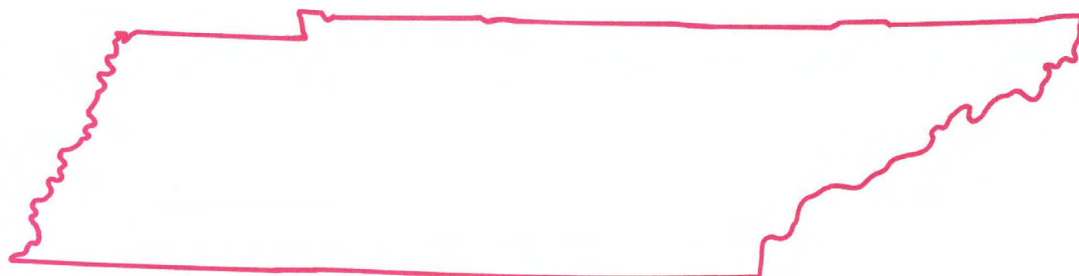
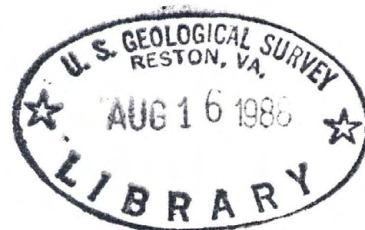


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Water Resources Data Tennessee Water Year 1987



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-87-1
Prepared in cooperation with the Tennessee Department of
Health and Environment, Office of Water Management; the
Tennessee Valley Authority; and with other State, County,
municipal, and Federal agencies

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

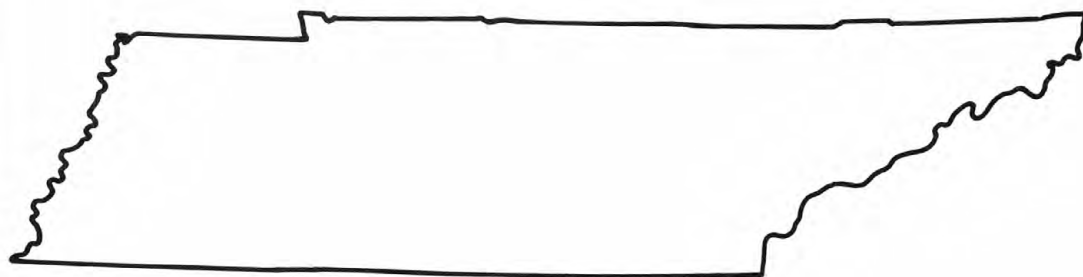
The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1 2.54×10^{-2}	millimeters (mm) meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3 4.047×10^{-1} 4.047×10^{-3}	square meters (m ²) square hectometers (hm ²) square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0 3.785×10^0 3.785×10^{-3}	liters (L) cubic decimeters (dm ³) cubic meters (m ³)
million gallons	3.785×10^3 3.785×10^{-3}	cubic meters (m ³) cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1 2.832×10^{-2}	cubic decimeters (dm ³) cubic meters (m ³)
cfs-days	2.447×10^3 2.447×10^{-3}	cubic meters (m ³) cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3 1.233×10^{-3} 1.233×10^{-6}	cubic meters (m ³) cubic hectometers (hm ³) cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1 2.832×10^1 2.832×10^{-2}	liters per second (L/s) cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2} 6.309×10^{-2} 6.309×10^{-5}	liters per second (L/s) cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1 4.381×10^{-2}	cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons



Water Resources Data Tennessee Water Year 1987

by J.F. Lowery, P.H. Counts, H.L. Edmiston and F.D. Edwards



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TN-87-1
Prepared in cooperation with the Tennessee Department of
Health and Environment, Office of Water Management; the
Tennessee Valley Authority; and with other State, County,
municipal, and Federal agencies

DEPARTMENT OF THE INTERIOR
DONALD PAUL HODEL, SECRETARY
U.S. GEOLOGICAL SURVEY
Dallas L. Peck, Director

For information on the water program in Tennessee write to
District Chief, Water Resources Division
U.S. Geological Survey
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Nashville, Tennessee 37203

PREFACE

This volume of the annual hydrologic data report of Tennessee 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 water quality provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. Most of the data were collected, computed, and processed from the subdistrict offices under the supervision of the following subdistrict chiefs:

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Delmer J. O'Connell, Nashville

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This report was prepared in cooperation with the State of Tennessee and with other agencies under the general supervision of V. Jeff May, Data Management Section Chief; and Ferdinand Quinones, District Chief, Tennessee.

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15. Supplementary Notes Prepared in cooperation with the Tennessee Department of Health and Environment, Office of Water Management; the Tennessee Valley Authority; and with other State, municipal, and Federal agencies.				
16. Abstract (Limit: 200 words) Water resources data for the 1987 water year for Tennessee consist of records of stage, discharge, and water quality of streams and springs; stage, contents, and water quality of lakes and reservoirs; water levels and water quality of wells; and quantity and quality of precipitation. This report contains discharge records for 100 gaging stations; stage only records for 6 gaging stations; elevation and contents for 27 lakes and reservoirs; water quality for 37 stations and 149 wells; water levels for 32 observation wells; and 1 precipitation station. Also included are 89 crest-stage partial-record stations and 82 low-flow partial-record stations. Additional water data were collected at various stream and spring sites not involved in the systematic data collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Tennessee.				
17. Document Analysis a. Descriptors *Tennessee, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment analyses, Water temperatures, Sampling sites, Water levels, Water analyses. b. Identifiers/Open-Ended Terms c. COSATI Field/Group				
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[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological,
(t) water temperature, (s) sediment, (e) elevation of contents]

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GROUND-WATER LEVELS

<u>CARTER COUNTY</u>		
Well 361738082132900	Local number Ct:H-1	336
<u>DAVIDSON COUNTY</u>		
Well 360835086441100	Local number Dv:L-10	337
<u>DICKSON COUNTY</u>		
Well 360429087233602	Local number Di:F-19	338
<u>HAMILTON COUNTY</u>		
Well 350234085181200	Local number Hm:G-36	339
Well 351428085003600	Local number Hm:O-15	340
<u>HUMPHREYS COUNTY</u>		
Well 360020087573300	Local number Hs:H-1	341
<u>LAUDERDALE COUNTY</u>		
Well 353839089493500	Local number Ld:F-4	342
Well 354158089384300	Local number Ld:G-12	343
Well 354357089271701	Local number Ld:J-5	344
Well 354552089455900	Local number Ld:L-2	345
Well 355251089350500	Local number Ld:S-2	346
<u>LAWRENCE COUNTY</u>		
Well 352610087182401	Local number Ln:R-014	347
<u>MADISON COUNTY</u>		
Well 354223088380200	Local number Md:N-1	348
<u>MORGAN COUNTY</u>		
Well 360543084343101	Local number Mg:F-5	349
<u>PUTNAM COUNTY</u>		
Well 360521085432600	Local number Pm:C-1	350
<u>SEVIER COUNTY</u>		
Well 353922083345600	Local number Sv:E-2	351
<u>SHELBY COUNTY</u>		
Well 350514089553700	Local number Sh:K-75	352
Well 351435090005200	Local number Sh:O-1	353
Well 350735089593300	Local number Sh:P-76	354
Well 350900089482300	Local number Sh:Q-1	355
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Well 350958090173800	Local number AR:C-1	356
Well 350344090130000	Local number AR:H-2	357
Well 351349090062800	Local number AR:O-1	358

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<u>BRADLEY COUNTY</u>		
Well 350503084505000	Local number Br:E-1	359
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Well 354823086104400	Local number Cn:D-1	359
<u>DYER COUNTY</u>		
Well 360200089280100	Local number Dy:H-1	360
Well 360147089230700	Local number Dy:H-7	360
<u>FAYETTE COUNTY</u>		
Well 352226089330101	Local number Fa:R-1	361
Well 352226089330102	Local number Fa:R-2	361
<u>SHELBY COUNTY</u>		
Well 352112089571200	Local number Sh:U-1	362
Well 352112089571300	Local number Sh:U-2	362
<u>WILLIAMSON COUNTY</u>		
Well 355505086541100	Local number Wm:M-1	363

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<u>ANDERSON COUNTY</u>		
Well 360007084150501	Local number AN:D-3	364
Well 360006084150401	Local number AN:D-4	364
Well 360005084150401	Local number AN:D-5	364
Well 360004084150401	Local number AN:D-6	364
Well 360006084145701	Local number AN:E-2	364
Well 660038084155401	Local number AN:D-13	364
Well 360045084154901	Local number AN:D-12	365
Well 360001084144201	Local number AN:E-1	365
Well 355938084140201	Local number GW-167	365
Well 355938084140101	Local number GW-168	366
Well 355946084134301	Local number GW-170	366
Well 360001084131401	Local number GW-171	367
Well 360000084131501	Local number GW-172	367
Well 355956084143202	Local number GW-206	368
Well 355956084143201	Local number GW-207	368
Well 355956084143301	Local number GW-208	369
Well 360000084131502	Local number GW-230	369
Well 355938084140202	Local number GW-239	370
Well 360009084150501	Local number AN:D-1	370
Well 360008084150501	Local number AN:D-2	370
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Well 360009084171901	Local number AN:D-7	370
Well 360008084172001	Local number AN:D-8	371
Well 360007084172001	Local number AN:D-9	371

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Well 360006084172001	Local number AN:D-10	371
Well 360033084163101	Local number AN:D-14	371
CHEATHAM COUNTY		
Well 361547087040101	Local number CH:H-008	371
DAVIDSON COUNTY		
Well 361108086500901	Local number DV:K-007	372
HAMILTON COUNTY		
Well 350719085050902	Local number HM:J-016	372
KNOX COUNTY		
Well 355403084042301	Local number KN:G-1	372
LAKE COUNTY		
Well 362709089241501	Local number LK:G-30	373
Well 362842089211701	Local number LK:H-5	373
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Well 355636084203802	Local number GW-210	375
Well 355637084203801	Local number GW-211	376
Well 355421084231701	Local number GW-212	376
Well 355421084231702	Local number GW-214	377
Well 355435084232801	Local number GW-215	377
Well 355421084231801	Local number GW-238	378
Well 355447084184301	Local number RN:M-5-440	378
Well 355447084184302	Local number RN:M-5-459	378
Well 355446084184301	Local number RN:M-5-460	379
Well 355445084184102	Local number RN:M-5-461	379
Well 355445084184103	Local number RN:M-5-462	379
Well 355445084184201	Local number RN:M-5-463	380
Well 355445084184202	Local number RN:M-5-464	380
Well 355456084184601	Local number RN:M-5-471	380
Well 355456084184501	Local number RN:M-5-472	381
Well 355421084193201	Local number RN:M-6-108	381
Well 355420084193301	Local number RN:M-6-109	381
Well 355343084201501	Local number RN:M-U-A1	382
Well 355406084195701	Local number RN:M-UB1	382
Well 355405084195801	Local number RN:M-UB2	382
Well 355457084184001	Local number RN:M-UE1	383
Well 355444084184101	Local number RN:M-UF1	383
Well 355517084171701	Local number RN:M-UG1	383
Well 355515084172401	Local number RN:M-UH1	384
Well 355505084174201	Local number RN:M-UI1	384
SHELBY COUNTY		
Well 350114090071701	Local number SH:J-146	384
Well 350446090013500	Local number SH:J-154	385
Well 350203090034901	Local number SH:J-155	385-386
Well 350222090013401	Local number SH:J-156	386
Well 350538090063101	Local number SH:J-165	387
Well 350508090015001	Local number SH:J-171	387-388
Well 350124090072202	Local number SH:J-172	388
Well 350518089554400	Local number SH:K-73	389
Well 350704089555501	Local number SH:K-137	389-390
Well 350218089511701	Local number SH:L-36	390
Well 350852089514100	Local number SH:O-116	391
Well 350908090014601	Local number SH:O-169	391-392
Well 351040090025501	Local number SH:O-215	392
Well 350917090012000	Local number SH:O-231	393
Well 350916090014901	Local number SH:O-244	393-394
Well 350915090005201	Local number SH:O-245	394
Well 351112089585100	Local number SH:P-121	395
Well 351103089585300	Local number SH:P-122	395
Well 351115089583300	Local number SH:P-123	395
Well 351106089581500	Local number SH:P-127	395
Well 351440089572301	Local number SH:P-134	396
Well 351456089564701	Local number SH:P-134	396-397
Well 351111089585101	Local number SH:P-135	397
Well 351103089585301	Local number SH:P-136	397
Well 351116089583701	Local number SH:P-137	397
Well 351111089582401	Local number SH:P-138	398
Well 351101089582001	Local number SH:P-140	398
Well 351040089582800	Local number SH:P-144	398
Well 351051089581102	Local number SH:P-154	398
Well 351051089581103	Local number SH:P-155	399
Well 351052089582802	Local number SH:P-157	399
Well 351052089582803	Local number SH:P-158	399
Well 351050089584002	Local number SH:P-160	399
Well 351050089584003	Local number SH:P-161	400
Well 351109089583402	Local number SH:P-163	400
Well 351103089582101	Local number SH:P-164	400
Well 351103089582102	Local number SH:P-165	400
Well 351103089582103	Local number SH:P-166	401
Well 351107089581901	Local number SH:P-167	401
Well 351107089581902	Local number SH:P-168	401

