	2002	1998	1991	1995

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003	
ANNUAL TOTAL	13714.18		15742.28			
ANNUAL MEAN	37.6		43.1		48.4	
HIGHEST ANNUAL MEAN					84.8 1991	
LOWEST ANNUAL MEAN					19.8 1996	
HIGHEST DAILY MEAN	1040	Mar 20	1960	Jun 12	5800	Dec 21 1990
LOWEST DAILY MEAN	0.00	Jul 8	0.00	Oct 1	0.00	Aug 21 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 12	0.00	Oct 1	0.00	Aug 21 1990
MAXIMUM PEAK FLOW			¹ 9090	Jun 12	¹ 13500	Dec 21 1990
MAXIMUM PEAK STAGE			13.67	Jun 12	15.30	Dec 21 1990
INSTANTANEOUS LOW FLOW			0.00	at times	0.00	at times
ANNUAL RUNOFF (AC-FT)	27200		31220		35060	
ANNUAL RUNOFF (CFSM)	1.39		1.60		1.79	
ANNUAL RUNOFF (INCHES)	18.90		21.69		24.36	
10 PERCENT EXCEEDS	101		103		101	
50 PERCENT EXCEEDS	5.3		6.1		8.2	
90 PERCENT EXCEEDS	0.04		0.07		0.00	

¹From rating curve extended above 790 ft³/s on basis of step-backwater computations

^eEstimated



RED RIVER BASIN

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, percent of saturation (00300)	pH, water, unfltrd units (00400)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
DEC												
13...	1240	80513	81213	330	70	16	753	5.7	16.1	135	6.3	7.3
16...	0915	80513	81213	39	20	5.5	749	5.3	8.7	75	6.6	8.4
31...	0830	80513	81213	538	80	9.6	746	4.5	10.9	99	6.2	10.1
FEB												
14...	1605	80513	81213	664	80	12	749	3.1	8.2	67	6.2	6.0
18...	1015	80513	81213	85	20	5.0	756	4.1	12.6	104	6.2	6.6
MAY												
05...	1630	80513	81213	78	70	19	744	3.2	9.2	104	6.6	19.7
JUN												
17...	0900	80513	81213	164	40	8.1	759	3.3	8.5	92	6.4	18.9
AUG												
25...	0815	80513	81213	.30	20	1.6	753	35	5.5	68	5.8	25.9

Date	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd end pt, field, CaCO3 mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
DEC													
13...	7	1.10	.94	.40	.2	1.0	23	6	1.40	<.1	4.80	2.40	16
16...	6	.92	.89	.30	.2	1.0	26	12	1.40	<.1	5.50	2.50	20
31...	6	1.00	.85	.40	.1	.8	21	4	1.00	<.1	4.50	2.50	14
FEB													
14...	6	1.00	.82	.40	.2	.9	23	2	1.00	<.1	4.40	2.80	13
18...	5	.84	.74	.30	.2	.9	26	3	1.20	<.1	5.20	2.60	14
MAY													
05...	8	1.40	1.00	.50	.1	.9	19	7	1.00	<.1	5.10	2.20	17
JUN													
17...	5	1.00	.71	.30	.2	.9	25	4	.80	<.1	5.70	2.00	14
AUG													
25...	13	2.30	1.80	.50	.1	1.2	16	12	1.30	<.1	3.70	.70	19

Date	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)
DEC													
13...	.04	23.2	26	.60	.01	.005	.049	.01	.013	.007	.002	.59	--
16...	.03	2.11	20	<.20	--	<.002	--	--	.011	--	<.001	--	--
31...	.04	37.8	26	.40	.01	.006	--	--	.004	--	<.001	.39	--
FEB													
14...	.04	46.6	26	.50	.01	.006	.089	.02	.021	.003	.001	.49	.003
18...	.02	2.75	12	<.20	--	<.002	--	--	.008	--	<.001	--	--
MAY													
05...	.05	7.79	37	.50	.01	.007	.080	.02	.020	.007	.002	.49	--
JUN													
17...	.03	11.1	25	.30	--	<.002	.018	--	.005	.003	.001	--	--
AUG													
25...	.04	.02	28	.20	--	A.003	--	--	A.004	--	<.001	--	--

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Suspnd. sediment, sieve diameter <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)
DEC													
13...	<.001	.022	.61	5.6	5.9	680	610	136	385	11	24	87	16
16...	<.001	.004	--	2.0	2.0	66	E15	48	98	3	3	100	3
31...	<.001	.025	.40	8.7	9.0	91	E450	134	219	6	12	83	11
FEB													
14...	.001	.026	.52	6.6	6.6	170	550	140	397	9	23	83	23
18...	<.001	.003	--	2.0	2.0	50	32	73	130	2	4	83	6
MAY													
05...	<.001	.005	.52	6.8	6.7	4300	4000	128	431	6	15	97	16
JUN													
17...	<.001	<.002	.30	5.9	5.2	E260	E710	108	177	5	8	100	7
AUG													
25...	<.001	.011	--	2.4	2.5	59	E120	225	808	33	37	72	13

RED RIVER BASIN

377

07362587 ALUM FORK SALINE RIVER NEAR REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspended sediment load, tons/d (80155)
DEC	
13...	14
16...	.32
31...	16
FEB	
14...	41
18...	1.4
MAY	
05...	3.4
JUN	
17...	3.1
AUG	
25...	.01

Remark codes used in this report:

- < -- Less than
- A -- Average value
- E -- Estimated value

RED RIVER BASIN

07362588 LAKE WINONA DOWNSTREAM FROM STILLHOUSE CREEK NEAR REFORM

LOCATION.--Lat 34°48'28", long 92°54'06", in NE1/4 sec.22, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, 0.5 mi downstream from Stillhouse Creek, and 3.4 mi upstream from dam.

PERIOD OF RECORD.--May 1989 to August 1990. December 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Reser-voir depth, feet (72025)	Sam-pling depth, feet (00003)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat un f uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)
FEB												
19...	1050	80513	80513	22.0	1.20	--	756	10.9	91	6.2	17	7.6
19...	1051	80513	81213	22.0	3.00	1.80	756	10.9	91	6.2	16	7.4
19...	1052	80513	80513	22.0	5.00	--	756	10.8	91	6.2	16	7.4
19...	1053	80513	80513	22.0	10.0	--	756	10.9	91	6.2	17	7.2
19...	1054	80513	80513	22.0	15.0	--	756	10.8	89	6.2	17	6.7
19...	1055	80513	80513	22.0	20.0	--	756	10.8	87	6.2	18	6.0
19...	1056	80513	80513	22.0	22.3	--	756	10.7	87	6.2	18	6.0
JUN												
25...	1238	80513	80513	20.0	.60	--	755	6.9	92	6.4	20	29.7
25...	1239	80513	81213	20.0	3.00	2.10	755	6.7	89	6.4	20	29.5
25...	1240	80513	80513	20.0	5.00	--	755	7.0	92	6.3	20	29.4
25...	1241	80513	80513	20.0	6.10	--	755	4.8	61	5.9	22	27.4
25...	1242	80513	80513	20.0	8.00	--	755	5.3	62	5.7	19	22.3
25...	1243	80513	80513	20.0	9.00	--	755	5.3	61	5.6	19	21.7
25...	1244	80513	80513	20.0	10.0	--	755	5.0	57	5.5	19	21.3
25...	1245	80513	80513	20.0	11.0	--	755	4.7	53	5.5	19	20.6
25...	1246	80513	80513	20.0	12.0	--	755	4.2	47	5.4	19	20.2
25...	1247	80513	80513	20.0	14.0	--	755	3.6	40	5.4	19	19.7
25...	1248	80513	80513	20.0	15.1	--	755	3.5	38	5.4	19	19.4
25...	1250	80513	81213	20.0	17.0	--	755	3.0	32	5.3	19	18.5
25...	1251	80513	80513	20.0	20.0	--	755	2.3	25	5.3	20	17.6
SEP												
03...	1330	80513	80513	10.0	.80	--	752	6.1	79	6.3	20	27.9
03...	1331	80513	80513	10.0	3.10	--	752	6.0	78	6.2	20	27.7
03...	1332	80513	81213	10.0	5.00	1.10	752	5.5	71	6.1	20	27.5
03...	1333	80513	80513	10.0	5.00	--	752	5.5	71	6.1	20	27.5
03...	1334	80513	80513	10.0	7.00	--	752	5.2	66	6.0	20	27.3
03...	1335	80513	80513	10.0	10.1	--	752	2.0	25	5.6	22	25.9

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Tur-bidity, NTU (00076)	Carbon dioxide water, unfltrd mg/L (00405)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat un f ixed end pt, field, mg/L as CaCO3 (00410)	Chlor-ide, water, fltrd, mg/L (00940)
FEB												
19...	1051	30	5.8	4.7	6	1.20	.82	.40	.2	.9	22	4
JUN												
25...	1239	20	1.9	11	7	1.40	.90	.50	.1	.9	20	13
25...	1250	50	8.5	127	7	1.40	.89	.60	.1	.8	18	14
SEP												
03...	1332	10	2.3	14	7	1.40	.78	.40	.1	.8	19	9

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia adsorp-tion ratio as N (00608)	Nitrite + nitrate water, fltrd, mg/L (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, unfltrd mg/L (00605)
FEB													
19...	<.1	4.20	2.70	14	.03	21	.70	.02	.016	.034	--	<.001	.68
JUN													
25...	<.1	2.70	2.20	17	.03	19	.20	--	<.002	<.002	--	<.001	--
25...	<.1	4.40	2.10	20	.04	32	.30	.01	.007	<.002	.007	.002	.29
SEP													
03...	<.1	2.50	1.40	14	.03	25	.30	--	<.002	<.002	--	A.001	--

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Chloro-phyll a phyto-plank-ton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)
FEB													
19...	<.001	.004	.73	3.5	3.6	E4	30	<.1	79	200	19	22	--
JUN													
25...	<.001	.010	--	4.0	4.2	E3	E2	2.0	48	88	10	20	<.1
25...	<.001	.017	--	6.1	6.2	--	--	--	161	308	89	98	--
SEP													
03...	<.001	.006	--	4.5	5.3	E9	E2	6.1	33	302	11	69	<.1

Remark codes used in this report:
 < -- Less than
 A -- Average value
 E -- Estimated value

RED RIVER BASIN

379

07362589 LAKE WINONA DOWNSTREAM FROM GILLIS BRANCH NEAR REFORM

LOCATION.--Lat 34°48'16", long 92°51'16", in SE1/4 sec.24, T.2 N., R.18 W., Saline County, Hydrologic Unit 08040203, 0.1 mi downstream from Gillis Branch, and 1.3 mi upstream from dam.

PERIOD OF RECORD.--May 1989 to August 1990. December 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	
FEB													
19...	1011	80513	80513	40.0	1.20	--	756	11.0	91	6.2	17	6.9	
19...	1012	80513	81213	40.0	3.00	2.00	756	11.1	92	6.3	17	6.7	
19...	1013	80513	80513	40.0	10.2	--	756	11.1	91	6.3	17	6.5	
19...	1014	80513	80513	40.0	15.0	--	756	11.1	91	6.3	17	6.5	
19...	1015	80513	80513	40.0	20.0	--	756	11.0	90	6.3	17	6.5	
19...	1016	80513	80513	40.0	25.0	--	756	10.9	90	6.3	17	6.4	
19...	1017	80513	80513	40.0	29.9	--	756	10.9	90	6.3	17	6.4	
19...	1018	80513	80513	40.0	35.0	--	756	10.9	89	6.3	17	6.4	
19...	1019	80513	80513	40.0	40.1	--	756	11.0	89	6.3	17	6.2	
JUN													
25...	1109	80513	80513	41.0	.60	--	754	7.4	96	6.4	20	28.5	
25...	1110	80513	81213	41.0	3.00	2.10	754	7.2	94	6.4	20	28.5	
25...	1111	80513	80513	41.0	5.00	--	754	7.2	93	6.4	20	27.8	
25...	1113	80513	80513	41.0	6.00	--	754	7.0	89	6.3	20	27.4	
25...	1114	80513	80513	41.0	7.00	--	754	5.9	73	5.9	20	25.9	
25...	1115	80513	80513	41.0	8.00	--	754	6.8	82	5.9	19	24.3	
25...	1116	80513	80513	41.0	9.00	--	754	5.4	63	5.6	19	22.3	
25...	1117	80513	80513	41.0	10.0	--	754	5.1	58	5.5	19	21.4	
25...	1118	80513	80513	41.0	11.0	--	754	4.3	48	5.5	19	20.9	
25...	1119	80513	80513	41.0	11.9	--	754	3.8	42	5.4	19	20.5	
25...	1120	80513	80513	41.0	13.9	--	754	3.1	35	5.3	19	19.9	
25...	1121	80513	80513	41.0	15.0	--	754	3.0	33	5.3	19	19.5	
25...	1122	80513	80513	41.0	16.9	--	754	2.6	28	5.3	19	18.8	
25...	1123	80513	81213	41.0	20.0	--	754	2.2	23	5.3	19	17.8	
25...	1124	80513	80513	41.0	23.0	--	754	2.8	29	5.3	20	15.4	
25...	1125	80513	80513	41.0	25.0	--	754	3.6	35	5.3	19	14.3	
25...	1126	80513	80513	41.0	27.0	--	754	4.2	40	5.3	19	13.0	
25...	1127	80513	80513	41.0	28.0	--	754	4.5	42	5.3	19	12.3	
25...	1128	80513	80513	41.0	30.0	--	754	4.4	40	5.3	20	11.2	
25...	1129	80513	80513	41.0	34.9	--	754	5.5	48	5.2	19	9.2	
25...	1131	80513	81213	41.0	38.0	--	754	5.6	48	5.2	19	8.6	
25...	1132	80513	80513	41.0	41.4	--	754	5.5	47	5.2	20	8.3	
SEP													
03...	1209	80513	80513	37.0	1.10	--	752	6.5	84	6.4	19	27.4	
03...	1210	80513	81213	37.0	3.00	2.20	752	6.4	82	6.4	20	27.4	
03...	1211	80513	80513	37.0	5.00	--	752	6.3	81	6.3	20	27.4	
03...	1212	80513	80513	37.0	10.0	--	752	6.3	81	6.3	20	27.4	
03...	1213	80513	80513	37.0	12.0	--	752	4.1	52	5.8	20	26.8	
03...	1214	80513	81213	37.0	12.9	--	752	2.2	28	5.6	21	25.9	
03...	1215	80513	80513	37.0	14.0	--	752	.3	4	5.5	22	23.9	
03...	1216	80513	80513	37.0	15.1	--	752	.1	2	5.4	22	21.7	
03...	1217	80513	80513	37.0	16.1	--	752	.1	1	5.5	22	19.5	
03...	1218	80513	80513	37.0	17.0	--	752	.1	1	5.4	22	17.9	
03...	1219	80513	80513	37.0	18.0	--	752	.1	1	5.4	22	16.7	
03...	1220	80513	80513	37.0	19.0	--	752	.2	2	5.4	21	15.8	
03...	1221	80513	80513	37.0	20.0	--	752	.4	4	5.3	21	15.1	
03...	1222	80513	80513	37.0	22.1	--	752	.9	9	5.4	21	14.0	
03...	1223	80513	80513	37.0	25.1	--	752	1.3	12	5.4	21	12.2	
03...	1224	80513	80513	37.0	30.0	--	752	2.3	21	5.4	21	10.7	
03...	1225	80513	81213	37.0	34.0	--	752	2.7	24	5.4	21	9.7	
03...	1226	80513	80513	37.0	36.7	--	752	3.0	26	5.4	22	9.2	
ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)													
Chloride, water, fltrd, mg/L (00940)													
Color, water, fltrd, Pt-Co units (00080)													
Turbidity, NTU (00076)													
Carbon dioxide, water, unfltrd mg/L (00405)													
Hardness, water, unfltrd mg/L as CaCO3 (00900)													
Calcium, water, fltrd, mg/L (00915)													
Magnesium, water, fltrd, mg/L (00925)													
Potassium, water, fltrd, mg/L (00935)													
Sodium adsorption ratio (00931)													
Sodium, water, fltrd, mg/L (00930)													
Sodium, percent (00932)													
Date													
Time													
FEB													
19...	1012	20	3.5	4.3	6	1.20	.84	.40	.2	.9	22	4	1.20
JUN													
25...	1110	20	1.8	2.8	7	1.40	.90	.50	.1	.9	20	4	1.00
25...	1123	30	6.4	47	7	1.40	.90	.50	.1	.9	20	5	1.20
25...	1131	10	3.2	60	7	1.30	.91	.40	.1	.9	21	5	1.20
SEP													
03...	1210	5	1.3	5.9	8	1.50	.92	.50	.1	.9	19	7	1.00
03...	1214	20	2.2	30	7	1.50	.90	.50	.1	.8	18	6	1.00
03...	1225	10	3.3	30	7	1.40	.95	.40	.1	.9	20	4	1.20

RED RIVER BASIN

07362589 LAKE WINONA DOWNSTREAM FROM GILLIS BRANCH NEAR REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd as N mg/L (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)
FEB 19...	<.1	4.00	2.70	14	.03	23	.90	.02	.018	--	.045	--	<.001
JUN 25...	<.1	2.80	2.30	12	.04	28	<.20	--	<.002	--	<.002	--	<.001
JUN 25...	<.1	3.40	2.40	14	.04	27	.30	.01	.004	.013	.004	.003	.001
JUN 25...	<.1	4.30	2.60	15	.03	19	<.20	.03	.022	--	.072	--	<.001
SEP 03...	<.1	2.90	1.60	14	.02	14	.20	--	<.002	--	<.002	--	A.001
SEP 03...	<.1	3.10	2.00	13	.03	25	.30	--	A.014	--	<.002	--	A.002
SEP 03...	<.1	4.80	2.60	15	.03	22	<.20	--	A.013	--	A.120	--	A.002

Date	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF 100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Chlorophyll a, phytoplankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, water, recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)
FEB 19...	.88	<.001	.007	.95	3.1	3.2	E2	26	<.1	65	169	29	34
JUN 25...	--	<.001	.006	--	4.2	4.3	<1	<1	1.6	33	69	3	11
JUN 25...	.30	<.001	<.002	.30	4.8	5.0	--	--	--	72	180	58	77
JUN 25...	--	<.001	<.002	--	2.7	2.7	--	--	--	36	150	70	71
SEP 03...	--	<.001	.008	--	4.4	5.2	E7	E6	4.3	28	101	1	28
SEP 03...	--	<.001	.007	--	4.5	4.5	--	--	--	41	220	45	112
SEP 03...	--	<.001	.017	--	2.8	3.1	--	--	--	86	415	433	455

Date	Mercury water, unfltrd recoverable, ug/L (71900)
JUN 25...	<.1
SEP 03...	<.1

Remark codes used in this report:
 < -- Less than
 A -- Average value
 E -- Estimated value

RED RIVER BASIN

381

07362590 LAKE WINONA AT REFORM

LOCATION.--Lat 34°47'51", long 92°50'43", in SE1/4SE1/4 sec.19, T.2 N., R.17 W., Saline County, Hydrologic Unit 08040203, at dam on Lake Winona at Reform.

PERIOD OF RECORD.--May 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
DEC												
17...	0805	80513	80513	69.0	.00	--	758	9.6	84	8.3	18	8.9
17...	0810	80513	81213	69.0	3.00	.91	758	9.8	85	8.3	18	8.6
17...	0811	80513	80513	69.0	5.00	--	758	9.7	83	8.2	18	8.6
17...	0812	80513	80513	69.0	9.90	--	758	9.7	83	8.0	18	8.5
17...	0813	80513	80513	69.0	15.0	--	758	9.3	80	7.9	18	8.5
17...	0814	80513	80513	69.0	20.1	--	758	9.3	80	7.7	18	8.5
17...	0815	80513	80513	69.0	24.8	--	758	9.5	82	7.6	19	8.4
17...	0816	80513	80513	69.0	30.0	--	758	9.2	78	7.5	19	8.3
17...	0817	80513	80513	69.0	35.0	--	758	9.1	78	7.3	19	8.3
17...	0818	80513	80513	69.0	40.1	--	758	9.1	77	7.2	19	8.3
17...	0819	80513	80513	69.0	45.0	--	758	9.0	77	7.2	19	8.2
17...	0820	80513	80513	69.0	50.0	--	758	9.1	77	7.1	19	8.2
17...	0821	80513	80513	69.0	55.2	--	758	9.1	77	7.0	19	8.1
17...	0822	80513	80513	69.0	60.1	--	758	9.2	78	7.0	18	8.0
17...	0823	80513	80513	69.0	65.8	--	758	9.4	80	6.9	18	7.9
17...	0824	80513	80513	69.0	69.3	--	758	9.3	79	6.8	18	7.9
FEB												
19...	0925	80513	80513	84.0	1.10	--	755	11.4	93	6.3	17	6.4
19...	0926	80513	81213	84.0	3.00	2.70	755	11.5	94	6.3	17	6.3
19...	0927	80513	80513	84.0	10.0	--	755	11.1	91	6.3	17	6.3
19...	0928	80513	80513	84.0	15.0	--	755	11.3	92	6.3	17	6.3
19...	0929	80513	80513	84.0	20.0	--	755	11.1	91	6.3	18	6.3
19...	0930	80513	80513	84.0	25.0	--	755	11.0	90	6.3	18	6.3
19...	0931	80513	80513	84.0	30.0	--	755	11.1	90	6.3	18	6.2
19...	0932	80513	80513	84.0	35.0	--	755	11.2	91	6.3	17	6.1
19...	0933	80513	80513	84.0	40.0	--	755	11.1	90	6.3	17	6.0
19...	0934	80513	80513	84.0	45.0	--	755	11.1	90	6.3	18	6.0
19...	0935	80513	80513	84.0	50.1	--	755	11.1	90	6.3	17	6.0
19...	0936	80513	80513	84.0	55.0	--	755	11.1	90	6.3	18	5.8
19...	0937	80513	80513	84.0	60.0	--	755	10.9	88	6.3	18	5.8
19...	0938	80513	80513	84.0	65.0	--	755	10.8	87	6.3	18	5.8
19...	0939	80513	80513	84.0	70.0	--	755	11.0	88	6.2	18	5.7
19...	0940	80513	80513	84.0	74.9	--	755	10.9	88	6.2	18	5.6
19...	0941	80513	80513	84.0	80.0	--	755	10.9	87	6.2	18	5.6
19...	0942	80513	80513	84.0	83.6	--	755	10.7	86	6.2	18	5.6
JUN												
25...	0906	80513	80513	83.0	.20	--	754	7.5	95	6.4	19	27.1
25...	0907	80513	81213	83.0	3.00	2.00	754	7.4	94	6.4	19	27.1
25...	0908	80513	80513	83.0	5.10	--	754	7.5	95	6.4	19	26.6
25...	0910	80513	80513	83.0	8.00	--	754	7.8	96	6.2	19	25.5
25...	0911	80513	80513	83.0	9.00	--	754	7.5	91	6.1	19	24.6
25...	0912	80513	80513	83.0	10.0	--	754	6.5	77	5.8	19	22.9
25...	0913	80513	80513	83.0	11.0	--	754	5.0	58	5.6	19	21.9
25...	0914	80513	80513	83.0	12.0	--	754	4.5	52	5.5	19	21.2
25...	0915	80513	80513	83.0	13.0	--	754	3.9	44	5.5	19	20.8
25...	0916	80513	80513	83.0	14.0	--	754	3.2	36	5.4	19	20.3
25...	0917	80513	80513	83.0	15.0	--	754	2.8	30	5.4	19	19.8
25...	0919	80513	80513	83.0	16.0	--	754	2.4	26	5.4	19	19.3
25...	0920	80513	80513	83.0	18.0	--	754	2.2	23	5.4	19	18.5
25...	0921	80513	80513	83.0	19.0	--	754	2.0	22	5.4	19	17.9
25...	0922	80513	80513	83.0	20.0	--	754	2.1	22	5.4	20	17.5
25...	0923	80513	81213	83.0	22.0	--	754	2.6	27	5.4	20	16.0
25...	0924	80513	80513	83.0	24.1	--	754	3.7	36	5.4	19	14.3
25...	0925	80513	80513	83.0	25.1	--	754	4.2	41	5.4	19	13.7
25...	0926	80513	80513	83.0	27.0	--	754	4.9	47	5.4	19	12.4
25...	0927	80513	80513	83.0	30.0	--	754	6.1	55	5.4	18	10.7
25...	0928	80513	80513	83.0	32.0	--	754	6.1	55	5.4	19	10.1
25...	0929	80513	80513	83.0	35.0	--	754	6.5	58	5.4	18	9.5
25...	0930	80513	80513	83.0	40.0	--	754	7.0	60	5.3	18	8.5
25...	0931	80513	80513	83.0	44.9	--	754	7.3	62	5.3	18	8.0
25...	0932	80513	80513	83.0	49.9	--	754	7.5	64	5.3	18	7.8
25...	0933	80513	80513	83.0	55.1	--	754	7.8	65	5.3	18	7.4
25...	0934	80513	80513	83.0	60.0	--	754	7.4	62	5.3	18	7.2
25...	0935	80513	80513	83.0	65.0	--	754	7.8	65	5.3	18	7.0
25...	0936	80513	80513	83.0	69.9	--	754	7.7	64	5.3	18	6.9
25...	0938	80513	80513	83.0	75.1	--	754	7.3	60	5.3	19	6.8
25...	0939	80513	81213	83.0	80.0	--	754	7.0	58	5.4	20	6.8
25...	0940	80513	80513	83.0	83.4	--	754	7.0	58	5.4	20	6.8

RED RIVER BASIN

07362590 LAKE WINONA AT REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Reservoir depth, feet (72025)	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfltrd, uS/cm, 25 degC (00095)	Temperature, water, deg C (00010)
SEP												
03...	0946	80513	80513	77.0	.20	--	752	6.3	80	6.3	19	27.1
03...	0949	80513	81213	77.0	3.20	2.10	752	6.4	81	6.3	19	27.1
03...	0951	80513	80513	77.0	5.00	--	752	6.3	80	6.3	20	27.1
03...	0953	80513	80513	77.0	8.00	--	752	6.2	80	6.3	19	27.1
03...	0954	80513	80513	77.0	10.0	--	752	6.1	78	6.2	19	27.1
03...	0955	80513	80513	77.0	12.1	--	752	6.0	77	6.2	20	27.1
03...	0958	80513	81213	77.0	13.0	--	752	2.8	34	5.5	20	25.4
03...	1000	80513	80513	77.0	14.0	--	752	.5	5	5.4	21	22.6
03...	1002	80513	80513	77.0	15.0	--	752	.1	2	5.4	21	20.2
03...	1004	80513	80513	77.0	16.0	--	752	.1	.0	5.3	21	18.6
03...	1006	80513	80513	77.0	18.0	--	752	.3	3	5.3	21	16.5
03...	1008	80513	80513	77.0	20.0	--	752	1.0	10	5.3	20	14.9
03...	1012	80513	80513	77.0	22.0	--	752	1.9	19	5.3	20	13.6
03...	1014	80513	80513	77.0	24.0	--	752	2.6	25	5.4	19	12.7
03...	1015	80513	80513	77.0	26.0	--	752	3.0	28	5.4	20	11.8
03...	1017	80513	80513	77.0	28.0	--	752	3.7	34	5.4	19	11.1
03...	1018	80513	80513	77.0	30.0	--	752	4.1	37	5.4	19	10.6
03...	1020	80513	80513	77.0	32.0	--	752	4.1	37	5.4	19	10.1
03...	1021	80513	80513	77.0	34.0	--	752	4.4	40	5.4	19	9.8
03...	1023	80513	80513	77.0	36.1	--	752	4.6	41	5.4	19	9.4
03...	1024	80513	80513	77.0	38.0	--	752	4.9	43	5.4	19	9.2
03...	1025	80513	80513	77.0	39.9	--	752	5.3	46	5.4	19	8.9
03...	1026	80513	80513	77.0	42.0	--	752	4.8	42	5.4	19	8.7
03...	1028	80513	80513	77.0	44.0	--	752	5.6	49	5.4	19	8.5
03...	1029	80513	80513	77.0	46.2	--	752	5.4	47	5.4	19	8.3
03...	1031	80513	80513	77.0	50.2	--	752	5.7	48	5.4	19	8.0
03...	1032	80513	80513	77.0	55.1	--	752	5.8	49	5.4	19	7.7
03...	1033	80513	80513	77.0	60.1	--	752	5.2	44	5.5	20	7.5
03...	1034	80513	80513	77.0	65.0	--	752	5.1	43	5.5	20	7.4
03...	1035	80513	80513	77.0	70.0	--	752	4.8	41	5.5	21	7.3
03...	1045	80513	81213	77.0	74.0	--	752	4.3	36	5.5	22	7.3
03...	1046	80513	80513	77.0	77.1	--	752	3.9	33	5.6	22	7.3

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Carbon dioxide, water, unfltrd, mg/L (00405)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption, ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd, end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)
DEC													
17...	0810	5	2.1		7	1.30	.90	.40	.1	.9	21	--	1.20
FEB													
19...	0926	10	2.6	3.7	6	1.20	.79	.40	.2	.9	22	4	1.20
JUN													
25...	0907	20	2.0	3.8	7	1.40	.88	.50	.1	.9	20	5	1.00
25...	0923	10	4.3	37	7	1.30	.90	.40	.1	.9	21	5	1.10
25...	0939	10	2.4	42	7	1.30	.90	.40	.1	.9	21	5	1.20

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents, mg/L (70301)	Residue water, fltrd, mg/L as tons/ acre-ft (70303)	Residue on evap. at 180degC, wat flt, mg/L (70300)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd, mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)
DEC													
17...	<.1	3.40	2.50	14	.02	17	.30	.01	.004	.048	<.001	.30	.003
FEB													
19...	<.1	3.80	2.60	14	.02	18	.70	.03	.022	.052	<.001	.68	--
JUN													
25...	<.1	2.90	2.20	13	.03	19	.30	.01	.004	<.002	<.001	.30	--
25...	<.1	3.10	2.50	13	.03	19	.20	.01	.006	<.002	<.001	.19	--
25...	<.1	4.70	2.60	16	.03	24	<.20	.02	.015	.101	<.001	--	--

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd, mg/L (00680)	Fecal coli-form, M-FC, 0.7u MF, col/ 100 mL (31625)	Fecal strep-tococci, KF, col/ 100 mL (31673)	Chloro-phyll a phyto-plank- ton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, unfltrd, recover- able, ug/L (01045)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd, recover- able, ug/L (01055)	Mercury water, unfltrd, recover- able, ug/L (71900)
DEC													
17...	.001	<.002	.35	2.6	2.7	<1	E2	<.1	94	293	141	178	--
FEB													
19...	<.001	.007	.75	2.9	3.0	E12	E9	<.1	58	157	32	40	--
JUN													
25...	<.001	<.002	--	4.4	4.3	<1	<1	1.6	30	93	2	10	<.1
25...	<.001	<.002	--	3.4	3.4	--	--	--	29	127	15	27	--
25...	<.001	<.002	--	2.8	2.7	--	--	--	55	170	222	241	--

RED RIVER BASIN

383

07362590 LAKE WINONA AT REFORM--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Color, water, fltrd, Pt-Co units (00080)	Turbidity, NTU (00076)	Carbon dioxide, water, unfltrd mg/L (00405)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)
SEP													
03...	0949	10	1.5	9.4	7	1.50	.91	.50	.1	.8	18	9	1.00
03...	0958	10	1.3	18	8	1.50	.93	.50	.1	.9	19	3	1.00
03...	1045	10	2.2	55	7	1.30	.94	.40	.1	.9	20	9	1.20

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue, water, sum of constituents mg/L (70301)	Residue, water, fltrd, tons/acre-ft (70303)	Residue, on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)
SEP													
03...	<.1	3.00	1.60	15	.03	23	.30	A.005	<.002	A.002	<.001	.008	4.3
03...	<.1	3.00	1.60	11	.02	14	.30	<.002	<.002	<.001	<.001	.008	5.0
03...	<.1	5.10	2.60	18	.03	21	<.20	A.007	A.151	A.002	<.001	.004	2.8

Date	Organic carbon, water, unfltrd mg/L (00680)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF MF col/100 mL (31673)	Chlorophyll a phyton, plankton, fluoro, ug/L (70953)	Iron, water, fltrd, ug/L (01046)	Iron, unfltrd recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, unfltrd recoverable, ug/L (01055)	Mercury, water, unfltrd recoverable, ug/L (71900)
SEP									
03...	5.0	E1	E1	3.4	33	99	2	28	<.1
03...	5.1	--	--	--	36	99	1	27	--
03...	2.8	--	--	--	59	249	466	475	--

Remark codes used in this report:

- < -- Less than
- A -- Average value
- E -- Estimated value

RED RIVER BASIN

07362693 MIDDLE FORK SALINE RIVER NEAR OWENSVILLE

LOCATION.--Lat 34°37'50", long 92°49'38", in SW_{1/4}NE_{1/4}NE_{1/4} sec.2, T.1 S., R.17 W., Saline County, Hydrologic Unit 08040203, on Vance Road, approximately 2.0 mi north of Owensville, off State Hwy 5, 17 mi west of Benton.

DRAINAGE AREA.--93.9 mi².

PERIOD OF RECORD.--May 2002 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	18	16	452	29	336	37	28	4.9	42	21	25
2	3.9	15	15	266	29	332	35	26	6.4	48	18	57
3	3.9	53	15	188	29	281	34	24	10	38	24	105
4	4.2	92	509	145	29	212	34	30	19	33	33	57
5	3.8	82	242	119	27	172	46	33	20	30	29	33
6	3.2	95	118	97	30	139	46	33	291	26	26	20
7	3.3	51	76	81	38	117	81	590	151	24	23	13
8	3.1	35	e61	74	38	101	66	239	78	22	23	11
9	5.1	28	e57	69	37	90	50	111	45	20	e14	8.8
10	33	24	e52	62	41	80	43	65	29	23	e10	7.3
11	24	21	e49	55	47	73	38	42	136	23	14	9.6
12	14	17	e46	49	51	69	35	28	3950	22	113	14
13	9.6	14	e630	46	52	67	33	20	601	20	47	19
14	7.4	13	317	44	1000	66	30	19	268	19	27	18
15	6.7	14	158	42	1060	60	27	17	189	17	20	15
16	e4.5	14	106	40	644	57	26	67	342	16	15	11
17	e4.3	13	79	38	340	54	25	406	858	14	12	9.0
18	e4.0	13	237	82	224	59	23	178	985	14	10	8.0
19	36	13	1610	35	172	512	24	104	2490	71	9.1	7.2
20	41	13	381	35	144	244	32	69	402	77	7.9	6.9
21	33	14	215	34	178	150	33	52	226	47	8.0	6.8
22	21	14	150	33	861	109	28	41	151	34	7.2	7.4
23	16	13	444	31	488	86	25	33	110	28	5.9	6.7
24	13	12	1080	29	273	71	92	25	85	23	5.4	6.6
25	12	15	408	29	226	63	95	20	64	19	4.9	6.6
26	11	19	234	29	208	81	61	18	99	16	5.2	6.9
27	11	22	165	28	203	66	47	14	103	15	12	6.3
28	13	20	129	28	265	57	40	11	65	13	183	5.9
29	42	18	106	30	---	50	35	9.7	48	13	62	5.6
30	27	17	140	31	---	e41	32	7.3	40	22	40	5.4
31	23	---	900	30	---	40	---	5.8	---	24	38	---
MEAN	14.2	26.7	282	75.8	242	127	41.8	76.3	396	27.5	28.0	17.3
MAX	42	95	1610	452	1060	512	95	590	3950	77	183	105
MIN	3.1	12	15	28	27	40	23	5.8	4.9	13	4.9	5.4

RED RIVER BASIN

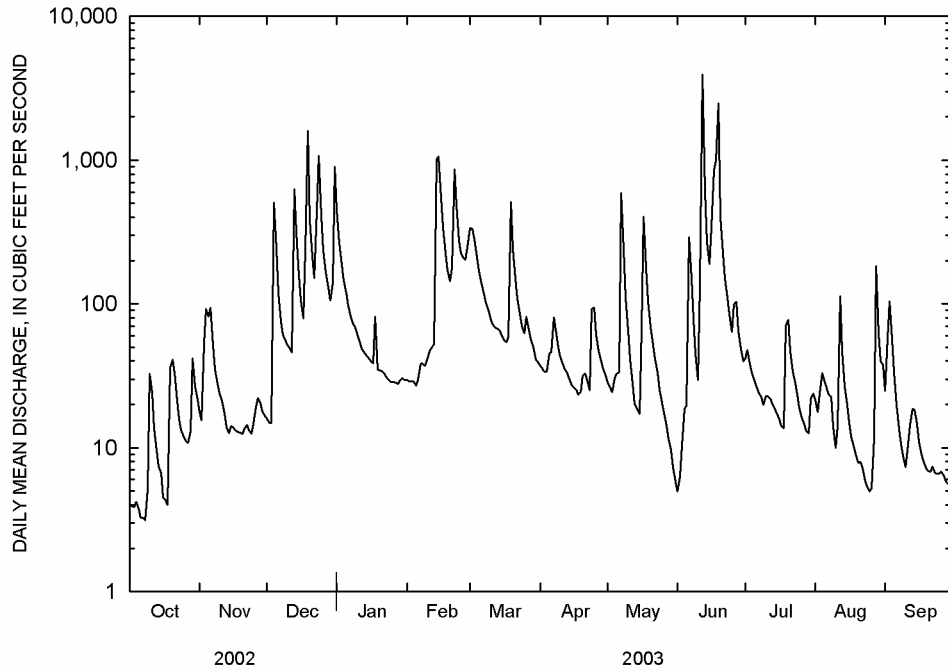
07362693 MIDDLE FORK SALINE RIVER NEAR OWENSVILLE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	14.2	26.7	282	75.8	242	127	41.8	76.3	204	38.7	18.9	12.1
MAX	14.2	26.7	282	75.8	242	127	41.8	76.3	396	49.9	28.0	17.3
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2003	2002	2003	2003
MIN	14.2	26.7	282	75.8	242	127	41.8	76.3	13.3	27.5	9.86	6.98
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	2002	2003	2002	2002

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	112		112	
HIGHEST ANNUAL MEAN			112	2003
LOWEST ANNUAL MEAN			112	2003
HIGHEST DAILY MEAN	3950	Jun 12	3950	Jun 12 2003
LOWEST DAILY MEAN	3.1	Oct 8	2.9	Sep 15 2002
ANNUAL SEVEN-DAY MINIMUM	3.6	Oct 2	3.3	Sep 12 2002
MAXIMUM PEAK FLOW	7910	Jun 12	7910	Jun 12 2003
MAXIMUM PEAK STAGE	13.01	Jun 12	13.01	Jun 12 2003
INSTANTANEOUS LOW FLOW	2.8	Oct 8	2.8	Oct 8 2002
10 PERCENT EXCEEDS	240		240	
50 PERCENT EXCEEDS	33		33	
90 PERCENT EXCEEDS	7.7		7.7	

^eEstimated



RED RIVER BASIN

07363000 SALINE RIVER AT BENTON

LOCATION.--Lat 34°34'05", long 92°06'37", in SW₁/₄NE₁/₄ sec.9, T.2 S., R.15 W., Saline County, Hydrologic Unit 08040203, on left bank 0.8 mi west of Benton, 3.0 mi downstream from confluence of North Fork and Alum Fork, and at mile 198.1.

DRAINAGE AREA.--550 mi².

PERIOD OF RECORD.--October 1950 to September 1979, October 1983 to September 1984, October 2000 to current year. Annual maximum 1980-2000. Gage-height records collected at site 0.4 mi downstream since July 1938 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR Ark. 1973: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 259.9 above NGVD of 1929. July 6, 1938, to July 29, 1948, and Feb. 14 to Mar. 24, 1950, nonrecording gage; July 30, 1948, to Feb. 13, 1950, and Mar. 25, 1950, to July 13, 1950, water-stage recorder, all at site 0.4 mi downstream at datum 3.0 ft lower.

REMARKS.--No estimated daily discharges. Water-discharge records good. Little Rock diverts about 35 ft³/s daily from Lake Winona on Alum Fork for municipal use and discharges sewage effluent into Arkansas River. Benton diverts about 7.5 ft³/s daily for municipal use just upstream from station. At times low flow is augmented by releases from Lake Norrell.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1927 reached a stage of about 32.0 ft, at former site and datum (from information by State Highway and Transportation Department), or about 30.5 ft, at present site and datum, discharge, about 110,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	117	69	4390	159	2280	273	199	119	329	67	95
2	28	94	65	2170	156	2250	251	181	113	301	60	88
3	20	191	61	1400	154	1900	235	179	113	287	79	78
4	18	411	2510	970	151	1510	230	172	122	262	72	127
5	14	339	2490	717	150	1180	283	163	133	242	72	123
6	21	326	885	569	158	913	325	167	564	238	78	104
7	22	275	483	484	175	731	360	593	1620	209	71	88
8	22	198	371	436	189	626	412	1820	550	201	67	70
9	25	151	315	405	194	569	368	848	398	188	59	66
10	61	140	278	375	199	526	321	504	316	184	54	61
11	37	145	273	337	215	486	302	430	378	166	49	72
12	63	133	262	309	240	452	250	336	9110	190	47	173
13	64	110	1610	286	270	439	211	272	9000	154	74	166
14	46	94	2710	266	3800	435	203	230	2530	151	98	180
15	36	89	1190	250	5580	404	182	207	1460	171	77	157
16	28	74	666	238	4400	383	154	177	1370	178	63	136
17	22	69	496	227	2500	368	134	2090	6080	175	52	116
18	19	66	535	345	1580	358	123	1990	6250	149	48	99
19	61	63	3560	309	1120	1380	133	1080	5670	197	46	85
20	110	63	2350	197	886	1580	167	628	2730	310	42	79
21	154	66	1230	195	855	978	179	469	1510	291	38	74
22	127	62	758	191	5870	688	162	391	878	233	35	72
23	96	63	1260	183	4400	548	132	331	583	185	34	72
24	74	52	8000	175	2220	472	532	279	476	148	37	75
25	57	63	3390	171	1620	408	627	246	404	119	37	77
26	46	65	1750	166	1470	460	412	219	415	95	59	70
27	38	61	1120	162	1440	476	326	195	481	69	32	62
28	44	71	770	158	1770	411	273	178	499	57	25	56
29	116	74	599	158	---	370	241	160	410	67	72	50
30	195	75	582	160	---	332	224	144	343	80	106	45
31	157	---	4510	162	---	304	---	126	---	68	93	---
TOTAL	1850	3800	45148	16561	41921	24217	8025	15004	54625	5694	1843	2816
MEAN	59.7	127	1456	534	1497	781	268	484	1821	184	59.5	93.9
MAX	195	411	8000	4390	5870	2280	627	2090	9110	329	106	180
MIN	14	52	61	158	150	304	123	126	113	57	25	45
AC-FT	3670	7540	89550	32850	83150	48030	15920	29760	108300	11290	3660	5590
CFSM	0.11	0.23	2.65	0.97	2.72	1.42	0.49	0.88	3.31	0.33	0.11	0.17
IN.	0.13	0.26	3.05	1.12	2.84	1.64	0.54	1.01	3.69	0.39	0.12	0.19

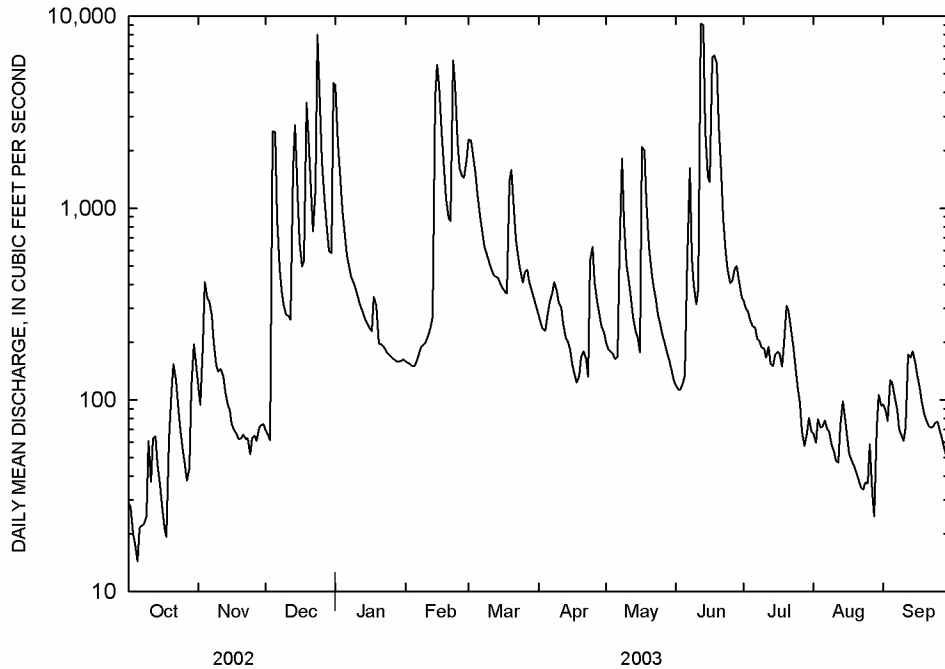
RED RIVER BASIN

07363000 SALINE RIVER AT BENTON--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-79, 1984, 2001-03, BY WATER YEAR (WY)

MEAN	178	654	997	1042	1346	1487	1360	1200	482	154	130	186
MAX	1415	3330	2529	3512	4935	4154	4631	5376	3930	888	951	1103
(WY)	1971	1974	1960	1969	1956	1973	1973	1968	1974	1951	1966	1973
MIN	16.0	49.1	72.3	81.3	242	215	197	114	33.4	3.22	3.59	1.28
(WY)	1957	1954	1966	1964	1963	1954	1972	1959	1954	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951-79, 1984 2001-03	
ANNUAL TOTAL	206256		221504			
ANNUAL MEAN	565		607		765	
HIGHEST ANNUAL MEAN					1646 1973	
LOWEST ANNUAL MEAN					282 1963	
HIGHEST DAILY MEAN	12100	Mar 20	9110	Jun 12	66000	Jan 30 1969
LOWEST DAILY MEAN	10	Sep 7	14	Oct 5	0.00	Jul 23 1954
ANNUAL SEVEN-DAY MINIMUM	16	Sep 6	20	Oct 3	0.04	Jul 23 1954
MAXIMUM PEAK FLOW			15600	Jun 12	100000	Jan 30 1969
MAXIMUM PEAK STAGE			17.87	Jun 12	29.68	Jan 30 1969
INSTANTANEOUS LOW FLOW			13	Oct 5	0.00	at times
ANNUAL RUNOFF (AC-FT)	409100		439400		554000	
ANNUAL RUNOFF (CFSM)	1.03		1.10		1.39	
ANNUAL RUNOFF (INCHES)	13.95		14.98		18.89	
10 PERCENT EXCEEDS	1630		1580		1560	
50 PERCENT EXCEEDS	140		195		206	
90 PERCENT EXCEEDS	25		57		29	



RED RIVER BASIN

07363200 SALINE RIVER NEAR SHERIDAN

LOCATION.--Lat 34°06'56", long 92°24'21", in NE1/4NW1/4 sec.15, T.7 S., R.13 W., Grant County, Hydrologic Unit 08040203, on downstream side of bridge on U.S. Highway 167, 13.5 mi south of Sheridan.

DRAINAGE AREA.--1,129 mi².

PERIOD OF RECORD.--October 1970 to October 1982, October 2001 to current year. Annual maximum 1983-2001.

GAGE.--Water-stage recorder.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	320	140	3890	357	5880	662	476	280	855	143	76
2	37	348	142	3670	356	5220	608	417	258	984	143	125
3	35	301	136	4830	351	4870	560	372	252	947	129	130
4	39	289	177	7300	337	4780	525	338	264	727	119	139
5	42	482	405	7290	328	4710	497	329	257	571	117	120
6	40	790	1400	6070	335	4300	489	343	249	562	141	114
7	38	888	1970	4400	394	3550	538	915	326	498	121	140
8	38	785	2160	2870	529	2870	597	2160	801	407	124	127
9	37	644	1970	1760	595	2080	640	2790	1360	342	128	106
10	60	497	1350	1410	586	1550	666	3180	943	293	110	88
11	151	391	881	1140	565	1240	606	3430	631	260	102	77
12	336	325	706	985	549	1070	538	2910	1480	237	99	82
13	300	284	694	821	537	984	496	1960	2890	220	92	129
14	184	250	898	700	801	972	461	1330	5150	203	84	207
15	144	226	1610	640	2080	964	424	908	7720	191	76	256
16	126	206	2130	e562	3600	915	393	660	10800	175	94	208
17	103	186	2380	e533	6060	850	362	713	10900	160	114	176
18	82	168	2310	e513	9960	791	332	1420	10200	146	95	144
19	87	161	1930	e493	9870	1040	318	2280	10500	156	80	118
20	119	153	1980	e473	7960	1640	310	2830	13100	244	71	98
21	196	146	2430	e456	6520	2240	346	3230	13400	462	62	84
22	253	141	2810	e451	5990	2560	390	3020	11000	462	56	76
23	289	131	3230	e437	5620	2510	394	1840	8470	419	52	70
24	278	116	4110	421	6260	1940	419	1020	6340	328	46	67
25	231	111	4600	397	9490	1340	664	717	3840	258	42	60
26	190	113	5450	380	10200	1040	1240	583	1780	211	40	56
27	159	115	7990	369	8350	911	1370	507	990	178	40	53
28	134	138	9390	363	6870	937	1050	444	874	151	68	50
29	123	154	8120	357	---	931	737	394	891	132	104	45
30	133	146	6440	357	---	832	566	348	809	119	79	40
31	225	---	5150	359	---	e732	---	312	---	108	53	---
TOTAL	4253	9005	85089	54697	105450	66249	17198	42176	126755	11006	2824	3261
MEAN	137	300	2745	1764	3766	2137	573	1361	4225	355	91.1	109
MAX	336	888	9390	7300	10200	5880	1370	3430	13400	984	143	256
MIN	35	111	136	357	328	732	310	312	249	108	40	40
AC-FT	8440	17860	168800	108500	209200	131400	34110	83660	251400	21830	5600	6470
CFSM	0.12	0.27	2.44	1.57	3.35	1.90	0.51	1.21	3.76	0.32	0.08	0.10
IN.	0.14	0.30	2.82	1.81	3.49	2.19	0.57	1.40	4.20	0.36	0.09	0.11

RED RIVER BASIN

07363200 SALINE RIVER NEAR SHERIDAN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971-83, 2001-03, BY WATER YEAR (WY)

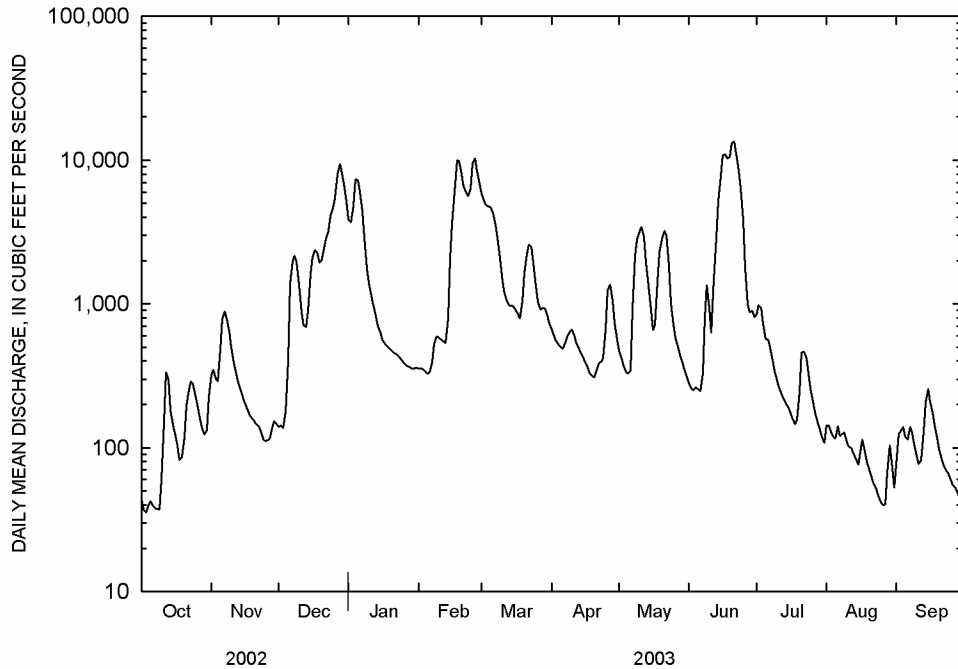
MEAN	234	1537	2620	2076	2344	3141	2988	1999	1546	320	235	328
MAX	919	5682	6579	4775	4216	6544	10500	6308	7770	915	1177	1627
(WY)	1974	1973	2002	1973	1975	1973	1973	1979	1974	1981	1971	1973
MIN	49.9	119	233	280	618	776	452	349	77.4	55.3	30.7	45.3
(WY)	1983	1976	1982	1981	1972	1972	1972	1977	1972	1980	1972	1982

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971-83, 2001-03	
ANNUAL TOTAL	563388		527963			
ANNUAL MEAN	1544		1446		1610	
HIGHEST ANNUAL MEAN					3369 1973	
LOWEST ANNUAL MEAN					565 1972	
HIGHEST DAILY MEAN	13700	Mar 24	13400	Jun 21	55800	Jun 10 1974
LOWEST DAILY MEAN	32	Sep 16	35	Oct 3	5.5	Sep 15 1980
ANNUAL SEVEN-DAY MINIMUM	33	Sep 13	38	Oct 2	8.5	Sep 9 1980
MAXIMUM PEAK FLOW			13900	Jun 21	173900	Dec 28 1987
MAXIMUM PEAK STAGE			16.38	Jun 21	22.66	Dec 28 1987
INSTANTANEOUS LOW FLOW			35	Oct 3-4	2	
ANNUAL RUNOFF (AC-FT)	1117000		1047000		1166000	
ANNUAL RUNOFF (CFSM)	1.37		1.29		1.43	
ANNUAL RUNOFF (INCHES)	18.66		17.49		19.48	
10 PERCENT EXCEEDS	4240		4800		4400	
50 PERCENT EXCEEDS	446		424		530	
90 PERCENT EXCEEDS	72		83		63	

¹Occurred during period of computation of annual maximum only, water years 1983-01

²Undetermined

^eEstimated



RED RIVER BASIN

07363400 HURRICANE CREEK BELOW SHERIDAN

LOCATION.--Lat 34°13'42", long 92°22'21", in SW_{1/4}NW_{1/4} sec.1, T.6 S., R.13 W., Grant County, Hydrologic Unit 08040203, on downstream side of bridge on State Highway 35, 6.0 mi south of Sheridan.

DRAINAGE AREA.--261 mi².

PERIOD OF RECORD.--October 1995 to current year. Gage-height records 1938-40 and 1947-64 are published in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. January 1, 1938 to Dec. 31, 1940 and Jan. 1, 1947 to Nov. 29, 1948, non-recording gage at present site at datum 180.10 ft above NGVD of 1929. Nov. 30, 1948 to Dec. 31, 1964 water-stage recorder at present site and at datum then in use.

REMARKS.--Water-discharge records good except estimated discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	143	13	999	50	e2400	82	34	17	92	27	e15
2	10	106	15	1130	52	e2250	68	26	16	168	25	e21
3	10	98	13	1360	47	e2200	60	21	16	110	19	e30
4	10	117	11	1410	46	e2000	55	19	16	73	18	e33
5	10	276	92	949	40	e1700	53	19	16	50	19	e1.2
6	11	261	337	440	50	e1540	50	18	17	35	31	1.0
7	11	236	386	276	81	e1050	65	596	86	27	20	1.0
8	14	176	244	215	149	e750	78	1250	153	22	19	2.3
9	17	120	151	181	176	e490	80	979	84	20	24	2.3
10	35	91	123	164	135	e290	73	479	39	20	22	2.0
11	62	65	108	147	118	199	68	237	25	20	18	1.8
12	204	41	98	e120	117	181	56	464	1900	19	17	2.2
13	116	32	111	e100	104	182	43	468	5850	19	17	2.1
14	55	30	218	e95	277	203	36	221	3910	19	17	2.3
15	39	30	394	93	923	208	31	116	2670	19	17	1.8
16	35	28	392	90	1950	191	27	89	1990	19	16	8.8
17	69	25	228	84	3310	165	24	245	2010	19	e19	11
18	81	23	158	81	2960	153	21	686	4870	19	e24	25
19	91	23	353	85	2220	464	19	886	6450	19	e22	56
20	125	22	664	69	1450	661	19	1040	5250	63	16	59
21	212	23	734	65	776	662	18	519	3250	153	16	60
22	167	23	711	61	1570	435	20	220	2110	91	16	62
23	121	23	450	56	2300	265	27	141	655	42	e14	62
24	104	21	978	51	2970	201	52	96	224	25	e14	62
25	96	17	1300	47	e3300	163	219	68	146	19	e13	61
26	92	15	1490	44	e3440	138	373	49	114	18	e12	60
27	59	13	2030	40	e2990	123	222	39	112	17	e13	59
28	57	9.6	1710	40	e2600	144	112	33	230	17	e12	56
29	83	8.9	900	41	---	136	67	26	153	17	e19	53
30	107	17	343	42	---	e100	48	21	102	17	e27	50
31	192	---	639	44	---	e86	---	18	---	17	e20	---
TOTAL	2305	2113.5	15394	8619	34201	19730	2166	9123	42481	1285	583	863.8
MEAN	74.4	70.5	497	278	1221	636	72.2	294	1416	41.5	18.8	28.8
MAX	212	276	2030	1410	3440	2400	373	1250	6450	168	31	62
MIN	10	8.9	11	40	40	86	18	18	16	17	12	1.0
AC-FT	4570	4190	30530	17100	67840	39130	4300	18100	84260	2550	1160	1710

RED RIVER BASIN

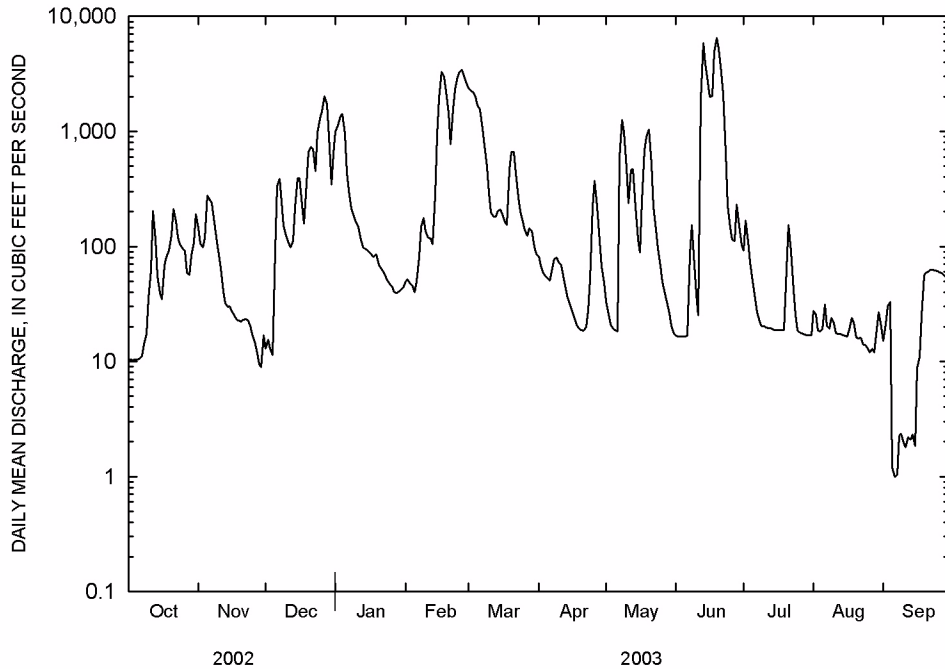
07363400 HURRICANE CREEK BELOW SHERIDAN--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	47.0	83.8	426	344	647	762	504	176	309	36.2	23.6	16.1
MAX	159	284	1769	723	1536	1852	2035	461	1416	95.7	131	55.9
(WY)	2002	1997	2002	1998	2001	2002	1997	2002	2003	1997	1996	1998
MIN	0.000	1.10	12.5	13.4	32.8	102	72.2	20.7	5.63	2.19	0.000	0.000
(WY)	1996	2000	1996	2000	2000	1996	2003	1998	1998	1998	2000	1999

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	139441.30		138864.3			
ANNUAL MEAN	382		380		279	
HIGHEST ANNUAL MEAN					496 2002	
LOWEST ANNUAL MEAN					49.3 2000	
HIGHEST DAILY MEAN	6160	Apr 1	6450	Jun 19	20100	Apr 6 1997
LOWEST DAILY MEAN	0.40	Sep 19	1.0	Sep 6	0.00	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	0.63	Sep 13	1.7	Sep 5	0.00	Oct 1 1995
MAXIMUM PEAK FLOW			7530	Jun 18-19	¹ 26400	Apr 6 1997
MAXIMUM PEAK STAGE			13.60	Jun 18-19	16.34	Apr 6 1997
INSTANTANEOUS LOW FLOW			1.0	Sep 6-7	0.00	at times
ANNUAL RUNOFF (AC-FT)	276600		275400		202200	
10 PERCENT EXCEEDS	1010		1180		711	
50 PERCENT EXCEEDS	91		67		45	
90 PERCENT EXCEEDS	3.3		16		0.10	

¹From rating curve extended above 7,500 ft³/s on basis of contracted-opening measurement of peak flow
^eEstimated



RED RIVER BASIN

07363500 SALINE RIVER NEAR RYE

LOCATION.--Lat 33°42'03", long 92°01'33", in SW₁/₄NW₁/₄ sec.3, T.12 S., R.9 W., Bradley County, Hydrologic Unit 08040204, near left bank on downstream side of bridge on State Highway 15, 3.6 mi southwest of Rye, 5.8 mi upstream from Hudgin Creek, and at mile 71.0.

DRAINAGE AREA.--2,102 mi².

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 97.06 ft above NGVD of 1929. Prior to May 30, 1939, non-recording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1927 reached a stage of 30.5 ft, discharge, about 73,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	179	182	7640	537	15000	1250	946	422	4630	204	127
2	70	257	199	8210	535	15300	1100	691	388	2010	159	111
3	66	444	192	8600	532	15400	981	545	388	1510	159	94
4	71	520	217	8740	529	14600	884	455	466	1510	184	129
5	63	508	235	8520	521	13300	790	458	508	1410	187	164
6	59	535	244	7940	534	12000	721	1930	433	1170	209	175
7	54	768	466	7210	663	10800	702	2050	404	953	227	173
8	54	1090	1330	6710	815	9650	719	2470	548	854	195	158
9	60	1210	1840	6570	976	8670	760	3340	657	741	184	170
10	71	1120	2120	6510	1160	7810	812	3920	1120	614	179	183
11	66	950	2190	6260	1210	6850	851	4380	1460	522	180	168
12	66	753	1870	5540	1160	5740	849	4570	3270	440	166	153
13	105	595	1360	3920	1080	4340	768	4410	6770	383	156	157
14	337	485	1100	2130	1170	3040	674	4410	8230	342	150	154
15	430	412	1080	1480	2900	2310	602	4430	8470	310	139	163
16	345	351	1340	1260	5220	2120	538	3920	8340	276	133	208
17	247	301	1850	1130	6800	1990	478	3210	8600	252	124	274
18	198	267	2240	1050	7770	1810	427	2910	9270	232	115	257
19	165	242	3360	983	8240	1830	386	2520	10500	218	133	223
20	137	221	4830	922	8230	2410	354	2950	13500	207	136	193
21	139	205	5220	870	8640	2980	325	3230	17100	207	121	172
22	157	197	5240	828	10700	3250	303	3290	17900	278	104	181
23	240	189	5150	775	12900	3360	318	3340	17500	566	96	174
24	358	184	6100	737	15700	3420	488	3420	17500	661	85	162
25	411	179	6990	698	17700	3400	572	3310	17000	600	80	155
26	392	172	7270	659	17500	3220	554	2370	15800	471	77	153
27	334	162	7440	621	16300	2630	918	1290	14000	364	74	152
28	279	161	7390	589	15300	1950	1480	868	12200	290	69	146
29	239	159	7140	571	---	1600	1640	691	10500	243	67	140
30	212	170	6810	557	---	1490	1350	579	8220	234	66	135
31	178	---	6910	544	---	1390	---	495	---	226	101	---
TOTAL	5682	12986	99905	108774	165322	183660	22594	77398	231464	22724	4259	5004
MEAN	183	433	3223	3509	5904	5925	753	2497	7715	733	137	167
MAX	430	1210	7440	8740	17700	15400	1640	4570	17900	4630	227	274
MIN	54	159	182	544	521	1390	303	455	388	207	66	94
AC-FT	11270	25760	198200	215800	327900	364300	44820	153500	459100	45070	8450	9930
CFSM	0.09	0.21	1.53	1.67	2.81	2.82	0.36	1.19	3.67	0.35	0.07	0.08
IN.	0.10	0.23	1.77	1.93	2.93	3.25	0.40	1.37	4.10	0.40	0.08	0.09

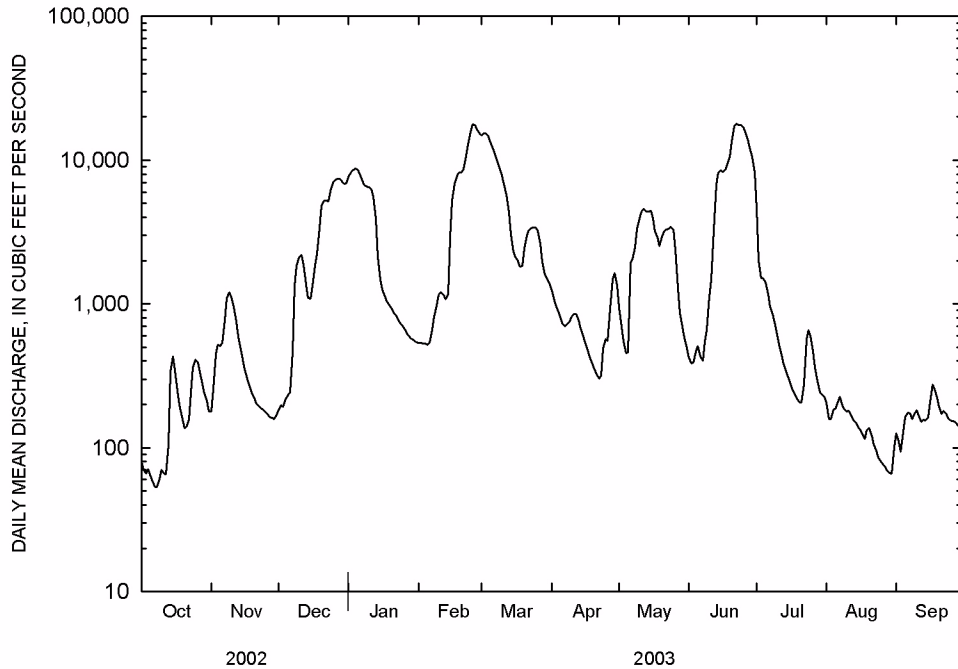
RED RIVER BASIN

07363500 SALINE RIVER NEAR RYE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	492	1176	3034	3783	5116	5486	5205	4519	1577	577	278	331
MAX	10570	9690	13540	14830	16710	13920	16340	21470	11950	8191	1573	4511
(WY)	1985	1958	2002	1946	1950	1945	1973	1958	1974	1989	1971	1950
MIN	15.4	50.7	111	143	307	706	640	352	80.5	32.5	10.6	4.95
(WY)	1939	1940	1940	1956	2000	1940	1972	1992	1972	1954	1954	1954

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	1010540		939772			
ANNUAL MEAN	2769		2575		2618	
HIGHEST ANNUAL MEAN					5436 1973	
LOWEST ANNUAL MEAN					704 1972	
HIGHEST DAILY MEAN	32200	Mar 21	17900	Jun 22	72500	May 18 1968
LOWEST DAILY MEAN	12	Sep 16	54	Oct 7	3.8	Sep 16 1954
ANNUAL SEVEN-DAY MINIMUM	15	Sep 13	61	Oct 3	4.0	Sep 15 1954
MAXIMUM PEAK FLOW			18100	Jun 22	74500	May 18 1968
MAXIMUM PEAK STAGE			23.74	Jun 22	31.40	May 18 1968
INSTANTANEOUS LOW FLOW			51	Oct 7	3.5	Sep 27 1954
ANNUAL RUNOFF (AC-FT)	2004000		1864000		1897000	
ANNUAL RUNOFF (CFSM)	1.32		1.22		1.25	
ANNUAL RUNOFF (INCHES)	17.88		16.63		16.93	
10 PERCENT EXCEEDS	7190		8230		7470	
50 PERCENT EXCEEDS	788		661		679	
90 PERCENT EXCEEDS	60		139		65	



RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE

LOCATION.--Lat 33°51'59", long 91°39'22", in SE1/4SW1/4 sec.6, T.10 S., R.5 W., Lincoln County, Hydrologic Unit 08040205, on downstream side of bridge on State Highway 54, 1.9 mi upstream from Flat Creek, at Garrett Bridge.