Well 351109089582701	Local number SH:P-170	401
Well 351113089582401	Local number SH:P-172	402
Well 351108089584301	Local number SH:P-174	402
Well 351108089584302	Local number SH:P-175	402
Well 351110089585001	Local number SH:P-177	402
Well 351113089583401	Local number SH:P-179	403
Well 351108089581301	Local number SH:P-181	403
Well 351108089581302	Local number SH:P-182	403
Well 351114089582001	Local number SH:P-183	404
Well 351115089584201	Local number SH:P-184	404
Well 351115089584202	Local number SH:P-185	404
Well 351123089584001	Local number SH:P-186	404
Well 351123089584002	Local number SH:P-187	405
Well 35111089585201	Local number SH:P-188	405
Well 351430089573201	Local number SH:P-197	405-406
Well 350757089502701	Local number SH:Q-55	406
Well 350737089485600	Local number SH:Q-89	407
Well 350749089505802	Local number SH:Q-92	407
Well 351111089512501	Local number SH:Q-94	408
Well 350749089505805	Local number SH:Q-95	409
Well 350749089505806	Local number SH:Q-96	409
Well 350739089501701	Local number SH:Q-98	410
Well 350741089490901	Local number SH:Q-101	410
Well 350803089495901	Local number SH:Q-102	411
Well 350822089504001	Local number SH:Q-105	411
Well 350845089512101	Local number SH:Q-109	412
Well 350807089511101	Local number SH:Q-112	412
Well 350812089505901	Local number SH:Q-113	413
Well 350804089504101	Local number SH:Q-119	413
Well 350804089503501	Local number SH:Q-120	414
Well 350817089503501	Local number SH:Q-125	414
Well 350817089503502	Local number SH:Q-126	415
Well 350817089503504	Local number SH:Q-128	415
Well 350810089503501	Local number SH:Q-129	416
Well 351109089512901	Local number SH:Q-40	417
Well 351124089520001	Local number SH:Q-79	417-418
Well 351454089514601	Local number SH:Q-89	418
Well 351703089575301	Local number SH:U-20	419
Well 351525089512102	Local number SH:V-21	419-420
STEWART COUNTY		
Well 363336087462500	Local number ST:M-063	420
Well 363336087463300	Local number ST:M-065	420
WILLIAMSON COUNTY		
Well 355307086535501	Local number WM:M-21	420
Well 355720086460602	Local number WM:N-043A	421
Well 355718086461001	Local number WM:N-044	421
Well 355715086462101	Local number WM:N-052	422
Well 355715086462102	Local number WM:N-052A	422
Well 355714086454501	Local number WM:N-055	423
Well 355714086454502	Local number WM:N-055A	423

DISCONTINUED STREAMFLOW STATIONS

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

[Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station number	Station name	Drainage area (mi ²)	Agency	Period of record
03312250	Red Boiling Spring at Red Boiling Springs		USGS	1986
03403718	Crabapple Branch near La Follette	1.07	USGS	1981-84
03407804	Indian Fork above Braytown	4.32	USGS	1975-78
03407874	Green Branch near Hembree	1.38	USGS	1976-78
034078745	Smoky Creek above Hembree (361240084245800)	8.07	USGS	1982-83
03407875	Bills Branch near Hembree	0.67	USGS	1975-83
034078755	Shack Creek at Hembree (361341084253900)	5.08	USGS	1982-84
03407876	Smoky Creek at Hembree	17.2	USGS	1977-84
03407877	Bowling Branch above Smoky Junction	2.19	USGS	1976-81
03407881	Anderson Branch near Montgomery	0.69	USGS	1976-80
03407882	Lowe Branch near Montgomery	0.92	USGS	1975-80
03408000	New River near New River	314	USGS	1923-35
03408600	Long Branch near Grimsley	1.11	USGS	1976-81
03408810	Crooked Creek tributary near Allardt	0.25	USGS	1976-79
03408815	Crooked Creek near Allardt	3.62	USGS	1976-81
03409000	White Oak Creek at Sunbright	13.5	USGS	1932-33
03409400	White Oak Creek at Rugby	98.0	USGS	1980-82
03410000	Pine Creek tributary at Oneida	1.21	USGS	1932-33
03415000	West Fork Obey River near Alpine	115	USGS	1943-71, 1980-81
03415500	Obey River near Byrdstown	445	USGS	1919-43
03417000	Obey River below Dale Hollow Dam	936	USGS	1939-42, 1945-58
03418000	Roaring River near Hilham	78.7	USGS	1932-75
03418188	Roaring River near Gainesboro	276	USGS	1975
03418500	Caney Fork at Clifty	111	USGS	1931-49
03419000	Bee Creek at Herbert	101	USGS	1931-37
03419500	Calfkiller River at Sparta	157	USGS	1932-41
03420000	Calfkiller River below Sparta	175	USGS	1940-71
03420500	Barren Fork near Trousdale	126	USGS	1932-57
03421500	Collins River near Rowland	755	USGS	1916-24
03423000	Falling Water River near Cookeville	67.0	USGS	1932-56
03424500	Caney Fork below Center Hill Dam, near Lancaster	2,183	USGS	1923-58
03425500	Spring Creek near Lebanon	35.3	USGS	1955-61
03425646	Town Creek at Maple Street at Gallatin	4.74	USGS	1984
03426000	Drakes Creek above Hendersonville	19.2	USGS	1955-61
03426210	Cumberland River at Dam3, near Old Hickory	11,688	USGS	1931-42, 1947-53
03427000	Bradley Creek at Lascassas	37.0	USGS	1955-61
03428000	West Fork Stones River near Murfreesboro	128	USGS	1932-69
03428047	Fox Camp Spring at Mankinville		USGS	1978-80
03428070	West Fork Stones River at Manson Pike, at Murfreesboro	165	USGS	1973-81
03429000	Stones River near Smyrna	571	USGS	1925-67
03429500	Stewart Creek near Smyrna (Smyrna Airport)	69.7	USGS	1953-58
03430100	Stones River below J. Percy Priest Dam	892	USGS	1939-67
03430800	Collins Creek at Bell Road, near Antioch	3.61	USGS	1976-77
03431000	Mill Creek near Antioch	64.0	USGS	1954-61, 1964-75
03431300	Browns Creek at State Fairgrounds, at Nashville	11.8	USGS	1964-75
03431500	Cumberland River at Nashville	12,856	USGS	1893-54
03431600	Whites Creek at Tucker Road, near Bordeaux	51.6	USGS	1965-75
03432500	West Harpeth River near Leipers Fork	66.9	USGS	1955-61
03435030	Red River near Portland	15.1	USGS	1967-75
03435500	Red River near Adams	706	USGS	1920-69
03436500	Cumberland River at Clarksville (lock C)	15,897	USGS	1925-44

DISCONTINUED STREAMFLOW STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record
03436700	Yellow Creek near Shiloh	124	USGS	1958-80
03437000	Cumberland River at Dover (gaging station)	16,437	USGS	1938-65
03461000	Pigeon River at Hartford	547	USGS	1925-48
03461500	Pigeon River at Newport	666	USGS	1900-29, 1945-46, 1948-82
			TVA	1982-83
03465000	North Indian Creek near Unicoi	15.9	USGS	1944-57
03466500	Nolichucky River below Nolichucky Dam	1,184	USGS	1902-09, 1919-26, 1946-73
03467000	Lick Creek at Mohawk	220	USGS	1946-71
03467500	Nolichucky River near Morristown	1,679	USGS	1921-57
03468050	Long Creek near White Pine	30.8	TVA	1964-81
03469000	French Broad River below Douglas Dam	4,543	USGS	1919-74
03469010	Millican Creek near Douglas Dam	4.22	TVA	1942-62
03469282	Roaring Fork Creek at HWY 441, at Gatlinburg	7.23	TVA	1977-82
03469390	Dudley Creek at Gatlinburg	8.84	TVA	1977-82
03469500	West Prong Little Pigeon River near Pigeon Forge	76.2	USGS	1946-49
			TVA	1967-69
03470000	Little Pigeon River at Sevierville	353	USGS	1921-82
03476500	South Fork Holston River below South Holston Dam	703	USGS	1951-74
03477000	South Fork Holston River at Bluff City	813	USGS	1900-53
03478500	Beaver Creek at Bristol	44.8	USGS	1932-34
03478620	Beaver Creek at Buffalo School, near Bluff City	108	TVA	1934-38
03479500	Watauga River at North Carolina-Tennessee State Line	152	USGS	1943-55
03480000	Watauga River at Stump Knob	171	USGS	1928-31, 1934-45
03482000	Roan Creek near Neva	102	USGS	1942-55
03482500	Roan Creek at Butler	166	USGS	1901-02, 1934-48
03483000	Watauga River at Butler	427	USGS	1900-02, 1921-48
03484000	Watauga River below Wilbur Dam	471	USGS	1903-09, 1948-82
03484110	Watauga River at Siam	480	TVA	1946
03484490	Doe River at Old Hopson School	59.3	TVA	1967-69
03484500	Doe River at Blevins	60.8	USGS	1912-15
03484900	Laurel Fork above Braemar	23.0	TVA	1948-51
03484910	Laurel Fork above Hampton	25.3	TVA	1948-52
03485500	Doe River at Elizabethton	137	USGS	1912-16, 1921-82
03486000	Watauga River at Elizabethton	692	USGS	1926-49, 1953-82
03486200	Buffalo Creek at Milligan College	28.1	TVA	1965-81
03486490	Brush Creek at Johnson City (Tennessee Street)	6.78	TVA	1969-73
03486495	Brush Creek at Johnson City (Elm Street)	9.58	TVA	1969-72
03486500	Brush Creek at Johnson City	10.3	USGS	1932-34
03486900	Fall Creek near Fort Patrick Henry Dam	13.1	TVA	1953-56
03487500	South Fork Holston River at Kingsport	1,935	USGS	1926-77
03487501	South Fork Holston River at Kingsport (auxiliary channel)	1.0	USGS	1953-77
03487640	South Fork Holston River near Ridgetfields Bridge, at Kingsport	2,047	TVA	1968-69
03491500	Holston River near Rogersville	3,035	USGS	1901-42
03491800	Poor Valley Creek near Mooresburg (near Spruce Pine School)	32.3	USGS	1958-61
03491820	Poor Valley Creek near Mooresburg (TVA)	43.3	TVA	1959-60
03492000	Holston River near Morristown	3,244	USGS	1937-42
03492500	Mossy Spring near Jefferson City		USGS	1950-59
03493000	Mossy Creek at Jefferson City	30.8	USGS	1932-34
03494000	Holston River near Jefferson City	3,429	USGS	1937-74