DRAINAGE AREA.--380 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage 144.13 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	9.0	15	2080	186	3330	130	21	214	1060	210	15
2	6.9	8.4	15	2010	163	3220	103	15	153	914	260	15
3	6.6	25	14	1920	112	3030	83	12	129	773	254	16
4	8.0	78	18	1770	94	2800	70	9.9	144	644	237	15
5	8.5	249	22	1610	129	2570	60	23	182	521	224	14
6	8.2	372	74	1440	123	2340	59	349	167	410	195	12
7	8.0	460	139	1280	118	2110	76	695	139	312	162	9.5
8	8.5	523	119	1140	136	1890	95	1020	166	232	128	8.6
9	10	513	78	1020	135	1660	90	1380	188	167	102	8.6
10	20	443	50	901	108	1450	69	1670	164	111	89	7.8
11	46	346	36	796	82	1260	58	1810	133	80	74	6.7
12	163	252	28	703	77	1090	49	1790	421	79	62	6.4
13	213	176	55	611	90	976	43	1700	885	100	61	9.0
14	167	131	129	516	149	878	38	1570	1280	109	65	17
15	91	102	257	416	395	782	35	1410	1520	113	71	13
16	42	81	320	319	1030	690	31	1280	1650	137	89	10
17	23	67	299	239	1610	602	26	1370	1810	119	96	8.5
18	16	59	239	179	e1860	522	22	1690	2100	94	84	7.3
19	13	51	473	131	2010	477	18	1900	2340	85	66	6.4
20	12	45	741	99	1980	442	17	1870	2510	94	55	5.8
21	11	37	1170	78	1990	411	17	1720	2590	122	47	5.2
22	9.7	31	1580	65	2360	367	16	1530	2560	139	39	5.5
23	9.5	26	1870	54	2830	329	18	1330	2430	126	34	5.0
24	10	23	2350	48	3080	300	32	1130	2260	102	31	5.0
25	12	20	2610	43	3200	278	48	962	2080	80	26	5.0
26	13	19	2680	39	e3280	257	89	814	1890	70	22	4.8
27	13	18	2690	36	3360	238	117	692	1710	79	22	4.4
28	12	17	2630	38	3380	221	85	585	1540	83	18	4.1
29	11	16	2490	58	---	204	50	488	1370	74	16	4.0
30	11	15	2300	116	---	182	31	392	1210	63	15	3.7
31	9.6	---	2170	173	---	161	---	297	---	102	14	---
TOTAL	999.7	4212.4	27661	19928	34067	35067	1675	31524.9	35935	7194	2868	258.3
MEAN	32.2	140	892	643	1217	1131	55.8	1017	1198	232	92.5	8.61
MAX	213	523	2690	2080	3380	3330	130	1900	2590	1060	260	17
MIN	6.6	8.4	14	36	77	161	16	9.9	129	63	14	3.7
AC-FT	1980	8360	54870	39530	67570	69560	3320	62530	71280	14270	5690	512
CFSM	0.08	0.37	2.35	1.69	3.20	2.98	0.15	2.68	3.15	0.61	0.24	0.02
IN.	0.10	0.41	2.71	1.95	3.33	3.43	0.16	3.09	3.52	0.70	0.28	0.03

RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE--CONTINUED

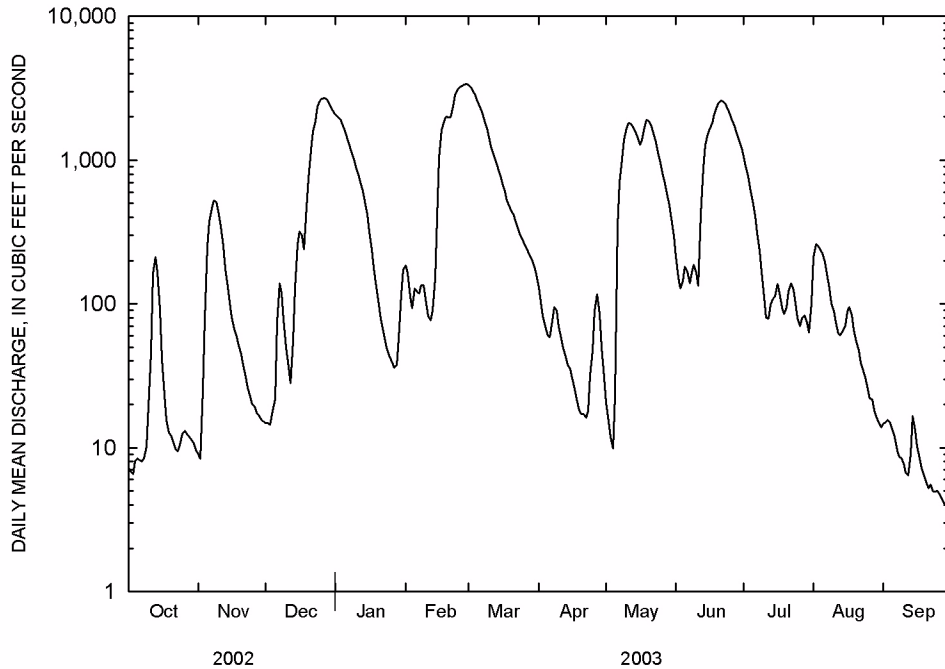
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2003, BY WATER YEAR (WY)

MEAN	128	270	748	956	979	1160	867	575	312	290	139	45.8
MAX	685	959	2992	2748	2861	3057	2297	1938	1198	2488	419	123
(WY)	2002	1988	2002	1988	1990	1997	1991	1991	2003	1989	1989	1989
MIN	1.53	3.03	146	27.5	83.0	321	55.8	55.2	0.000	0.000	0.000	0.000
(WY)	1996	1996	2000	2000	2000	1988	2003	1988	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1988 - 2003	
ANNUAL TOTAL	185243.4		201390.3			
ANNUAL MEAN	508		552		544	
HIGHEST ANNUAL MEAN					966 1989	
LOWEST ANNUAL MEAN					174 1996	
HIGHEST DAILY MEAN	2990	Apr 3	3380	Feb 28	5210	Mar 7 1997
LOWEST DAILY MEAN	5.2	Sep 14	3.7	Sep 30	0.00	May 12 1994
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 13	4.4	Sep 24	0.00	May 12 1994
MAXIMUM PEAK FLOW			3380	Feb 27-28	5220	Mar 7 1997
MAXIMUM PEAK STAGE			19.21	Feb 27-28	22.36	¹ Dec 23 2001
INSTANTANEOUS LOW FLOW			3.5	Sep 30	0.24	Oct 21 1995
ANNUAL RUNOFF (AC-FT)	367400		399500		394400	
ANNUAL RUNOFF (CFSM)	1.34		1.45		1.43	
ANNUAL RUNOFF (INCHES)	18.13		19.72		19.46	
10 PERCENT EXCEEDS	1620		1910		1630	
50 PERCENT EXCEEDS	216		119		178	
90 PERCENT EXCEEDS	9.8		10		15	

¹Also December 24, 2001

^eEstimated



RED RIVER BASIN

07364133 BAYOU BARTHOLOMEW AT GARRETT BRIDGE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, unfltrd water, mg/L as CaCO3 (00900)	Calcium, unfltrd water, mg/L (00915)	Magnesium, unfltrd water, mg/L (00925)	
OCT	16...	1000	80513	81213	43	764	5.4	54	7.3	290	15.4	95	24.0	8.40
DEC	03...	1115	80513	81213	14	782	5.6	46	7.4	147	7.7	48	12.0	4.40
FEB	04...	0930	80513	81213	84	780	8.5	71	7.9	217	8.4	74	19.0	6.40
APR	15...	0800	80513	81213	35	767	4.3	45	7.0	102	18.1	31	7.60	2.90
JUN	24...	1115	80513	81213	2270	774	3.5	41	6.9	53	24.8	19	4.80	1.60
AUG	26...	1350	80513	81213	22	763	4.3	56	8.0	483	28.8	190	49.0	17.0

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	
OCT	16...	9.00	.6	14.0	22	29.0	15.0	182	.90	.05	.04	--	--	.35
DEC	03...	5.40	.5	7.6	23	9.20	5.70	89	.80	--	<.01	--	--	<.02
FEB	04...	4.20	.6	11.0	23	15.0	7.10	146	1.0	.08	.06	--	--	.13
APR	15...	2.90	.5	5.9	27	6.00	6.60	68	.80	.08	.06	--	--	.16
JUN	24...	2.20	.2	2.1	18	1.70	2.40	54	.80	.08	.06	1.15	.26	.27
AUG	26...	3.60	1	31.0	26	57.0	12.0	315	.60	.04	.03	--	--	.13

Date	Nitrite water, fltrd, mg/L as N (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci, MF, col/100 mL (31673)	Suspnd. sediment, sieve diametr <.063mm percent (70331)	Suspended sediment concentration mg/L (80154)	
OCT	16...	--	<.010	.86	.460	.15	.15	.23	1.2	250	320	250	90	53
DEC	03...	--	<.010	--	.368	.12	.14	.22	--	82	76	50	95	20
FEB	04...	--	<.010	.94	.153	.05	.04	.14	1.1	93	81	78	99	79
APR	15...	--	<.010	.74	.215	.07	.07	.25	.96	240	150	130	88	55
JUN	24...	.033	.010	.74	.399	.13	.12	.22	1.1	56	62	350	86	35
AUG	26...	--	<.010	.57	.276	.09	.09	.11	.73	260	E640	270	89	54

Date	Suspended sediment load, tons/d (80155)	
OCT	16...	6.2
DEC	03...	.76
FEB	04...	18
APR	15...	5.2
JUN	24...	215
AUG	26...	3.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RED RIVER BASIN

397

07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE

LOCATION.--Lat 33°37'40", long 91°26'45", in NE1/4SW1/4 sec.30, T.12 S., R.3 W., Desha County, Hydrologic Unit 08050001, near center of stream on downstream side of bridge on State Highway 4, 2.7 mi west of McGehee, 17.5 mi downstream from Ables Creek, at mile 200.5.

DRAINAGE AREA.--576 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1942, October 1945 to current year. Gage-height records collected and occasional discharge measurements made by U.S. Army Corps of Engineers at this site since August 1938. Daily stages 1940 to date and results of discharge measurements 1938, 1947 to date are published in reports of U.S. Army Corps of Engineers.

REVISED RECORDS.--WDR Ark. 1979: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 120.48 ft above NGVD of 1929. Prior to Sept. 7, 1949, nonrecording gage at same site. October 1938 to June 6, 1972, at datum 1.00 ft higher. Since Jan. 20, 1971, auxiliary water-stage recorder 14 mi upstream.

REMARKS.--Water-discharge records good except discharges and discharges below 50 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	16	2930	76	4170	259	109	794	1850	85	e41
2	29	13	15	2850	77	4190	232	110	681	1690	144	e37
3	30	15	14	2740	86	4170	210	105	589	1540	180	e36
4	55	21	21	2620	110	4120	190	94	484	1390	187	e35
5	61	82	31	2490	128	4020	171	81	396	1250	189	e34
6	57	185	32	2350	147	3870	157	167	348	1140	196	e32
7	49	232	33	2200	170	3680	159	564	322	1020	203	e31
8	41	237	35	2050	175	3460	155	838	260	900	202	e30
9	38	223	30	1900	176	3230	163	1000	209	794	196	30
10	58	227	25	1740	176	2970	177	1100	178	680	186	28
11	83	274	22	1600	176	2700	184	1170	159	564	172	28
12	108	303	28	1450	177	2440	182	1250	226	452	154	27
13	110	329	54	1320	173	2200	172	1340	413	358	e124	28
14	95	344	80	1190	181	2010	156	1440	650	298	e113	27
15	79	339	101	1080	207	1840	137	1510	890	237	e100	27
16	73	310	111	970	370	1670	117	1540	1170	185	e82	26
17	82	263	104	863	593	1500	99	1720	1460	145	e73	26
18	93	204	99	762	803	1350	85	1820	1730	116	e70	25
19	98	147	816	663	1090	1240	75	1830	1970	103	e77	24
20	94	110	1400	565	1470	1140	68	1870	2180	102	e100	23
21	80	81	1550	473	1920	1040	63	1920	2360	108	e101	23
22	64	60	1520	386	2520	937	59	1950	2490	111	e83	32
23	51	47	1490	333	2910	839	56	1940	2580	108	e72	35
24	42	39	1840	267	3180	745	61	1880	2600	100	e70	35
25	37	32	2180	209	3450	656	71	1780	2590	96	e60	36
26	33	28	2480	164	3700	576	76	1660	2520	91	e56	37
27	29	25	2710	130	3970	499	90	1510	2430	86	e59	37
28	25	24	2860	107	4100	433	103	1360	2290	84	e64	35
29	23	21	2930	94	---	377	106	1210	2150	83	e57	34
30	20	18	2940	86	---	334	107	1060	2000	77	e49	32
31	17	---	2940	80	---	293	---	922	---	71	e45	---
TOTAL	1783	4248	28507	36662	32311	62699	3940	36850	39119	15829	3549	931
MEAN	57.5	142	920	1183	1154	2023	131	1189	1304	511	114	31.0
MAX	110	344	2940	2930	4100	4190	259	1950	2600	1850	203	41
MIN	17	13	14	80	76	293	56	81	159	71	45	23
AC-FT	3540	8430	56540	72720	64090	124400	7810	73090	77590	31400	7040	1850
CFSM	0.10	0.25	1.60	2.05	2.00	3.51	0.23	2.06	2.26	0.89	0.20	0.05
IN.	0.12	0.27	1.84	2.37	2.09	4.05	0.25	2.38	2.53	1.02	0.23	0.06

RED RIVER BASIN

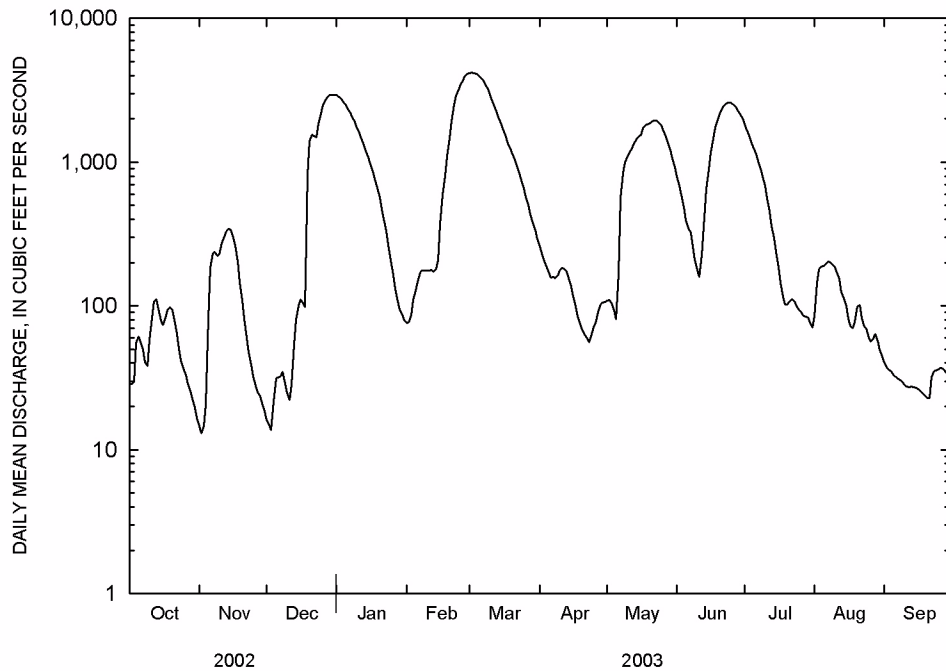
07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-42, 1946-03, BY WATER YEAR (WY)

MEAN	176	336	778	1042	1402	1418	1203	1052	465	216	151	146
MAX	1491	2240	4142	3900	5085	4006	3127	5972	2575	3688	1032	1792
(WY)	1985	1958	2002	1946	1990	1997	1991	1958	1974	1989	1989	1974
MIN	8.45	6.88	31.9	39.3	98.3	189	82.8	73.0	22.1	6.03	0.44	14.4
(WY)	1996	1996	1982	1966	2000	1954	1966	1965	1972	1954	1956	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939-42, 1946-03	
ANNUAL TOTAL	283905		266428			
ANNUAL MEAN	778		730		695	
HIGHEST ANNUAL MEAN					1488 1973	
LOWEST ANNUAL MEAN					149 1972	
HIGHEST DAILY MEAN	4550	Jan 1	4190	Mar 2	6870	May 11 1958
LOWEST DAILY MEAN	13	Nov 2	13	Nov 2	0.20	Aug 15 1956
ANNUAL SEVEN-DAY MINIMUM	18	Oct 29	18	Oct 29	0.20	Aug 15 1956
MAXIMUM PEAK FLOW			4190	Mar 1-2	6870	May 11 1958
MAXIMUM PEAK STAGE			20.45	Mar 3-4	¹ 25.49	May 11 1958
INSTANTANEOUS LOW FLOW			12	Nov 2	0.20	Aug 15 1956
ANNUAL RUNOFF (AC-FT)	563100		528500		503800	
ANNUAL RUNOFF (CFSM)	1.35		1.27		1.21	
ANNUAL RUNOFF (INCHES)	18.34		17.21		16.40	
10 PERCENT EXCEEDS	2520		2390		2020	
50 PERCENT EXCEEDS	263		177		244	
90 PERCENT EXCEEDS	28		30		31	

¹At present datum
^eEstimated



RED RIVER BASIN

399

07364150 BAYOU BARTHOLOMEW NEAR MCGEHEE--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-1972, October 1973, January 1975, December 1975 to August 1976, Water years 1977 through 1979, and Water years 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT 16...	1305	80513	81213	39	763	5.6	57	7.4	251	16.4	78	19.0	7.30
DEC 03...	1350	80513	81213	14	781	7.2	60	7.4	166	8.2	53	13.0	4.90
FEB 04...	1130	80513	81213	110	782	8.9	73	7.4	84	8.0	25	6.40	2.30
APR 15...	1030	80513	81213	138	768	5.7	59	7.0	102	17.7	24	5.90	2.20
JUN 24...	1345	80513	81213	2390	775	4.6	55	7.2	80	24.9	26	6.60	2.30
AUG 26...	1120	80513	81213	67	765	3.6	46	7.8	324	28.7	130	33.0	12.0

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT 16...	7.10	.6	13.0	25	26.0	7.30	148	.90	.05	.04	--	--	.23
DEC 03...	5.50	.5	8.9	25	12.0	6.50	106	1.0	--	<.01	--	--	<.02
FEB 04...	2.80	.4	4.2	24	5.00	7.70	67	.60	.08	.06	--	--	.12
APR 15...	2.70	.4	4.2	25	4.30	8.50	62	.90	.08	.06	--	--	.20
JUN 24...	2.70	.3	3.9	22	4.40	3.80	62	.90	.06	.05	1.46	.33	.34
AUG 26...	3.80	.8	22.0	26	37.0	7.40	227	.40	.04	.03	--	--	.13

Date	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Fecal streptococci, KF col/100 mL (31673)	Suspnd. sediment, sieve percent diametr (70331)	Suspended sediment concentration mg/L (80154)
OCT 16...	--	<.010	.86	.215	.07	.08	.14	1.1	160	230	200	94	26
DEC 03...	--	<.010	--	.276	.09	.11	.21	--	130	170	40	82	17
FEB 04...	--	<.010	.54	.215	.07	.05	.15	.72	150	120	54	96	51
APR 15...	--	<.010	.84	.215	.07	.07	.28	1.1	270	120	230	98	76
JUN 24...	.033	.010	.85	.368	.12	.11	.21	1.2	140	57	380	95	37
AUG 26...	--	<.010	.37	.245	.08	.07	.12	.53	60	110	E830	90	61

Date	Suspended sediment load, tons/d (80155)
OCT 16...	2.7
DEC 03...	.64
FEB 04...	15
APR 15...	28
JUN 24...	239
AUG 26...	11

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

RED RIVER BASIN

07364185 BAYOU BARTHOLOMEW NEAR PORTLAND

LOCATION.--Lat 33°13'50", long 91°32'08", in SW₁/4NE₁/4 sec.8, T.17 S., R.4 W., Ashley County, Hydrologic Unit 08040205, at bridge on State Highway 160, 1.4 mi west of Portland.

DRAINAGE AREA.--1,109 mi².

PERIOD OF RECORD.--September 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 96.85 ft above NGVD of 1929. Auxiliary water-stage recorder 7.8 mi upstream.

REMARKS.--Records good except estimated daily discharges, discharges below 100 ft³/s, and stages above 17.0 ft, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	45	122	4290	333	4710	1490	203	1980	2640	106	84
2	19	40	113	4290	273	4910	1320	194	1870	2630	106	85
3	19	39	106	4270	232	5060	1170	182	1760	2610	110	87
4	25	52	136	4240	207	5170	1020	170	1630	2560	108	89
5	32	113	232	4190	192	5240	874	162	1500	2500	106	94
6	41	314	256	4120	198	5290	765	159	1380	2480	116	95
7	56	379	245	4020	254	5310	913	157	1260	2380	138	89
8	66	387	226	3910	297	5320	969	154	1120	2270	160	80
9	78	364	206	3790	329	5290	973	196	980	2170	174	71
10	189	335	189	3660	364	5240	963	343	829	2040	183	64
11	248	317	175	3520	393	5170	912	561	690	1910	189	58
12	229	307	163	3360	413	5080	829	771	854	1750	191	54
13	186	299	174	3200	435	e4980	758	941	1160	1590	196	56
14	141	294	199	3040	459	e4840	683	1080	1290	1420	197	54
15	111	295	206	2880	543	4720	599	1190	1290	1250	195	50
16	96	300	213	2720	737	4550	517	1290	1270	1080	187	47
17	90	308	225	2550	897	4370	447	1470	1240	901	176	45
18	86	315	236	2390	e1030	4180	381	1690	1280	728	157	44
19	82	321	323	2230	1150	4030	313	1820	1350	579	130	44
20	79	323	716	2070	1230	3830	253	1920	1440	455	110	43
21	76	318	1130	1910	1380	3610	207	1990	1560	354	97	43
22	77	306	1600	1730	1890	3380	174	2050	1700	269	88	58
23	81	286	2030	e1600	2360	3170	152	2100	1850	213	86	63
24	84	263	2690	1400	2850	2960	138	2140	2010	171	83	69
25	85	237	3240	1240	3330	2760	160	2170	2150	140	81	72
26	86	214	3610	1080	3760	2580	182	2210	2290	125	80	68
27	86	191	3870	924	4190	2390	179	2230	2420	123	80	61
28	81	168	4040	774	4470	2210	164	2220	2510	123	81	54
29	72	149	4150	639	---	2030	155	2190	2580	117	82	49
30	61	134	4210	518	---	1850	179	2150	2610	112	82	46
31	52	---	4270	414	---	1670	---	2080	---	109	83	---
TOTAL	2734	7413	39301	80969	34196	125900	17839	38183	47853	37799	3958	1916
MEAN	88.2	247	1268	2612	1221	4061	595	1232	1595	1219	128	63.9
MAX	248	387	4270	4290	4470	5320	1490	2230	2610	2640	197	95
MIN	19	39	106	414	192	1670	138	154	690	109	80	43
AC-FT	5420	14700	77950	160600	67830	249700	35380	75740	94920	74970	7850	3800

RED RIVER BASIN

07364185 BAYOU BARTHOLOMEW NEAR PORTLAND--CONTINUED

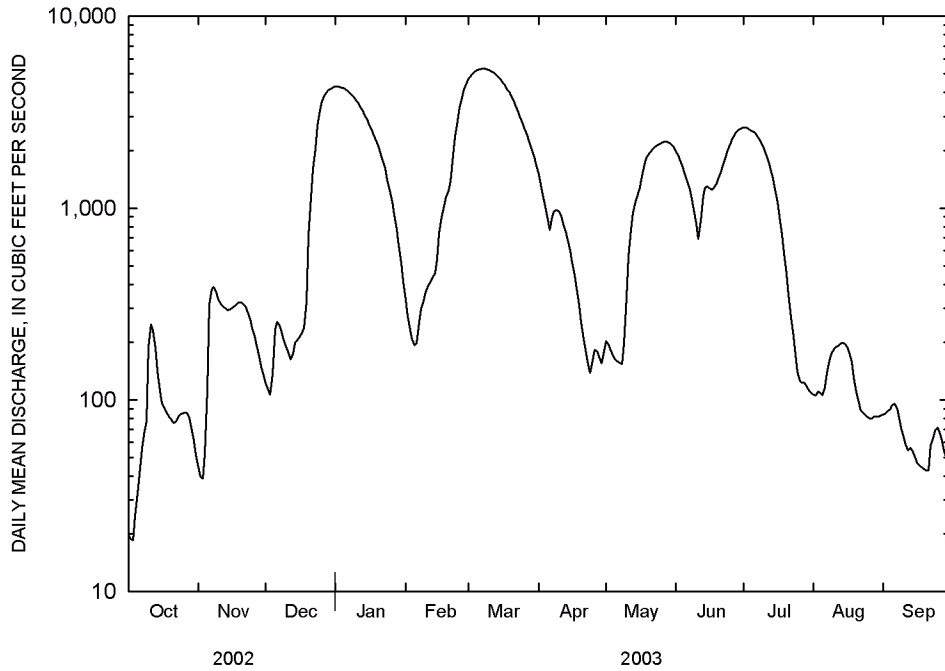
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

MEAN	248	247	1883	2668	2679	3016	2572	1061	593	344	94.0	90.3
MAX	1021	610	5920	5126	5159	6299	4559	2049	1595	1219	128	266
(WY)	2002	2002	2002	2002	1999	2001	2002	2002	2003	2003	2003	2001
MIN	32.0	27.8	152	66.2	114	667	595	572	244	59.4	40.3	33.0
(WY)	2000	2000	2000	2000	2000	2000	2003	1999	1999	2000	2000	2000

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1998 - 2003

ANNUAL TOTAL		574031		438061								
ANNUAL MEAN		1573		1200					1286			
HIGHEST ANNUAL MEAN									2077			2002
LOWEST ANNUAL MEAN									441			2000
HIGHEST DAILY MEAN		7000	Jan 1	5320	Mar 8	7530	Mar 5 2001					
LOWEST DAILY MEAN		19	Oct 2	19	Oct 2	19	Oct 2 2002					
ANNUAL SEVEN-DAY MINIMUM		20	Sep 27	30	Oct 1	20	Sep 27 2002					
MAXIMUM PEAK FLOW				5320	Mar 7, 8	7540	Mar 6 2001					
MAXIMUM PEAK STAGE				33.09	Mar 7, 8	36.65	Dec 19 2001					
INSTANTANEOUS LOW FLOW				18	Oct 2-3	18	Oct 2 2002					
ANNUAL RUNOFF (AC-FT)		1139000		868900		931400						
10 PERCENT EXCEEDS		4860		3770		4130						
50 PERCENT EXCEEDS		331		379		300						
90 PERCENT EXCEEDS		55		72		38						

¹From floodmark
^eEstimated



RED RIVER BASIN

07369680 BAYOU MACON AT EUDORA

LOCATION.--Lat 33°06'09", long 91°15'08", in SE₁/₄SE₁/₄ sec.25, T.18 S., R.2 W., Chicot County, Hydrologic Unit 08030100, near left bank on downstream side of bridge on U.S. Highway 65, 0.6 mi south of Eudora.

DRAINAGE AREA.--500 mi².

PERIOD OF RECORD.--October 1988 to current year. Gage-height record and results of discharge measurements since January 1938, are contained in reports of the U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 80.92 ft above NGVD of 1929.

REMARKS.--Water-discharge records good except estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1938, 27.43 ft May 10, 22, 1958.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	43	39	198	49	829	61	56	63	126	e83	105
2	45	42	39	158	46	572	60	55	62	120	e81	134
3	50	50	41	126	46	412	60	54	64	117	e79	107
4	404	76	105	102	54	334	59	54	66	115	e77	97
5	318	688	205	86	49	289	58	54	65	139	e75	90
6	165	1040	123	79	117	208	98	54	63	151	e73	88
7	163	651	86	73	191	146	593	55	67	117	71	86
8	124	275	71	63	111	112	414	56	67	112	79	84
9	139	168	63	57	79	95	176	54	64	110	76	81
10	369	137	58	55	77	87	97	55	62	108	70	83
11	304	121	54	56	69	82	79	56	62	108	72	83
12	176	105	51	53	62	77	71	57	932	105	88	86
13	119	90	122	49	57	74	66	55	1490	104	116	87
14	97	79	119	48	62	70	61	55	1400	103	114	86
15	87	70	91	48	121	69	60	57	1050	102	111	84
16	79	61	76	46	215	69	59	55	683	97	99	68
17	73	53	69	48	147	68	59	116	481	95	94	59
18	66	47	65	48	103	70	58	154	569	93	84	59
19	63	46	127	47	81	124	58	112	502	120	79	60
20	62	44	184	47	74	98	57	100	407	139	91	59
21	57	41	133	46	577	79	58	138	341	121	97	61
22	51	39	94	46	1520	72	58	97	300	106	96	200
23	48	38	85	46	1570	69	58	87	274	107	93	133
24	45	38	740	46	1450	66	59	77	233	102	94	95
25	46	39	935	45	916	66	70	74	173	98	89	73
26	60	42	555	45	956	77	60	76	154	98	89	64
27	47	43	268	45	1270	87	59	74	168	96	90	61
28	52	41	184	45	1120	71	59	71	160	92	109	60
29	64	41	147	62	---	63	58	64	154	91	117	61
30	52	41	125	58	---	e60	57	63	141	88	105	61
31	46	---	171	50	---	e60	---	63	---	85	98	---
TOTAL	3518	4289	5225	2021	11189	4655	2900	2248	10317	3365	2789	2555
MEAN	113	143	169	65.2	400	150	96.7	72.5	344	109	90.0	85.2
MAX	404	1040	935	198	1570	829	593	154	1490	151	117	200
MIN	45	38	39	45	46	60	57	54	62	85	70	59
AC-FT	6980	8510	10360	4010	22190	9230	5750	4460	20460	6670	5530	5070

RED RIVER BASIN

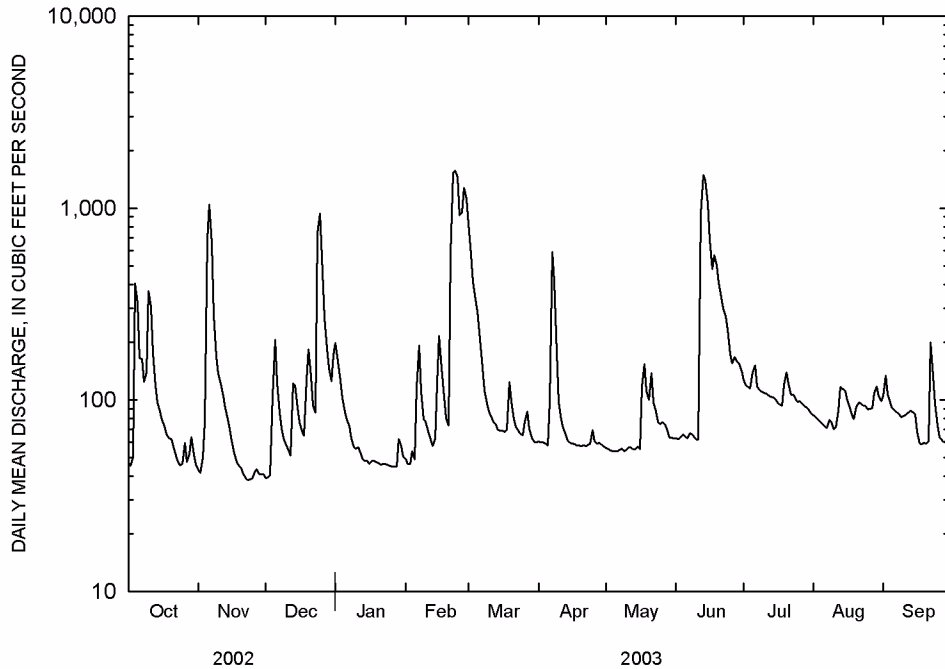
07369680 BAYOU MACON AT EUDORA--CONTINUED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

MEAN	92.1	133	359	449	495	384	382	265	187	237	152	94.3
MAX	297	265	1498	924	1174	858	1053	1510	344	847	425	150
(WY)	1995	2002	2002	1999	1991	1995	1991	1991	2003	1994	1994	1994
MIN	41.8	51.5	58.5	51.0	51.1	98.1	63.0	72.0	89.8	83.0	83.2	59.8
(WY)	1994	1996	2000	2000	2000	1993	1998	1992	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003	
ANNUAL TOTAL	76331		55071			
ANNUAL MEAN	209		151		268	
HIGHEST ANNUAL MEAN					493 1991	
LOWEST ANNUAL MEAN					130 1996	
HIGHEST DAILY MEAN	1680	Apr 1	1570	Feb 23	4170	Apr 23 1995
LOWEST DAILY MEAN	24	Jun 22	38	Nov 23	24	Jun 22 2002
ANNUAL SEVEN-DAY MINIMUM	33	Jun 17	40	Nov 21	33	Jun 17 2002
MAXIMUM PEAK FLOW			1660	Feb 22-23	4280	Apr 23 1995
MAXIMUM PEAK STAGE			16.93	Feb 22-23	24.41	Apr 29 1991
INSTANTANEOUS LOW FLOW			38	Nov 23-24	23	Jun 22 2002
ANNUAL RUNOFF (AC-FT)	151400		109200		194400	
10 PERCENT EXCEEDS	646		281		622	
50 PERCENT EXCEEDS	88		79		105	
90 PERCENT EXCEEDS	48		47		55	

^eEstimated



PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation of each gage is developed from discharge measurements made by direct or indirect methods. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but it is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum		Period of record maximum	
			Date	Gage height (ft) Discharge (ft ³ /s)	Date	Gage height (ft) Discharge (ft ³ /s)
ST. FRANCIS RIVER BASIN						
07047823 Murray Creek Tributary near Jonesboro	Lat 35° 51'51", long 90° 38'27", in SW _{1/4} SW _{1/4} sec.2, T.14 N., R.4 E., Craighead County, Hydrologic Unit 08020203, on wingwall at culvert on U.S. Highway 49, 4.0 mi northeast of Jonesboro. Drainage area is 0.36 mi ² .	1986-03	5-17-03	11.49	255	2-15-01 12.06 310
07047860 Higginbotham Creek at Jonesboro	Lat 35° 48'48", long 90° 42'29", in NE _{1/4} NW _{1/4} sec.30, T.14 N., R.4 E., Craighead County, Hydrologic Unit 08020203. Drainage area is 0.95 mi ² .	1992-03	5-17-03	18.46	710	8-13-02 19.48 1,200
07047880 Pope Creek Tributary at Birdeye	Lat 35° 22'35", long 90° 42'00", in NE _{1/4} SE _{1/4} sec.30, T.9 N., R.4 E., Cross County, Hydrologic Unit 08020203, at culvert on State Highway 42, 0.9 mi west of Birdeye. Drainage area is 0.08 mi ² .	1963-03	5-17-03	6.38	162	9-13-78 7.73 253
070479475 Spring Creek at Forrest City	Lat 35° 00'56", long 90° 47'34", in SE _{1/4} NW _{1/4} sec.28, T.5 N., R.3 E., St. Francis County, Hydrologic Unit 08020205, on Cherry Street in Forrest City. Drainage area is 0.54 mi ² .	1990-03	12-19-02	15.79	257	4-5-97 16.94 380
WHITE RIVER BASIN						
07048900 Whitener Branch Tributary near Spring Valley	Lat 36° 10'24", long 93° 54'59", in SE _{1/4} NW _{1/4} sec.1, T.17 N., R.28 W., Washington County, Hydrologic Unit 11010001, at culvert on State Highway 68, 1.0 mi east of Spring Valley. Drainage area is 1.07 mi ² .	1960-03		<4.84	--	7-25-60 17.60 1,410
07050285 Osage Creek at Osage	Lat 36° 11'19", long 93° 24'51", in NW _{1/4} SE _{1/4} sec.27, T.18 N., R.23 W., Carroll County, Hydrologic Unit 11010001, at bridge on State Highway 68, 0.7 mi northwest of Osage. Drainage area is 82.3 mi ² .	1989-03	5-17-03	11.68	12,500	5-3-90 14.91 27,000
07054450 East Sugarloaf Tributary near Lead Hill	Lat 36° 22'28", long 92° 49'52", in NW _{1/4} NW _{1/4} sec.19, T.20 N., R.17 W., Marion County, Hydrologic Unit 11010003, at culvert on State Highway 14, 5.0 mi southeast of Lead Hill. Drainage area is 0.85 mi ² .	1962-03	5-17-03	6.85	27	10-13-68 15.30 2,480
07055000 White River near Flippin	Lat 36° 18'35", long 92° 33'28", in NE _{1/4} NW _{1/4} sec.10, T.19 N., R.15 W., Marion County, Hydrologic Unit 11010003, on right bank 1.4 mi upstream from Hightower Creek, 3.2 mi northeast of Flippin. Drainage area is 6,081 mi ² .	1928-80 ^f 1981-91 1992-03 ^f	8-18-03	12.94	--	4-17-45 39.82 215,000
07060728 White River at Allison	Lat 35° 56'21", long 91° 38'28", in NW _{1/4} NW _{1/4} sec.13, T.15 N., R.11 W., Stone County, Hydrologic Unit 11010004, on right upstream side of wingwall of bridge on State Highway 9 at Allison. Drainage area is 10,458 mi ² .	1997-03 ^f	5-18-03	298.42	--	3-20-02 311.91 --
07069250 Brush Creek near Mammoth Spring	Lat 36° 25'36", long 91° 29'27", in SE _{1/4} SE _{1/4} sec.34, T.21 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at culvert on U.S. Highway 63, 5.5 mi southeast of Mammoth Spring. Prior to 1967 published as Spring River Tributary near Mammoth Spring. Drainage area is 0.48 mi ² .	1961-03	5-17-03	7.57	116	4-22-73 15.05 960
07069410 Ferguson Creek near Ravenden Springs	Lat 36° 17'29", long 91° 14'29", in NE _{1/4} SE _{1/4} sec.13, T.19 N., R.3 W., Randolph County, Hydrologic Unit 11010010, at bridge on State Highway 90, 1.9 mi southwest of Ravenden Springs. Drainage area is 3.79 mi ² .	1989-03		<5.13	--	4-28-98 10.02 3,200

PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

405

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum		Period of record maximum				
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)	
WHITE RIVER BASIN--CONTINUED									
07074865 Glaise Creek near Bradford	Lat 35° 27'45", long 91° 32'49", in NW ¹ / ₄ SW ¹ / ₄ sec.28, T.10 N., R.5 W., Jackson County, Hydrologic Unit 11010013, at bridge on State Highway 87, 5.9 mi northwest of Bradford. Drainage area is 8.35 mi ² .	1989-03	5-17-03	9.71	5,000	5-17-03	9.71	5,000	
07075000 Middle Fork of Little Red River at Shirley	Lat 35° 39'25", long 92° 17'34", in SW ¹ / ₄ sec.20, T.12 N., R.12 W., Van Buren County, Hydrologic Unit 11010014, on right bank 0.5 mi downstream from Sugar Camp or Weavers Creek, 1.0 mi east of Shirley. Drainage area is 302 mi ² .	1939-84 ^f 1985-94 1995-03 ^g	5-16-03	18.11	19,100	12-3-82	37.53	241,000	
07075600 Choctaw Creek Tributary near Choctaw	Lat 35° 31'30", long 92° 25'03", in SE ¹ / ₄ SW ¹ / ₄ sec.6, T.10 N., R.13 W., Van Buren County, Hydrologic Unit 11010014, at culvert on State Highway 330, 1.4 mi east of Choctaw. Drainage area is 1.36 mi ² .	1964-03	5-17-03	10.05	270	12-3-82	19.07	1,760	
07075800 Dill Branch Tributary near Ida	Lat 35° 32'36", long 91° 57'25", in SW ¹ / ₄ NE ¹ / ₄ sec.33, T.11 N., R.9 W., Cleburne County, Hydrologic Unit 11010014, at culvert on State Highway 25, 3.5 mi southwest of Ida. Prior to 1975 published as Peter Creek Tributary near Ida. Drainage area is 0.11 mi ² .	1964-03	5-17-03	8.37	133	4-2-79	9.96	230	
07076630 Key Branch near Searcy	Lat 35° 14'47", long 91° 47'01", in NW ¹ / ₄ SW ¹ / ₄ sec.8, T.7 N., R.7 W., White County, Hydrologic Unit 11010014, at culvert on State Highway 36, 2.8 mi west of Searcy. Prior to 1964 published as Little Red River Tributary near Searcy. Drainage area is 0.66 mi ² .	1961-03	5-16-03	7.04	430	11-24-73	7.79	573	
07076634 Litte Red River at Judsonia	Lat 35° 16'01", long 91° 38'23", in NW ¹ / ₄ NW ¹ / ₄ sec.3, T.7 N., R.7 W., White County, Hydrologic Unit 11010014, at highway bridge on county road just south of Highway 385 curve at south edge of Judsonia, at mile 25.2. Drainage area is 1,693 mi ² .	1982-03	5-17-03	35.06	--	a	a	a	
07076750 White River at Georgetown	Lat 35° 07'45", long 91° 27'00", in SW ¹ / ₄ SW ¹ / ₄ sec.20, T.6 N., R.4 W., White County, Hydrologic Unit 08020301, on right bank at Arkansas Game and Fish Commission boat launching area at Georgetown, and at mile 167. Drainage area is 22,387 mi ² .	1978-90 1991-94 ^f 1995-03	5-22-03	20.55	56,400	3-31-02 4-01-02	24.24	99,300	
07076870 Pigeon Roost Creek at Butlerville	Lat 34° 58'36", long 91° 50'38", in NW ¹ / ₄ NE ¹ / ₄ sec.15, T.4 N., R.8 W., Lonoke County, Hydrologic Unit 08020301, at bridge on State Highway 38, 0.6 mi west of Butlerville. Drainage area is 23.0 mi ² .	1961-03	5-17-03	10.84	2,350	4-21-74	12.62	8,800	
07077100 Big Creek near Boydsville	Lat 36° 22'12", long 90° 19'50", in SE ¹ / ₄ NW ¹ / ₄ , sec.16, T.20 N., R.7 E., Clay County, Hydrologic Unit 08020302, at bridge on county road, 0.5 mi south of Crockett and 4.0 mi northeast of Boydsville. Drainage area is 12.9 mi ² .	1962-81 1993-03	5-17-03	17.42	3,750	4-19-73	19.14	4,700	
07077200 Big Creek Tributary near Boydsville	Lat 36° 22'32", long 90° 19'56", in SE ¹ / ₄ SW ¹ / ₄ sec.9, T.20 N., R.7 E., Clay County, Hydrologic Unit 08020302, at culvert on county road, 0.1 mi west of Crockett, and 4.1 mi norttheast of Boydsville. Drainage area is 1.58 mi ² .	1962-03	5-17-03	8.34	490	7-25-98	9.94	790	
07077430 Willow Ditch near Egypt	Lat 35° 56'29", long 90° 56'33", in SW ¹ / ₄ SW ¹ / ₄ sec.12, T.15 N., R.1 E., Lawrence County, Hydrologic Unit 08020302, at culvert on State Highway 91, 5.1 mi north of Egypt. Drainage area is 0.25 mi ² .	1963-03	5-17-03	6.12	34	12-21-91	6.37	112	
07077650 Big Creek near Jonesboro	Lat 35° 51'11", long 90° 45'00", in SE ¹ / ₄ SE ¹ / ₄ sec.10, T.14 N., R.3 E., Craighead County, Hydrologic Unit 08020302, at bridge on State Highway 63, 1.3 mj west of Jonesboro. Drainage area is 50.6 mi ² .	1989-03	5-17-03	22.65	3,800	12-17-01	^b 25.10	4,250	
07077655 Christian Creek at GE Drive at Jonesboro	Lat 35° 50'29", long 90° 43'33", in NW ¹ / ₄ SW ¹ / ₄ , sec.3, T.14 N., R.3 E., Craighead County, Hydrologic Unit 08020302, 100 ft west of Gee Street in Jonesboro, on bridge at entrance to General Electric plant. Drainage area is 3.78 mi ² .	1993-03	7-31-03	10.83	560	8-13-02	17.56	2,130	

PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum		Period of record maximum				
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)	
WHITE RIVER BASIN--CONTINUED									
*07077920 Big Creek at Goodwin	Lat 34° 56'22", long 91° 00'55", in NE ^{1/4} NE ^{1/4} sec.29, T.4 N., R.1 E., St. Francis County, Hydrologic Unit 08020304, at bridge on U.S. Highway 70, 0.3 mi east of Goodwin. Drainage area is 31.1 mi ² .	1961-03	12-20-02	9.89	364	12-25-87	10.35	1,250	
07077940 Spring Creek near Aubrey	Lat 34° 41'16", long 90° 53'45", in SW ^{1/4} SE ^{1/4} , sec.16, T.1 N., R.2 E., Lee County, Hydrologic Unit 08020304, at bridge on State Highway 121, 2.1 mi south of Aubrey. Drainage area is 38.0 mi ² .	1962-80 1993-03	12-19-02	15.60	1,590	4-5-97	16.11	2,050	
ARKANSAS RIVER BASIN									
07249444 Mill Creek near Jenny Lind Road in Fort Smith	Lat 35° 18'14", long 94° 24'42", in NW ^{1/4} SE ^{1/4} sec.9, T.7 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, on downstream side of bridge on Jenny Lind Road in Fort Smith. Drainage area is 1.18 mi ² .	1999-03	6-2-03	2.80	275	6-30-99	7.42	1,600	
07249447 Mill Creek at Fort Smith	Lat 35° 20'34", long 94° 25'20", in NW ^{1/4} NW ^{1/4} sec.33, T.8 N., R.32 W., Sebastian County, Hydrologic Unit 11110104, on right bank 30 ft upstream from bridge on Towson Avenue in Fort Smith. Drainage area is 10 mi ² .	1981-03	2-3-03	29.53	647	5-02-90	36.40	2,400	
07249457 May Branch at Fort Smith	Lat 35° 22'30", long 94° 23'51", in NE ^{1/4} SW ^{1/4} sec.15, T.8 N., R.32 W., Sebastian County, Hydrologic Unit 11110104, on upstream side of bridge on Free Ferry Road. Drainage area is 1.0 mi ² .	1981-86 ^f 1993-03	6-2-03	6.05	a	12-2-82	8.01	580	
07249490 Lee Creek near Lee Creek	Lat 35° 42'12", long 94° 19'37", in NW ^{1/4} SE ^{1/4} sec.19, T.12 N., R.31 W., Crawford County, Hydrologic Unit 11110104, at bridge on State Highway 220, 1.8 mi northeast of Lee Creek. Drainage area is 93.5 mi ² .	1988-03	5-17-03	8.45	2,540	6-21-00 5-3-90	15.39 15.39	23,700 23,700	
07249500 Cove Creek near Lee Creek	Lat 35° 43'20", long 94° 24'28", in SW ^{1/4} NW ^{1/4} sec.16, T.12 N., R.32 W., Crawford County, Hydrologic Unit 11110104, at bridge on U.S. Forest Service road, 4.5 mi northwest of Lee Creek. Drainage area is 35.3 mi ² .	1951-70 ^f 1971-03	5-17-03	3.93	460	5-5-60	15.60	33,600	
07249950 Webber Creek Tributary near Cedarville	Lat 35° 36'00", long 92° 22'49", in SE ^{1/4} SE ^{1/4} sec.27, T.11 N., R.32 W., Crawford County, Hydrologic Unit 11110104, at culvert on State Highway 59, 2.3 mi north of Cedarville. Drainage area is 0.34 mi ² .	1962-03	5-17-03	5.15	27.5	10-26-70	7.71	274	
07250514 Sunnymede Creek at North 46th Terrace at Ft Smith	Lat 35° 23'53", long 94° 22'50", in NE ^{1/4} NW ^{1/4} sec.11, T.8 N., R.32 W., Sebastian County, Hydrologic Unit 11110105, on upstream side of bridge at North 46th Terrace in Ft. Smith. Drainage area is 1.13 mi ² .	1997-98 ^f 1999-03	6-2-03	4.55	267	6-30-99	6.02	423	
07251500 Frog Bayou at Rudy	Lat 35° 31'32", long 94° 16'18", in SW ^{1/4} SW ^{1/4} sec.23, T.10 N., R.31 W., Crawford County, Hydrologic Unit 11110104, at bridge on State Highway 282 at Rudy. Drainage area is 216 mi ² .	1951-70 ^f 1971-03	5-16-03	12.11	13,100	5-30-90	18.76	41,300	
07251790 Mulberry River near Oark	Lat 35° 41'01", long 93° 35'57", in NW ^{1/4} SE ^{1/4} sec.24, T.12 N., R.25 W., Johnson County, Hydrologic Unit 11110201, at bridge on State Highway 103, 1.5 mi west of Oark. Drainage area is 70.2 mi ² .	1988-03	5-16-03	7.82	3,070	6-17-00	17.63	32,900	
07256490 Greenbrier Creek at Clarksville	Lat 35° 28'15", long 93° 27'09", in NW ^{1/4} NW ^{1/4} sec.4, T.9 N., R.23 W., Johnson County, Hydrologic Unit 1111020, on State Highway 64 about 0.7 mi west of State Highway 21 North junction, at Clarksville. Drainage area is 26.7 mi ² .	1993-03		<4.25	--	1-31-02	8.76	1,920	
*07256500 Spadra Creek at Clarksville	Lat 35° 28'06", long 93° 27'46", in NW ^{1/4} NE ^{1/4} sec.5, T.9 N., R.23 W., Johnson County, Hydrologic Unit 11110202, on right bank at Clarksville, 0.2 mi downstream from bridge on U.S. Highway 64. Drainage area 61.1 mi ² .	1953-70 ^f 1971-03 ^d	5-17-03	5.57	780	6-5-74	19.93	27,400	
07256700 Big Shoal Creek near New Blaine	Lat 35° 17'30", long 93° 27'37", in NW ^{1/4} SE ^{1/4} sec.5, T.7 N., R. 23 W., Logan County, Hydrologic Unit 11110202, at bridge on State Highway 22, 2.3 mi west of New Blaine. Drainage area is 50.0 mi ² .	1989-03		<9.22	--	5-3-90	19.11	26,100	

PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

407

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
ARKANSAS RIVER BASIN--CONTINUED								
07257100 Minnow Creek Tributary near Hagarville	Lat 35° 30'11", long 93° 21'56", in SE ¹ / ₄ SE ¹ / ₄ sec.19, T.10 N., R.22 W., Johnson County, Hydrologic Unit 11110202, at culvert on State Highway 123, 2.6 mi southwest of Hagarville. Drainage area is 0.20 mi ² .	1962-03		<4.44	--	4-24-70	6.62	176
07258200 Pack Saddle Creek Tributary near Waldron	Lat 34° 58'19", long 94° 05'46", in SE ¹ / ₄ SE ¹ / ₄ sec.29, T.4 N., R.29 W., Scott County, Hydrologic Unit 11110105, at culvert on U.S. Highway 71, 5.2 mi north of Waldron. Drainage area is 0.92 mi ² .	1961-03	12-31-02	3.10	275	5-13-68	9.42	689
07260640 Petit Jean River near Centerville	Lat 35° 04'30", long 93° 11'58", in NE ¹ / ₄ sec.23, T.5 N., R.21 W., Yell County, Hydrologic Unit 11110204, on right bank 300 ft upstream from State Highway 7, 3.0 mi southeast of Centerville. Drainage area is 927 mi ² .	1988-90 [§] 1991-94 1995-03 [§]				5-5-90	26.40	--
07260679 East Fork Point Remove Creek Tributary near Saint Vincent	Lat 35° 16'09", long 92° 44'00", in NE ¹ / ₄ NE ¹ / ₄ sec.7, T.7 N., R.16 W., Conway County, Hydrologic Unit 11110203, at culvert on State Highway 213, 2.2 mi south of Saint Vincent. Drainage area is 0.06 mi ² .	1967-03	5-17-03	5.01	a	12-3-82	18.24	102
07260800 Arkansas River at Morrilton	Lat 35° 07'39", long 92° 43'55", in SE ¹ / ₄ SW ¹ / ₄ sec.29, T.6 N., R.16 W., Conway County, Hydrologic Unit 11110203, on left bank upstream from bridge on State highway 9, 2.0 mi southeast of Morrilton, 4.0 mi downstream from A.V. Ormon (No. 9) Lock and Dam, and at mile 189.1. Drainage area is 155,484 mi ² .	1927-03 [§]	5-18-03	22.68	--	5-15-43	40.8	--
07261800 Brogan Creek near Rover	Lat 34° 54'27", long 93° 24'06", in NW ¹ / ₄ SE ¹ / ₄ sec.13, T.3 N., R.23 W., Yell County, Hydrologic Unit 11110206, at culvert on State Highway 27, 2.7 mi south of Rover. Prior to 1968 published as Fourche LaFave River Tributary near Rover. Drainage area is 1.04 mi ² .	1963-03	5-17-03	11.48	1,550	5-17-03	^b 11.48	1,550
07263000 South Fourche LaFave River near Hollis	Lat 34° 54'41", long 93° 03'21", in SE ¹ / ₄ NE ¹ / ₄ sec.18, T.3 N., R.19 W., Perry County, Hydrologic Unit 11110206, on left bank 0.8 mi upstream from Big Cove Creek, 2.1 mi downstream from Cedar Creek, 4.0 mi northeast of Hollis, and at mile 5.6. Drainage area is 210 mi ² .	1941-95 ^f 1996-03	5-17-03	12.68	17,600	12-3-82	24.55	94,000
07263100 Fourche LaFave Tributary near Perryville	Lat 35° 01'14", long 92° 46'06", in SE ¹ / ₄ NE ¹ / ₄ sec.25, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, at left bank on downstream side of bridge on State Highway 10, 4.1 mi south of Wye. Drainage area is 89.4 mi ² .	1962-03	5-17-03 3-19-02 2-15-01 1-2-99 2-11-98 11-24-96 6-6-96 3-27-95 12-3-93 12-15-92 11-20-91 12-21-90 5-3-90	10.50 8.80 8.55 7.87 6.89 8.69 7.18 9.28 9.52 8.55 9.22 8.50 9.36	a ^c 550 ^c 470 ^c 280 ^c 74 ^c 500 ^c 120 ^c 680 ^c 760 ^c 470 ^c 670 ^c 460 ^c 710	12-3-82	11.45	a
07263400 Little Maumelle River at Ferndale	Lat 34° 46'48", long 92° 33'15", in NW ¹ / ₄ SE ¹ / ₄ sec.25, T.2 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, at bridge on Congo Road, 0.2 mi northeast of Ferndale. Drainage area is 15.0 mi ² .	1963-86 1993-03	12-4-02	6.49	850	3-10-73	15.01	10,800
07263426 Hickory Creek at Bent Tree Court in Little Rock	Lat 34° 47'18", long 92° 25'54", in SE ¹ / ₄ SE ¹ / ₄ sec.19, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, on downstream side of bridge at Bent Tree Court in Little Rock. Drainage area is 2.44 mi ² .	1997-98 ^f 1999-03	7-19-03	4.10	922	8-10-01 12-16-01	5.16	2,000
07263465 Storm Ditch at Rolling Oaks Drive at Maumelle	Lat 34° 52'41", long 92° 24'03", in NW ¹ / ₄ SW ¹ / ₄ sec.21, T.3 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, on downstream side of culvert apron at Rolling Oaks Drive at Maumelle. Drainage area is 0.36 mi ² .	1997-98 ^f 1999-03	7-19-03	3.49	137	5-28-97	4.23	211

ARKANSAS RIVER BASIN--CONTINUED

PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum		Period of record maximum				
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)	
07263500 Arkansas River at Little Rock	Lat 34° 45'00", long 92° 16'25", sec.3, T.1 N., R.12 W., on top of the second pier from the right bank of the new Main Street Bridge, 0.25 mile above Missouri Pacific Railway bridge at Little Rock, Pulaski County, and at mile 165.5. Gage can be reached by going east of Main Street on Markham Street to Cumberland Street (2 blocks east of Main) and to the left to the river. Drainage area is 158,201 mi ² of which 22,242 mi ² is probably noncontributing (determined from "Drainage Area Data, Arkansas, White, and Red River Basins").	1928-69 ^f 1970-03 ^s	5-19-03	12.25	--	5-27-43	30.05	536,000	
07263570 Grassy Flat Creek at Reservoir Road at Little Rock	Lat 34° 46'01", long 92° 22'03", in SE ¹ / ₄ NE ¹ / ₄ sec.34, T.2 N., R.13 W., Pulaski County, Hydrologic Unit 11110207, on downstream left bank of Reservoir Road bridge in Little Rock. Drainage area is 3.88 mi ² .	1974-87 1988-92 ^s 1996-98 ^f 1999-03	12-23-02	5.80	984	5-17-81	11.47	3,230	
07263590 Coleman Creek at Little Rock	Lat 34° 45'07", long 92° 20'02", in SE ¹ / ₄ NW ¹ / ₄ sec.6, T.1 N., R.12 W., Pulaski County, Hydrologic Unit 11110207, at Markham and N. Tyler in Little Rock. Drainage area is 1.08 mi ² .	1990-03	12-23-02	13.77	380	5-19-90	17.50	1,260	
07263594 Coleman Creek at West 28th Street in Little Rock	Lat 34° 43'36", long 92° 20'17", in SW ¹ / ₄ SW ¹ / ₄ sec.7, T.1 N., R.12 W., Pulaski County, Hydrologic Unit 11110207, at culvert on West 28th Street, 0.2 mi east of University Avenue, 1.1 mi upstream from mouth, and in Little Rock. Drainage area is 2.78 mi ² .	1997-98 ^f 1999-03	7-19-03	10.10	1,080	8-10-01	11.86	2,320	
07263650 Arkansas River at Pine Bluff	Lat 34° 17'26", long 91° 59'14", in NW ¹ / ₄ SW ¹ / ₄ sec.9, T.5 S., R.9 W., Jefferson County, Hydrologic Unit 11110207, under U.S. Highway 79 bridge on top of pier cap near left bank, 1.0 mile northeast of Pine Bluff, 0.7 mile upstream from Boyd Point Cutoff, and at mile 73.7. Drainage area is 158,595 mi ² .	1948-03 ^s	5-19-03	36.19	--	6-1-57	50.74	--	
07263930 Rocky Branch at Braden and Marshall Roads at Jacksonville	Lat 34° 52'14", long 92° 07'41", in NE ¹ / ₄ SE ¹ / ₄ sec.24, T.3 N., R.11 W., Pulaski County, Hydrologic Unit 11110207, at Braden and Marshall Roads at Jacksonville. Drainage area is 0.48 mi ² .	1997-98 ^f 1999-03	5-16-03	6.19	a	3-5-97	4.15	85	
07264050 Bayou Two Prairie near Furlow (published as near Cabot 1993-99)	Lat 34° 51'32", long 91° 58'48" in SW ¹ / ₄ NW ¹ / ₄ sec.28, T.3 N., R.9 W., Lonoke County, Hydrologic Unit 08020402, at bridge on State Highway 89, 1.8 mi north of Furlow. Drainage area is 84.9 mi ² .	1988-03	5-17-03	9.35	1,200	12-28-87	12.12	5,200	
07265280 Arkansas River at Pendleton	Lat 33° 58'45", long 91° 22'40", at Pendleton, and approximately 9 miles NE of Dumas, AR, 44.5 miles above mouth. Drainage area is 160,200 mi ² .	1993-03 ^s	5-20-03	28.30	--	5-11-95	30.02	--	
RED RIVER BASIN									
07339500 Rolling Fork near DeQueen	Lat 34° 02'51", long 94° 24'47" in SW ¹ / ₄ SW ¹ / ₄ sec.21, T.8 N., R.32 W., Sevier County, Hydrologic Unit 11140109, near span on downstream side of bridge on U.S. Highway 70, 4.0 mi, west of DeQueen. Drainage area is 182 mi ² .	1948-80 ^f 1981-03	2-26-03	8.95	1,810	12-10-71	24.23	71,000	
07340500 Cossatot River near DeQueen	Lat 34° 02'45", long 94° 12'42", in NE ¹ / ₄ NE ¹ / ₄ sec.29, T.8 S., R.30 W., Sevier County, Hydrologic Unit 11140109, near right bank on downstream side of bridge on U.S. Highway 71, 7.0 mi east of DeQueen. Drainage area is 360 mi ² .	1938-80 ^f 1981-03	5-17-03	8.89	3,340	5-13-68	22.60	122,000	
07341000 Saline River near Dierks	Lat 34° 05'45", long 94° 05'04", in NW ¹ / ₄ SW ¹ / ₄ sec.3, T.8 S., R. 29 W., Howard County, Hydrologic Unit 11140109, near left bank on downstream side of U.S. Highway 70, 4.0 mi southwest of Dierks. Drainage area is 121 mi ² .	1938-80 ^f 1981-03	2-18-03	8.29	1,220	5-13-68	22.95	59,200	
07341260 Dillard Creek near Nashville	Lat 33° 26'04", long 93° 54'45", in NE ¹ / ₄ NE ¹ / ₄ sec.30, T.9 S., R.27 W., Howard County, Hydrologic Unit 11140109, at bridge on State Highway 24, 4.1 mi west of Nashville. Drainage area is 5.82 mi ² .	1989-03		<7.87	--	2-16-01	10.03	1,370	

RED RIVER BASIN--continued

PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

409

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum		Period of record maximum			
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
07344280 Nix Creek at E. 12th Street at Texarkana	Lat 33° 26'04", long 94° 01'33", in NW1/4SW1/4 sec.20, T.15 S., R.28 W., Miller County, Hydrologic Unit 11140302, at bridge on E. 12th Street at Texarkana, 0.1 mi west of junction with U.S. Highway 67. Drainage area is 8.87 mi ² .	1993-03	6-16-03	16.51	3,600	5-28-98	^b 20.50	8,260
07344285 Swampoodle Creek at Broad Street at Texarkana, Texas	Lat 33° 25'06", long 94° 02'57", in Bowie County, Texas, Hydrologic Unit 11140302, at bridge on Broad Street, 0.4 mi southwest of Arkansas-Texas State line. Drainage area is 424 mi ² .	1993-03	6-16-03	18.74	2,950	5-28-98	19.52	3,330
07348635 Big Creek Tributary at Magnolia	Lat 33° 15'51", long 93° 13'56", in NW1/4NE1/4 sec.13, T.17 S., R.21 W., Columbia County, Hydrologic Unit 11140203, at Dudley and Grayson St. in Magnolia. Drainage area is 0.34 mi ² .	1990-03	7-28-03	16.15	a	4-28-91	17.70	a
07355800 Lewis Creek Tributary near Mena	Lat 34° 37'15", long 95° 12'15", in NE1/4SW1/4 sec.33, T.1 S., R.30 W., Polk County, Hydrologic Unit 08040101, at culvert on U.S. Highway 71, 3.1 mi northeast of Mena. Drainage area is 0.65 mi ² .	1961-03		<1.99	--	10-8-90	6.23	560
07357740 Bear Creek near Royal	Lat 34° 30'30", long 93° 15'21", in NE1/4NW1/4 sec.4, T.3 S., R.21 W., Garland County, Hydrologic Unit 08040101, at bridge on U.S. Highway 270, 1.0 mi west of Royal. Drainage area is 5.99 mi ² .	1989-03	12-4-02	3.81	a	3-8-90	6.42	1,600
07357860 Stokes Creek at Kimery Road at Hot Springs	Lat 34° 28'36", long 93° 04'52", in SE1/4NW1/4 sec.18, T.3 S., R.19 W., Garland County, Hydrologic Unit 08040101, at bridge on Kimery Road, 2.8 mi southwest of Hot Springs Post Office. Drainage area is 3.02 mi ² .	1993-03	6-6-03	3.77	a	11-5-94	6.49	a
07359710 Rock Creek near Glenwood	Lat 34° 18'34", long 93° 32'21", in NW1/4NE1/4 sec.14, T.5 S., R.24 W. Pike County, Hydrologic Unit 08040102, at bridge on State Highway 8, 1.3 mi southeast of Glenwood. Drainage area is 8.62 mi ² .	1989-03	12-24-02	5.69	540	5-20-90	13.58	7,450
07359805 Valley Creek near Point Cedar	Lat 34° 19'17", long 93° 15'24", in NW1/4NE1/4 sec.9, T.5 S., R.21 W., Hot Spring County, Hydrologic Unit 08040102, at bridge on State Highway 84, 2.9 mi east of Point Cedar. Drainage area is 7.62 mi ² .	1989-03	6-12-03	7.32	885	5-20-90	16.9	10,500
07360100 LEau Frais at Joan	Lat 34° 06'27", long 92° 55'22", in SW1/4NE1/4 sec.22, T.7 S., R.18 W., Clark County, Hydrologic Unit 08040102, at bridge on State Highway 128, 0.7 mi southeast of Joan. Drainage area is 74.2 mi ² .	1989-03	6-12-03	6.09	1,950	04-14-93	8.16	^c 5,400
07360225 Little Blocker Creek near Langley	Lat 34° 18'41", long 93° 49'06", in SE1/4NE1/4 sec.18, T.5 S., R.26 W., Pike County, Hydrologic Unit 08040103, at bridge on State Highway 84, 1.3 mi east of Langley. Drainage area is 5.74 mi ² .	1989-03	5-16-03	6.32	220	12-3-93	11.79	^b 3,420
07361180 South Fork Ozan Creek near Ozan	Lat 33° 49'15", long 93° 42'28", in SE1/4SW1/4 sec.5, T.11 S., R.25 W., Hempstead County, Hydrologic Unit 08040103, at bridge on State Highway 4, 2.0 mi south of Ozan. Drainage area is 17.7 mi ² .	1963-03		<16.05	--	4-19-73	25.06	8,360
07361760 Bell Creek near Hollywood	Lat 34° 05'47", long 93° 16'53", in NW1/4NE1/4 sec.31, T.7 S., R.21 W., Clark County, Hydrologic Unit 08040103, at bridge on State Highway 26, 2.0 mi west of Hollywood. Drainage area is 9.22 mi ² .	1988-03	7-19-03	11.77	1,550	12-26-87	14.0	2,600
07361894 Mill Creek near Holly Springs	Lat 33° 46'01", long 92° 39'52", in SE1/4SW1/4 sec.17, T.11 S., R.15 W., Ouachita County, Hydrologic Unit 08040102, at bridge on State Highway 203, 4.2 mi southeast of Holly Springs. Drainage area is 9.01 mi ² .	1989-03	6-12-03	11.31	310	4-5-97	14.47	4,500
07362330 Dunn Creek near Hampton	Lat 33° 32'05", long 92° 30'55", in SE1/4NW1/4 sec.2, T.14 S., R.14 W., Calhoun County, Hydrologic Unit 08040201, at bridge on State Highway 4, 2.8 mi west of Hampton. Drainage area is 13.6 mi ² .	1962-03	2-15-03	8.21	1,020	5-1-66	10.11	4,240
07362591 Alum Fork Saline River at Winona Dam at Reform	Lat 34° 47'51", long 92° 50'43", in NE1/4NE1/4 sec.30, T.2 N., R.17 W., Saline County, Hydrologic Unit 08040203, at water intake 500 ft above dam, 0.8 mi northwest of Reform. Drainage area is 44.4 mi ² .	1995-03	6-12-03	42.21	--	2-16-01	42.52	--

PEAK DISCHARGE AND STAGE AT PARTIAL-RECORD STATIONS

Station number and name	Location and drainage area	Period of record	Water year 2003 maximum		Period of record maximum			
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
07362715 Big Creek near Crow	Lat 34° 37'00", long 92° 43'35", in NE _{1/4} NW _{1/4} sec.28, T.1 S., R.16 W. Saline County, Hydrologic Unit 08040203, at bridge on State Highway 5, 2.5 mi east of Crow. Drainage area is 4.7 mi ² .	1988-03	6-12-03	6.31	590	12-28-87	9.68	5,300
07363435 Derriousseaux Creek near Grapevine	Lat 34° 08'44", long 92° 14'38", in NE _{1/4} NW _{1/4} sec.5, T.7 S., R.11 W., Grant County, Hydrologic Unit 08040203, at bridge on State Highway 54, 4.2 mi east of Grapevine. Drainage area is 77.0 mi ² .	1988-03	2-22-03	9.00	1,580	4-5-97	11.50	a
07364030 L'Aigle Creek Tributary near Hermitage	Lat 33° 24'30", long 92° 12'30", in SE _{1/4} NW _{1/4} sec.14, T.15 S., R.11 W., Bradley County, Hydrologic Unit 08040204, at culvert on State Highway 15, 3.3 mi southwest of Hermitage. Prior to 1975 published as Eagle Creek Tributary near Hermitage. Drainage area is 0.36 mi ² .	1963-03	12-19-02 11-29-01	5.70 4.89	234 130	4-14-91	17.06	260
07364110 Nevins Creek Tributary near Pine Bluff	Lat 34° 10'08", long 92° 05'12", in NW _{1/4} SE _{1/4} sec.26, T.6 S., R.10 W., Jefferson County, Hydrologic Unit 08040205, at culvert on U.S. Highway 79, 6.0 mi southwest of Pine Bluff. Prior to 1962 published as Bayou Bartholomew Tributary near Pine Bluff. Drainage area is 0.75 mi ² .	1961-03	5-7-03	5.64	a	9-24-84	10.58	600
07364114 Pitts Drain at Louisiana Street in Pine Bluff	Lat 34° 12'29", long 91° 59'48", in NW _{1/4} NE _{1/4} sec.15, T.6 S., R.9 W., Jefferson County, Hydrologic Unit 08040205, at culvert on U.S. Highway 79, 6.0 mi southwest of Pine Bluff. Prior to 1962 published as Bayou Bartholomew Tributary near Pine Bluff. Drainage area is 0.75 mi ² .	1997-98 ^f 1999-03	5-7-03	5.61	510	5-6-00	6.15	600
07364128 Deep Bayou near Grady	Lat 34° 02'03", long 91° 42'34", in NW _{1/4} NW _{1/4} sec.16, T.8 S., R.6 W., Lincoln County, Hydrologic Unit 08040205, at bridge on State Highway 11, 2.7 mi south of Grady. Drainage area is 84 mi ² .	1989-03	12-19-02	15.15	1,500	7-18-89	18.1	2,350
07364140 Ables Creek near Tyro	Lat 33° 49'29", long 91° 44'06", in NE _{1/4} SE _{1/4} sec.20, T.10 S., R.6 W., Lincoln County, Hydrologic Unit 08040205, on left downstream bridge pier on State Highway 54, 1.3 mi southwest of Tyro. Drainage area is 36 mi ² .	1993-03	5-17-03	12.88	5,300	4-5-97	14.28	13,700
07364550 Caney Creek Tributary near El Dorado	Lat 33° 11'22", long 92° 36'28", in NE _{1/4} NW _{1/4} sec.1, T.18 S., R.15 W., Union County, Hydrologic Unit 08040202, at culvert on U.S. Highway 82, 3.5 mi southeast of El Dorado. Drainage area is 0.07 mi ² .	1961-03	12-19-02	7.72	65	6-8-74	12.40	978
07365800 Cornie Bayou near Three Creeks	Lat 33° 02'21", long 92° 56'15", in SW _{1/4} NW _{1/4} sec.36, T.19 S., R.18 W., Union County, Hydrologic Unit 08040206, on left bank at downstream side of bridge on State Highway 15, 6.0 mi southwest of Three Creeks. Drainage area is 180 mi ² .	1956-87 ^f 1990-03	12-19-02	11.06	4,020	6-8-74	17.50	65,000

^a Not determined

^b From floodmarks

^c Revised

^d Prior to December 20, 1989 at datum 2.00 ft higher

* Also a low-flow partial-record station

^f Operated as a continuous-record gaging station

^g Operated as a stage-only station

^h Not previously published

ⁱ At site and datum then in use

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the State during water year 2003.

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
ST. FRANCIS RIVER BASIN						
07047947 Second Creek near Palestine	L'Anguille River	Lat 35 02'20", long 90 54'40", in SW ¹ / ₄ SE ¹ / ₄ sec.17, T.5 N., R.2 E., St. Francis County, Hydrologic Unit 08020205, at bridge on county road, 4.0 mi north of Palestine.	d	4<; 9035	43056035	446
					904; 036	438
WHITE RIVER BASIN						
07047984 Middle Fork White River southeast of Fayetteville	White River	Lat 35 59'47", long 94 04'21", in SE ¹ / ₄ SE ¹ / ₄ sec.5, T.15 N., R.29 W., Washington County, Hydrologic Unit 11010001, at ford on farm road 2.0 mi south of State Hwy 16 and 5.9 mi southeast of Fayetteville.	d	4<<; 035	40<036	5817
					609036	8917
07050206 Kings River near Alabam	White River	Lat 36 11'20", long 93 38'58", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ sec.28, T.18 N., R.25 W., Madison County, Hydrologic Unit 11010001, at bridge on county road, 3.6 mi northeast of Alabam.	d	4<<; 035	4504<035	6314
					40 036	8317
					603036	446
07050390 Osage Creek southwest of Berryville	Kings River	Lat 36 20'55", long 93 35'26", in SE ¹ / ₄ SW ¹ / ₄ sec.36, T.20 N., R.25 W., Carroll County, Hydrologic Unit 11010001, at bridge on State Highway 221 at McKennon Ford, and 1.0 mi southwest of Berryville.	d	4<; 0<3 ^f 4<<; 035	43048035	6137
					45044035	451
					40 036	8; 1
					603036	496
07069170 Warm Fork Spring River near Thayer, Missouri	Black River	Lat 36 30'10", long 92 31'31", in SE ¹ / ₄ SE ¹ / ₄ sec.5, T.21 N., R.5 W., Oregon County, Mo., Hydrologic Unit 11010010 at bridge on county road, 0.6 mi east of U.S. Highway 63, 0.2 mi north of Missouri-Arkansas State line, and 1.1 mi southeast of Thayer, Mo.	d	4<; 40 8 4<; 6035	43055035	4819
					40 036	6<13
					904<036	6; 15
07069266 Spring River near Hardy	Spring River	Lat 36 20'00", long 91 30'30", in SW ¹ / ₄ SW ¹ / ₄ sec.34, T.20 N., R.5 W., Fulton County, Hydrologic Unit 11010010, at low-water bridge on county road, 1.8 mi upstream from South Fork Spring River, and 2.2 mi northwest of Hardy.	68	4<; 70 ; 5333035	43055035	6: 5
					904<036	6; 7
07069295 South Fork Spring River at Saddle	Spring River	Lat 36 21'00", long 92 38'00", in NW ¹ / ₄ NW ¹ / ₄ sec.33, T.20 N., R.6 W., Fulton County, Hydrologic Unit 11010010, at bridge on State Highway 289, 0.2 mi southeast of Saddle.	d	4<; 7035	43055035	491
					70 036	443
					; 045036	5313
07073500 Piney Fork at Evening Shade	Strawberry River	Lat 36 04'50", long 91 36'39", in NE ¹ / ₄ sec.34, T.17 N., R.6 W., Sharp County, Hydrologic Unit 11010012, on Hwy 167 0.8 mi north of Evening Shade.	d	5334035	8054036	496
07073995 North Big Creek near Evening Shade	Strawberry River	Lat 36 08'17", long 91 30'12", in NE ¹ / ₄ sec.10, T.17 N., R.5 W., Sharp County, Hydrologic Unit 11010012, on Hwy 354, 3.4 mi west of intersection of Hwys 354 and 58.	d	5334035	8054036	443
07074050 Mill Creek south of Sitka	Strawberry River	Lat 36 07'13", long 91 24'12", in SE ¹ / ₄ sec.16, T.17 N., R.4 W., Sharp County, Hydrologic Unit 11010012, 2.5 mi east of Hwy 58, 4.2 mi northeast of Poughkeepsie, and 4.5 mi south of Sitka on Strawberry Road.	d	5334035	8054036	5; 13
07074248 South Big Creek near Strawberry	Strawberry River	Lat 36 01'12", long 91 20'09", in NE ¹ / ₄ sec.19, T.16 N., R.3 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 117, 4.0 mi northwest of intersection of Hwys 230 and 25.	d	5334035	8055036	43:
07074250 Reeds Creek near Strawberry	Strawberry River	Lat 35 58'58", long 91 20'12", in SW ¹ / ₄ sec.32, T.16 N., R.3 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 117, 1.4 mi north of intersection of Hwys 230 and 25.	d	5334035	8055036	9413
07074325 Strawberry River near Saffell	Black River	Lat 35 55'06", long 91 14'52", in NW ¹ / ₄ sec.30, T.15 N., R.2 W., Lawrence County, Hydrologic Unit 11010012, on Hwy 361, 2. 4 mi north of intersection of Hwys 361 and 25.	d	5334035	8055036	4533

412 DISCHARGE MEASUREMENTS MADE AT SPECIAL STUDY AND MISCELLANEOUS SITES

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Measurements Discharge (ft ³ /s)
WHITE RIVER BASIN--continued						
07076950 Wattensaw Bayou near Hazen	White River	Lat 34 52'34", long 92 33'56", in SE1/4SE1/4 sec.18, T.3 N., R.5 W., Prairie County, Hydrologic Unit 08020301, at bridge on State Highway 11, 7.0 mi north of Hazen.	d	4<; 7035	4305035 40<036 705036 9059036	944 4; 5 3 487
07077660 Bayou DeView near Gibson	Cache River	Lat 35 47'36", long 90 50'18", in SW1/4SW1/4 sec.36, T.14 N., R.2 E., Craighead County, Hydrologic Unit 08020302, at bridge on State Highway 226, 1.8 mi northwest of Gibson.	d	4<; 70 ; 4<<80<9 4<<; 035	43056035 904; 036	^h 3034 761
ARKANSAS RIVER BASIN						
07195400 Illinois River near Siloam Springs	Arkansas River	Lat 36 08'41", long 94 29'41", in SW1/4SW1/4 sec.15, T.17 N., R.33 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 16, 4.6 mi southeast of Siloam Springs.	83<	4<; <0 4 ⁱ 4<; 50 8 4<; 9 ⁱ 4<; : 035	4305035 404036 705036 8063036 : 063036	469 494 5; 7 636 44;
07246940 Poteau River at Waldron	Arkansas River	Lat 34 53'46", long 94 03'57", in SW1/4SE1/4 sec.22, T.3 N., R.29 W., Scott County, Hydrologic Unit 11110105, at bridge on State Highway 80, in Waldron.	d	4<; 9035	430 035 4504; 035 704036 : 05; 036	^h 3035 745 41 : 3
07260620 Chickalah Creek near Chickalah	Petit Jean River	Lat 35 09'36", long 93 17'34", in SW1/4 sec.24, T.6 N., R.22 W., Yell County, Hydrologic Unit 11110204, at bridge on State Highway 27, 0.5 mi upstream from Little Chickalah Creek and 1.0 mi southwest of Chickalah.	d	4<9709; ^f 4<; 9035	4504<035 805<036 : 063036	431 81 : 3
072632962 Bringle Creek at Martindale	Maumelle River	Lat 34 52'53", long 92 40'52", in NE1/4NW1/4 sec.26, T.3 N., R.16 W., Pulaski County, Hydrologic Unit 11110207, at bridge on State Highway 10, 0.4 mi east of Martindale	d	00	5047036 808036	<; 1< 6403
072632971 Yount Creek near Martindale	Maumelle River	Lat 34 53'23", long 92 38'48", SW1/4NW1/4 sec.19, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, at bridge on State Highway 113, 1.0 mi north of intersection of Highways 10 and 13 and 3.0 mi northeast of Martindale.	d	00	5047036 808036	681 ; 1<4
072632982 Reece Creek at Little Italy	Maumelle River	Lat 34 55'48", long 92 35'36", in NE1/4SW1/4 sec.3, T.3 N., R.15 W., Pulaski County, Hydrologic Unit 11110207, at low water crossing on Hundley Road, 0.6 mi south of Little Italy.	d	00	5047036 808036	77 6 564
RED RIVER BASIN						
07338720 Mountain Fork near Hatfield	Little River	Lat 34 30'18", long 94 25'50", in NE1/4NE1/4 sec.3, T.6 S., R.5 W., Polk County, Hydrologic Unit 11140108 at bridge on State Highway 246, 3.1 mi northwest of Hatfield.	49;	4<9509; ^f 4<; 40 6 4<; 9035	430 035 5044036 805; 036	80< 961 8803
07339780 Rolling Fork near West Otis	Little River	Lat 33 58'32", long 94 26'03", in SW1/4NW1/4 sec.20, T.9 S., R.32 W., Sevier County, Hydrologic Unit 11140109, on right bank downstream from bridge on county road, 1.5 mi north of West Otis.	5<3	4<95 4<; 50 6 4<<<035	44047035 607036 9058036	465 4463 843
07344300 ^g Days Creek southeast of Texarkana	Sulphur River	Lat 33 19'06", long 94 00'16", in NE1/4SE1/4 sec.33, T.16 S., R.28 W., Miller County, Hydrologic Unit 11140302, at bridge on State Highway 237, 7.0 mi south of Texarkana.	: ; 18	4<; 6035	44046035 607036 9057036	4<17 8; 1< 631
07349440 Bodcau Creek near Lewisville	Red Chute Bayou	Lat 33 15'42", long 93 33'05", in SE1/4 sec.14, T.17 S., R.24 W., Lafayette County, Hydrologic Unit 11140205, at bridge on State Highway 313, 6.7 mi southeast of Lewisville.	5<5	4<; 70 8 4<; : 0<3 4<<8/ <; 5334035	7054036 ; 07036	^h 43 3
07359770 Caddo River near Amity	Ouachita River	Lat 34 17'05", long 93 24'56", in NW1/4SE1/4 sec.24, T.5 S., R.23 W., Clark County, Hydrologic Unit 08040102, at bridge on State Highway 84, 2.9 mi northeast of Amity.	5<5	4<; : 035	7056036 ; 0 036	: 81 89

DISCHARGE MEASUREMENTS MADE AT SPECIAL STUDY AND MISCELLANEOUS SITES

413

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
RED RIVER BASIN--continued						
07362550 Moro Creek near Banks	Ouachita River	Lat 33 32'38", long 92 19'00", in sec.35, T.13 S., R.12 W., Bradley-Calhoun County, Hydrologic Unit 08040201, at bridge on State Highway 4, 4.0 mi west of Banks.	6; 8	4<8; 096 ^f 4<: 7035	4306035 70<036	31 8 9; 16
07363270 Hurricane Creek near Sardis	Saline River	Lat 34 30'40", long 92 24'54", in SW ¹ / ₄ sec.28, T.2 S., R.13 W., Saline County line, Hydrologic Unit 08040203, at crossing on county road, 200 ft downstream from Brushy Creek, 1.5 mi southwest of Sardis.	99 3	4<: 7035	43043035 40 036 7054036 ; 055036	748 97 6 4< 3 4< 7
07364115 Bayou Bartholomew near Ladd	Ouachita River	Lat 34 06'24", long 92 54'06", in NW ¹ / ₄ sec.22, T.7 S., R.8 W., Jefferson County, Hydrologic Unit 08040205, at bridge on county road, 2.2 mi south of Ladd.	d	4<9; / 4<: 7033	43055035 70 036 ; 046036	48 9 461 91 6
07364600 Bayou DeLoutre near El Dorado	Ouachita River	Lat 33 05'55", long 92 35'32", in SE ¹ / ₄ NW ¹ / ₄ sec.6, T.19 S., R.14 W., Union County, Hydrologic Unit 08040201, at bridge on county road, 8.5 mi southeast of El Dorado.	; ; 17	4<8<097 4<: 40 8 4<: ; 0 8 4<: ; 035	4304035 70<036 ; 0 036	; 1<3 4: 6 49 9

^dNot determined.^eEstimated.^fOperated as a low-flow partial-record station.^gNot previously published.^hEstimatedⁱOperated as a continuous-record station.^jOperated as a stage station by U.S. Army Corps of Engineers.

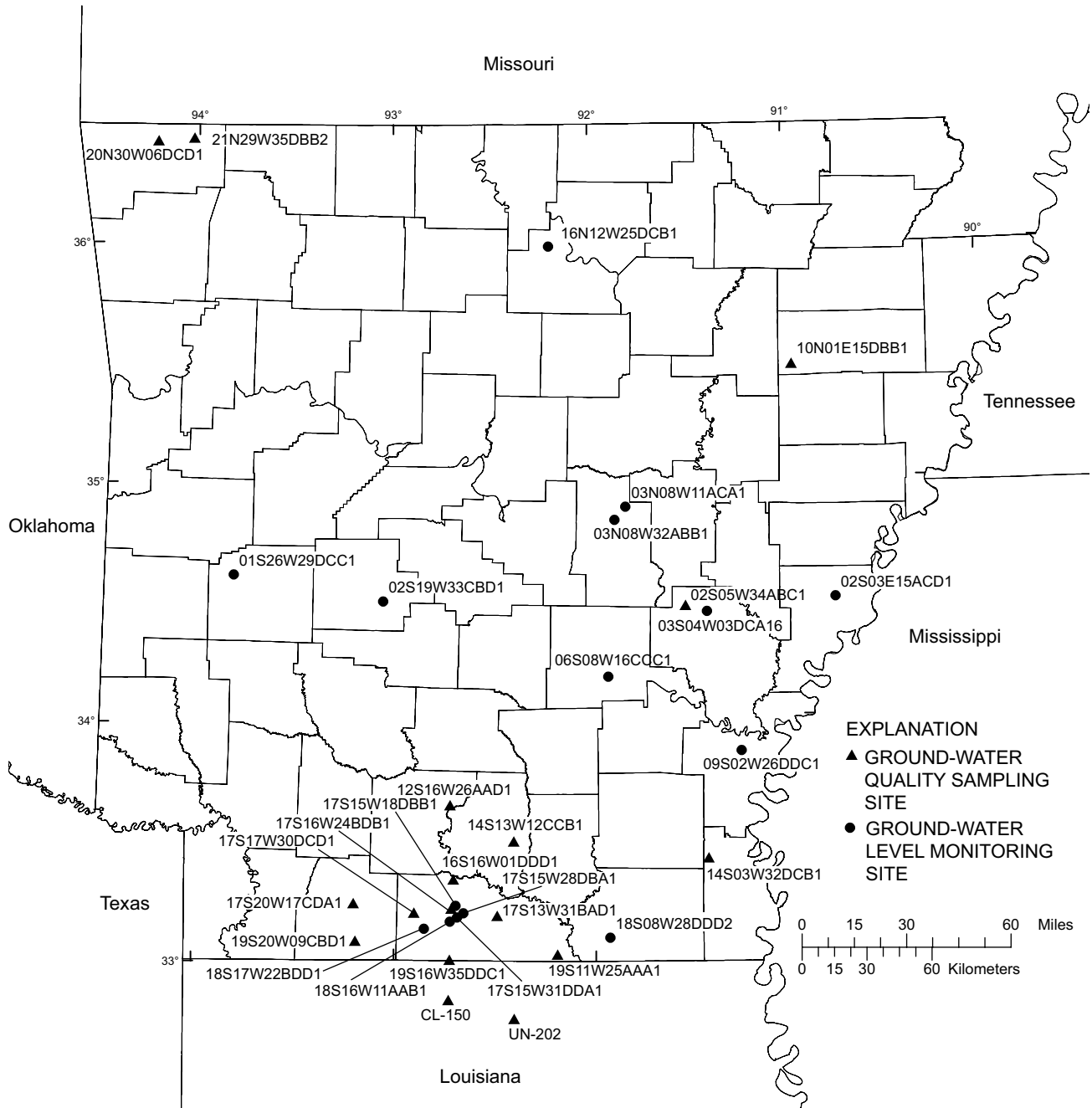


Figure 4. Locations of ground-water quality sampling sites and ground-water monitoring sites in Arkansas.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ARKANSAS COUNTY

342649091251916. Local number, 03S04W03DCA1.

LOCATION.--Lat 34°27'53", long 91°25'15", Hydrologic Unit 08020303, near Stuttgart.

Owner: University of Arkansas Rice Experimental Station.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS--Drilled for observation well, diameter 26 in, depth 126 ft, screened 120-126 ft.

DATUM.--Land surface 205 ft above NGVD of 1929. Measuring point: Top of casing inside housing, 1.0 ft above land surface.

PERIOD OF RECORD.--5-day water levels June 1961 to July 1967. Annual water levels March 1968 to March 2000, and continuous water levels June 2000 to current year.

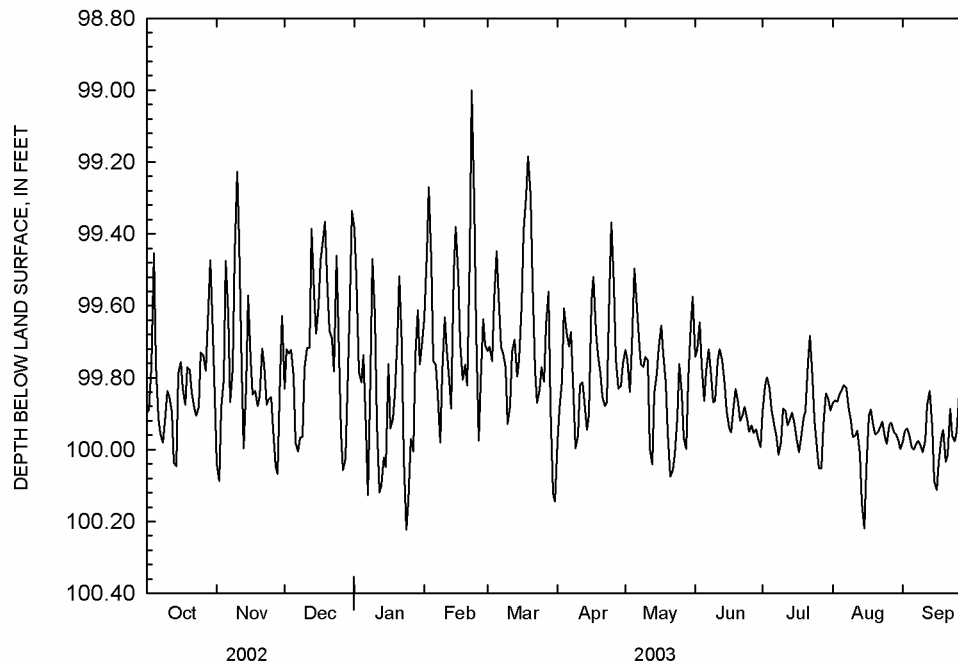
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 95.20 ft below land surface, January 10, 1963: lowest, 100.22 ft below land surface, January 24 and September 30, 2003.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	99.76	99.47	99.79	99.74	99.75	99.45	99.67	99.50	99.87	99.89	99.83	99.99
10	99.84	99.23	99.77	99.63	99.63	99.93	99.96	99.74	99.87	99.89	99.96	100.01
15	99.79	99.57	99.68	100.05	99.38	99.75	99.90	99.79	99.89	99.93	100.22	100.09
20	99.78	99.85	99.56	99.69	99.82	99.29	99.79	99.95	99.87	99.89	99.96	100.03
25	99.73	99.85	99.67	100.15	99.98	99.77	99.37	99.76	99.95	100.00	99.98	99.95
EOM	99.85	99.63	99.34	99.70	99.71	100.15	99.76	99.57	99.99	99.89	100.00	100.22
MEAN	99.82	99.78	99.71	99.84	99.65	99.69	99.77	99.81	99.85	99.91	99.94	99.97
MAX	100.05	100.09	100.06	100.22	99.98	100.15	100.00	100.08	99.99	100.05	100.22	100.22
MIN	99.45	99.23	99.34	99.39	99.00	99.18	99.37	99.50	99.65	99.68	99.82	99.77

WTR YR 2003 MEAN 99.81 HIGH 99.00 FEB 22 LOW 100.22 JAN 24, SEP 30



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ARKANSAS COUNTY--CONTINUED

342925091314701. Local number, 02S05W34ABC1.

LOCATION.--Lat 34°29'25", long 91°31'47", Hydrologic Unit 08020402, near Stuttgart.

Owner: Alfred Heien.

AQUIFER.--Sparta Sand of the Eocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in, depth 758 ft, screened 668-748 ft.

DATUM.--Land surface, 216 ft NGVD of 1929.

PERIOD OF RECORD.--August 1993, August 1998, June 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Color, water, fltrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Carbon dioxide, unfltrd mg/L (00405)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	
JUN 2003	26...	0950	80513	80020	<5	754	9.1	7.3	459	23.2	140	42.0
Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	
JUN 2003	26...	9.10	6.10	1	36.0	34	100	20.0	.2	13.0	4.00	194
Date	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Barium, water, fltrd, mg/L (01005)	
JUN 2003	26...	.36	263	.70	.82	.64	<.02	<.010	.06	.092	.03	310
Date	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	
JUN 2003	26...	<1	80	<.5	<1	<1	<2	935	<2	19	33	<2
Date	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,4-D, water, fltrd, ug/L (50470)	2,4-D, water, fltrd, ug/L (39732)	2,4-DB, water, fltrd, ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	
JUN 2003	26...	<1	<1	1400	<1	2	<.009	<.02	<.02	<.03	<.04	<.008
Date	3-Hydroxy carbonyl, water, fltrd, ug/L (49308)	3-Ketocarbonyl, water, fltrd, ug/L (50295)	Acifluorfen, water, fltrd, 0.7u GF ug/L (49315)	Aldicarb sulfone, water, fltrd, 0.7u GF ug/L (49313)	Aldicarb sulfide, water, fltrd, 0.7u GF ug/L (49314)	Aldicarb, water, fltrd, 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Bendiocarb, water, fltrd, ug/L (50299)	Bensulfuron, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	
JUN 2003	26...	<.006	<2	<.007	<.02	<.008	<.04	<.009	<.03	<.02	<.01	<.03

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

417

ARKANSAS COUNTY--CONTINUED

342925091314701. Local number, 02S05W34ABC1.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Caffeine, water, fltrd 0.7u GF ug/L (50305)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Chloramben methyl ester, water, fltrd 0.7u GF ug/L (61188)	Chlorimuron, water, fltrd 0.7u GF ug/L (50306)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cycloate, water, fltrd 0.7u GF ug/L (04031)	Dacthal monoacid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water, fltrd 0.7u GF ug/L (38442)
JUN 2003 26...	<.02	E.010	<.03	<.006	<.02	<.010	<.04	<.01	<.01	<.01	<.01
Date	Dichloroprop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb, water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd 0.7u GF ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron, water, fltrd 0.7u GF ug/L (49297)	Flumetsulam, water, fltrd 0.7u GF ug/L (61694)	Fluometuron, water, fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd 0.7u GF ug/L (50356)	Imazethapyr, water, fltrd 0.7u GF ug/L (50407)	Imidacloprid, water, fltrd 0.7u GF ug/L (61695)	Linuron water, fltrd 0.7u GF ug/L (38478)
JUN 2003 26...	<.01	<.01	<.03	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.01
Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metaxyl, water, fltrd 0.7u GF ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsulfuron, water, fltrd 0.7u GF ug/L (61697)	N-(4-Chlorophenyl)-N'-methylurea, water, fltrd 0.7u GF ug/L (61692)	Neburon, water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd 0.7u GF ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)
JUN 2003 26...	<.02	<.01	<.02	<.008	<.004	<.03	<.02	<.01	<.01	<.02	<.02
Date	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Propham, water, fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd 0.7u GF ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron, water, fltrd 0.7u GF ug/L (38548)	Sulfometuron, water, fltrd 0.7u GF ug/L (50337)	Tebu-thiuron, water, fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (04032)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Alpha radioactivity, water, fltrd Th-230, pCi/L (04126)
JUN 2003 26...	<.01	<.02	<.010	<.02	<.008	<.02	<.009	<.006	<.010	<.02	1.1
Date					Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)						
JUN 2003 26...					10.1						

Remark codes used in this report:
< -- Less than

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

ASHLEY COUNTY

330624091552801. Local number, 18S08W28DDD2.

LOCATION.--Lat 33°06'25", long 91°55'28", Hydrologic Unit 08040205, near Crossett.

Owner: Georgia-Pacific Paper Co.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 4 in, depth 155 ft, screened 142-152 ft.

DATUM.--Land surface, 163.26 ft above NGVD of 1929. Measuring point: Top of casing, 3.27 ft above land surface.

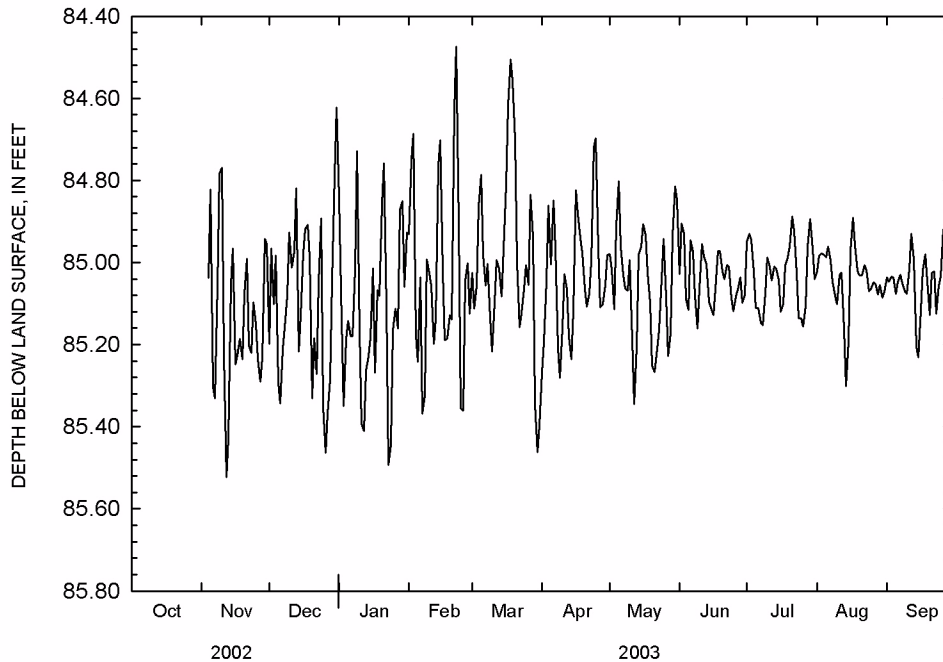
PERIOD OF RECORD.--Monthly water levels June 1960 to August 1963, semi-annual water levels 1971-1974, and continuous water levels March 1975 to November 1994, July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.47 ft below land surface, Feb,22, 2003; lowest, 93.28 ft below land surface, Aug. 22, 1963.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	-----	84.82	85.29	85.14	85.24	84.79	85.00	84.80	85.12	85.11	84.99	85.08
10	-----	84.77	84.93	85.17	85.03	85.22	85.16	84.99	85.06	84.99	85.10	85.08
15	-----	84.97	85.13	85.18	84.70	84.97	85.12	84.96	85.11	85.04	85.19	85.23
20	-----	85.08	85.33	84.86	85.14	84.70	85.06	85.25	85.02	84.96	85.03	85.13
25	-----	85.15	85.35	85.17	85.36	85.01	84.70	84.94	85.12	85.14	85.06	85.03
EOM	-----	84.95	84.62	84.93	85.13	85.40	84.98	84.85	85.08	85.04	85.07	85.28
MEAN	-----	85.13	85.09	85.12	85.03	85.00	85.03	85.05	85.04	85.03	85.04	85.07
MAX	-----	85.52	85.46	85.49	85.37	85.46	85.28	85.34	85.16	85.16	85.30	85.33
MIN	-----	84.77	84.62	84.73	84.47	84.51	84.70	84.80	84.91	84.89	84.89	84.92

WTR YR 2003 HIGH 84.47 FEB 22 LOW 85.52 NOV 12



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

419

BENTON COUNTY

362548094123501. Local number, 20N30W06DCD1.

LOCATION.--Lat 36°25'48", long 94°12'33", Hydrologic Unit 11070208, near Bella Vista.

Owner: Deckard

AQUIFER.--Boone Formation of the Mississippian age.

WELL CHARACTERISTICS.--Drilled public supply artesian well, diameter 7 in, depth 160 ft, open hole 16-140 ft.

DATUM.--Land surface, 1,052 ft above NGVD of 1929.

PERIOD OF RECORD.--August 1998, June 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Color, water, fltrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	
JUN 2003	24...	80513	80020	<5	731	9.1	7.3	390	19.3	200	77.0	
Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	
JUN 2003	24...	1.10	1.00	.1	2.1	2	87	3.30	<.1	9.20	5.40	156
Date	Residue water, fltrd, tons/acre-ft (70303)	Residue evap. at 180degC, wat fltrd mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	
JUN 2003	24...	.30	217	<.20	.03	.02	.99	<.010	<.01	39.0	<1	9
Date	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	
JUN 2003	24...	<.5	<1	<1	19	2	<2	<1	<1	<2	<1	<1
Date	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,6-Diethyl-aniline water, fltrd, 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-fluralin water, fltrd, 0.7u GF ug/L (82673)	
JUN 2003	24...	49.0	<1	5	<.006	<.006	<.006	<.004	<.005	<.007	<.050	<.010

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

BENTON COUNTY--CONTINUED

362548094123501. Local number, 20N30W06DCD1.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis-Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipronil water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)
JUN 2003 24...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02
Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)
JUN 2003 24...	<.002	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027
Date	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- Pendi- methalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)
JUN 2003 24...	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	.02
Date	Pron- amide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water, fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
JUN 2003 24...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
Date						Alpha radio- activty water, fltrd, Th-230, pCi/L (04126)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)				
JUN 2003 24...						.3	2.2				

Remark codes used in this report:
< -- Less than

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

421

BENTON COUNTY--CONTINUED

362636094012602. Local number, 21N29W35DBB2.

LOCATION.--Lat 36°26'36", long 94°01'26", Hydrologic Unit 11070208, near Pea Ridge.

Owner: National Park Service

AQUIFER.--Gunter Sandstone member of Van Buren Formation of the Ordovician age.

WELL CHARACTERISTICS.--Drilled public supply artesian well, diameter 10 in, depth 1769 ft, open hole 416-1769 ft.

DATUM.--Land surface, 1,406 ft above NGVD of 1929.

PERIOD OF RECORD.--October 1993, August 1998, June 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Color, water, fltrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	
JUN 2003	24...	80513	80020	<5	723	1.0	8.2	380	22.8	10	3.70	
Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	
JUN 2003	24...	.18	.60	12	87.0	95	88	7.60	.4	7.90	7.00	168
Date	Residue water, fltrd, tons/acre-ft (70303)	Residue evap. at 180degC, wat fltr mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	
JUN 2003	24...	.31	228	<.20	<.01	<.02	<.010	<.01	1.6	<1	114	<.5
Date	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	
JUN 2003	24...	<1	<1	10	29	<2	16	<1	<2	<1	<1	19.0
Date	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,6-Diethyl-aniline water, fltrd, 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, ug/L (82686)	Ben-flur-alin, water, fltrd, ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	
JUN 2003	24...	<1	52	<.006	<.006	<.006	<.004	<.005	<.007	<.050	<.010	<.002

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

BENTON COUNTY--CONTINUED

362636094012602. Local number, 21N29W35DBB2.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbaryl, water, fltrd ug/L (82680)	Carbofuran, water, fltrd ug/L (82674)	Chlorpyrifos, water, fltrd ug/L (38933)	cis-Permethrin, water, fltrd ug/L (82687)	Cyanazine, water, fltrd ug/L (04041)	DCPA, water, fltrd ug/L (82682)	Desulfinyl fipronil, water, fltrd ug/L (62170)	Diazinon, water, fltrd ug/L (39572)	Dieldrin, water, fltrd ug/L (39381)	Disulfoton, water, fltrd ug/L (82677)	EPTC, water, fltrd ug/L (82668)
JUN 2003 24...	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
Date	Ethalfurfluralin, water, fltrd ug/L (82663)	Ethoprop, water, fltrd ug/L (82672)	Desulfinyl fipronil amide, wat flt ug/L (62169)	Fipronil sulfide, water, fltrd ug/L (62167)	Fipronil sulfone, water, fltrd ug/L (62168)	Fipronil, water, fltrd ug/L (62166)	Fonofos, water, fltrd ug/L (04095)	Lindane, water, fltrd ug/L (39341)	Linuron, water, fltrd ug/L (82666)	Malathion, water, fltrd ug/L (39532)	Methyl parathion, water, fltrd ug/L (82667)
JUN 2003 24...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006
Date	Metolachlor, water, fltrd ug/L (39415)	Metribuzin, water, fltrd ug/L (82630)	Molinate, water, fltrd ug/L (82671)	Napropamide, water, fltrd ug/L (82684)	p,p'-DDE, water, fltrd ug/L (34653)	Parathion, water, fltrd ug/L (39542)	Pebulate, water, fltrd ug/L (82669)	Pendimethalin, water, fltrd ug/L (82683)	Phorate, water, fltrd ug/L (82664)	Prometon, water, fltrd ug/L (04037)	Pronamide, water, fltrd ug/L (82676)
JUN 2003 24...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004
Date	Propachlor, water, fltrd ug/L (04024)	Propanil, water, fltrd ug/L (82679)	Propargite, water, fltrd ug/L (82685)	Simazine, water, fltrd ug/L (04035)	Tebu-thiuron, water, fltrd ug/L (82670)	Terbacil, water, fltrd ug/L (82665)	Terbufos, water, fltrd ug/L (82675)	Thiobencarb, water, fltrd ug/L (82681)	Triallate, water, fltrd ug/L (82678)	Tri-fluralin, water, fltrd ug/L (82661)	Alpha radio-activty, water, fltrd pCi/L (04126)
JUN 24...	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	.8
Date	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)										
JUN 2003 24...	-.3										

Remark codes used in this report:
< -- Less than

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

423

CALHOUN COUNTY

333040092240301. Local number, 14S13W12CCB1.

LOCATION.--Lat 33°30'40", long 92°24'04", Hydrologic Unit 08040201, near Harrell.

Owner: Town of Harrell

AQUIFER.--Sparta Sand of the Eocene age.

WELL CHARACTERISTICS.--Drilled public supply artesian well, diameter 6 in, depth 613 ft, screened 560-610 ft.

DATUM.--Land surface, 205 ft above NGVD of 1929.

PERIOD OF RECORD.--October 2002 to September 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	1430	80513	81213	495	22.8	15.0
JUL 2003 23...	1000	80513	81213	452	23.4	14.0

Remark codes used in this report:
< -- Less than

333944092430401. Local number, 12S16W26AAD1.

LOCATION.--Lat 33°39'48", long 92°43'04", Hydrologic Unit 08040201, near Shumaker.

Owner: Shumaker Public Supply

AQUIFER.--Sparta Sand Formation of the Eocene age.

WELL CHARACTERISTICS.--Public supply well, diameter 12.75 in, depth 221 ft, screened 174-221 ft.