DISCONTINUED STREAMFLOW STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record
03494500	Mill Spring near Jefferson City		TVA	1941-48
			USGS	1951-59
03496000	First Creek at Mineral Springs Avenue, at Knoxville	15.7	USGS	1945-63
03496200	First Creek above Powers Avenue, at Knoxville	17.2	USGS	1964-70
03496500	First Creek at Fifth Avenue, at Knoxville	21.1	USGS	1932-34, 1945-59
03497000	Tennessee River at Knoxville (Gay Street Bridge)	8,934	USGS	1900-82
03497110	Fourth Creek at Knoxville	9.65	TVA	1942-43
03497500	Little River at Walland	175	USGS	1925-31
03498000	Little River near Walland	192	USGS	1931-52
03499000	Pistol Creek at Maryville	13.5	USGS	1932-33
03499100	Little River below Rockford Dam, at Rockford	346	TVA	1940-44
03499110	Little River near Rockford	352	TVA	1936-37
03499200	Ten Mile Creek near Ebenezer	13.2	TVA	1941-45
03499600	Muddy Creek near Fort Loudon Dam	10.7	TVA	1941-59
03518000	Little Tennessee River at Calderwood	1,862	USGS	1912-19, 1921-57
03518300	Little Tennessee River below Chilhowee Dam	1,987	USGS	1958-79
03518400	North Fork Citico Creek near Tellico Plains	7.04	TVA	1960-71
03518500	Tellico River at Tellico Plains	118	USGS	1925-82
03519500	Little Tennessee River at McGhee	2,443	USGS	1905-69
03519640	Baker Creek near Greenback	16.0	USGS	1966-75
03520000	Tennessee River at Loudon	12,220	USGS	1923-55
03520045	Sweetwater Creek below Sweetwater	26.4	TVA	1970-81
03520050	Sweetwater Creek near Sweetwater	28.2	TVA	1964-70
03528100	Big Sycamore Creek near Sneedville	5.49	TVA	1935-45
03528300	Big Barren Creek near New Tazewell	22.5	TVA	1935-45
03528400	White Creek near Sharps Chapel	2.68	TVA	1935-72
03532000	Powell River near Arthur	685	USGS	1920-82
03532100	Davis Creek near Speedwell	31.2	TVA	1936-37
03532220	Big Creek near La Follette	26.2	TVA	1936-38
03533000	Clinch River below Norris Dam	2,913	USGS	1904-74
03533100	Clear Creek near Norris	2.83	TVA	1934-38
03534000	Coal Creek at Lake City	24.5	USGS	1932-34
03534500	Buffalo Creek at Norris	9.92	USGS	1947-51
03536500	Whiteoak Creek at ORNL, near Oak Ridge	2.08	USGS	1950-55
03537000	Whiteoak Creek below ORNL, near Oak Ridge	3.62	USGS	1950-53, 1955-64
03537500	Melton Branch near Oak Ridge	1.48	USGS	1955-64
03538000	Whiteoak Creek at Whiteoak Dam, near Oak Ridge	6.01	USGS	1953-55, 1960-64
03538150	Clinch River near Oak Ridge	3,385	USGS	1937-64, 1968
03538275	Bear Creek near Oak Ridge	7.15	USGS	1960-64
03538500	Emory River near Wartburg	83.2	USGS	1934-57, 1966-68
03539000	Daddys Creek near Grassy Cove	51.2	USGS	1925-30
03539500	Daddys Creek near Crab Orchard	93.5	USGS	1931-58
03539600	Daddys Creek near Hebbertsburg	139	USGS	1957-68
03539750	Clear Creek near Lancing	153	USGS	1966-68
03539860	Crooked Fork near Wartburg	50.3	USGS	1966-68
03540000	Emory River at Deermont	704	USGS	1920-28
03540100	Crab Orchard Creek near Deermont	33.7	USGS	1966-68
03541300	Bitter Creek near Oakdale	12.6	USGS	1967-75
03541400	Kingston Creek at Kingston	0.74	TVA	1940-41
03541500	Whites Creek near Glen Alice	108	USGS	1934-55
03542000	Whites Creek at Glen Alice	120	USGS	1931-34
03542500	Piney River at Spring City	95.9	USGS	1927-31
03544000	Tennessee River at Breedenton	17,440	USGS	1934-40

DISCONTINUED STREAMFLOW STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record
03544500	Richland Creek near Dayton	50.2	USGS	1927-31, 1934-55, 1979-82
03556000	Turtletown Creek at Turtletown	26.9	USGS	1934-71
03556500	Hiwassee River near McFarland	1,136	USGS	1943-81
03557000	Hiwassee River near Reliance	1,233	USGS	1900-14, 1918-48
03559500	Ocoee River at Copperhill	352	USGS	1903-14, 1943-70
03560700	North Potato Creek tributary, Copper Basin area 6, near Ducktown	0.01	TVA	1940-51
03560800	Burra-burra Creek tributary, Copper Basin area 5, near Ducktown	0.02	TVA	1940-51
03561000	North Potato Creek near Ducktown	13.0	USGS	1934-70
03561200	North Potato Creek tributary No. 2, Copper Basin area 1-W, near Ducktown	0.01	TVA	1942-52
03561300	North Potato Creek tributary No. 3, Copper Basin area 1-E, near Ducktown	0.01	TVA	1942-52
03561500	Ocoee River at McHarg	447	USGS	1917-43
03561700	Walkertown Branch tributary, Copper Basin area 4, near Ducktown	0.01	TVA	1940-45
03561800	Ocoee River tributary, Copper Basin area 3, near Ducktown	0.01	TVA	1940-51
03562000	Brush Creek near Ducktown	14.4	USGS	1934-42
03565000	Hiwassee River above Charleston	2,001	USGS	1954-76
03565040	Chestuee Creek above Englewood (TVA)	14.8	TVA	1944-57
03565080	Little Chestuee Creek below Wilson Station	8.54	TVA	1947-57
03565120	Chestuee Creek at Zion Hill (TVA)	37.8	TVA	1944-62
03565160	Middle Creek below Highway 39 near Englewood	32.7	TVA	1944-62
03565200	Chestuee Creek near Athens (TVA)	77.9	TVA	1944-54
03565250	Chestuee Creek at Dentville	114	TVA	1944-62
03565700	Oostanula Creek near Calhoun	67.0	TVA	1940-44
03566450	Long Savannah Creek near Snow Hill	28.3	TVA	1939-44
03566600	North Chickamauga Creek at Upper Mill, near Hixson	99.5	TVA	1937-43
03566630	North Chickamauga Creek near Hixson	114	TVA	1937-43
03567600	South Chickamauga Creek near McCarty	458	TVA	1937-45
03570650	Sequatchie River near College Station	154	USGS	1966-68
03571500	Little Sequatchie River at Sequatchie	116	USGS	1932-34
03571850	Tennessee River at South Pittsburg	22,640	USGS	1930-87
03578500	Bradley Creek near Prairie Plains	41.3	USGS	1952-60
03579100	Elk River near Estill Springs	275	USGS	1921-81
03580000	Boiling Fork Creek south of Cowan	20.2	USGS	1932
03580300	Boiling Fork Creek above Winchester	55.9	USGS	1962-70
03580500	Boiling Fork Creek at Winchester	77.1	USGS	1932-34
03580750	Elk River below Tims Ford Dam	534	USGS	1966-76
03580990	Jack Daniel Spring at Lynchburg		USGS	1970-78
03581000	East Fork Mulberry Creek at Lynchburg	23.1	USGS	1932
03581100	East Fork Mulberry Creek near Lynchburg	29.5	TVA	1967-69
03581200	East Fork Mulberry Creek near Mulberry	49.4	TVA	1967-69
03581400	West Fork Mulberry Creek near Booneville at Mt. Herman	17.4	TVA	1967-69
03581500	West Fork Mulberry Creek at Mulberry	41.2	USGS	1954-62, 1966-68
03582000	Elk River above Fayetteville	827	USGS	1934-82
03582140	Union Branch below Belleville	2.37	USGS	1977
03582500	Elk River near Fayetteville	897	USGS	1926-34
03583000	Bradshaw Creek at Frankewing	36.5	USGS	1955-61, 1966-68
03583300	Richland Creek near Cornersville	47.5	USGS	1961-68
03583330	Factory Creek (head of Big Creek) near Campbellsville	38.2	USGS	1966-68
03583360	Yokley Creek near Campbellsville	20.2	USGS	1966-68
03583500	Weakley Creek near Bodenham	24.4	USGS	1955-61, 1966-68

DISCONTINUED STREAMFLOW STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record
03584000	Richland Creek near Pulaski	366	USGS	1934-75
03593300	Snake Creek near Adamsville	49.4	TVA	1940-59
03593700	Holland Creek near Lowryville	14.9	TVA	1965-78
03594000	Horse Creek near Savannah	114	USGS	1929-34
03594040	Turkey Creek near Savannah	53.7	TVA	1940-59
03594058	White Oak Creek near Milledgeville	46.1	TVA	1940-59
03594110	White Oak Creek at Milledgeville	49.2	TVA	1961-65
03594120	Middleton Creek near Milledgeville	45.5	TVA	1940-59
03594160	Indian Creek near Cerro Gordo	201	TVA	1940-59
03594415	Beech River near Lexington	15.9	TVA	1953-63
03594420	Wolf Creek at Graper Springs	11.7	TVA	1953-55
03594425	Pine Tree Branch near Lexington	0.14	TVA	1941-78
03594430	Harmon Creek near Lexington	6.87	TVA	1953-73
03594435	Piney Creek at Highway 104 near Lexington	19.2	TVA	1953-55, 1957-73
03594437	Cane Creek near Shady Hill	20.7	TVA	1966-73
03594441	Haley Creek near Chesterfield	8.30	TVA	1953-55
03594445	Beech River near Chesterfield (old channel before channelization)	115	TVA	1940-54, 1960-65
03594450	Browns Creek near Chesterfield	20.2	TVA	1953-63
03594455	Cane Creek near Shady Hill	16.8	TVA	1953-64
03594460	Cane Creek near Chesterfield (old channel before channelization)	22.2	TVA	1940-54
03594465	Beech River near Darden (old channel before channelization)	165	TVA	1954-60
03594470	Flat Creek near Middleburg	13.8	TVA	1953-55
03594475	Big Creek near Darden	10.6	TVA	1953-55, 1966-73
03594480	Turkey Creek near Decaturville	8.40	TVA	1953-63
03594482	Turkey Creek at Middleburg Road, near Decaturville	11.5	TVA	1964-73
03594485	Rushing Creek near Decaturville	17.0	TVA	1953-55
03594500	Tennessee River at Perryville	34,550	USGS	1931-32
03595000	Duck River near Manchester	55.2	USGS	1932-34
03595500	Little Duck River at Manchester	40.4	USGS	1932-34
03596500	Duck River at Normandy	208	USGS	1920-31, 1972-75
03597000	Garrison Fork at Fairfield	66.3	USGS	1953-58, 1966-68
03597500	Wartrace Creek at Bell Buckle	16.3	USGS	1953-61, 1966-75
03597600	Wartrace Creek at Wartrace	36.4	USGS	1966-68
03599000	Big Rock Creek at Lewisburg	24.9	USGS	1953-61, 1966-68
03599430	Fountain Creek near Culleoka	26.9	USGS	1966-68
03599450	Fountain Creek near Fountain Heights	74.0	USGS	1966-68
03600000	Rutherford Creek near Carters Creek	68.8	USGS	1953-58
03600100	Rutherford Creek (No. 4) near Columbia	112	TVA	1948-53
03600200	Rutherford Creek (No. 3) near Columbia	116	TVA	1948-49
03601000	Big Bigby Creek near Mount Pleasant	25.8	USGS	1953-57
03601500	Big Bigby Creek at Cross Bridges	112	USGS	1938-39
03602000	Duck River at Centerville	2,048	USGS	1919-55
03603500	Hurricane Creek at Hurricane Mills	75.1	USGS	1932-33
03604100	Coon Creek near Hohenwald	10.1	USGS	1967-74
03604600	Blue Creek at State Highway 13 near Waverly	24.8	TVA	1964-71
03604800	Birdsong Creek near Holladay	44.9	TVA	1940-68
03605500	Trace Creek at Waverly	20.1	USGS	1932-33
03606400	Cotton Creek near Camden	0.43	TVA	1941-45
03607000	Big Sandy River at Big Sandy	379	USGS	1935-44
03607500	Tennessee River near Buchanan	39,730	USGS	1930-43
07025000	Rutherford Fork Obion River near Bradford	201	USGS	1929-57
07025500	North Fork Obion River near Union City	480	USGS	1929-71

DISCONTINUED STREAMFLOW STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record
07026500	Reelfoot Creek near Samburg	110	USGS	1951-73
07026795	Indian Creek near Samburg	8.01	USGS	1982-86
07027500	South Fork Forked Deer River at Jackson	495	USGS	1929-73
07028000	South Fork Forked Deer River at Chestnut Bluff	1,003	USGS	1929-57
07028500	North Fork Forked Deer River at Trenton	73.5	USGS	1950-71
07029000	Middle Fork Forked Deer River near Alamo	369	USGS	1929-73
07030000	Hatchie River near Stanton	1,975	USGS	1929-58
07030245	Kelly Branch near Clopton	7.79	USGS	1975-76
07030295	Loosahatchie River trib at New Allen Rd at Memphis	1.26	USGS	1977-83
07030500	Wolf River at Rossville	503	USGS	1929-72
07031500	Marys Creek at Pisgah Road, near Fisherville	13.6	USGS	1955-57
07031680	Fletcher Creek near Cordova	1.45	USGS	1974-83
07031683	Fletcher Creek at Whitten Rd at Memphis	21.4	USGS	1978-82
07031685	Unnamed tributary at Charles Bryan Road, near Cordova	3.18	USGS	1975-77
07031777	Lick Creek at Dickinson Street, at Memphis	2.96	USGS	1975-83
07032222	Johns Creek trib at Holmes Road, near Memphis	5.83	USGS	1975-85
07032224	Johns Creek at Raines Road, at Memphis	19.4	USGS	1975-82, 1985
07032241	Black Bayou at Southern Avenue, at Memphis	0.59	USGS	1975-83
07032248	Cane Creek at East Person Avenue, at Memphis	4.98	USGS	1975-85
07032260	Cypress Creek at Neely Road, at Memphis	3.18	USGS	1975-85

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following surface-water-quality stations in Tennessee have been discontinued or converted to partial-record stations. Water-quality data (daily or periodic samples with collection frequency not less than quarterly) were collected and published for the period of record shown for each station. Discontinued project stations with less than three years of record have not been included. Information regarding these stations may be obtained from the District Chief at the address given on the back of the title page of this report.

[Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority. Type of record: (B) biological, (C) chemical, (S) sediment, (T) temperature]

Station number	Station name	Drainage area (mi ²)	Agency	Period of record	Type of record
03403718	Crabapple Branch near La Follette	1.07	USGS	1981-84	C,T
03407804	Indian Fork above Braytown	4.32	USGS	1975-81	C
03407850	New River at Stainville	66.0	USGS	1975-77, 1979-81	C,S
03407874	Green Branch near Hembree	1.38	USGS	1975-81	C,S
034078745	Smoky Creek above Hembree (361240084245800)	8.07	USGS	1982-83	S
03407875	Bills Branch near Hembree	0.67	USGS	1975-83	C,S
				1980-83	C,S,T
034078755	Shack Creek at Hembree (361341084253900)	5.08	USGS	1982-84	C,S,T
03407876	Smoky Creek at Hembree	17.2	USGS	1978-84	S
				1980-84	C,T
03407877	Bowling Branch above Smoky Junction	2.19	USGS	1975-83	C,S
03407879	Smoky Creek at Smoky Junction	32.8	USGS	1975-77, 1979-81	C,S
03407881	Anderson Branch near Montgomery	0.69	USGS	1975-81	C
03407882	Lowe Branch near Montgomery	0.92	USGS	1975-81	C
03407908	New River at Cordell	198	USGS	1976-77, 1979-82	C,S
03408500	New River at New River	382	USGS	1977-86	C,T
			USGS	1965-67, 1975-77, 1979-81	C,S
03409500	Clear Fork near Robbins	272	USGS	1982-86	T
			USGS	1982, 1984-86	C
			USGS	1964-65, 1976-77, 1979-82, 1984	C,S
03410210	South Fork Cumberland River at Leatherwood Ford	806	USGS	1986	C,S,T
			USGS	1979-80, 1984-85	C,S
03418000	Roaring River near Hilham	78.7	USGS	1969-71	T
03418070	Roaring River above Gainesboro	210	USGS	1980-83	C,S
03421000	Collins River near McMinnville	640	USGS	1964-67, 1979-82	C,S
03425000	Cumberland River at Carthage	10,690	USGS	1975-81	C,T
03428000	West Fork Stones River near Murfreesboro	128	USGS	1964-68	C
03428070	West Fork Stones River at Manson Pike, at Murfreesboro	165	USGS	1973-82	C,T
03431700	Richland Creek at Charlotte Avenue, at Nashville	24.3	USGS	1901, 1979-83	C,S
03434500	Harpeth River near Kingston Springs	681	USGS	1979-83	C,S
03435637	Sulphur Fork Red River near Greenbrier	34.9	USGS	1976-78	T
03435700	Sulphur Fork Red River above Beaverdam Creek, near Springfield	49.1	USGS	1975-77	T
03435770	Sulphur Fork Red River above Springfield	65.6	USGS	1976-83	C,S
03436000	Sulphur Fork Red River near Adams	186	USGS	1964, 1979-83	C,S
03436100	Red River at Port Royal	935	USGS	1979-83	C,S
03436700	Yellow Creek near Shiloh	124	USGS	1964-65, 1979-81	C,S
03454757	French Broad River below Hot Springs, NC	1,712	USGS	1970-73	C
03455000	French Broad River near Newport	1,858	TVA	1946-47, 1960-61, 1969-70, 1974-75, 1979-80	C
03465500	Nolichucky River at Embreeville	805	USGS	1979-82	C,S
03466500	Nolichucky River below Nolichucky Dam	1,184	TVA	1974-79	C
			TVA	1962	T
03468510	French Broad River at Douglas Dam (tailwater)	4,541	TVA	1975-80	C
03470000	Little Pigeon River at Sevierville	353	TVA	1967-68, 1970	C
			TVA	1969-74	T
			USGS	1979-82	C,S

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record	Type of record
03470500	French Broad River near Knoxville	5,101	USGS	1975-82	C,T
			USGS	1975-86	B,C,S,T
03476010	South Fork Holston River at South Holston Dam	703	TVA	1975-80	C
03480000	Watauga River at Stump Knob	171	TVA	1962	T
03481450	Elk River at Elk Mills	74.0	TVA	1975-76	C
03482100	Roan Creek near Doevoile	110	TVA	1962, 1971-74	T
			TVA	1975-76	C
03483950	Watauga River below Watauga Dam	468	TVA	1973, 1975-80	C
03484800	Doe River at Hampton	100	TVA	1968-73	T
03485500	Doe River at Elizabethton	137	TVA	1967-68, 1971	C
			TVA	1954-63	T
			USGS	1979-82	C,S
03486810	South Fork Holston River at Boone Dam (tailwater)	1,840	TVA	1975-78	C
03487010	South Fork Holston River at Ft. Patrick Henry Dam	1,903	TVA	1975-80	C
03487550	Reedy Creek at Orebank	36.3	TVA	1964-66	T
			TVA	1964-67	C
			USGS	1979-82	C,S
03490350	Holston River near Church Hill	2,819	TVA	1974-78	C
03490500	Holston River at Surgoinsville	2,874	USGS	1975-82	T
			TVA	1974-80	C
03491000	Big Creek near Rogersville	47.3	USGS	1972-75, 1977-79	T
03491300	Beech Creek at Kepler	47.0	TVA	1966-68	T
03491500	Holston River near Rogersville	3,035	TVA	1966-75	T
03493510	Holston River at Cherokee Dam (tailwater)	3,428	TVA	1975-80	C
03496200	First Creek above Powers Avenue, at Knoxville	17.2	USGS	1969-71	T
03497100	Tennessee River below Knoxville	8,963	TVA	1970-80	T
03497300	Little River above Townsend	106	USGS	1964-82	T
			USGS	1982	C
03498500	Little River near Maryville	269	TVA	1967-68	C
			USGS	1979-82	C,S
03499510	Tennessee River at Fort Loudon Dam (tailwater)	9,550	TVA	1975-80	C
03518210	Little Tennessee River at Calderwood Dam	1,977	TVA	1977-80	C
03518300	Little Tennessee River below Chilhowee Dam	1,987	TVA	1964-78	T
03518500	Tellico River at Tellico Plains	118	TVA	1964-78	T
			TVA	1969-70, 1973-76	C
			USGS	1979-82	C,S
03519500	Little Tennessee River at McGhee	2,443	TVA	1963	T
03519740	Little Tennessee River near Centersville		TVA	1976-79	T
03528000	Clinch River above Tazewell	1,474	TVA	1962-66, 1971-75	T
			TVA	1971-80	C
03532000	Powell River near Arthur	685	TVA	1965, 1969-72,	
				1974-82	C,S
			TVA	1963-66, 1971-75	T
03532190	Ollis Creek at Ivydell	13.3	TVA	1974-78	C
03533000	Clinch River below Norris Dam	2,913	TVA	1968-70, 1972-80	C
03533500	Clinch River at Coal Creek	2,921	TVA	1976-79	T
03534100	Clinch River near Clinton	2,980	TVA	1971-74, 1977	C
03534900	Clinch River at Edgemoor	3,089	TVA	1969-78	C
03535000	Bullrun Creek near Halls Crossroads	68.5	USGS	1967-74	T
03535915	Clinch River near Eaton Crossroads	3,346	TVA	1963-79	T
03538225	Poplar Creek near Oak Ridge	82.5	USGS	1961-65, 1979-81	C,S
			USGS	1962-65	T
03538250	East Fork Poplar Creek near Oak Ridge	19.5	USGS	1962-68	T
03538275	Bear Creek near Oak Ridge	7.15	USGS	1962-63	T
03538500	Emory River near Wartburg	83.2	TVA	1965-68, 1975-76	C
03539800	Obed River near Lancing	518	TVA	1965-66	T
			TVA	1965-68	C
03539860	Crooked Fork near Wartburg	50.3	TVA	1965-68	C
			USGS	1979-81	C,S

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record	Type of record
03540100	Crab Orchard Creek near Deermont	33.7	TVA	1966-68	C
			TVA	1967-68	T
			USGS	1979-81	C,S
03540500	Emory River at Oakdale	764	TVA	1965-67, 1974-81	C,S
03543005	Tennessee River at Watts Bar Dam (tailwater)	17,310	USGS	1975-86	B,C,S,T
			USGS	1976-81	T,C
03544500	Richland Creek near Dayton	50.2	TVA	1966-67	C
			USGS	1979-82	C,S
03557050	Hiwassee River near Wetmore	1,233	TVA	1973-74, 1976	C
03557400	Hiwassee River at Patty	1,358	TVA	1976-78	T
03557405	Hiwassee River near Benton	1,362	TVA	1978-80	C
03564500	Ocoee River at Parksville	595	TVA	1971-72, 1976-80	C
03565500	Oostanaula Creek near Sanford	57.0	USGS	1979-82	C,S
03566404	Tennessee River at Sequoyah Nuclear Plant	20,630	TVA	1975-78	C
03566405	Tennessee River near Harrison Bay State Park	20,650	TVA	1969-73	C
03566510	Tennessee River at Chickamauga Dam (tailwater)	20,790	TVA	1975-80	C
03570525	Tennessee River at Nickajack Dam (tailwater gage)	21,849	TVA	1975-78	C
03570835	Sequatchie River near Dunlap	292	TVA	1975-78	C
03571000	Sequatchie River near Whitwell	402	TVA	1962-71	T
			TVA	1965, 1970, 1974-75	C
			USGS	1979-82	C,S
03571200	Sequatchie River at Whitwell Waterworks near Whitwell	410	TVA	1975-79	C
03571850	Tennessee River at South Pittsburg	22,640	USGS	1975-82	T
			USGS	1975-79, 1981	C
			USGS	1974-86	B,C,S,T
03579100	Elk River near Estill Springs	275	TVA	1974-78	C
			TVA	1971-77	T
03580110	Boiling Fork Creek near Decherd	37.7	TVA	1975-77	T
03580750	Elk River below Tims Ford Dam	534	TVA	1971-79	T
			TVA	1966-67, 1973, 1975-80	C
03582000	Elk River above Fayetteville	827	TVA	1974, 1977-80	C
			USGS	1961-64	T
03582400	Elk River at Fayetteville	895	TVA	1976-78	T
03582600	Cane Creek near Fayetteville	106	TVA	1969-73	T
03584000	Richland Creek near Pulaski	366	TVA	1965-73	T
03584500	Elk River near Prospect	1,784	TVA	1961-64	T
03588500	Shoal Creek at Iron City	348	TVA	1974-80	C,S
			USGS	1980-83	C,S
03593005	Tennessee River at Pickwick Landing Dam	32,820	USGS	1976-82	C,T
03594439	Beech River near Chesterfield	121	TVA	1969-71, 1976	C
03596000	Duck River below Manchester	107	TVA	1967-68, 1970-71	C
			TVA	1976-80	T
			USGS	1975, 1979-83	C,S
03596500	Duck River at Normandy	208	TVA	1969-75	T
03597850	Duck River at Shelbyville Waterworks	425	TVA	1975-80	C
03598000	Duck River near Shelbyville	481	TVA	1961-64, 1976-78	T
03599460	Duck River near Columbia	1,176	TVA	1974-82	T
03599482	Duck River at Columbia Waterworks	1,195	TVA	1975-80	C
03602500	Piney River at Vernon	193	TVA	1964-67	T
03603000	Duck River above Hurricane Mills	2,557	TVA	1966-67, 1974-80	C
			TVA	1961-64	T
03604000	Buffalo River near Flat Woods	447	TVA	1964-78	T
03604500	Buffalo River near Lobelville	707	TVA	1961-64	T
			TVA	1967-68, 1973-76	C
03605555	Trace Creek above Denver	31.9	USGS	1979-83	C
03606500	Big Sandy River at Bruceton	205	TVA	1971-78	T
			TVA	1968, 1970-72	C
			USGS	1976, 1979-83	C,S

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Agency	Period of record	Type of record
s07026360	North Reelfoot Creek at Clayton	54.7	USGS	1982-84	C,S
07026795	Indian Creek near Samburg	8.01	USGS	1982-84	C,S
07029410	Mosses Creek near Pocahontas	47.6	USGS	1961, 1963, 1977-78	C,S
07029425	Hatchie River near Lacy	1033	USGS	1977-78	C,S
07030010	Big Muddy Creek at Stanton	84.4	USGS	1977-78	C,S
07030240	Loosahatchie River near Arlington	262	USGS	1979-82	C,S
07030500	Wolf River at Rossville	503	USGS	1961, 1963-68	C
07032200	Nonconnah Creek near Germantown	68.2	USGS	1979-82	C,S

WATER RESOURCES DATA - TENNESSEE, 1987

INTRODUCTION

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

This report consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains discharge records for 100 gaging stations; stage only at 6 gaging stations; stage and contents at 27 lakes and reservoirs; water quality for 37 stations, 33 of these at gaging stations, and 149 wells; and water levels at 32 observation wells. Also included are data for 89 crest-stage partial-record stations, and 82 low-flow partial-record stations. Locations of these sites are shown on figures 5 and 6. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and miscellaneous analyses or as seepage investigations.

This series of annual reports for Tennessee began with the 1961 water year with a report that contained only data relating to the quantities of surface water. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several years concurrent with it, water-resources data for Tennessee were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report TN-87-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (615) 736-5424.

COOPERATION

The U.S. Geological Survey and agencies of the State of Tennessee have had cooperative agreements for the systematic collection of streamflow records since 1918, for ground-water levels since 1946, and for water-quality records since 1960. Organizations that assisted in collecting data contained in this report through cooperative agreement with the Survey are:

Tennessee Department of Conservation, Elbert T. Gill, Jr., Commissioner.
Tennessee Department of Health and Environment, James E. Word, Commissioner, through
Office of Water Management, Elmo Lunn, Director.
Tennessee Department of Transportation, Robert E. Farris, Commissioner, through Lewis Evans,
State Transportation Engineer and Ray Terrell, Executive Director Bureau of Planning and
Development and Clellon L. Loveall, Engineer Director Structures Division.
Tennessee Wildlife Resources Agency, Gary Myers, Executive Director.
City of Alcoa, Mickey J. Bentley, City Manager
City of Franklin, Lillian Stewart, Mayor.
City of Lawrenceburg, Ivan Johnston, Mayor.
City of Memphis, Richard C. Hackett, Mayor.
City of Murfreesboro, Joe B. Jackson, Mayor.
Shelby County, William N. Morris, Jr., Mayor.
Metropolitan Government of Nashville and Davidson County, William Boner, Mayor,
through Department of Public Works, Peter Heidenreich, Acting Director.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, Nashville District, in collecting records for 23 gaging stations and 4 water-quality stations and by the Tennessee Valley Authority for 19 gaging stations. All data are published in this report.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Tennessee has an abundance of rivers, lakes, and streams. The largest of these, excluding the Mississippi River which forms the State's western boundary, are the highly regulated Tennessee and Cumberland Rivers. Natural runoff conditions are best represented in these basins, as well as in the rest of Tennessee, by data from stations on unregulated rivers and streams, such as Harpeth River near Kingston Springs (03434500) in the Cumberland Basin, and Emory River at Oakdale (03540500) and Buffalo River near Lobelville (03604500) in the Tennessee Basin. Comparisons of monthly average and yearly average discharge for the 1987 water year with the median discharge during the period 1951-80 are shown in figure 1 for these three gaging stations.

Rainfall in the state during the 1987 water year was below normal for the third consecutive year. According to the National Weather Service, rainfall during the 1987 calendar year was 73 percent of normal at Knoxville, 89 percent at Chattanooga, 63 percent at Nashville, and 103 percent at Memphis. At Nashville, 1987 was the driest year since records began in 1871. Nashville reported 30.23 inches of rainfall for 1987 compared to the previous record of 30.24 inches reported in 1941.

No major floods occurred in Tennessee during the 1987 water year. At most gaging stations, the annual peak for the 1987 water year was about the same as the base peak discharge, a threshold discharge selected to limit the number of peaks each year from four to six. Most of the high water that occurred had a recurrence interval of less than 2 years.

For the second year in a row, the unusually dry spring has caused runoff to be below the long-term average across the State. In the Cumberland River basin, runoff ranged from a low of 59 percent of the long-term average for Sulphur Fork Red River above Springfield (03435770) to a high of 103 percent of the long-term average for New River at New River (03408500). At stations in the Tennessee River basin, runoff ranged from 57 percent of the long-term average at Big Sandy River at Bruceton (03606500) to 108 percent at Clinch River above Tazewell (03528000). At stations in the lower Mississippi River basin (western Tennessee), runoff ranged from 51 percent of the long-term average at South Fork Obion River near Greenfield (07024500) to 89 percent at Hatchie River at Bolivar (07029500).

Because rainfall during 1987 was again deficient across most of the State, the 1986 drought showed little recovery in 1987. In the Cumberland River basin, most streams had average recurrence intervals of annual minimum flow of about 5 years. In the Tennessee River basin, recurrence intervals of annual minimum flows varied across the basin. In the eastern part of the basin, the minimum daily flow was less than the 20-year recurrence interval flow at several stations. In the central and western parts of the basin, the minimum daily flow was about a 5-year recurrence interval flow. In the western part of the State, minimum flows were near the long-term average, or about a 1-year recurrence interval. Most streams had recurrence intervals of minimum daily flow of less than 2 years.

Comparisons of the 1987 water year minimum daily flows to selected long-term recurrence minimum flows are shown in table 1.

Table 1.--Comparison of 1987 minimum daily flows with 1-day 20-year and 3-day 20-year recurrence interval minimum daily flows

Station name	1987 minimum daily flows		1-Day 20-year recurrence interval minimum flow (ft ³ /s)	3-Day 20-year recurrence interval minimum flow (ft ³ /s)
	Discharge (ft ³ /s)	Recurrence interval (years)		
<u>CUMBERLAND RIVER BASIN</u>				
Wolf River near Byrdstown	6.4	3	3.2	3.6
Collins River near McMinnville	65	5	47	50
East Fork Stones River at Woodbury	4.0	15	3.6	3.8
Sycamore Creek near Ashland City	8.0	> 20	9.0	9.3
Sulphur Fork Red River near Adams	14	< 2	3.6	3.7
<u>TENNESSEE RIVER BASIN</u>				
Cosby Creek above Cosby	1.9	10	1.6	1.6
Nolichucky River at Embreeville	167	15	160	173
Reedy Creek at Orebank	4.2	20	4.2	4.3
Big Creek near Rogersville	3.2	5	2.2	2.3
Beech Creek at Kepler	.93	> 20	1.2	1.3
Little River above Townsend	24	> 20	29	30
Poplar Creek near Oak Ridge	3.8	> 20	4.7	4.8
Sewee Creek near Decatur	15	> 20	12.8	12.9
Wolfever Creek near Ooltewah	1.3	> 20	1.7	1.9
South Chickamauga Creek near Chickamauga	72	> 20	76	79
Sequatchie River near Whitwell	45	3	25	27
Shoal Creek at Iron City	78	5	61	66
Buffalo River near Lobelville	200	3	156	157
<u>LOWER MISSISSIPPI RIVER BASIN</u>				
Beaver Creek at Huntingdon	23	5	20	20
Obion River at Obion	419	< 2	230	241
Loosahatchie River near Arlington	79	< 2	64	66

Ground Water

The fluctuations of ground-water levels in the State are characterized by representative hydrographs shown in figure 2. The hydrographs for wells in Putnam and Hamilton Counties are indicative of conditions that existed in the eastern and middle part of the State, while the hydrograph for Lauderdale County reflected the conditions that existed in the western part of the State during the 1987 water year.

In the eastern part of the State, water levels in wells Hm:O-15 and Pm:C-1 recovered from record lows in 1986. Well Hm:O-15 set a record high for December and remained above the monthly median through June. In central and western Tennessee, water levels generally were above record lows for the period October through May. However, at well Ld:F-4 in western Tennessee, water levels were below record lows for the entire year.

Hydrographs of the lowest daily water level for all the continuous-record wells are shown with the station description and water-level data in the body of this report. Water levels in wells located in central and eastern Tennessee generally respond quicker and have larger fluctuations than wells in the sand and gravel aquifers in western Tennessee. Most wells across the State had declining water levels from late spring through fall because of below-normal precipitation.

Ground-water levels in observation wells in Shelby County are strongly affected by the pumping of large volumes of water in Memphis and surrounding areas. Hence, the fluctuations throughout the year reflect changes in the rates of pumping and location of the principal pumping centers. As pumping rates increase and new pumping centers are developed to keep pace with growing water demands, water levels in both confined and unconfined aquifers decline. The Memphis index well (Sh:Q-1) has been declining steadily since 1972 (fig. 3). The occurrence of new low levels is not indicative of any long-term reduction in the available water supply. It is merely a reflection of the response of the aquifer system to the additional stress of increased pumpage.

Water Quality

Water-quality data were collected at 37 surface-water sites during 1987. Seven of these sites are part of the U.S. Geological Survey's National Stream Quality Accounting Network (NASQAN), where chemical, physical, and bacteriological determinations are made on a quarterly or bimonthly frequency. These seven stations are located on the Obion, Hatchie, Tennessee, Cumberland, and Clinch Rivers. Data are also collected at two additional stations that are a part of the national Hydrologic Benchmark Network (HBM). Basins gaged as a part of this network are to be undisturbed by mankind. The HBM sites are located on the Buffalo and Little Rivers. Other surface-water-quality activities in the District included:

- Operation of five continuous monitors to measure temperature, dissolved oxygen, pH, and specific conductance in the Cumberland River Basin in support of the U.S. Army Corps of Engineers, Nashville District operations.
- Determination of water quality at Carter's Creek in Maury County in support of a study monitoring the construction of the Saturn automotive plant facility.

The data from these networks did not identify any significant problems. Sanitary conditions (bacteria concentrations) at the stations were generally within the maximum allowable standards for human contact and recreation. There were no indications of toxic organic or inorganic compounds.

Daily sediment stations were operated in the northwestern part of the State for the full year at North Reelfoot Creek and South Reelfoot Creek, and for part of the year at Running Slough near Ledford, Ky. The sediment loads for 1987 at North and South Reelfoot Creeks were 42,000 and 54,600 tons respectively, which are the lowest annual loads for the past 3 years of record. The continuous decline of measured sediment yields from these basins over the past 3 years is believed to be due to the below-average rainfall in the basins. These loads for 1987 are relatively low for the Reelfoot Creek basin but would still be considered average to slightly high for western Tennessee in general.

Ground-water quality sampling was limited to support of special projects in selected areas as follows:

- Trace organic constituents in the Memphis-Shelby County area in support of Memphis Light, Gas and Water Division. No organic constituents were found at most sites; traces of organic constituents were detected in water from the shallow aquifer.
- Inorganic and organic compounds that could be migrating from the vicinity of the Shelby County landfill to the Memphis Sand aquifer. There was no evidence of migration beyond the shallow aquifer.
- General quality of ground water used for water supply in the communities of Hixson and Eastside.
- General ground-water quality at the Kennon property hazardous-waste site in the vicinity of Brentwood to define extent of contamination by organic compounds in support of the Tennessee Division of Superfund. Organic compounds were detected in water from several of the wells sampled.
- Ground-water quality in the vicinity of burial grounds of radioactive wastes in the Oak Ridge Reservation in support of the U.S. Department of Energy. Mercury contamination in shallow ground water in the vicinity of Poplar Creek within the Oak Ridge Reservation was investigated. Major and minor inorganic constituents were determined from water in wells in Bear Creek and Melton Valleys to assist in defining constituent flowpaths.