DATUM.--Land surface, 135 ft above NGVD of 1929.

PERIOD OF RECORD.--October 2002 to September 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	1530	80513	81213	241	18.2	6.7
JUL 2003 23...	1335	80513	81213	218	21.0	6.6

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

CHICOT COUNTY

332613091255101. Local number, 14S03W32DCB1.

LOCATION.--Lat 33°26'13", long 91°25'51", Hydrologic Unit 08050001, near Dermott.

Owner: James Roy Baugh

AQUIFER.--Quaternary alluvium.

WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 18 in, depth 90 ft, screened 50-90 ft.

DATUM.--Land surface, 134 ft above NGVD of 1929.

PERIOD OF RECORD.--July 1991, August 1998, June 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Color, water, fltrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Carbon dioxide, water, unfltrd mg/L (00405)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	
JUN 2003	25...	0810	80513	80020	10	758	21	7.0	466	19.3	170	49.0
Date		Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue, water, fltrd, sum of constituents mg/L (70301)
JUN 2003	25...	11.0	1.30	.7	20.0	20	98	26.0	.2	36.0	11.0	231
Date		Residue water, fltrd, tons/acre-ft (70303)	Residue evap, at 180degC, wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Orthophosphate, water, fltrd, mg/L as P (00671)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)
JUN 2003	25...	.38	282	.80	.89	.69	<.02	<.010	.11	<.01	280	<1
Date		Boron, water, fltrd, ug/L (01020)	Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
JUN 2003	25...	35	<.5	<1	<1	<2	15800	<2	8	640	<2	<1
Date		Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,4-D, water, fltrd, ug/L (50470)	2,4-D, water, fltrd, ug/L (39732)	2,4-DB, water, fltrd, 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)
JUN 2003	25...	<1	250	<1	<2	<.009	<.02	<.02	<.03	<.04	<.008	<.006

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

425

CHICOT COUNTY--CONTINUED

332613091255101. Local number, 14S03W32DCB1.--continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aci-fluor-fen, water, fltrd, 0.7u GF ug/L (49315)	Aldi-carb sulfone, water, fltrd, 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt, fltrd, 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd, 0.7u GF ug/L (49312)	Atra-zine, water, fltrd, ug/L (39632)	Bendio-carb, water, fltrd, ug/L (50299)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd, 0.7u GF ug/L (49311)
JUN 2003 25...	<2	<.007	<.02	<.008	<.04	<.009	<.03	<.02	E.04	<.03	<.02
Date	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd, 0.7u GF ug/L (49310)	Carbo-furan, water, fltrd, 0.7u GF ug/L (49309)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-thalo-nil, water, fltrd, 0.7u GF ug/L (49306)	Clopyr-alid, water, fltrd, 0.7u GF ug/L (49305)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd, 0.7u GF ug/L (49304)	Dicamba water, fltrd, 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd, 0.7u GF ug/L (49302)
JUN 2003 25...	<.010	<.03	<.006	<.02	<.010	<.04	<.01	<.01	<.01	<.01	<.01
Date	Dinoseb water, fltrd, 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	Fenuron water, fltrd, 0.7u GF ug/L (49297)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water, fltrd, 0.7u GF ug/L (38811)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Linuron water, fltrd, 0.7u GF ug/L (38478)	MCPA, water, fltrd, 0.7u GF ug/L (38482)
JUN 2003 25...	<.01	<.03	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.01	<.02
Date	MCPB, water, fltrd, 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd, 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd, 0.7u GF ug/L (49296)	Metsul-furon, water, fltrd, ug/L (61697)	N-(4-Chloro-phenyl)-N'-methyl-urea, water, fltrd, ug/L (61692)	Neburon water, fltrd, 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur-azon, water, fltrd, 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd, 0.7u GF ug/L (49292)	Oxamyl, water, fltrd, 0.7u GF ug/L (38866)
JUN 2003 25...	<.01	<.02	<.008	<.004	<.03	<.02	<.01	<.01	<.02	<.02	<.01
Date	Pic-loram, water, fltrd, 0.7u GF ug/L (49291)	Propham water, fltrd, 0.7u GF ug/L (49236)	Propi-conazole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd, 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water, fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, ug/L (04032)	Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235)	Alpha radio-activty water, fltrd, Th-230, pCi/L (04126)	Gross beta radioac water, fltrd, Cs-137, pCi/L (03515)
JUN 2003 25...	<.02	<.010	<.02	<.008	<.02	<.009	<.006	<.010	<.02	1.4	2.2

Remark codes used in this report:
< -- Less than

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

COLUMBIA COUNTY

330555093112801. Local number, 19S20W09CBD1.

LOCATION.--Lat 33°05'55", long 93°11'29", Hydrologic Unit 11140203, near Emerson.

Owner: City of Emerson

AQUIFER.--Sparta Sand of the Eocene age.

WELL CHARACTERISTICS.--Drilled public supply well, depth 623 ft.

DATUM.--Land surface, 332 ft above NGVD of 1929.

PERIOD OF RECORD.--October 2002 to September 2003.

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	0745	80513	81213	247	21.9	3.4
JUL 2003 23...	1505	80513	81213	232	23.2	3.2

331519093115901. Local number, 17S20W17CDA1.

LOCATION.--Lat 33°15'20", long 93°12'01", Hydrologic Unit 11140203, near Magnolia.

Owner: Magnolia Public Supply

AQUIFER.--Sparta Sand of the Eocene age.

WELL CHARACTERISTICS.--Drilled public supply well, depth 495 ft.

DATUM.--Land surface, 325 ft above NGVD of 1929.

PERIOD OF RECORD.--October 2002 to September 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	0845	80513	81213	414	21.1	5.8
JUL 2003 23...	1600	80513	81213	392	22.0	5.7

DESHA COUNTY

335258091152301. Local number, 09S02W26DDC1.

LOCATION.--Lat 33°52'57", long 91°15'30", Hydrologic Unit 08050002, near Watson.

Owner: Ed Smith.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 5-2 in, depth 97 ft, cased 0-94 ft, screened 94-97 ft.

DATUM.--Land surface, 149.27 ft above NGVD of 1929. Measuring point: Top of casing, 1.71 ft above land surface.

REMARKS.--Water level fluctuates largely with stage of Arkansas River.

PERIOD OF RECORD.--5-day water levels January 1957 to December 1971, annual water levels 1972-1975, and continuous water levels March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.94 ft below land surface, Feb. 17, 1959; lowest, 32.74 ft below land surface, Aug. 30, 2001.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

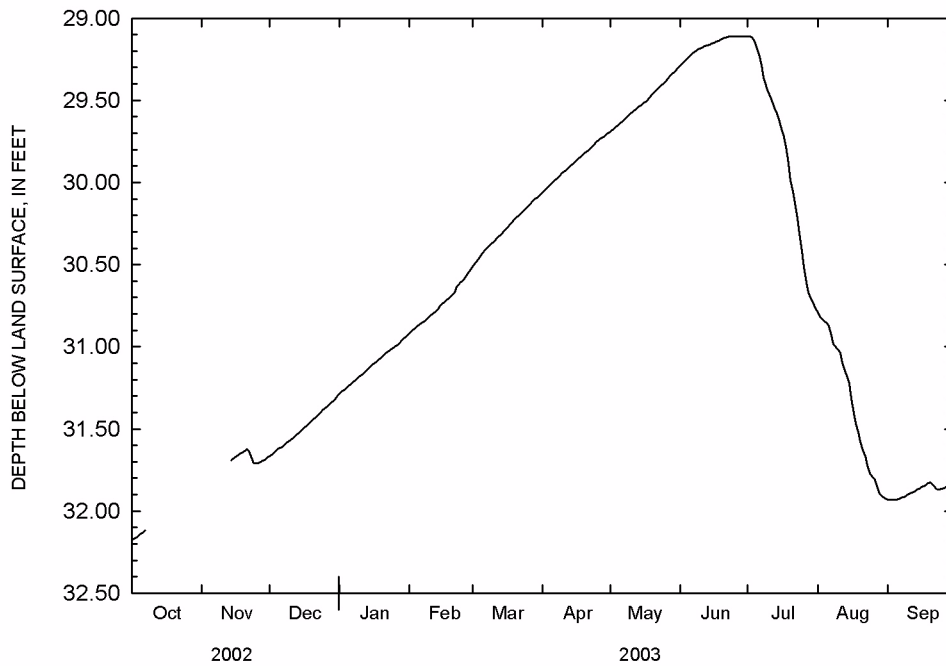
DESHA COUNTY--CONTINUED

335258091152301. Local number, 09S02W26DDC1.--continued

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	32.14	----	31.62	31.24	30.87	30.44	30.01	29.65	29.24	29.17	30.86	31.93
10	----	----	31.57	31.18	30.81	30.37	29.94	29.58	29.18	29.45	31.02	31.90
15	----	31.68	31.51	31.12	30.75	30.29	29.88	29.53	29.15	29.63	31.23	31.86
20	----	31.63	31.45	31.06	30.69	30.22	29.82	29.46	29.12	29.99	31.57	31.82
25	----	31.71	31.38	31.00	30.59	30.16	29.75	29.39	29.11	30.42	31.79	31.86
EOM	----	31.67	31.30	30.93	30.53	30.08	29.70	29.30	29.11	30.77	31.92	31.83
MEAN	----	----	31.49	31.11	30.75	30.28	29.88	29.51	29.16	29.82	31.35	31.88
MAX	----	----	31.67	31.29	30.92	30.51	30.06	29.69	29.29	30.77	31.92	31.93
MIN	----	----	31.30	30.93	30.53	30.08	29.70	29.30	29.11	29.11	30.79	31.82

CAL YR 2002 MEAN 30.61 HIGH 28.73 JUN 2 LOW 32.48 AUG 25
WTR YR 2003 MEAN 30.63 HIGH 29.11 JUN 25 LOW 31.93 SEP 5



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

GARLAND COUNTY

343048093030401. Local number, 02S19W33CBD1.

LOCATION.--Lat 34°30'48", long 93°03'04", Hydrologic Unit 08040101, at Hot Springs.

Owner: Hot Springs Rehabilitation Center.

AQUIFER.--Hot Springs Sandstone of Mississippian age.

WELL CHARACTERISTICS.--Drilled unused well, depth 336.5 ft.

DATUM.--Land surface, 740 ft above NGVD of 1929. Measuring point: Top of casing, 1.30 ft above land surface.

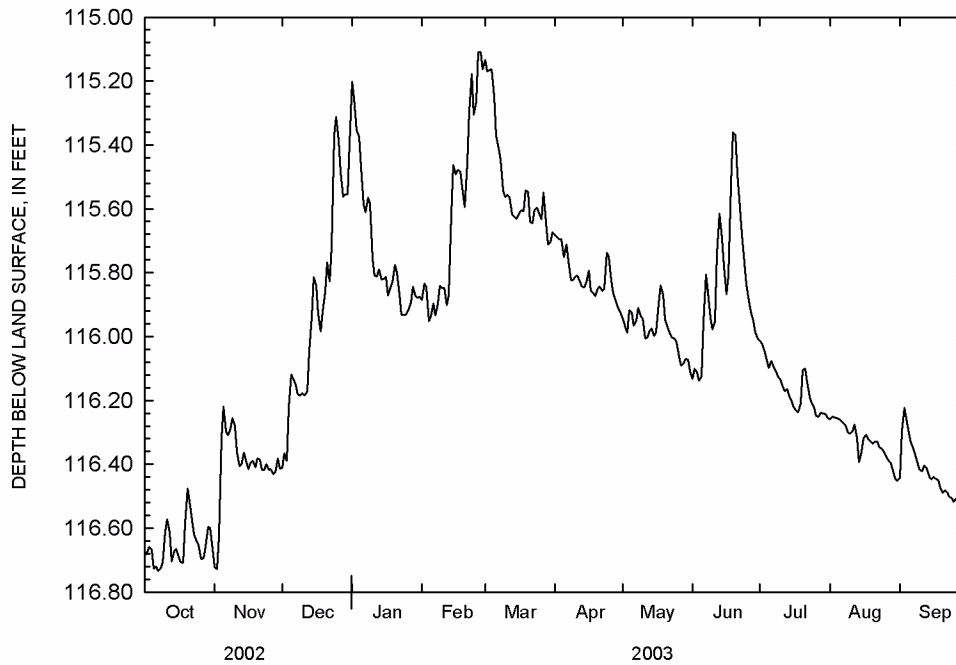
PERIOD OF RECORD.--Continuous water levels February 1991 to March 1995, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.00 ft below land surface Dec. 18, 2001; lowest, 117.21 ft below land surface, Feb. 20, 1991.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	116.73	116.22	116.12	115.47	115.94	115.25	115.75	115.92	116.12	116.10	116.26	116.30
10	116.61	116.28	116.18	115.76	115.85	115.56	115.81	115.94	115.98	116.13	116.30	116.42
15	116.66	116.39	115.81	115.82	115.46	115.63	115.83	116.00	115.78	116.20	116.36	116.45
20	116.47	116.38	115.86	115.77	115.59	115.55	115.85	115.95	115.37	116.10	116.33	116.49
25	116.65	116.42	115.31	115.93	115.26	115.61	115.75	116.02	115.84	116.22	116.36	116.52
EOM	116.66	116.41	115.40	115.88	115.16	115.67	115.92	116.11	116.01	116.25	116.45	116.57
MEAN	116.65	116.40	115.90	115.73	115.61	115.52	115.81	115.98	115.83	116.16	116.33	116.43
MAX	116.73	116.73	116.41	115.93	115.95	115.71	115.92	116.11	116.14	116.25	116.45	116.57
MIN	116.47	116.22	115.31	115.20	115.11	115.13	115.68	115.84	115.36	116.01	116.25	116.22

CAL YR 2002 HIGH 115.31 SEP 25 LOW 116.99 JAN 1



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

429

JEFFERSON COUNTY

341138091551601. Local number, 06S08W16CCC1.

LOCATION.--Lat 34°11'38", long 91°55'16", Hydrologic Unit 08040205, at intersection of U.S. Highway 62 and State Highway 81 near Pine Bluff (company observation well 3).

Owner: International Paper Company.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 1,106 ft, cased 0-1, 317 ft, 1,033-1,053 ft, 1,068-1,090 ft, screened 1,017-1,033 ft, 1,053-1,068 ft, 1,090-1,106 ft.

DATUM.--Land surface, 202.42 ft above NGVD of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

PERIOD OF RECORD.--August 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.98 ft below land surface, Sept. 4, 1958; lowest, 275.20 ft below land surface, Nov. 30, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
OCT 01	262.10	JAN 01	260.00	MAR 05	266.40	APR 23	248.90	JUL 01	257.30	SEP 02	259.10
NOV 01	262.30	FEB 03	258.60	31	254.60	MAY 30	253.70	30	258.40		

WATER YEAR 2003	HIGHEST	248.90	APR 23, 2003	LOWEST	266.40	MAR 05, 2003
PERIOD OF RECORD	HIGHEST	108.98	SEP 04, 1958	LOWEST	275.20	NOV 30, 1999

LONOKE COUNTY

345057091525601. Local number, 03N08W32ABB1.

LOCATION.--Lat 34°50'57", long 91°52'56", Hydrologic Unit 08020402, near Wattensaw.

Owner: University of Arkansas at Pine Bluff.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled for observation well, diameter 4 in, depth 154 ft, screened 124-154 ft.

DATUM.--Land surface 250 ft above NGVD of 1929. Measuring point: Top of casing, 1.6 ft above land surface.

PERIOD OF RECORD.--June 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 110.92 ft below land surface, June 20, 2000; lowest, 120.88 ft below land surface, Aug. 31, 2002.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

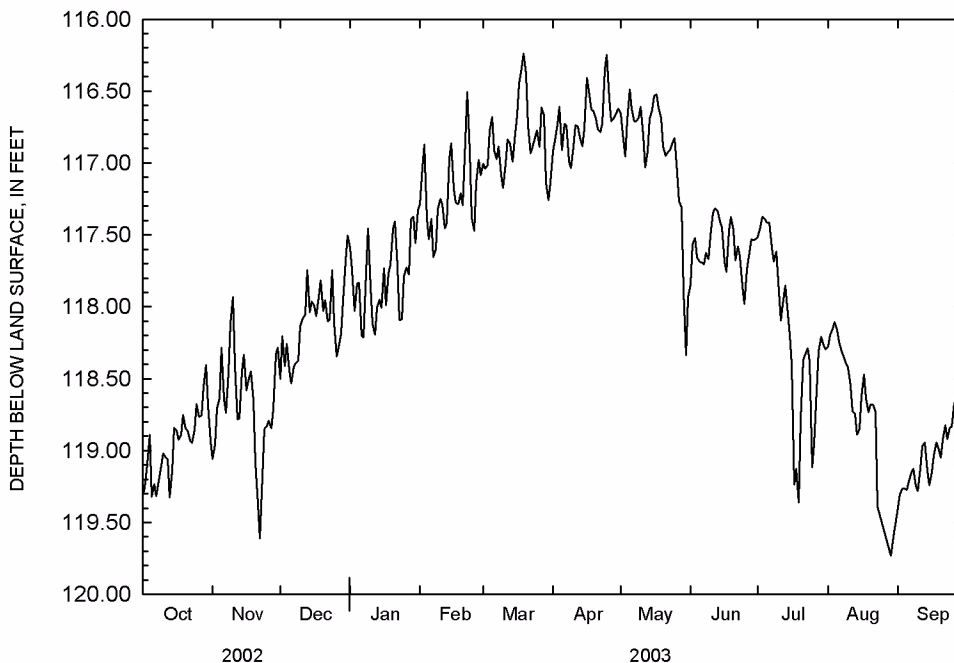
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	119.32	118.28	118.44	117.83	117.53	116.68	116.91	116.49	117.68	117.41	118.17	119.27
10	119.02	117.93	118.13	117.86	117.25	117.17	116.89	116.61	117.51	117.83	118.42	119.28
15	118.84	118.33	117.96	118.01	116.86	116.84	116.76	116.63	117.45	118.19	118.85	119.24
20	118.85	119.09	118.03	117.46	117.29	116.38	116.69	116.89	117.47	118.78	118.68	119.05
25	118.68	118.83	118.11	117.79	117.47	116.77	116.25	116.83	117.98	119.12	120.38	118.84
EOM	118.93	118.28	117.50	117.33	117.08	117.13	116.62	117.94	117.53	118.30	119.51	119.09
MEAN	118.96	118.68	118.11	117.80	117.21	116.84	116.71	116.92	117.59	118.17	118.93	119.06
MAX	119.33	119.61	118.53	118.21	117.66	117.26	117.03	118.33	117.98	119.36	120.66	119.40
MIN	118.40	118.68	117.93	117.33	116.51	116.24	116.25	116.49	117.32	117.37	118.10	118.67

CAL YR 2002	MEAN	117.40	HIGH	114.97	MAR 21	LOW	120.88	AUG 31
WTR YR 2003	MEAN	117.92	HIGH	116.24	MAR 19	LOW	120.66	AUG 27

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

LONOKE COUNTY--CONTINUED,

345057091525601. Local number, 03N08W32ABB1.--continued



345413091493401. Local number, 03N08W11ACA1.

LOCATION.--Lat 34°54'13", long 91°49'34", Hydrologic Unit 08020301, near Wattensaw.

Owner: City of Cabot.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS--Drilled for observation well, diameter 4 in, depth 144 ft, screened 123-143 ft.

DATUM.--Land surface 256 ft above NGVD of 1929. Measuring point: Top of casing, 0.53 ft above land surface.

PERIOD OF RECORD.--January 1999 to present year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 89.78 ft below land surface, January 11, 1999; lowest, 98.92 ft below land surface, August 20, 2003.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES

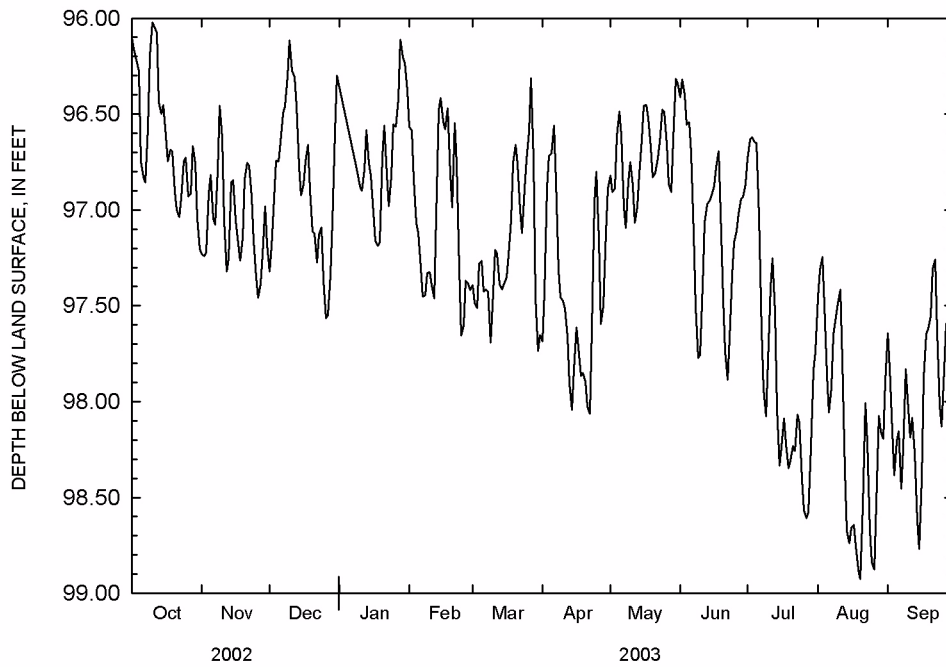
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	96.75	96.82	96.75	97.07	97.12	97.26	96.71	96.49	96.54	96.65	97.86	98.21
10	96.02	96.63	96.11	96.88	97.32	97.50	97.47	96.75	97.76	97.79	97.49	97.99
15	96.45	96.84	96.92	96.82	96.42	97.39	97.83	96.64	96.92	98.33	98.74	98.77
20	96.90	96.84	97.12	96.72	96.99	96.66	97.90	96.83	97.47	98.31	98.92	97.55
25	96.73	97.35	97.37	96.55	97.60	96.74	96.80	96.49	97.17	98.40	98.84	98.13
EOM	97.20	97.18	96.30	96.38	97.42	97.65	96.89	96.34	96.86	97.84	97.89	98.47
MEAN	96.61	97.05	96.85	96.79	97.05	97.20	97.42	96.72	97.06	97.81	98.16	98.00
MAX	97.20	97.46	97.57	97.64	97.66	97.74	98.06	97.09	97.89	98.61	98.92	98.77
MIN	95.97	96.46	96.11	96.11	96.42	96.31	96.56	96.31	96.32	96.62	97.24	97.26

WTR YR 2003 MEAN 95.71 HIGH 95.97 OCT 11, 2002 LOW 98.92 AUG 20, 2003

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

LONOKE COUNTY--CONTINUED

345413091493401. Local number, 03N08W11ACA1.--continued



MONTGOMERY COUNTY

343726093481801. Local number, 01S26W29DCC1.

LOCATION.--Lat 34°37'26", long 93°48'18", Hydrologic Unit 08040101, near Oden.

Owner: U.S. Forest Service.

AQUIFER.--Stanley Shale of Devonian age.

WELL CHARACTERISTICS.--Drilled well, diameter 7 in, depth 208 ft, cased 0-84 ft.

DATUM.--Land surface, 895 ft above NGVD of 1929. Measuring point: Top of casing, 2.6 ft below land surface.

PERIOD OF RECORD.--Monthly water levels January 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.38 ft below land surface, Feb. 23, 2001; lowest, 54.00 ft below land surface, Aug. 27, 1937.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	47.63	MAR 11	37.16	MAY 19	37.70	AUG 01	46.48
JAN 23	46.35	APR 11	44.59	JUL 07	41.62		

WATER YEAR 2003 HIGHEST 37.16 MAR 11, 2003 LOWEST 47.63 DEC 10, 2002

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

PHILLIPS COUNTY

343108090462601. Local number, 02S03E15ACD1.

LOCATION.--Lat 34°31'08", long 90°46'26", Hydrologic Unit 08020304, near Barton.

Owner: Don R. Dearing.

AQUIFER.--Sand and gravel of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 in, depth 112 ft.

DATUM.--Land surface, 174 ft above NGVD of 1929. Measuring point: Top of casing, at land surface.

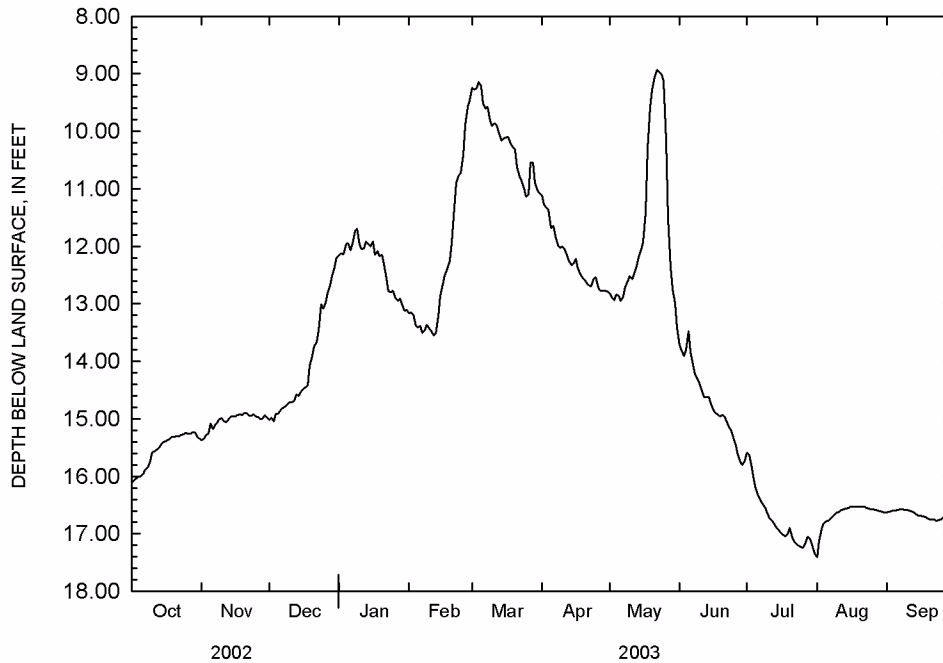
PERIOD OF RECORD.--Annual water levels March 1955, semi-annual water levels 1961-1974, montly water levels January 1957 to April 1960, and continuous water levels October 1975 to September 1994, October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.61 ft below land surface, Apr. 25, 1973; lowest, 36.99 ft below land surface, Jan. 7, 2002.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	16.01	15.08	14.91	11.95	13.41	9.22	11.69	12.86	13.48	16.21	16.78	16.59
10	15.57	14.99	14.72	11.97	13.43	9.91	12.01	12.51	14.38	16.64	16.63	16.58
15	15.40	14.95	14.53	12.01	12.86	10.12	12.31	12.06	14.74	16.93	16.55	16.68
20	15.32	14.90	13.91	12.16	11.93	10.32	12.59	9.29	14.94	16.90	16.53	16.75
25	15.25	14.96	13.08	12.78	10.42	11.14	12.54	9.13	15.33	17.23	16.57	16.75
EOM	15.34	14.97	12.19	13.11	9.46	11.08	12.79	13.42	15.72	17.34	16.62	16.77
MEAN	15.53	15.03	14.06	12.30	12.32	10.17	12.22	11.63	14.71	16.76	16.66	16.67
MAX	16.11	15.37	15.05	13.12	13.55	11.14	12.79	13.42	15.81	17.34	17.40	16.77
MIN	15.23	14.90	12.19	11.69	9.46	9.14	11.12	8.93	13.48	15.59	16.52	16.57

WTR YR 2003 MEAN 14.00 HIGH 8.93 MAY 22, 2003 LOW 17.40 AUG 01, 2003



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

433

POINSETT COUNTY

352930090582501. Local number, 10N01E15DBB1.

LOCATION.--Lat 35°29'31", long 90°58'25", Hydrologic Unit 08020302, near Fisher.

Owner: City of Fisher

AQUIFER.--500-Foot Memphis Sand aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled public supply well, diameter 6 in, depth 302 ft, screened 260-302 ft.

DATUM.--Land surface, 232 ft above NGVD of 1929.

PERIOD OF RECORD.--July 1991, July 1995, July 1998.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Color, water, fltrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Carbon dioxide, water, unfltrd mg/L (00405)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd, uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	
JUN 2003	23...	80513	80020	5	752	11	7.3	529	18.4	190	52.0	
						ANC, wat unfltrd fixed end pt, field, mg/L as CaCO3 (00410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	
JUN 2003	23...	15.0	2.60	1	38.0	30	125	16.0	.2	20.0	<.20	309
		Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia, water, fltrd, mg/L (71846)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)
JUN 2003	23...	.50	.64	.50	<.02	<.010	.00	.061	.02	220	<1	44
		Cadmium, water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt, water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)
JUN 2003	23...	<.5	<1	<1	<2	1340	<2	6	167	<2	<1	<1
		Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,4-D, water, fltrd, ug/L (50470)	2,4-D, water, fltrd, ug/L (39732)	2,4-DB, water, fltrd, 0.7u GF (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxycarbofuran, wat flt 0.7u GF (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)
JUN 2003	23...	410	<1	<2	<.009	<.02	<.02	<.03	<.04	<.008	<.006	<2

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

POINSETT COUNTY--CONTINUED

352930090582501. Local number, 10N01E15DBB1.--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	Atra-zine, water, fltrd ug/L (39632)	Bendio-carb, water, fltrd ug/L (50299)	Bensul-furon, water, fltrd ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Caf-feine, water, fltrd ug/L (50305)
JUN 2003 23...	<.007	<.02	<.008	<.04	<.009	<.03	<.02	<.01	<.03	<.02	<.010
Date	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Chlor-amben methyl ester, water, fltrd ug/L (61188)	Chlori-muron, water, fltrd ug/L (50306)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyclo-ate, water, fltrd ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water, fltrd ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)
JUN 2003 23...	<.03	<.006	<.02	<.010	<.04	<.01	<.01	<.01	<.01	<.01	<.01
Date	Diphen-amid, water, fltrd ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet-sulam, water, fltrd ug/L (61694)	Fluo-meturon water, fltrd 0.7u GF ug/L (38811)	Imaza-quin, water, fltrd ug/L (50356)	Imaze-thapyr, water, fltrd ug/L (50407)	Imida-cloprid water, fltrd ug/L (61695)	Linuron water, fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)
JUN 2003 23...	<.03	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.01	<.02	<.01
Date	Meta-laxyl, water, fltrd ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omy, water, fltrd 0.7u GF ug/L (49296)	Metsul-furon, water, fltrd ug/L (61697)	N-(4-Chloro-phenyl)-N'-methyl-urea, fltrd ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd ug/L (50364)	Norflur-azon, water, fltrd ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)
JUN 2003 23...	<.02	<.008	<.004	<.03	<.02	<.01	<.01	<.02	<.02	<.01	<.02
Date	Propam water, fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd ug/L (38548)	Sulfo-met-ruron, water, fltrd ug/L (50337)	Tebu-thiuron water, fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd ug/L (04032)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Alpha radio-activty water, fltrd Th-230, pCi/L (04126)	Gross beta radioac water, fltrd Cs-137, pCi/L (03515)	
JUN 2003 23...	<.010	<.02	<.008	<.02	<.009	<.006	<.010	<.02	1.2	5.8	

Remark codes used in this report:
< -- Less than

STONE COUNTY

355927092122401. Local number, 16N12W25DCB1.

LOCATION.--Lat 35°59'27", long 92°12'24", Hydrologic Unit 11010004, near Fifty-Six.

Owner: U.S. National Park Service.

AQUIFER.--Boone Formation of Mississippian age.

WELL CHARACTERISTICS.--Drilled well, diameter 6.5 in, depth 88 ft, cased 0-29 ft.

DATUM.--Land surface, 485 ft above NGVD of 1929. Measuring point: Top of casing, 0.0 ft above land surface.

PERIOD OF RECORD.--Monthly water levels March 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.80 ft below land surface, Apr. 22, 1998; lowest, 69.84 ft below land surface, Mar. 14, 2000.

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

435

STONE COUNTY--CONTINUED

355927092122401. Local number, 16N12W25DCB1.--continued

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 06	67.30	MAR 09	65.99	MAY 23	65.18	AUG 14	66.75				
JAN 24	66.58	APR 28	66.30	JUL 09	66.70						
WATER YEAR 2003	HIGHEST	65.18	MAY 23, 2003	LOWEST	67.30	DEC 06, 2002					

UNION COUNTY

330107092432301. Local number, 19S16W35DDC1.

LOCATION.--Lat 33°01'09", long 92°43'26", Hydrologic Unit 08040206, near Junction City.

Owner: Junction City.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Drilled public supply artesian well, diameter 10 in, depth 601 ft., screened 546-601 ft.

DATUM.--Land surface 175 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	1100	80513	81213	633	23.2	92.0
JUL 2003 24...	1135	80513	81213	578	24.0	92.0

330219092111201. Local number, 19S11W25AAA1.

LOCATION.--Lat 33°02'18", long 92°11'13", Hydrologic Unit 08040202, near Huttig City.

Owner: City of Huttig.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, diameter 10 in, depth 529 ft.

DATUM.--Land surface 135 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	1215	80513	81213	1270	22.5	215
JUL 2003 24...	1430	80513	81213	1170	22.6	210

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

330855092505601. Local number, 18S17W22BDD1.

LOCATION.--Lat 33°08'56", long 92°50'56", Hydrologic Unit 08040206, near Shuler.

Owner: McKinnon.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Drilled unused artesian well, diameter 10 in, depth 705 ft., cased 0-605 ft, screened 605-705 ft.

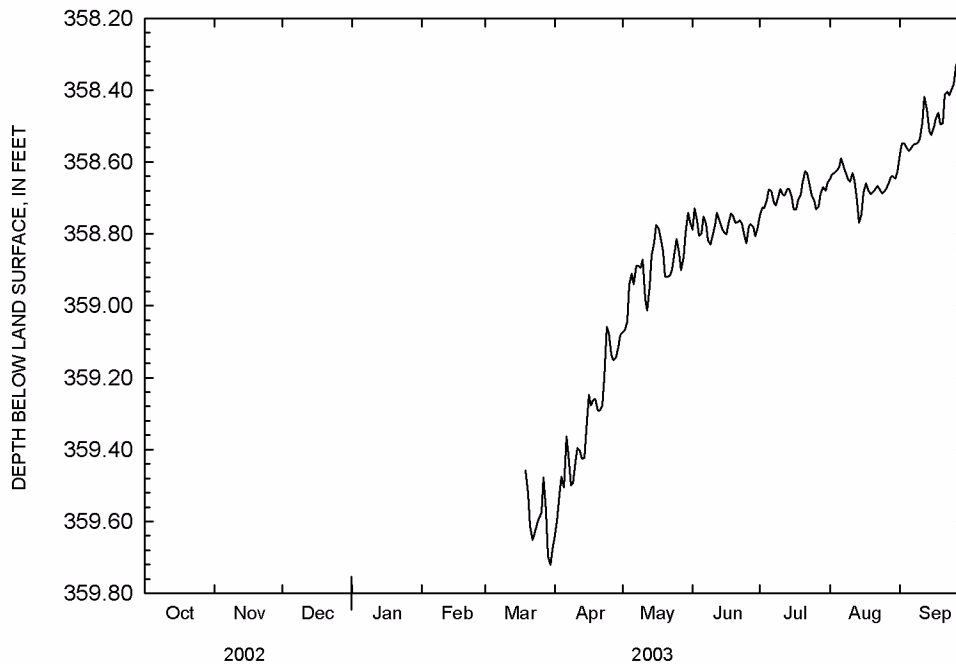
DATUM.--Land surface 285 ft above NGVD of 1929. Measuring point: Top of casing, 1.20 ft above land surface.

PERIOD OF RECORD.--April 1968 to September 1991, October 1993 to July 1995, July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 315.37 ft below land surface, April 3, 1968; lowest, 365.60 ft below land surface, September 23,1996.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	----	----	----	----	----	----	359.50	358.91	358.80	358.68	358.61	358.57
10	----	----	----	----	----	----	359.43	358.87	358.81	358.68	358.66	358.54
15	----	----	----	----	----	----	359.34	358.83	358.79	358.70	358.74	358.53
20	----	----	----	----	----	359.52	359.29	358.92	358.77	358.66	358.69	358.49
25	----	----	----	----	----	359.59	359.07	358.81	358.83	358.71	358.68	358.38
EOM	----	----	----	----	----	359.68	359.08	358.77	358.78	358.66	358.63	358.51
MEAN	----	----	----	----	----	----	359.33	358.89	358.93	358.69	358.66	358.49
MAX	----	----	----	----	----	359.72	359.64	359.07	358.83	358.75	358.77	358.58
MIN	----	----	----	----	----	359.46	359.06	358.74	358.73	358.62	358.59	358.33



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

437

UNION COUNTY--CONTINUED

331041092431401. Local number, 18S16W11AAB1.

LOCATION.--Lat 33°10'41", long 92°43'14", Hydrologic Unit 08040202, near El Dorado.

Owner: Great Lakes Chemical.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Diameter 4 in, depth 520 ft.

DATUM.--Land surface 225 ft above NGVD of 1929. Measuring point: Top of casing, 0.89 ft above land surface.

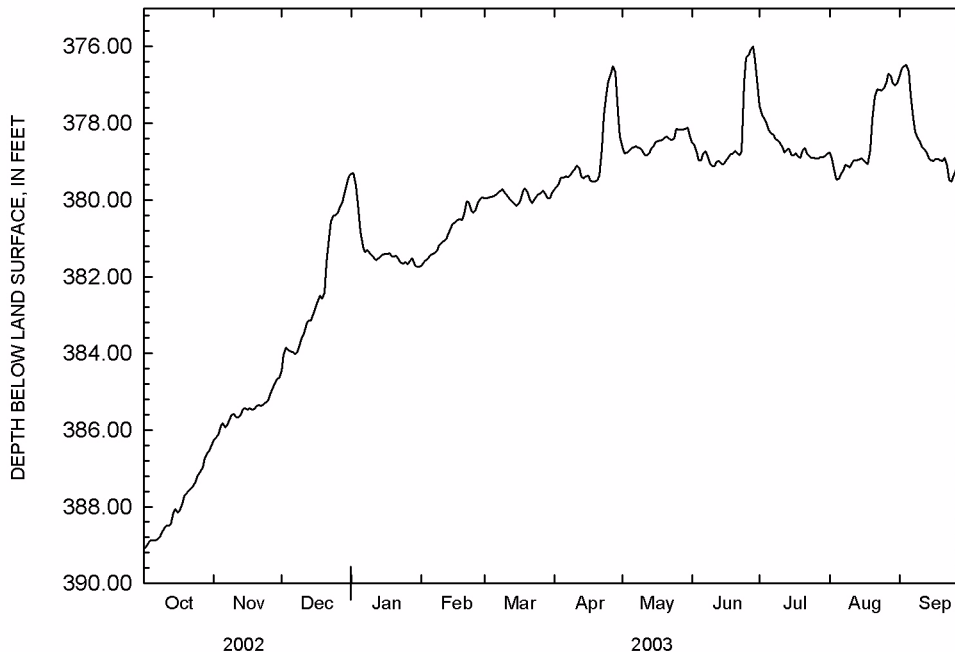
PERIOD OF RECORD.--Continuous water levels March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 375.99 ft below land surface, June 28, 2004; lowest, 400.23 ft below land surface, September 7, 2000.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES												
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	388.87	385.81	383.94	380.82	381.44	379.90	379.42	378.65	378.97	378.17	379.46	376.64
10	388.56	385.59	383.61	381.44	381.12	379.80	379.19	378.71	379.12	378.52	379.15	378.47
15	388.07	385.43	383.00	381.42	380.63	380.15	379.38	378.58	379.07	378.84	378.93	378.98
20	387.64	385.37	382.43	381.48	380.38	379.81	379.48	378.36	378.71	378.73	377.91	378.99
25	387.18	385.23	380.41	381.63	380.26	379.86	376.89	378.16	376.29	378.90	377.10	379.37
EOM	386.39	384.65	379.39	381.74	379.94	379.83	378.35	378.32	377.03	378.78	376.94	379.01
MEAN	387.98	385.49	382.42	381.19	380.79	379.91	378.81	378.50	378.30	378.59	378.30	378.46
MAX	389.09	386.26	384.47	381.75	381.72	380.15	379.72	378.84	379.12	378.92	379.48	379.52
MIN	386.39	384.65	379.57	379.31	379.94	379.70	376.51	378.12	375.99	377.55	376.71	376.48

WTR YR 2003 MEAN 380.73 HIGH 375.99 JUN 28, 2003 LOW 389.09 OCT 01, 2002



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

331144092410601. Local number, 17S15W31DDA1.

LOCATION.--Lat 33°11'44", long 92°41'05", Hydrologic Unit 08040202, near El Dorado.

Owner: Lion Oil.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Drilled for industrial production well, converted to observation, diameter 16 in, depth 740 ft, screened 650-730 ft.

DATUM.--Land surface 261 ft above NGVD of 1929. Measuring point: Top of casing, 0.0 ft above land surface.

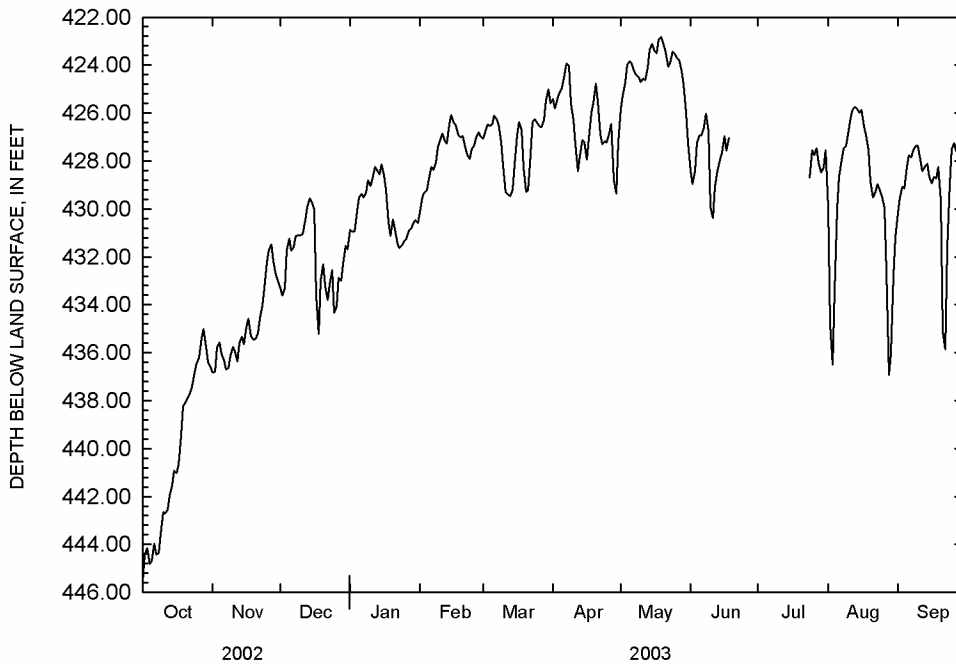
PERIOD OF RECORD.--Annual water levels April 1951 and March 1952 and continuous water levels March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 329 ft below land surface, April 1, 1951: lowest, 467.12 ft below land surface, March 3, 1999.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	444.68	436.06	431.24	429.51	428.76	426.49	424.94	423.82	426.94	----	430.01	428.23
10	442.64	435.75	431.09	429.05	427.11	428.18	426.30	424.70	429.93	----	426.86	427.35
15	440.93	435.65	429.72	428.13	426.08	428.17	427.20	423.12	427.66	----	426.01	428.68
20	438.06	435.43	432.32	430.43	426.97	429.28	424.78	423.07	----	----	428.86	429.65
25	436.46	432.22	434.33	431.36	427.33	426.40	427.21	423.52	----	427.54	429.47	427.48
EOM	436.62	432.98	431.70	430.60	426.99	425.59	427.21	427.26	----	427.55	431.18	429.37
MEAN	440.37	434.92	432.17	430.06	427.59	427.16	426.43	424.17	----	----	429.50	428.95
MAX	445.53	436.81	435.21	431.64	430.13	429.48	429.36	427.26	430.38	428.70	436.94	435.86
MIN	435.01	431.49	429.55	428.13	426.08	425.01	423.95	422.81	426.01	427.46	425.75	427.27

WTR YR 2003 MEAN 428.69 HIGH 422.81 MAY 19, 2003 LOW 445.53 OCT 01, 2002



GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

439

UNION COUNTY--CONTINUED

331203092290801. Local number, 17S13W31BAD1.

LOCATION.--Lat 33°12'04", long 92°29'07", Hydrologic Unit 08040201, near Lawson.

Owner: Lawson-Urbana Water.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, depth 771 ft.

DATUM.--Land surface 222 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Chlor-ide, water, fltrd, mg/L (00940)
JAN 2003						
30...	1215	80513	81213	1010	24.3	83.0
JUL 2003						
24...	1515	80513	81213	726	25.4	83.0

331346092391101. Local number, 17S15W28DBA1.

LOCATION.--Lat 33°12'46", long 92°39'10", Hydrologic Unit 08040201, near El Dorado.

Owner: City of El Dorado.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Drilled for public water supply well, converted to observation, diameter 16 in, depth 668 ft, screened 588-688 ft.

DATUM.--Land surface 230 ft above NGVD of 1929. Measuring point: Top of casing, 0.0 ft above land surface.

PERIOD OF RECORD.--Annual water levels July 1943, January, 1944, 1943, 1994, 1982, 1990, 1993, and 1999. Continuous water levels March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 363.27 ft below land surface, September 28, 2000; lowest, 427.22 ft below land surface, March 3, 1999.

DEPTH BELOW LAND SURFACE, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAILY MEAN VALUES

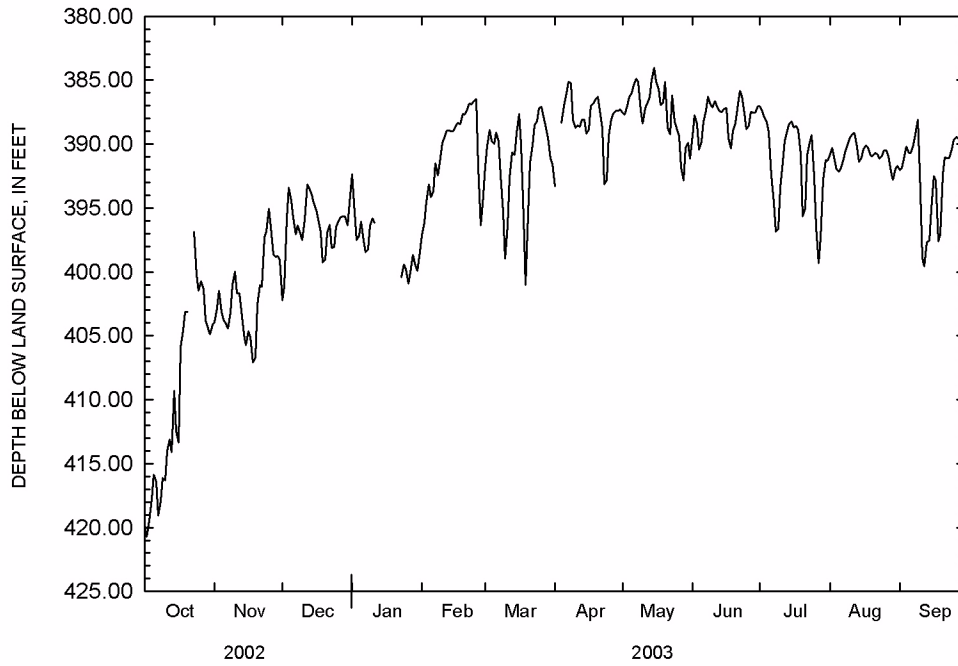
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	415.88	403.72	394.44	396.07	394.14	390.00	387.05	386.00	389.80	389.05	392.14	390.70
10	416.33	399.97	397.52	395.80	389.88	398.99	388.73	388.41	387.15	393.40	389.51	392.13
15	412.44	405.74	394.60	----	388.99	389.16	389.19	384.01	387.23	388.24	391.06	395.11
20	403.15	402.57	399.08	----	387.70	395.50	386.26	385.14	388.34	395.66	390.93	392.43
25	401.48	395.08	396.48	399.78	386.49	387.21	389.37	388.75	388.87	392.58	390.48	389.72
EOM	404.12	399.10	394.62	398.43	394.70	391.58	387.29	391.16	387.07	391.33	391.71	388.20
MEAN	410.01	401.81	396.39	----	390.61	391.21	388.19	387.46	387.87	391.59	390.88	392.22
MAX	420.72	407.08	402.25	400.94	397.14	401.02	393.15	392.87	390.47	399.31	392.83	399.56
MIN	396.84	395.08	393.18	392.36	386.49	387.08	385.16	384.01	385.86	387.05	389.13	388.11

WTR YR 2003 MEAN 393.70 HIGH 384.01 MAY 15 LOW 420.72 OCT 02

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

331346092391101. Local number, 17S15W28DBA1.--continued



331351092572701. Local number, 17S17W30DCD1.

LOCATION.--Lat 33°12'57", long 92°53'56", Hydrologic Unit 08040201, near Marysville.

Owner: Marysville Water District.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, diameter 6 in, depth 690 ft, screened 660-690 ft.

DATUM.--Land surface 280 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf 25 degC (00095)	Temper- ature, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003						
29...	0915	80513	81213	377	24.7	9.8
JUL 2003						
23...	1745	80513	81213	332	25.3	9.6

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

441

UNION COUNTY--CONTINUED

331358092424301. Local number, 17S16W24BDB1.

LOCATION.--Lat 33°13'57", long 92°42'48", Hydrologic Unit 08040201, near El Dorado.

Owner: El Dorado Water Utilities.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, diameter 12 in, depth 615 ft, screened 493-615 ft.

DATUM.--Land surface 205 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 30...	0735	80513	81213	575	21.3	23.0
JUL 2003 24...	0728	80513	81213	433	21.9	23.0

331438092411901. Local number, 17S15W18DBB1.

LOCATION.--Lat 33°14'38", long 92°41'19", Hydrologic Unit 08040201, at El Dorado.

Owner: Monsanto Chemical Company.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 540 ft, cased 0-520 ft, screened 520-540 ft.

DATUM.--Land surface, 182.93 ft above NGVD of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

PERIOD OF RECORD.--Annual water levels October 1942, July 1943, January 1947, January 1950, April 1964 to April 1969, monthly water levels October 1969 to September 1975, October 1990 to September 1992, February 1993 to July 2003, and continuous water levels October 1954 to September 1963, October 1975 to September 1990, October 1992 to January 1993, and July 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 122.00 ft below land surface, 1942; lowest, 381.37 ft below land surface, Apr. 29, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL
OCT 25 377.56	DEC 20 377.24	FEB 03 350.40	MAR 04 346.83	JUL 09 347.86
NOV 18 378.21	JAN 22 377.34	18 350.41	APR 30 349.34	
WATER YEAR 2003	HIGHEST 346.83	MAR 04, 2003	LOWEST 378.21	NOV 18, 2002
PERIOD OF RECORD	HIGHEST 122.00	, 1942	LOWEST 381.37	APR 29, 1993

GROUND-WATER LEVELS AND QUALITY OF GROUND WATER

UNION COUNTY--CONTINUED

332113092421001. Local number, 16S16W01DDD1.

LOCATION.--Lat 33°21'14", long 92°42'11", Hydrologic Unit 08040201, near Smackover.

Owner: City of Smackover.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, diameter 12 in, depth 470 ft, screened 430-470 ft.

DATUM.--Land surface 112 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 29...	1645	80513	81213	479	20.9	20.0
JUL 2003 23...	1220	80513	81213	455	21.5	20.0

CLAIBORNE PARISH

325103092434901. Local number, CL-150

LOCATION.--Lat 32°51'04", long 92°43'47", Hydrologic Unit 08040206, near Darbonne, Louisiana.

Owner: Darbonne Water Supply.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, depth 750 ft.

DATUM.--Land surface 200 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 30...	0930	80513	81213	737	23.5	45.0
JUL 2003 24...	1055	80513	81213	533	25.6	44.0

UNION PARISH

325004092260801. Local number, UN-202.

LOCATION.--Lat 32°46'16", long 92°24'16", Hydrologic Unit 08040206, near Farmerville, Louisiana.

Owner: Farmerville.

AQUIFER.--Sparta Sand of Eocene age.

WELL CHARACTERISTICS--Public supply well, depth 800 ft.

DATUM.--Land surface 201 ft above NGVD of 1929.

PERIOD OF RECORD.--January 2002, July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Chlor- ide, water, fltrd, mg/L (00940)
JAN 2003 30...	1030	80513	81213	1780	24.3	216
JUL 2003 24...	1330	80513	81213	1250	25.2	212

PRECIPITATION

443

00040380 NATIONAL TRENDS NETWORK SITE NEAR CADDO VALLEY

LOCATION.--Lat 34°10'45", long 93°05'54", in NW₁/₄NW₁/₄ sec.36, T.6 S., R.20 W., Clark County, Hydrologic Unit 08040102, approximately 1.6 mi west of Caddo Valley.

PERIOD OF RECORD.--January 1984 to current year.

INSTRUMENTATION.--An automatic wet-dry precipitation collector is used to collect 7-day accumulations. The collector is equipped with a precipitation sensor which activates a motor to operate the sample bucket cover. The sample bucket remains uncovered for the duration of each precipitation event and covered during dry periods. Dryfall samples are not collected. A standard 8.0-inch recording rain gage is used to obtain onsite precipitation records.

REMARKS.--Data for this site are verified by the National Atmospheric Deposition Program/National Trends Network (NADP/NTN) Coordinator. Additional data are available from the NADP/NTN Coordinator, NADP Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, Illinois 61820. Data for all sites in the network are published quarterly by the NADP/NTN Coordinator's Office. Laboratory analyses were performed by the Central Analytical Laboratory of the Illinois State Water Survey.

Finalized quality assured data from all 200 NADP/NTN sites including the U.S. Geological Survey site near Caddo Valley, Arkansas, are available online via the internet at <http://btdqs.usgs.gov/acidrain>. Paper copies of the data for Caddo Valley are available by contacting the Arkansas District Office, 401 Hardin Road, Little Rock, Arkansas 72211, (501) 228-3600.

	Page
A	
Ables Creek near Tyro	410
Acid neutralizing capacity, definition of	7
Acre-foot, definition of	7
Adenosine triphosphate, definition of	7
Adjusted discharge, definition of	7
Alabam, Kings River near	411
Algae,	
Blue-green, definition of	9
Fire, definition of	12
Green, definition of	13
Algal growth potential, definition of	7
Alicia, Lick Pond near	xvii
Alkalinity, definition of	7
Allison, South Sylamore Creek at	xvi
Allison, White River at	404
Alzheimer, Arkansas River near	xviii
Alum Fork Saline River at Winona Dam at Reform	409
Alum Fork Saline River near Reform	374
Amity, Caddo River near	412
Annual runoff, definition of	7
Annual 7-day minimum, definition of	8
Antoine River at Antoine	-xix, 365
Antoine, Antoine River at	-xix, 365
Aplin, Fourche LaFave River near	xviii, 310
Aquifer	
Confined, definition of	10
Unconfined, definition of	24
Water-table, definition of	25
Arkadelphia, Caddo River at DeGray Regulating Dam near	xix
Arkadelphia, DeGray Lake near	xix
Arkadelphia, Ouachita River at	xix
Arkana, Bear Creek near	xix
Arkana, Wheeler Creek near	xix
Arkansas City, Mississippi River near	xv
Arkansas River at Dardanelle	-296
Arkansas River at David D. Terry Lock and Dam below Little Rock	-339
Arkansas River at James W. Trimble Lock and Dam near Van Buren	-279
Arkansas River at Little Rock	-xviii, 408
Arkansas River at Lock and Dam 3 near Swan Lake	-xviii
Arkansas River at Morrilton	-407
Arkansas River at Murray Dam at Little Rock	-335
Arkansas River at Ozark	-xviii
Arkansas River at Pendleton	-xviii, 408
Arkansas River at Pine Bluff	-xviii, 408
Arkansas River near Alzheimer	-xviii
Arkansas-Louisiana State Line, Cooley Creek near	-xix
Arkansas-Louisiana State Line, Crooked Creek at	-xix
Aroclor, definition of	8
Artificial substrate, definition of	8
Ash mass, definition of	8
Aspect, definition of	8
Aubrey, Spring Creek near	406
Augusta, White River above	-xvii
Augusta, White River near	xvii, 215
B	
Bacteria, definition of	8
Enterococcus, definition of	12
Escherichia coli, definition of	12
Fecal coliform, definition of	12
Fecal streptococcal, definition of	12
Total coliform, definition of	23
Bankfull stage, definition of	8
Banks, Moro Creek near	-413
Barfield, Mississippi River at	xv
Baron Fork at Dutch Mills	-259
Base discharge, definition of	8
Base flow, definition of	8
Bates, Poteau River south of	-xviii
Batesville, White River at	-xvi, 193
Bayou Bartholomew at Garrett Bridge	-394
Bayou Bartholomew near Ladd	-413
Bayou Bartholomew near McGehee	-397
Bayou Bartholomew near Portland	-400
Bayou DeLoutre near El Dorado	-413
Bayou DeView near Brasfield	-xvii
Bayou DeView near Gibson	-412
Bayou DeView near Morton	-236
Bayou Dorcheat near Bussey	-xix
Bayou Lapile at Strong	-xix
Bayou Macon at Eudora	-402

Bayou Meto near Lonoke	-xviii, 343
Bayou Meto near Stuttgart	xiv, xviii
Bayou Two Prairie near Furlow	-xviii, 408
Bear Creek near Arkana	-xix
Bear Creek near Omaha	-141
Bear Creek near Royal	-409
Bear Creek near Silver Hill	-168
Bear Creek West of Marshall	-xvi
Beaver Lake at Highway 12 Bridge near Rogers	-113
Beaver Lake at Highway 68 bridge near Sonora	-102
Beaver Lake near Eureka Springs	-118
Beaver Lake near Lowell	-109
Beaver, White River at	-xvi
Bed material, definition of	8
Bedload, definition of	8
Bedload discharge, definition of	8
Beebe, Cypress Bayou near	-xiii, xvii
Bell Creek near Hollywood	-409
Bennett's River at Vidette	-174
Benthic organisms, definition of	9
Benton County	-419
Benton, Saline River at	-386
Berryville, Kings River near	-128
Berryville, Osage Creek southwest of	-411
Big Bay Ditch near Lester	-xv
Big Bayou near Jerome	-xix
Big Creek at Goodwin	-406
Big Creek at Poplar Grove	-xiii, xvii
Big Creek near Boydsville	-405
Big Creek near Crow	-410
Big Creek near Elizabeth	-176
Big Creek near Jonesboro	-405
Big Creek near Moro	-xiii
Big Creek near Poplar Grove	-xviii
Big Creek near Watkins Corner	-xviii
Big Creek tributary at Magnolia	-409
Big Creek tributary near Boydsville	-405
Big Lake Outlet near Manila	-xv
Big Music Creek near Midway fishpens, Bull Shoals Lake below	-xvi
Big Music Creek near Midway mouth of cove, Bull Shoals Lake below	-xvi
Big Piney Creek at Hwy 164 near Dover	-290
Big Piney Creek near Dover	-xviii
Big Shoal Creek near New Blaine	-406
Big Slough Ditch near Paragould	-xv
Bigelow, Fourche LaFave River near	-xviii
Biochemical oxygen demand, definition of	9
Biomass, definition of	9
Biomass pigment ratio, definition of	9
Birdeye, Cross County Ditch near	-xiii, xv, 71
Birdeye, Pope Creek Tributary at	-404
Birdeye, Straight Slough near	-xiii, xv
Black Oak, Cockle Burr Slough Ditch near	-xv
Black River at Black Rock	-xvi, 207
Black River at Elgin Ferry	-211
Black River at Jacksonport	-xvii
Black River at Pocahontas	-197
Black River near Corning	-195
Black Rock, Black River at	-xvi, 207
Blue-green algae, definition of	9
Bodcau Creek at Stamps	-xiv
Bodcau Creek near Lewisville	-412
Bodcau Creek near Taylor	-xix
Booneville, Petit Jean River near	-298
Bottom material, definition of	9
Boxley, Buffalo River near	-156
Boydsville, Big Creek near	-405
Boydsville, Big Creek Tributary near	-405
Bradford, Glaise Creek near	-405
Branch, Hurricane Creek near	-xiii
Branch, Sixmile Creek near	-xiii
Branch, Sixmile Creek near Subwatershed No. 23 near	-xiii
Branson Missouri, Lake Taneycomo at	-xvi
Branson, Missouri, Table Rock Lake near	-137
Branson, Missouri, White River below Table Rock Dam near	-140
Brasfield, Bayou DeView near	-xvii
Brasfield, Cache River at	-xvii
Bringle Creek at Martindale	317, 412
Brogan Creek near Rover	-407
Brush Creek near Mammoth Spring	-404
Brushy Creek near Ouachita	-xix
Buffalo City, White River at	-xvi
Buffalo River near Boxley	154, 156

Page	Page
Buffalo River near Rush -----	xiii, xvi
Buffalo River near St. Joe -----	164
Bulk electrical conductivity, definition of -----	9
Bull Shoals Lake below Big Music Creek near Midway fishpens -----	xvi
Bull Shoals Lake below Big Music Creek near Midway mouth of cove -----	xvi
Bull Shoals Lake near Flippin -----	143
Bull Shoals, White River below Bull Shoals Dam at -----	149
Busch, White River above -----	xvi
Busch, White River at Campground E near -----	xv
Bussey, Bayou Dorcheat near -----	xix
Butler Creek near Sulphur Springs -----	xviii
Butlerville, Pigeon Roost Creek at -----	405
C	
Cache River at 100 Yards below Dredging -----	xvii
Cache River at Brasfield -----	xvii
Cache River at Egypt -----	229
Cache River at Mouth near Clarendon -----	xvii
Cache River at Patterson -----	231
Cache River near Cash -----	xvii
Cache River near Cotton Plant -----	234
Caddo Gap, Caddo River near -----	361
Caddo River at DeGray Regulating Dam near Arkadelphia -----	xix
Caddo River at Glenwood -----	xiv
Caddo River near Amity -----	412
Caddo River near Caddo Gap -----	361
Cadron Creek near Guy -----	xviii, 306
Cadron Creek west of Conway -----	xviii
Calf Creek near Silver Hill -----	161
Calico Rock, White River at -----	185
Camden, Ouachita River at -----	367
Campbell, Missouri, Wilhelmina Cutoff near -----	54
Canadian Geodetic Vertical Datum 1928, definition of -----	9
Caney Creek tributary near El Dorado -----	410
Carter Hollow Missouri, Clearwater Lake at -----	xvi
Carter Spring on Webb Creek Missouri, Clearwater Lake near -----	xvi
Cash, Cache River near -----	xvii
Caulksville, Hurricane Creek near -----	xiii
Caulksville, Sixmile Creek at -----	xiii
Caulksville, Sixmile Creek Subwatershed No. 2 near -----	xiii
Cauthron, Poteau River at -----	262
Cave Springs, Osage Creek near -----	244
Cedarville, Webber Creek Tributary near -----	406
Cell volume, definition of -----	9
Cells/volume, definition of -----	9
Centerville, Petit Jean River near -----	xviii, 407
Cfs-day, definition of -----	9
Channel bars, definition of -----	9
Chelford, Tyronza River Ditch No. 40 near -----	xv
Chemical oxygen demand, definition of -----	9
Cherry Valley, L'Anguille River near -----	xv
Chickalah Creek near Chickalah -----	412
Chickalah, Chickalah Creek near -----	412
Chicot County -----	424
Chismville, Sixmile Creek at -----	xiii
Chismville, Sixmile Creek Subwatershed near -----	xviii
Chismville, Sixmile Creek Subwatershed No. 5 near -----	xiii
Chismville, Sixmile Creek Subwatershed No. 6 near -----	xiii
Choctaw Creek tributary near Choctaw -----	405
Choctaw, Choctaw Creek Tributary near -----	405
Christian Creek at GE Drive at Jonesboro -----	405
Clarendon, Cache River at Mouth near -----	xvii
Clarendon, White River at -----	xvii
Clark Corner Cut-Off near Colt -----	xiii, xv, 75
Clarksville, Greenbrier Creek at -----	406
Clarksville, Spadra Creek at -----	xiii, 406
Clearwater Lake at Carter Hollow, Missouri -----	xvi
Clearwater Lake near Carter Spring on Webb Creek, Missouri -----	xvi
Clinton, South Fork Little Red River at -----	217
Clostridium perfringens, definition of -----	10
Cockle Burr Slough Ditch near Black Oak -----	xv
Cockle Burr Slough Ditch near Monette -----	xv
Coffee Creek near Crossett -----	xix
Coleman Creek at Little Rock -----	408
Coleman Creek at West 28th Street in Little Rock -----	408
Coliphages, definition of -----	10
Color unit, definition of -----	10
Colt, Clark Corner Cut-Off near -----	xiii, xv, 75
Colt, L'Anguille River near -----	75, 77
Columbia County -----	426
Conductivity, definition of -----	21
Confined aquifer, definition of -----	10
Contents, definition of -----	10
Continuous-record station, definition of -----	10
Control, definition of -----	10
Control structure, definition of -----	10
Conway, Cadron Creek west of -----	xviii
Conway, East Fork Cadron Creek north of -----	xviii
Cooperation -----	1
Cornie Bayou near Three Creeks -----	xiv, 410
Corning, Black River near -----	195
Cossatot River near DeQueen -----	xiv, xviii, 408
Cossatot River near Lockesburg -----	xviii
Cossatot River near Vandervoort -----	352
Cotton Plant, Cache River near -----	234
Cove Creek near Lee Creek -----	xiii, 406
Crooked Creek at Arkansas-Louisiana State Line -----	xix
Crooked Creek at Pyatt -----	xvi
Crooked Creek at Yellville -----	154
Crooked Creek Tributary near Dog Patch -----	xvi
Cross County Ditch near Birdeye -----	xiii, xv, 71
Crossett, Coffee Creek near -----	xix
Crow, Big Creek near -----	410
Cubic foot per second, definition of -----	10
Cubic foot per second-day, definition of -----	10
Cubic foot per second per square mile, definition of -----	10
Cypress Bayou near Beebe -----	xiii, xvii
D	
Daily mean suspended-sediment concentration, definition of -----	10
Daily record station, definition of -----	10
Daisy, Self Creek near -----	xix
Danville, Petit Jean River at -----	xviii, 302
Dardanelle, Arkansas River at -----	296
Dardanelle, Lake Dardanelle at -----	xviii
Data collection platform, definition of -----	10
Data logger, definition of -----	10
Datum, definition of -----	11
Days Creek south of Texarkana -----	xix
Days Creek southeast of Texarkana -----	412
Deep Bayou near Grady -----	410
DeGray Lake near Arkadelphia -----	xix
Dell, Pennisot Bayou near -----	xv
Denver, Long Creek at -----	131
DeQueen, Cossatot River near -----	xiv, xviii, 408
DeQueen, Rolling Fork near -----	xiv, xviii, 408
Derriusseau Creek near Grapevine -----	410
Desha County -----	426
DeValls Bluff, White River at -----	xvii, 226
Dewey, Little Red River near -----	224
Diatoms, definition of -----	11
Diel, definition of -----	11
Dierks, Saline River near -----	xiv, xviii, 408
Dill Branch tributary near Ida -----	405
Dillard Creek near Nashville -----	408
Discharge, definition of -----	11
Dissolved, definition of -----	11
Dissolved oxygen, definition of -----	11
Dissolved solids concentration, definition of -----	11
Diversity index, definition of -----	11
Dog Patch, Crooked Creek Tributary near -----	xvi
Dooley Creek near Arkansas-Louisiana State Line -----	xix
Dover, Big Piney Creek at Hwy 164 near -----	290
Dover, Big Piney Creek near -----	xviii
Drainage area, definition of -----	11
Drainage basin, definition of -----	11
Dredging, Cache River at 100 Yards below -----	xvii
Dry mass, definition of -----	12
Dry weight, definition of -----	12
Dunn Creek near Hampton -----	409
Dutch Creek at Waltreak -----	300
Dutch Mills, Baron Fork at -----	259
Dyess, Tyronza Bayou near -----	xv
Dyess, Tyronza River near -----	xv
E	
East Fork Cadron Creek North of Conway -----	xviii
East Fork Point Remove Creek tributary near Saint Vincent -----	407
East Sugarloaf tributary near Lead Hill -----	404
Egypt, Cache River at -----	229
Egypt, Willow Ditch near -----	405
Eight Mile Ditch near Paragould -----	xv
El Dorado, Bayou DeLoutre near -----	413
El Dorado, Caney Creek Tributary near -----	410
Eleven Point River near Ravenden Springs -----	xvi, 205