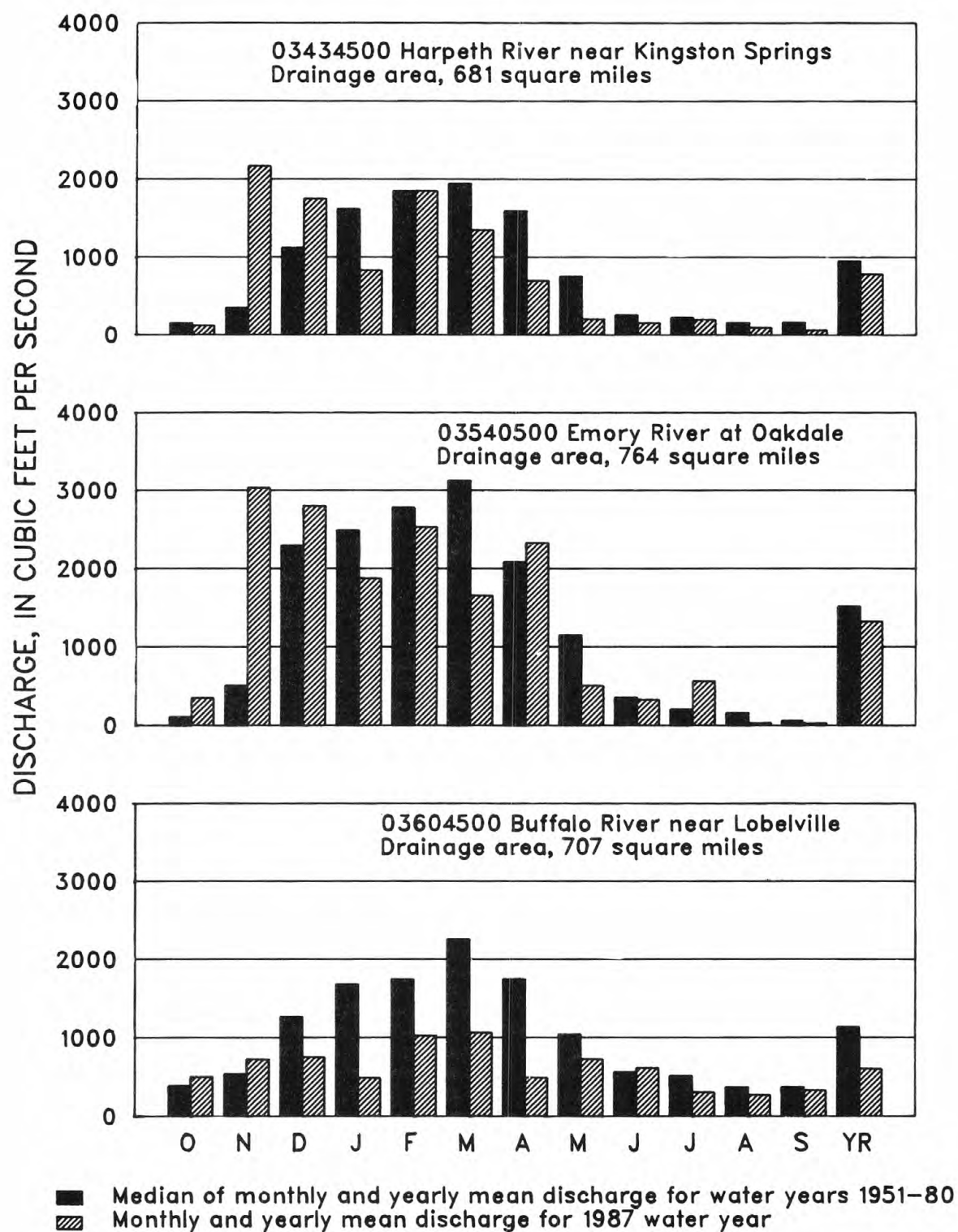


Figure 1.—Discharge for 1987 water year compared with median discharge for period 1951-80 at three representative gaging stations.

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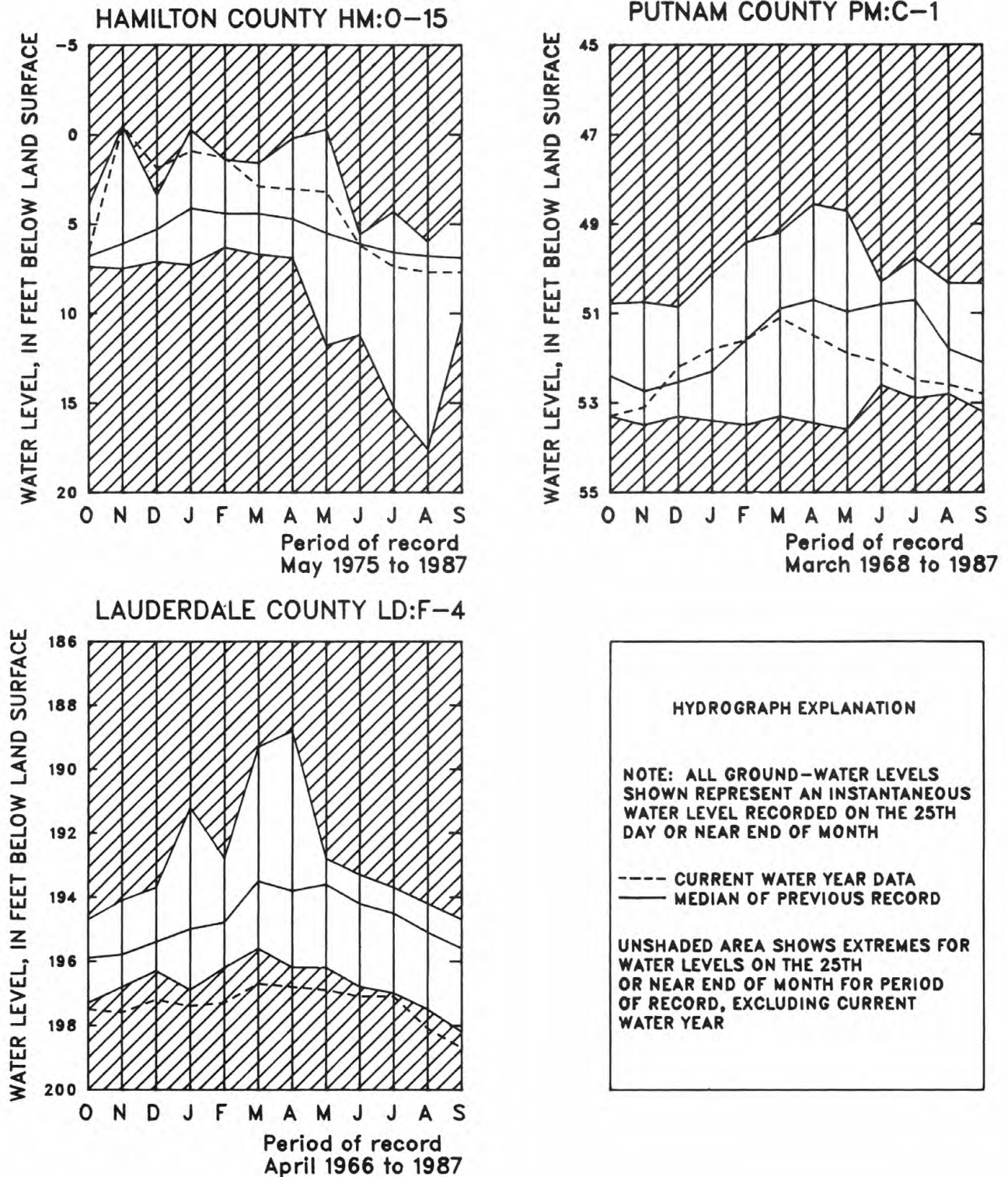


Figure 2.—Ground-water levels for the 1987 water year compared to the maximum, minimum, and median water levels for the period of record.

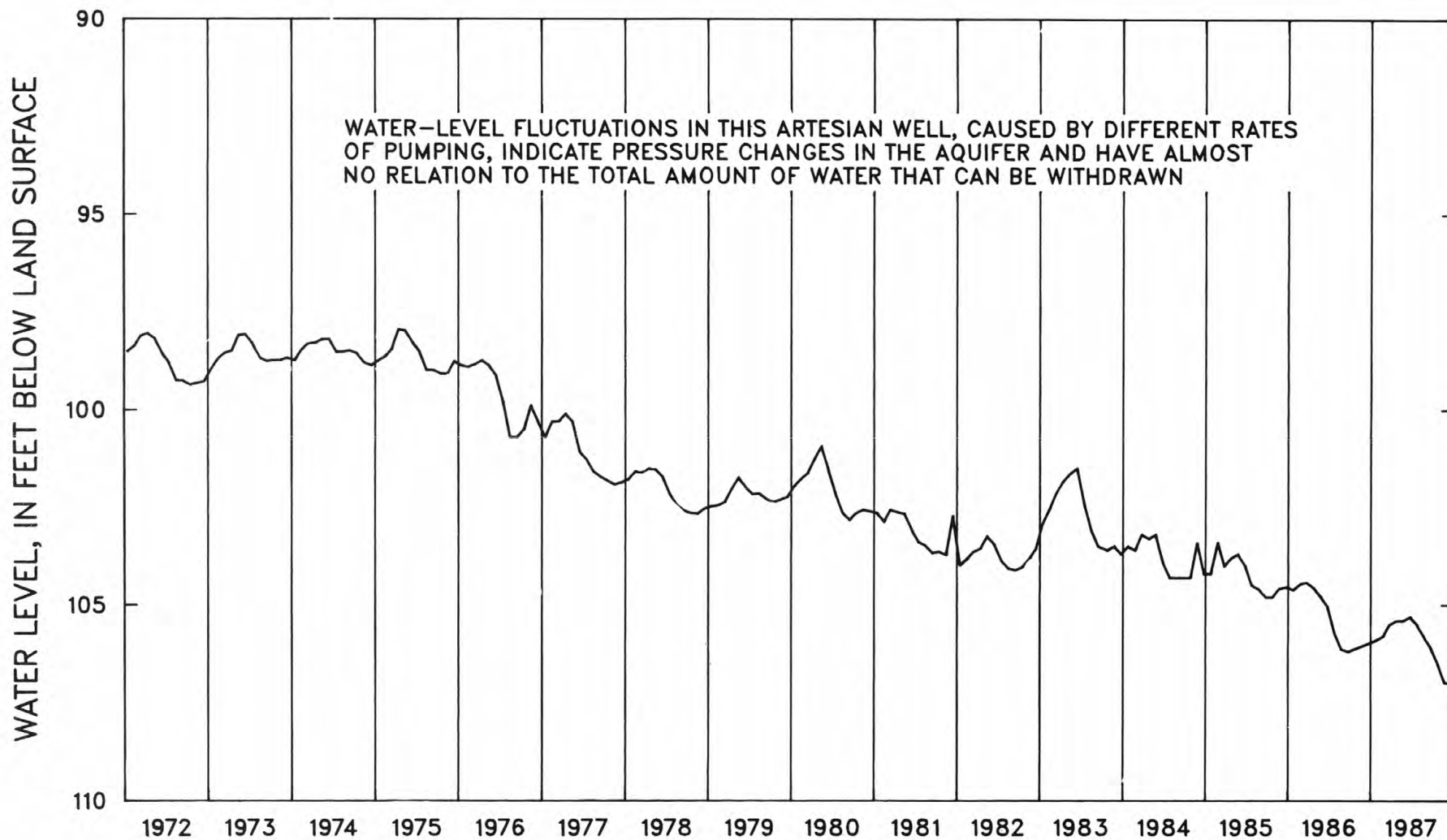


Figure 3.—Hydrograph of well SH:Q-1 in Shelby County showing long-term decline in the water level.

SPECIAL NETWORKS AND PROGRAMS

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

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF RECORDS

The surface-water and ground-water records published in this report are for the 1986 water year that began October 1, 1985, and ended September 30, 1986. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 6 and 7. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

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

Each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete number for each station such as 03540500...., which appears just to the left of the station name, includes the 2-digit part number "03" plus the multi-digit downstream order number "540500...." This downstream numbering system is used in most cases; however, in some cases latitude and longitude numbers are assigned to hydrologic stations and partial-record stations as a means of identification (See Numbering System for Wells).

Numbering system for wells

Downstream order station numbers are not assigned to wells. The well numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well 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, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 4 on the next page.

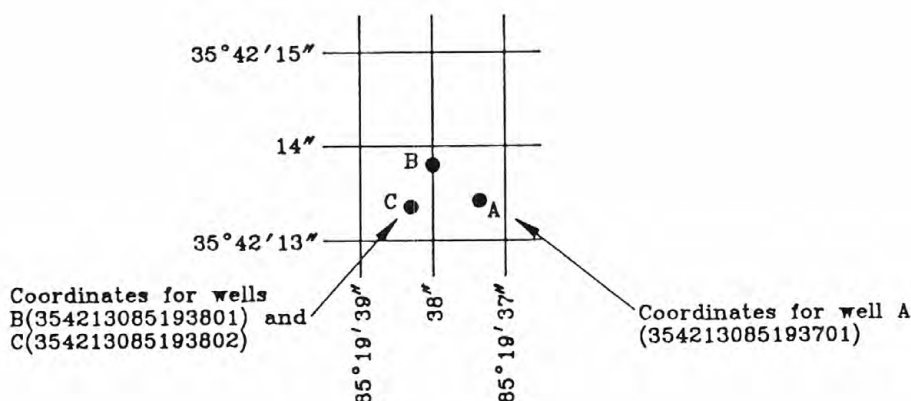


Figure 4.--System for numbering wells (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relation between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A6.

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

Daily mean discharges are computed from gage heights and rating tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes of the personnel making the measurements are used in applying the gage heights to the rating tables. The shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and comparable records of discharge for other stations in the same or nearby basins.

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

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

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, description information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileage is that determined and used by the Geological Survey, Tennessee Valley Authority, or other agencies.

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 indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see "Definition of terms"), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

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

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

AVERAGE DISCHARGE.--The discharge value is computed as the arithmetic mean of the water-year mean discharges. It is not computed for stations having fewer than 5 complete water years of record or for stations where diversions, storage, or other water-use practices cause the value to be meaningless.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified.

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

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

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

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

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

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 is a table of annual maximum stage and discharge at crest-stage stations, the the second is a table of 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 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.

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures to more than 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 discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square 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 Available

Records of discharge, not published by the Geological Survey, are collected in Tennessee at several sites by the U.S. Army Corps of Engineers and Tennessee Valley Authority. The National Water Data Exchange (NAWDEx), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

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

Records of Surface-Water Quality

Records of surface-water quality ordinarily are collected at or near stream-gaging stations. Records of surface-water quality in this report may 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 continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once 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 continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

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 needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District Office.

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 through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (NASQAN) (see definitions) are obtained from at least several verticals.

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, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey District Office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at 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, maximum, minimum, and mean temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office and are also published in this report.

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 sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been 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 loads 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 were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, 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 the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colo. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

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, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. 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 recorder, 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 Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Users of U.S. Geological Survey water-quality data should be aware of this update procedure because corrections are not documented in the State data-report series.

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 report:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
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 organisms count less than 0.5 percent (organisms may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Data Collection and Computation

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

Tables of water-level data are presented by counties arranged in alphabetical order. 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 provided for local needs.

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

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

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

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

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

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

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929).

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

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

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

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent

water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood in the well casing where it would have been exposed to the atmosphere and to the material comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled **QUALITY OF GROUND WATER** immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The **REMARK** codes listed for surface-water-quality records are also applicable to ground-water-quality records.

EXPLANATION OF PRECIPITATION-QUALITY RECORDS

Collection of the Data

The precipitation-quality records in this report are for one site operated by the U.S. Geological Survey in the National Trends Network. Field measurements of pH and specific conductance of weekly composite precipitation samples and daily precipitation quantity are made. Other chemical analyses for all National Trends Network sites are performed by the Central Analytical Laboratory of the Illinois Water Survey. A numerical agency code (17003) has been assigned to the Illinois Water Survey for data storage purposes.

ACCESS TO WATSTORE DATA

The National **WATER** Data **STOR**age and **RE**trieval System (**WATSTORE**) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about **WATSTORE** may be directed to:
Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

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

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

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

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

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

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Bottom material in tables of data, refers to the chemical analysis of unconsolidated matter described as **bed material** and specifically includes anthropogenic matter in addition to natural solid material.

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

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.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, 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.

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

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

Cubic foot per second-day [$\text{ft}^3/\text{s}/\text{d}$] 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, approximately 1.9835 acre-feet, about 646,000 gallons or 2,445 cubic meters.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

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

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

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

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

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

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

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

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

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L , $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. En-

Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

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

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	.004 - .062	Sedimentation
Sand	.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

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

Percent composition 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, mass, or volume.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

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

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.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from 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 only 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.

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

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

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

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a 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.

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the total quantity of sediment (suspended-sediment and bed-load) as measured by dry weight or volume, that passes a section during a specified period.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

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.

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

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

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

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

Thermograph is an instrument that continuously records variations of water temperature on a chart. The more general term "temperature recorder" is the term used in the table headings and refers to any instrument that records water 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

Tons per day (T/DAY) is the quantity of substance in solution or suspension that passes a stream section during a 24-hour period.

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

Total in bottom material is the total 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 load is the quantity of any individual constituent, as measured by dry mass or volume that passes through a section during a specified period. It is computed by multiplying the total stream discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

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

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

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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

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.

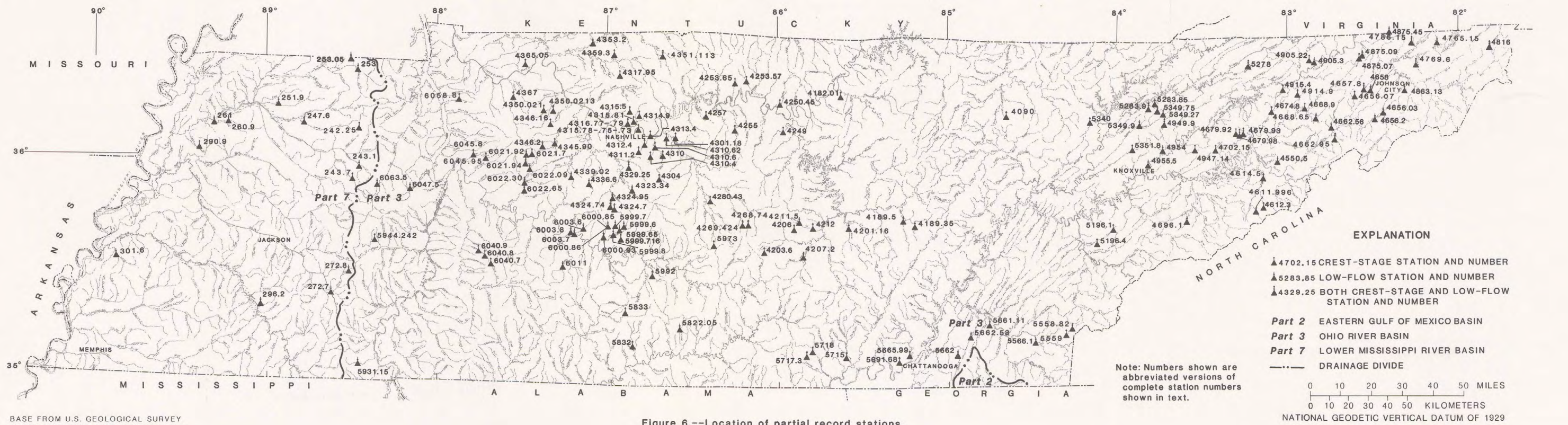
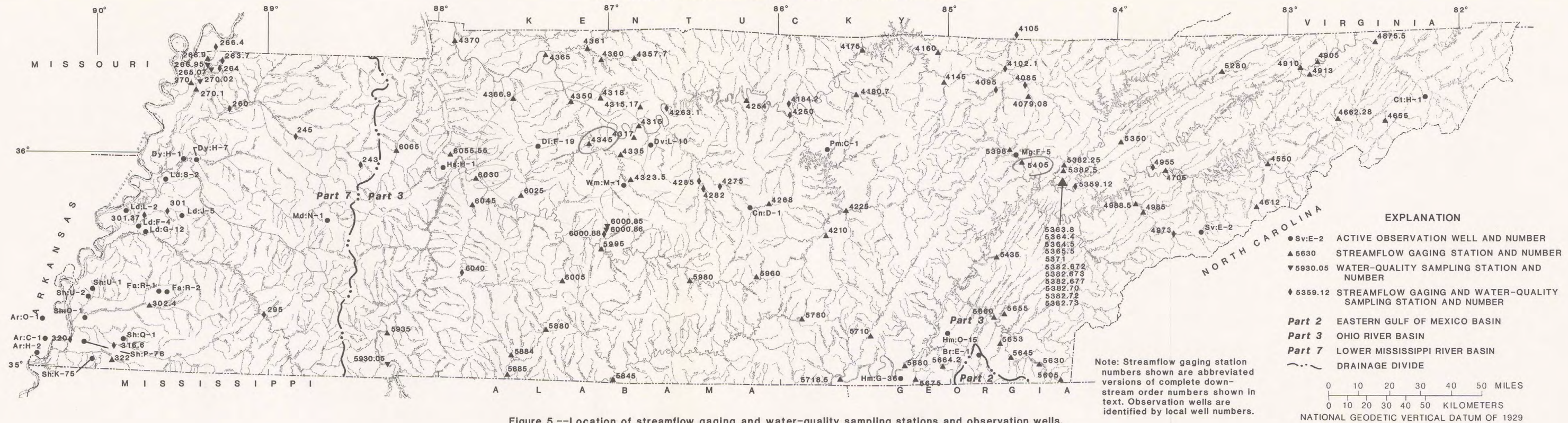
The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or 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 "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 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, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 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, Chapter D1. 1974. 116 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

- 3-C1. *Fluvial sediment concepts* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
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- 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, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
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- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
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WATER RESOURCES DATA FOR TENNESSEE, 1987



BASE FROM U.S. GEOLOGICAL SURVEY
STATE BASE MAP, 1957, REVISED 1973

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CUMBERLAND RIVER BASIN

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03407908 NEW RIVER AT CORDELL, TN

LOCATION.--Lat 36°20'10", long 84°27'06", Scott County, Hydrologic Unit 05130104, on right bank at Cordell Bridge, 3.4 mi south of Winona, and at mile 24.9.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1975 to April 1977 (discharge measurements only); May 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,180 ft above National Geodetic Vertical Datum, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 26 to Feb. 24. Records fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--10 years, 439 ft³/s, 30.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft³/s, Mar. 21, 1980, gage height, 24.58 ft; minimum, 1.8 ft³/s, Oct. 17, 1980, gage height, 1.72 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 26	1400	11,700	15.86	Jan. 19	1045	8,050	12.02
Dec. 9	1700	*13,100	*17.19				

Minimum discharge, 5.7 ft³/s, Sept. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	107	488	233	550	2220	836	242	148	53	15	12
2	36	97	478	218	500	1190	606	213	184	125	14	10
3	45	89	511	192	500	761	541	197	135	813	13	8.8
4	33	83	483	173	450	538	468	2510	118	387	15	7.7
5	28	82	454	161	360	425	430	904	90	689	19	7.1
6	25	129	403	151	300	374	490	511	72	785	17	6.5
7	24	148	357	145	260	331	1360	370	59	857	14	6.4
8	21	1180	391	137	240	310	1180	293	53	499	13	6.0
9	19	4020	8090	128	230	328	879	234	46	328	13	5.9
10	18	1720	4810	136	210	302	606	199	40	277	14	6.8
11	21	1650	1790	135	200	255	496	170	36	207	33	9.6
12	50	1660	1230	122	190	248	430	151	35	172	23	9.3
13	261	878	810	114	185	228	395	250	93	140	16	47
14	1020	520	555	110	180	215	702	205	85	170	13	26
15	362	432	440	115	240	212	3200	154	103	130	13	16
16	207	369	382	121	300	272	1570	146	80	98	11	12
17	143	309	352	113	600	313	1280	125	219	80	23	10
18	112	262	639	141	650	312	1040	108	150	66	59	9.1
19	90	224	536	4300	600	722	724	98	128	56	32	8.7
20	77	217	430	1750	520	677	561	171	331	48	18	13
21	64	283	372	874	480	536	463	357	355	42	14	23
22	54	267	324	595	450	431	392	457	258	37	11	15
23	48	256	305	438	2500	366	379	384	178	33	9.8	11
24	43	547	874	348	1500	319	736	391	137	31	9.1	9.5
25	332	982	806	652	734	310	719	240	282	28	8.4	8.5
26	775	6390	555	1470	528	265	533	163	272	25	7.8	7.9
27	325	2520	443	1200	3250	235	431	125	166	23	7.2	7.3
28	228	1230	372	900	2530	253	377	125	106	21	22	7.1
29	173	791	324	700	---	219	316	184	79	18	84	7.4
30	145	586	298	750	---	313	280	125	62	17	27	61
31	122	---	260	600	---	1370	---	177	---	16	15	---
TOTAL	4936	28028	28562	17222	19237	14850	22420	9979	4100	6271	603.3	395.6
MEAN	159	934	921	556	687	479	747	322	137	202	19.5	13.2
MAX	1020	6390	8090	4300	3250	2220	3200	2510	355	857	84	61
MIN	18	82	260	110	180	212	280	98	35	16	7.2	5.9
CFSM	.80	4.72	4.65	2.81	3.47	2.42	3.77	1.63	.69	1.02	.10	.07
IN.	.93	5.27	5.37	3.24	3.61	2.79	4.21	1.87	.77	1.18	.11	.07

CAL YR 1986	TOTAL 130160.0	MEAN 357	MAX 8090	MIN 10	CFSM 1.80	IN. 24.45
WTR YR 1987	TOTAL 156603.6	MEAN 429	MAX 8090	MIN 5.9	CFSM 2.17	IN. 29.41

03408500 NEW RIVER AT NEW RIVER, TN

LOCATION.--Lat 36°23'08", long 84°33'17", Scott County, Hydrologic Unit 05130104, on left bank at town of New River, 700 ft downstream from Phillips Creek, 1,000 ft downstream from bridge on U.S. Highway 27, 1.7 mi downstream from Brimstone Creek, and at mile 8.6.

DRAINAGE AREA.--382 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1934 to current year. Gage-height records collected in this vicinity 1908-52 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1436: Drainage area. WRD TN-73: 1939(M), 1951(M), 1970(M).

GAGE.--Water-stage recorder. Datum of gage is 1,092.67 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges, Water Year 1986: Dec. 22, 25-31, Jan. 8-16, 28-30. Records good, except for periods of estimated daily discharges, which are poor.
Estimated daily discharges, Water Year 1987: Jan. 1-6, 21-31, and Feb. 24-26. Records good. Periodic observations of water temperatures are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--53 years, 734 ft³/s, 26.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,700 ft³/s, May 27, 1973, gage height, 37.91 ft, from high water mark in gage well, from rating curve extended above 27,000 ft³/s on basis of slope-area and contracted-opening measurements of peak flow; no flow part of each day Aug. 12-15, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 23, 1929, reached a stage of 41.2 ft, discharge, 74,700 ft³/s, estimated, based on field survey at old U.S. Weather Bureau gage, 1,200 ft upstream at datum 3.41 ft higher.

EXTREMES FOR WATER YEARS 1986-1987.--Peak discharges above base of 12,000 ft³/s and maximum (*):

Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1986	Nov. 29, 1985	0230	14100	16.22	1987	Nov. 9, 1986	1700	15000	16.66
	Feb. 18, 1986	0730	*16200	*17.37		Nov. 26, 1986	1830	18100	18.53
						Dec. 9, 1986	2100	*19700	*19.41
						Jan. 19, 1987	1400	13300	15.81

Water year 1986: Minimum daily discharge, 9.2 ft³/s Aug. 7, 1986.

Water year 1987: Minimum discharge, 7.9 ft³/s Sept. 29, 1987, gage height, 1.58 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	83	1340	353	265	657	243	176	395	80	19	175
2	1100	87	1160	357	277	621	229	162	1270	105	16	1450
3	520	141	872	359	321	600	218	147	707	229	14	2150
4	564	258	730	349	345	534	206	132	693	136	14	580
5	313	804	636	324	997	476	190	125	532	81	12	371
6	220	553	596	285	1980	442	182	120	517	59	11	255
7	168	387	472	266	1870	399	204	114	333	47	9.2	175
8	135	313	410	250	1390	344	281	120	307	39	9.6	126
9	113	244	373	240	1050	306	636	118	564	32	9.6	99
10	100	204	331	220	847	294	468	99	1130	34	11	82
11	90	182	303	210	748	328	396	89	930	91	642	70
12	82	167	353	200	569	338	348	86	640	111	465	179
13	75	152	594	190	453	400	307	103	398	109	170	213
14	73	140	878	180	439	740	278	100	278	174	99	125
15	79	133	799	170	465	1090	261	90	214	213	69	90
16	77	136	712	160	514	1130	241	78	173	165	50	116
17	73	361	603	150	4370	923	217	68	141	166	48	131
18	68	398	506	150	12200	765	204	59	117	153	48	105
19	60	322	387	300	3410	1910	187	67	100	90	49	87
20	56	277	356	543	1770	1710	176	90	87	64	47	107
21	55	242	333	424	1220	1060	270	97	79	49	142	117
22	214	580	300	387	943	802	321	74	70	47	70	106
23	181	996	314	352	782	659	278	1890	61	38	50	92
24	146	746	300	313	683	555	242	4840	55	30	38	331
25	188	552	280	306	662	464	225	3880	49	24	29	170
26	151	437	260	358	552	403	215	1670	42	24	28	119
27	125	529	240	344	637	376	204	1450	38	22	41	90
28	109	6210	220	330	728	340	199	1260	50	19	135	73
29	99	8000	200	310	---	303	242	1010	97	22	210	69
30	90	2200	190	280	---	279	212	744	78	32	116	76
31	82	---	180	269	---	262	---	535	---	24	90	---
TOTAL	6601	25834	15228	8929	40492	19510	7880	19593	10145	2509	2761.4	7929
MEAN	213	861	491	288	1446	629	263	632	338	80.9	89.1	264
MAX	1190	8000	1340	543	12200	1910	636	4840	1270	229	642	2150
MIN	55	83	180	150	265	262	176	59	38	19	9.2	69
CFSM	.56	2.25	1.29	.75	3.79	1.65	.69	1.65	.89	.21	.23	.69
IN.	.64	2.52	1.48	.87	3.94	1.90	.77	1.91	.99	.24	.27	.77

CAL YR 1985 TOTAL 194922 MEAN 534 MAX 8000 MIN 36 CFSM 1.39 IN. 18.97
WIR YR 1986 TOTAL 167411.4 MEAN 459 MAX 12200 MIN 0 CFSM 1.39 IN. 18.97

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DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	153	836	440	1100	3980	1280	396	308	91	21	34
2	60	137	796	400	958	2170	1010	340	294	93	20	25
3	68	125	833	360	948	1440	943	312	240	803	18	20
4	65	117	790	330	829	1090	882	4030	329	518	17	17
5	49	112	720	300	703	873	816	2040	225	922	32	14
6	41	129	632	270	617	744	885	1090	146	1150	33	13
7	36	230	562	258	562	626	2050	768	112	962	32	14
8	34	1500	632	242	521	564	1840	573	93	816	24	13
9	30	9230	10100	226	472	569	1410	436	81	534	20	13
10	26	3550	9890	231	398	564	1070	352	71	609	20	11
11	40	2810	3210	239	335	443	891	294	61	525	23	11
12	99	3080	2130	216	332	431	757	253	56	552	46	16
13	745	1550	1500	196	321	393	693	317	78	349	40	24
14	1770	988	1150	189	294	362	723	346	139	316	28	71
15	908	809	951	198	323	352	5780	248	102	263	21	50
16	452	681	808	208	344	416	3100	236	115	183	18	33
17	288	557	713	193	1440	551	2420	201	206	141	28	24
18	210	469	1030	252	1680	529	1910	165	260	115	103	19
19	161	399	1060	7800	1300	882	1400	143	144	96	149	17
20	131	383	915	3400	1040	1010	1090	194	254	84	79	19
21	111	493	786	2000	904	866	887	606	849	75	45	23
22	99	454	661	1200	841	738	742	964	890	64	31	42
23	88	452	598	900	3800	627	690	495	541	57	23	29
24	82	835	1220	700	2500	542	1020	635	444	51	18	21
25	170	1500	1370	1700	1600	494	1240	378	683	46	16	17
26	1100	9780	1100	3500	1000	435	952	266	475	41	14	14
27	588	4910	924	2500	5030	375	783	196	309	37	12	12
28	372	1920	795	1800	4960	380	657	302	197	33	13	9.4
29	270	1270	676	1200	---	341	536	467	139	29	75	9.3
30	215	974	596	1300	---	399	458	425	108	26	98	24
31	181	---	511	1200	---	1610	---	377	---	23	51	---
TOTAL	8546	49597	48495	33948	35152	24796	38915	17845	7949	9604	1168	658.7
MEAN	276	1653	1564	1095	1255	800	1297	576	265	310	37.7	22.0
MAX	1770	9780	10100	7800	5030	3980	5780	4030	890	1150	149	71
MIN	26	112	511	189	294	341	458	143	56	23	12	9.3
CFSM	.72	4.33	4.10	2.87	3.29	2.09	3.40	1.51	.69	.81	.10	.06
IN.	.83	4.83	4.72	3.31	3.42	2.41	3.79	1.74	.77	.94	.11	.06
CAL YR 1986	TOTAL 226386.4 MEAN 620 MAX 12200 MIN 9.2 CFSM 1.62 IN. 22.04											
WTR YR 1987	TOTAL 276673.6 MEAN 758 MAX 10100 MIN 9.3 CFSM 1.98 IN. 26.94											

03408500 NEW RIVER AT NEW RIVER, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1975 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to September 1986.
 pH: October 1976 to September 1986.
 WATER TEMPERATURE: October 1976 to September 1986.
 DISSOLVED OXYGEN: October 1976 to September 1986.
 TURBIDITY: December 1976 to September 1986.
 OXIDATION-REDUCTION POTENTIAL: December 1976 to September 1977.
 SUSPENDED SEDIMENT DISCHARGE: October 1976 to September 1986.

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler since Oct. 21, 1976.

REMARKS--Interruptions in the record were due to malfunction of the instruments.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 896 microsiemens, July 11, 1985; minimum, 44 microsiemens, Apr. 4, 1977.
 pH: 8.6 units, May 16, 1983; minimum, 5.3 units, Nov. 17, 1978.
 WATER TEMPERATURE: Maximum, 32.5°C, July 16, 1980, minimum, 0.0°C, on many days in 1977, 1981, 1983, 1984, 1986.
 DISSOLVED OXYGEN: Maximum, 14.4 mg/L, Dec. 6, 1976; minimum, 5.6 mg/L, July 26, 1977.
 TURBIDITY: Maximum, 3,000 JTU, Sept. 2, 1982; minimum, 0 JTU, several days 1982-86.
 SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,190 mg/L, Aug. 8, 1981; minimum daily mean, 1 mg/L, on many days in 1976, 1984, 1986.
 SEDIMENT LOADS: Maximum daily, 262,000 tons, Apr. 5, 1977; minimum daily, 0.00 ton, Oct. 21-24, 27, 1980.

EXTREMES FOR 1986 WATER YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 518 microsiemens, Oct. 25; minimum, 102 microsiemens, Feb. 18.
 pH: Maximum, 7.7 units, Jan. 2-4, May 5; minimum, 6.8 units, Nov. 28, 29, May 25, Sept. 3.
 WATER TEMPERATURE: Maximum, 30.0°C, July 21, 22, 24; minimum recorded, 0.0°C, Dec. 26, 30, Jan. 9.
 DISSOLVED OXYGEN: Maximum, 13.4 mg/L, Dec. 22, 30; minimum, 5.7 mg/L, July 30 to Aug. 1.
 TURBIDITY: Maximum, 900 JTU, Sept. 3; minimum, 0 JTU, June 25.
 SEDIMENT CONCENTRATIONS: Maximum daily mean, 563 mg/L, Nov. 28; minimum daily mean, 1 mg/L, Feb. 14, 15, April 24
 SEDIMENT LOADS: Maximum daily, 13,900 tons, Nov. 28; minimum daily, 0.09 ton, Aug. 10.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	344	160	252	362	348	354	174	158	166	290	274	283
2	226	172	189	352	346	349	190	174	181	294	284	290
3	256	248	252	354	346	351	200	188	195	292	282	286
4	318	242	273	370	352	359	210	196	202	282	252	266
5	318	264	290	378	324	360	212	202	207	252	238	245
6	266	242	253	318	262	283	220	206	213	242	236	238
7	246	236	240	262	246	253	224	218	220	238	232	236
8	252	242	247	248	242	245	232	222	228	242	234	237
9	260	248	254	254	244	248	240	226	232	244	194	235
10	270	256	263	256	250	253	242	236	238	254	244	248
11	282	264	273	260	254	257	252	240	247	258	214	249
12	294	278	286	268	258	263	258	250	253	260	236	256
13	298	292	295	276	266	270	258	240	251	260	254	257
14	---	---	---	282	272	276	246	234	243	266	188	253
15	---	---	---	288	280	283	232	212	224	270	228	265
16	318	312	316	292	286	289	212	198	205	272	264	269
17	324	314	320	304	290	296	204	196	199	272	264	268
18	336	324	331	314	304	310	206	196	204	272	264	268
19	340	330	337	318	302	311	214	206	209	268	258	263
20	350	338	346	300	266	277	218	210	213	270	264	267
21	358	348	353	266	260	264	226	216	221	270	264	267
22	390	354	369	262	252	258	230	222	226	266	238	254
23	444	392	422	266	222	245	234	226	231	236	226	231
24	502	448	466	220	202	209	242	232	237	230	222	226
25	518	406	479	204	196	200	250	238	243	---	---	---
26	402	340	360	210	198	204	262	246	256	---	---	---
27	344	340	343	210	200	204	268	260	263	226	218	222
28	350	340	345	206	106	153	270	262	266	---	---	---
29	362	350	356	136	112	125	272	260	268	---	---	---
30	374	364	370	160	134	147	280	266	275	234	226	230
31	374	360	366	---	---	