Page	Page		
Elgin Ferry, Black River near -----	211	Goodwin, Big Creek at -----	406
Elizabeth, Big Creek near -----	176	Goshen, Richland Creek at -----	98
Elm Springs, Osage Creek near -----	246	Goshen, White River near -----	95
Embeddedness, definition of -----	12	Grady, Deep Bayou near -----	410
Enterococcus bacteria, definition of -----	12	Grapevine, Derriusseau Creek near -----	410
EPT Index, definition of -----	12	Grassy Flat Creek at Reservoir Road at Little Rock -----	408
Escherichia coli (E. coli), definition of -----	12	Gravelly, Fourche LaFave River near -----	308
Estimated (E) value, definition of -----	12	Greasy, Oklahoma, Little Lee Creek near -----	270
Eudora, Bayou Macon at -----	402	Green algae, definition of -----	13
Euglenoids, definition of -----	12	Greenbrier Creek at Clarksville -----	406
Eureka Springs, Beaver Lake near -----	118	Greenland, West Fork White River at -----	xiii, xv
Eureka Springs, White River at Beaver Dam near -----	125	Greenville Mississippi, Mississippi River near -----	xv
Evansville Creek at Evansville -----	xviii	Greers Ferry Lake near Heber Springs -----	219
Evansville, Evansville Creek at -----	xviii	Ground-Water Levels -----	6
Evening Shade, North Big Creek near -----	411	Guy, Cadron Creek near -----	xviii, 306
Evening Shade, Piney Fork at -----	xiii, xvii		
Evening Shade, Piney Fork near -----	411	H	
Evening Shade, Strawberry River near -----	xiii, xvii	Habitat, definition of -----	13
Extractable organic halides, definition of -----	12	Habitat quality index, definition of -----	13
		Hackett, James Fork near -----	265
F		Hagarville, Minnow Creek Tributary near -----	407
Fairview, White River below Bull Shoals Dam near -----	152	Hampton, Dunn Creek near -----	409
Fannie, Irons Fork Creek near -----	xix	Hardness, definition of -----	13
Fayetteville, Middle Fork White River southeast of -----	411	Hardy, Spring River at Town Branch bridge at -----	201
Fayetteville, Mud Creek Tributary at Township Street at -----	242	Hardy, Spring River near -----	411
Fayetteville, Town Branch at B.R. 62 at -----	83	Hatfield, Mountain Fork near -----	412
Fayetteville, Town Branch Tributary at Hwy 16 at -----	85	Hattieville, West Fork Point Remove Creek near -----	304
Fayetteville, West Fork White River east of -----	87	Hazen, Wattensaw Bayou near -----	412
Fayetteville, West Fork White River near -----	xiii	Heber Springs, Greers Ferry Lake near -----	219
Fayetteville, White River near -----	91	Heber Springs, Little Red River near -----	xiii, 221
Fecal coliform bacteria, definition of -----	12	Helena, Mississippi River at -----	xv
Fecal streptococcal bacteria, definition of -----	12	Helena, St. Francis River north of -----	xv
Felsenthal, Ouachita River near -----	xix	Hermitage, L' Aigle Creek at -----	xix
Ferguson Creek near Ravenden Springs -----	404	Hermitage, L' Aigle Creek Tributary near -----	410
Ferndale, Little Maumelle River at -----	407	Hickory Creek at Bent Tree Court in Little Rock -----	407
Fifty-Six, North Sylamore Creek near -----	190	Higginbotham Creek at Jonesboro -----	404
Fire algae, definition of -----	12	High tide, definition of -----	13
Fisk Missouri, St. Francis River at -----	50	Hilsenhoff's Biotic Index, definition of -----	14
Flint Creek at Springtown -----	xviii, 255	Hindsville, War Eagle Creek near -----	105
Flint Creek near West Siloam Springs, Oklahoma -----	xviii, 257	Hollis, South Fourche LaFave River near -----	407
Flint Creek north of Siloam Springs -----	xviii	Holly Island, St. Francis River at -----	59
Flippin, Bull Shoals Lake near -----	143	Holly Springs, Mill Creek near -----	409
Flippin, White River at Bull Shoals Dam near -----	146	Hollywood, Bell Creek near -----	409
Flippin, White River near -----	xiii, xvi, 404	Horatio, Little River near -----	350
Flow, definition of -----	11	Horatio, Rolling Fork near -----	xviii
Flow-duration percentiles, definition of -----	13	Horizontal datum, definition of -----	14
Fordyce, Moro Creek near -----	372	Hot Springs, Lake Ouachita near -----	xix
Forrest City, Spring Creek at -----	404	Hot Springs, Ouachita River near -----	xiv
Fort Lynn, Sulphur River near -----	xix	Hot Springs, Ouahita River at Carpenter Dam near -----	xix
Fort Smith, May Branch at -----	406	Hot Springs, Stokes Creek at Kimery Road at -----	409
Fort Smith, Mill Creek at -----	406	Hot Sprngs, Oquadhita River at Blakely Mountain Dam near -----	xix
Fort Smith, Mill Creek near Jenny Lind Road in -----	406	Huffman, Mississippi River at -----	xv
Fourche LaFave River near Aplin -----	xviii, 310	Hurricane Creek below Sheridan -----	xix, 390
Fourche LaFave River near Bigelow -----	xviii	Hurricane Creek near Branch -----	xiii
Fourche LaFave River near Gravelly -----	308	Hurricane Creek near Caulksville -----	xiii
Fourche LaFave River near Nimrod -----	xiii	Hurricane Creek near Sardis -----	413
Fourche LaFave Tributary near Perryville -----	407	Hydrologic Conditions -----	2
Fourche River above Pochontas -----	xiii	Hydrologic index stations, definition of -----	14
Fourche River near Middlebrook -----	xvi	Hydrologic unit, definition of -----	14
Frog Bayou at Rudy -----	xiii, 406		
Frog Bayou near Mountainburg -----	xiii	I	
Frog Bayou near Winfrey -----	284	Ida, Dill Branch Tributary near -----	405
Ft. Smith, Sunnymede Creek at North 46th Terrace at -----	406	Illinois Bayou near Scottsville -----	xviii, 294
Fulton, Red River at -----	xix	Illinois River at Hwy 16 near Siloam Springs -----	249
Furlow, Bayou Two Prairie near -----	xviii, 408	Illinois River at Savoy -----	239
		Illinois River near Siloam Springs -----	412
G		Illinois River near Viney Grove -----	xiii
Gage datum, definition of -----	13	Illinois River south of Siloam Springs -----	251
Gage height, definition of -----	13	Imboden, Spring River at -----	xvi, 203
Gage values, definition of -----	13	Inch, definition of -----	14
Gaging station, definition of -----	13	Index, Red River at -----	345
Garland County -----	428	Instantaneous discharge, definition of -----	14
Garland, Red River at -----	xix	International Boundary Commission Survey Datum, definition of -----	14
Garrett Bridge, Bayou Bartholomew at -----	394	Irons Fork Creek near Fannie -----	xix
Gas chromatography/flame ionization detector, definition of -----	13	Island, definition of -----	14
Geomorphic channel units, definition of -----	13		
Georgetown, White River at -----	xiii, xvii, 405	J	
Gibson, Bayou DeView near -----	412	Jack Creek neart Winfrey -----	286
Glaise Creek near Bradford -----	405	Jacksonport, Black River at -----	xvii
Glennonville Missouri, St. Francis River near -----	53	Jacksonport, White River at -----	xvii
Glennonville, Missouri, St. Francis River near -----	53	Jacksonville, Rocky Branch at Braden and Marshall Roads at -----	408
Glenwood, Caddo River at -----	xiv	James Fork near Hackett -----	265
Glenwood, Rock Creek near -----	409	Jasper, Little Buffalo River at -----	xvi
		Jerome, Big Bayou near -----	xix

	Page		Page
Joan, L'Eau Frais at	-409	Little Red River near Wilburn	-xvii
Jones Creek at Winfrey	-282	Little River near Horatio	-350
Jones Mill, Ouachita River at Rimmel Dam above	-359	Little Rock, Arkansas River at	-xviii, 408
Jonesboro Big Creek near	-405	Little Rock, Arkansas River at David D. Terry Lock and Dam below	-339
Jonesboro, Christian Creek at GE Drive at	-405	Little Rock, Arkansas River at Murray Dam at	-335
Jonesboro, Higginbotham Creek at	-404	Little Rock, Coleman Creek at	-408
Jonesboro, Murray Creek near	-404	Little Rock, Coleman Creek at West 28th Street in	-408
Judsonia, Little Red River at	xvii, 405	Little Rock, Grassy Flat Creek at Reservoir Road at	-408
Junction City, Little Cornie Bayou east of	-xix	Little Rock, Hickory Creek at Bent Tree Court in	-407
K			
Key Branch near Searcy	-405	Little Rock, Rock Creek at 36th Street at	-337
Kings River near Alabam	-411	Lockesburg, Cossatot River near	-xviii
Kings River near Berryville	-128	Lockesburg, Saline River near	-355
L			
L'Aigle Creek at Hermitage	-xix	Locust Creek Ditch near Paragould	-xv
L'Aigle Creek tributary near Hermitage	-410	Lone Rock, White River near	-xvi
L'Anguille River at Palestine	xv, 81	Long Creek at Denver	-131
L'Anguille River near Cherry Valley	xv	Long-term method detection level, definition of	-15
L'Anguille River near Colt	77	Lonoke County	-429
L'Eau Frais at Joan	-409	Lonoke, Bayou Meto near	-xviii, 343
Laboratory reporting level, definition of	14	Low flow, 7-day, 10-year, definition of	-20
Ladd, Bayou Bartholomew near	-413	Low tide, definition of	-15
LaFourche Bayou near Wilmot	-xix	Lowell, Beaver Lake near	-109
LaGrue Bayou near Stuttgart	-xiii	M	
Lake City, St. Francis River at	60	Macrophytes, definition of	-15
Lake Dardanelle at Dardanelle	-xviii	Madison, St. Francis River at	-76
Lake Greeson near Murfreesboro	-xix	Magnolia, Big Creek Tributary at	-409
Lake Maumelle at State Hwy 10 near Wye	-319	Mammoth Spring at Mammoth Spring	-199
Lake Maumelle east of Hwy 10 bridge near Wye	-322	Mammoth Spring, Brush Creek near	-404
Lake Maumelle near Little Italy	-327	Mammoth Spring, Mammoth Spring at	-199
Lake Maumelle near Natural Steps	-330	Mammoth Springs, Spring River near	-xiii
Lake Maumelle west of Hwy 10 Bridge near Wye	-318	Manila, Big Lake Outlet near	-xv
Lake Ouachita near Hot Springs	-xix	Maple Ditch near Swifton	-xvii
Lake Taneycomo at Branson, Missouri	-xvi	Marked Tree (Dam), St. Francis River Floodway near	-xiii
Lake Winona at Reform	-381	Marked Tree, St. Francis River at	-xiii, xv
Lake Winona downstream from Gillis Branch near Reform	-379	Marked Tree, St. Francis River Floodway near	-xv, 67
Lake Winona downstream from Stillhouse Creek near Reform	-378	Marshall, Bear Creek west of	-xvi
Lakeview, White River below Bruce Creek near	-xvi	Martindale, Bringle Creek at	317, 412
Lamar, Little Piney Creek near	-292	Martindale, Yount Creek near	-325
Land-surface datum, definition of	14	Maumelle River at Maumelle Dam at Natural Steps	-333
Langley, Little Blocker Creek near	-409	Maumelle River at Williams Junction	-312
Langley, Little Missouri River near	-363	Maumelle, Storm Ditch at Rolling Oaks Drive at	-xiv, 407
Latent heat flux, definition of	14	May Branch at Fort Smith	-406
Lead Hill, East Sugarloaf Tributary near	-404	McDougal, Little Cache River Ditch No. 1 near	-xvii
Lee Creek at Lee Creek Reservoir near Van Buren	-277	McGehee, Bayou Bartholomew near	-397
Lee Creek at Short, Oklahoma	-268	Mean concentration of suspended sediment, definition of	-15
Lee Creek near Lee Creek	-406	Mean discharge, definition of	-15
Lee Creek near Natural Dam	-xviii	Mean high tide, definition of	-15
Lee Creek near Short, Oklahoma	-274	Mean low tide, definition of	-15
Lee Creek near Van Buren	-xviii	Mean sea level, definition of	-15
Lee Creek, Cove Creek near	-xiii, 406	Measuring point, definition of	-15
Lee Creek, Lee Creek near	-406	Megahertz, definition of	-15
Lepanto, Tyrnza River Ditch No. 6	xv	Membrane filter, definition of	-15
Lester, Big Bay Ditch near	xv	Mena, Lewis Creek Tributary near	-409
Lester, Thompson Creek near	xv	Metamorphic stage, definition of	-15
Lewis Creek tributary near Mena	-409	Method detection limit, definition of	-15
Lewisville, Bodcau Creek near	-412	Method of Cubatures, definition of	-15
Lick Pond near Alicia	-xvii	Methylene blue active substances, definition of	-15
Light-attenuation coefficient, definition of	14	Micrograms per gram, definition of	-16
Lipid, definition of	15	Micrograms per kilogram, definition of	-16
Little Black River at Success	-xvi	Micrograms per liter, definition of	-16
Little Blocker Creek near Langley	-409	Microsiemens per centimeter, definition of	-16
Little Buffalo River at Jasper	-xvi	Middle Fork of Little Red River at Shirley	-xiii, xvii, 405
Little Cache River Ditch No. 1 near McDougal	-xvii	Middle Fork Saline River near Owensville	-384
Little Cornie Bayou east of Junction City	-xix	Middle Fork White River southeast of Fayetteville	-411
Little Italy, Lake Maumelle near	-327	Middlebrook, Fourche River near	-xvi
Little Italy, Reece Creek at	-326	Mill Creek at Fort Smith	-406
Little LaGrue Bayou near Stuttgart	-xviii	Mill Creek near Holly Springs	-409
Little Lee Creek near Greasy, Oklahoma	-270	Mill Creek near Jenny Lind Road in Fort Smith	-406
Little Lee Creek near Short, Oklahoma	-272	Mill Creek south of Sitka	-411
Little Maumelle River at Ferndale	-407	Milligrams per liter, definition of	-16
Little Missouri River near Langley	-363	Millwood Lake on Mine Creek near Okay	-xix
Little Missouri River near Murfreesboro	-xiv	Minimum reporting level, definition of	-16
Little Missouri River near Newhope	-xix	Minnock Creek tributary near Hagarville	-407
Little Piney Creek near Lamar	-292	Miscellaneous site, definition of	-16
Little Red River at Judsonia	xvii, 405	Mississippi River at Barfield	-xv
Little Red River at Pangburn	-xvii	Mississippi River at Helena	-xv
Little Red River near Dewey	-224	Mississippi River at Huffman	-xv
Little Red River near Heber Springs	xiii, 221	Mississippi River at West Memphis	-xv
Little Red River near Searcy	xiii, xvii	Mississippi River near Arkansas City	-xv
Little Red River near West Point	-xvii	Mississippi River near Greenville, Mississippi	-xv
		Moko, South Fork of Spring River near	-xvi
		Monette, Cockle Burr Slouth Ditch near	-xv

	Page
Montgomery County -----	431
Moro Creek near Banks -----	413
Moro Creek near Fordyce -----	372
Moro, Big Creek near -----	xiii
Morrilton, Arkansas River at -----	407
Morton, Bayou DeView near -----	236
Most probable number, definition of -----	16
Mount Ida, Ouachita River near -----	357
Mount Ida, South Fork Ouachita River at -----	xiv
Mount Ida, South Fork Ouchita River -----	xix
Mountain Fork near Hatfield -----	412
Mountain Pine, Ouachita River at -----	xix
Mountainburg, Frog Bayou near -----	xiii
Mud Creek Tributary at Township Street at Fayetteville -----	242
Mulberry River near Mulberry -----	xviii, 288
Mulberry River near Oark -----	406
Mulberry, Mulberry River near -----	xviii, 288
Multiple-plate samplers, definition of -----	16
Murfreesboro, Lake Greeson near -----	xix
Murfreesboro, Little Missouri River near -----	xiv
Murfreesboro, Prairie Creek at -----	xix
Murfreesboro, Prairie Creek near -----	xix
Murray Creek Tributary near Jonesboro -----	404
N	
Nady, White River at Arkansas Post Canal near -----	xviii
Nanograms per liter, definition of -----	16
Nashville, Dillard Creek near -----	408
National Geodetic Vertical Datum of 1929, definition of -----	16
Natural Dam, Lee Creek near -----	xviii
Natural Steps, Lake Maumelle near -----	330
Natural Steps, Maumelle River at Maumelle Dam at -----	333
Natural substrate, definition of -----	16
Nekton, definition of -----	16
Nephelometric turbidity unit, definition of -----	16
Nevins Creek tributary near Pine Bluff -----	410
New Blaine, Big Shoal Creek near -----	406
Newhope, Little Missouri River near -----	xix
Newport, Village Creek near -----	xvii
Newport, White River at -----	213
Nimrod, Fourche LaFave River near -----	xiii
Nix Creek at E. 12th Street at Texarkana -----	409
Norfolk Lake near Norfolk -----	178
Norfolk River at base of Norfolk Dam near Norfolk -----	181
Norfolk, Norfolk Lake near -----	178
Norfolk, Norfolk River at base of Norfolk Dam near -----	181
Norfolk, North Fork River at -----	xvi
Norfolk, North Fork River at Norfolk Dam near -----	184
Norfolk, White River near -----	172
North American Datum of 1927, definition of -----	17
North American Datum of 1983, definition of -----	17
North American Vertical Datum of 1988, definition of -----	17
North Big Creek near Evening Shade -----	411
North Flint Creek near Springtown -----	xviii
North Fork River at Norfolk -----	xvi
North Fork River at Norfolk Dam, near Norfolk -----	184
North Sylamore Creek near Fifty-Six -----	190, 193
O	
Oak Grove, Yocum Creek near -----	133
Oark, Mulberry River near -----	406
Okay, Millwood Lake on Mine Creek near -----	xix
Omaha, Bear Creek near -----	141
Open interval, definition of -----	17
Organic carbon, definition of -----	17
Organic mass, definition of -----	17
Organism count,	
Area, definition of -----	17
Total, definition of -----	24
Volume, definition of -----	17
Organochlorine compounds, definition of -----	17
Osage Creek at Osage -----	404
Osage Creek near Cave Springs -----	244
Osage Creek near Elm Springs -----	246
Osage Creek southwest of Berryville -----	411
Osage, Osage Creek at -----	404
Otis, Rolling Fork near -----	412
Ouachita River at Arkadelphia -----	xix
Ouachita River at Blakely Mountain Dam near Hot Springs -----	xix
Ouachita River at Camden -----	367
Ouachita River at Carpenter Dam near Hot Springs -----	xix
Ouachita River at Mountain Pine -----	xix
Ouachita River at Rammel Dam above Jones Mill -----	359

Ouachita River near Felsenthal -----	xix
Ouachita River near Hot Springs -----	xiv
Ouachita River near Mount Ida -----	357
Ouachita River near Sparkman -----	xix
Ouachita River near Washita -----	xix
Ouachita, Brushy Creek near -----	xix
Owensville, Middle Fork Saline River near -----	384
Ozan, South Fork Ozan Creek near -----	409
Ozark, Arkansas River at -----	xviii

P

Pack Saddle Creek tributary near Waldron -----	407
Palestine, L'Anguille River at -----	xv, 81
Palestine, Second Creek near -----	411
Pangburn, Little Red River at -----	xvii
Paragould, Big Slough Ditch near -----	xv
Paragould, Eight Mile Ditch near -----	xv
Paragould, Locust Creek Ditch near -----	xv
Parameter code, definition of -----	17
Paris, Short Mountain Creek west of -----	xviii
Parkin, St. Francis River at -----	xv, 65
Partial-record station, definition of -----	17
Particle size, definition of -----	17
Particle-size classification, definition of -----	18
Patterson, Cache River at -----	231
Peak flow, definition of -----	18
Peak stage, definition of -----	18
Pendleton, Arkansas River at -----	xviii, 408
Penniscot Bayou near Dell -----	xv
Penniscot Bayou near Yarbrow -----	xv
Percent composition, definition of -----	18
Percent of total, definition of -----	18
Percent shading, definition of -----	18
Periodic-record station, definition of -----	18
Periphyton, definition of -----	18
Perryville, Fouché LaFave Tributary near -----	407
Pesticides, definition of -----	18
Petit Jean River at Danville -----	xviii, 302
Petit Jean River near Booneville -----	298
Petit Jean River near Centerville -----	xviii, 407
Petit Jean River near Waveland -----	xiii
pH, definition of -----	18
Phytoplankton, definition of -----	18
Picocurie, definition of -----	19
Pigeon Roost Creek at Butlerville -----	405
Piggott, St. Francis River near -----	58
Pine Bluff, Arkansas River at -----	xviii, 408
Pine Bluff, Nevins Creek Tributary near -----	410
Pine Bluff, Pitts Drain at Louisiana Street in -----	410
Piney Fork at Evening Shade -----	xiii, xvii
Piney Fork near Evening Shade -----	411
Pitts Drain at Louisiana Street in Pine Bluff -----	410
Plankton, definition of -----	19
Pocahontas, Black River at -----	197
Pocahontas, Fourche River above -----	xiii
Poinsett County -----	432
Point Cedar, Valley Creek near -----	409
Polychlorinated biphenyls, definition of -----	19
Polychlorinated naphthalenes, definition of -----	19
Pool, definition of -----	19
Pope Creek tributary at Birdeye -----	404
Poplar Grove, Big Creek at -----	xiii, xvii
Poplar Grove, Big Creek near -----	xviii
Portland, Bayou Bartholomew near -----	400
Poteau River at Cauthron -----	262
Poteau River at Waldron -----	412
Poteau River south of Bates -----	xviii
Poughkeepsie, Strawberry River near -----	xvii, 209
Prairie Creek at Murfreesboro -----	xix
Prairie Creek near Murfreesboro -----	xix
Prairie Creek northeast of Rogers -----	xiii
Primary productivity, definition of -----	19
Carbon method, definition of -----	19
Oxygen method, definition of -----	19
Pyatt, Crooked Creek at -----	xvi

R

Radioisotopes, definition of -----	19
Ravenden Springs, Eleven Point River near -----	xvi, 205
Ravenden Springs, Ferguson Creek near -----	404
Reach, definition of -----	19
Recoverable from bed (bottom) material, definition of -----	19
Recurrence interval, definition of -----	20

Page	Page
Red River at Fulton -----	xix
Red River at Garland -----	xix
Red River at Index -----	-345
Reece Creek at Little Italy -----	-326
Reeds Creek near Strawberry -----	-411
Reform, Alum Fork Saline River at Winona Dam at -----	-409
Reform, Alum Fork Saline River near -----	-374
Reform, Lake Winona at -----	-381
Reform, Lake Winona downstream from Gillis Branch near -----	-379
Reform, Lake Winona downstream from Stillhouse Creek near -----	-378
Replicate samples, definition of -----	20
Return period, definition of -----	20
Richland Creek at Goshen -----	98
Richland Creek near Witts Spring -----	-159
Rifle, definition of -----	20
Right Hand Chute of Little River at Rivervale -----	64
River mileage, definition of -----	20
Riverfront, St. Francis Bay at -----	72
Rivervale, Right Hand Chute of Little River at -----	64
Rock Creek at 36th Street at Little Rock -----	-337
Rock Creek near Glenwood -----	-409
Rocky Branch at Braden and Marshall Roads at Jacksonville -----	-408
Rogers, Beaver Lake at Highway 12 Bridge near -----	-113
Rogers, Prairie Creek northeast of -----	xiii
Rogers, White River near -----	xiii
Rolling Fork near DeQueen -----	xiv, xviii, 408
Rolling Fork near Horatio -----	xviii
Rolling Fork near West Otis -----	-412
Rover, Brogan Creek near -----	-407
Royal, Bear Creek near -----	-409
Rudy, Frog Bayou at -----	xiii, 406
Run, definition of -----	20
Runoff, definition of -----	20
Rush, Buffalo River near -----	xiii, xvi
Rye, Saline River near -----	-xix, 392
S	
Saddle, South Fork Spring River at -----	-411
Saffell, Strawberry River near -----	-411
Saint Vincent, E Fork Point Remove Creek Tributary near -----	-407
Salado, White River near -----	xvi
Saline River at Benton -----	-386
Saline River near Dierks -----	xiv, xviii, 408
Saline River near Lockesburg -----	-355
Saline River near Rye -----	-xix, 392
Saline River near Sheridan -----	-388
Saline River near Tull -----	xix
Saline River near Warren -----	xiv
Sandtown, Sullivan Creek at -----	xiii
Sardis, Hurricane Creek near -----	-413
Savoy, Illinois River at -----	-239
Scottsville, Illinois Bayou near -----	-xviii, 294
Screened interval, definition of -----	17
Sea level, definition of -----	20
Searcy, Key Branch near -----	-405
Searcy, Little Red River near -----	xiii, xvii
Second Creek near Palestine -----	-411
Sediment, definition of -----	20
Self Creek near Daisy -----	xix
Sensible heat flux, definition of -----	20
Seven-day, 10-year low flow, definition of -----	20
Shelves, definition of -----	20
Sheridan, Hurricane Creek below -----	-xix, 390
Sheridan, Saline River near -----	-388
Shippys Ferry, White River at -----	xiii, xvi
Shirley, Middle Fork of Little Red River at -----	xiii, xvii, 405
Short Mountain Creek west of Paris -----	xviii
Short, Oklahoma, Lee Creek at -----	-268
Short, Oklahoma, Lee Creek near -----	-274
Short, Oklahoma, Little Lee Creek near -----	-272
Siloam Springs, Flint Creek north of -----	xviii
Siloam Springs, Illinois River at Hwy 16 near -----	-249
Siloam Springs, Illinois River south of -----	-251
Siloam Springs, Illinois River near -----	-412
Silver Hill, Bear Creek near -----	-168
Silver Hill, Calf Creek near -----	-161
Sitka, Mill Creek south of -----	-411
Sixmile Creek at Caulksville -----	xiii
Sixmile Creek at Chismville -----	xiii
Sixmile Creek near Branch -----	xiii
Sixmile Creek near Subwatershed No. 23 near Branch -----	xiii
Sixmile Creek Subwatershed near Chismville -----	xviii
Sixmile Creek Subwatershed No. 2 near Caulksville -----	xiii
Sixmile Creek Subwatershed No. 5 near Chismville -----	xiii
Sixmile Creek Subwatershed No. 6 near Chismville -----	xiii
Smackover Creek near Smackover -----	-370
Smackover, Smackover Creek near -----	-370
Sodium adsorption ratio, definition of -----	-21
Soil heat flux, definition of -----	-21
Soil-water content, definition of -----	-21
Sonora, Beaver Lake at Highway 68 bridge near -----	-102
South Big Creek near Strawberry -----	-411
South Fork Little Red River at Clinton -----	-217
South Fork of Spring River near Moko -----	xvi
South Fork Ouachita River at Mount Ida -----	xiv, xix
South Fork Ozan Creek near Ozan -----	-409
South Fork Spring River at Saddle -----	-411
South Fourche LaFave River near Hollis -----	-407
South Sylamore Creek at Allison -----	xvi
Spadra Creek at Clarksville -----	-xiii, 406
Sparkman, Ouachita River near -----	xix
Spear Lake, Tyroneza River near -----	-xv
Specific electrical conductance (conductivity), definition of -----	-21
Spring Creek at Forrest City -----	-404
Spring Creek near Aubrey -----	-406
Spring River at Imboden -----	xvi, 203
Spring River at Town Branch bridge at Hardy -----	-201
Spring River near Hardy -----	-411
Spring River near Mammoth Springs -----	xiii
Spring Valley, Whitner Branch Tributary near -----	-404
Springtown, Flint Creek at -----	xviii, 255
Springtown, North Flint Creek near -----	xviii
St Francis River Floodway near Marked Tree -----	-xv
St. Francis Bay at Riverfront -----	-72
St. Francis River at Fisk, Missouri -----	-50
St. Francis River at Holly Island -----	-59
St. Francis River at Lake City -----	-60
St. Francis River at Madison -----	-76
St. Francis River at Marked Tree -----	xiii, xv
St. Francis River at Parkin -----	xv, 65
St. Francis River at St. Francis -----	-55
St. Francis River Floodway near Marked Tree -----	-67
St. Francis River floodway near Marked Tree (Dam) -----	xiii
St. Francis River near Glennonville, Missouri -----	-53
St. Francis River near Piggott -----	-58
St. Francis River north of Helena -----	-xv
St. Francis, St. Francis River at -----	-55
St. James, White River above Lock and Dam 3 near -----	xvi
St. Joe, Buffalo River near -----	-164
Stable isotope ratio, definition of -----	-21
Stage, definition of -----	-21
Stage-discharge relation, definition of -----	-21
Stamps, Bodcau Creek at -----	xiv
Stokes Creek at Kimery Road at Hot Springs -----	-409
Stone County -----	-434
Storm Ditch at Rolling Oaks Drive at Maumelle -----	-xiv, 407
Straight Slough near Birdeye -----	xiii, xv
Strawberry River near Evening Shade -----	-xiii, xvii
Strawberry River near Poughkeepsie -----	xvii, 209
Strawberry River near Saffell -----	-411
Strawberry, Reeds Creek near -----	-411
Strawberry, South Big Creek near -----	-411
Streamflow, definition of -----	-21
Strong, Bayou Lapile at -----	xix
Stuttgart, Bayou Meto near -----	xiv, xviii
Stuttgart, LaGrue Bayou near -----	xiii
Stuttgart, Little LaGrue Bayou near -----	xviii
Substrate, definition of -----	-21
Artificial, definition of -----	8
Natural, definition of -----	-16
Substrate embeddedness class, definition of -----	-21
Success, Little Black River at -----	xvi
Sullivan Creek at Sandtown -----	xiii
Sulphur River near Fort Lynn -----	xix
Sulphur Springs, Butler Creek -----	xviii
Sunnymede Creek at North 46th Terrace at Ft. Smith -----	-406
Surface area of a lake, definition of -----	-21
Surficial bed material, definition of -----	-21
Surrogate, definition of -----	-21
Suspended, definition of -----	-22
Recoverable, definition of -----	-22
Total, definition of -----	-22
Suspended sediment, definition of -----	-22
Suspended-sediment concentration, definition of -----	-22

	Page
Suspended-sediment discharge, definition of	22
Suspended-sediment load, definition of	22
Suspended solids, total residue at 105 °C concentration, definition of	22
Swampoodle Creek at Broad Street at Texarkana, Texas	-409
Swan Lake, Arkansas River at Lock and Dam 3 near	- xviii
Swan Pond Ditch near Tuckerman	- xvii
Swifton, Maple Ditch near	- xvii
Swifton, Village Creek near	- xvii
Sylamore, White River at	- xvi
Synoptic studies, definition of	22
T	
Table Rock Lake near Branson, Missouri	-137
Taxa (Species) richness, definition of	22
Taxonomy, definition of	22
Taylor, Bodcau Creek near	- xix
Texarkana Texas, Swampoodle Creek at Broad Street at	-409
Texarkana, Days Creek south of	- xix
Texarkana, Days Creek southeast of	-412
Texarkana, Nix Creek at 12th Street at	-409
Thalweg, definition of	23
Thayer Missouri, Warm Fork Spring River near	-411
Thermograph, definition of	23
Thompson Creek near Lester	- xv
Three Creeks near Three Creeks	- xiv, xix
Three Creeks, Cornie Bayou near	- xiv, 410
Three Creeks, Three Creeks near	- xiv, xix
Time-weighted average, definition of	23
Tons per acre-foot, definition of	23
Tons per day, definition of	23
Total, definition of	23
Total coliform bacteria, definition of	23
Total discharge, definition of	23
Total in bottom material, definition of	23
Total length, definition of	23
Total load, definition of	24
Total organism count, definition of	24
Total recoverable, definition of	24
Total sediment discharge, definition of	24
Total sediment load, definition of	24
Town Branch at B.R. 62 at Fayetteville	83
Town Branch Tributary at Hwy 16 at Fayetteville	85
Transect, definition of	24
Tuckerman, Swan Pond Ditch near	- xvii
Tull, Saline River near	- xix
Turbidity, definition of	24
Twist, Tyronza River near	- xv
Tyro, Ables Creek near	-410
Tyronza Bayou near Dyess	- xv
Tyronza River Ditch No. 40 near Chelford	- xv
Tyronza River Ditch No. 6 near Lepanto	- xv
Tyronza River near Dyess	- xv
Tyronza River near Spear Lake	- xv
Tyronza River near Twist	- xv
U	
Ultraviolet (UV) absorbance (absorption), definition of	24
Unconfined aquifer, definition of	24
Union County	-435
V	
Valley Creek near Point Cedar	-409
Van Buren, Arkansas River at James W. Trimble Lock and Dam near	-279
Van Buren, Lee Creek at Lee Creek Reservoir near	-277
Van Buren, Lee Creek near	- xviii
Vandervoort, Cossatot River near	-352
Vertical datum, definition of	24
Vidette, Bennett's River at	-174
Village Creek near Newport	- xvii
Village Creek near Swifton	- xvii
Village Creek near Walnut Ridge	- xvii
Viney Grove, Illinois River near	- xiii
Volatile mass, definition of	17
Volatile organic compounds, definition of	24
W	
Waldron, Pack Saddle Creek near	-407
Waldron, Poteau River at	-412
Walnut Ridge, Village Creek near	- xvii
Waltreak, Dutch Creek at	-300
War Eagle Creek near Hindsville	-105
Warm Fork Spring River near Thayer, Missouri	-411
Warren, Saline River near	- xiv
Washita, Ouachita River near	- xix

Water table, definition of	-24
Water-table aquifer, definition of	-25
Water year, definition of	-25
Watershed, definition of	-25
Watkins Corner, Big Creek near	- xviii
Wattensaw Bayou near Hazen	-412
Waveland, Petit Jean River near	- xiii
WDR, definition of	-25
Webber Creek tributary near Cedarville	-406
Weighted average, definition of	-25
West Fork Point Remove Creek near Hattieville	-304
West Fork White River at Greenland	- xiii, xv
West Fork White River east of Fayetteville	-87
West Fork White River near Fayetteville	- xiii
West Memphis, Mississippi River at	- xv
West Point, Little Red River near	- xvii
West Siloam Springs, Oklahoma, Flint Creek near	-257
West Siloam Springs, Oklahoma, Flint Creek near	- xviii
Wet mass, definition of	-25
Wet weight, definition of	-25
Wheeler Creek near Arkana	- xix
White River above Augusta	- xvii
White River above Busch	- xvi
White River above Lock and Dam 3 near St. James	- xvi
White River at Allison	-404
White River at Arkansas Post Canal near Nady	- xviii
White River at Batesville	- xvi
White River at Beaver	- xvi
White River at Beaver Dam, near Eureka Springs	-125
White River at Buffalo City	- xvi
White River At Bull Shoals Dam, near Flippin	-146
White River at Calico Rock	-185
White River at Campground E near Busch	- xv
White River at Clarendon	- xvii
White River at DeValls Bluff	- xvii, 226
White River at Georgetown	- xiii, xvii, 405
White River at Jacksonport	- xvii
White River at Newport	-213
White River at Shippis Ferry	- xiii, xvi
White River at Sylamore	- xvi
White River below Bruce Creek near Lakeview	-149
White River below Bull Shoals Dam at Bull Shoals	-149
White River below Bull Shoals Dam near Fairview	-152
White River below Table Rock Dam near Branson, Missouri	-140
White River near Augusta	- xvii, 215
White River near Fayetteville	-91
White River near Flippin	- xiii, xvi, 404
White River near Goshen	-95
White River near Lone Rock	- xvi
White River near Norfolk	-172
White River near Rogers	- xiii
White River near Salado	- xvi
Whitener Branch Tributary near Spring Valley	-404
Wilburn, Little Red River near	- xvii
Wilhelmina Cutoff near Campbell, Missouri	-54
Williams Junction, Maumelle River at	-312
Willow Ditch near Egypt	-405
Wilmot, LaFourche Bayou near	- xix
Winfrey, Frog Bayou near	-284
Winfrey, Jack Creek near	-286
Winfrey, Jones Creek at	-282
Witts Spring, Richland Creek near	-159
WSP, definition of	-25
Wye, Lake Maumelle at State Hwy 10 near	-319
Wye, Lake Maumelle east of Hwy 10 bridge near	-322
Wye, Lake Maumelle west of Hwy 10 Bridge near	-318
Y	
Yarbro, Penniscot Bayou near	- xv
Yellville, Crooked Creek at	-154
Yocum Creek near Oak Grove	-133
Yount Creek near Martindale	-325
Z	
Zooplankton, definition of	-25

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton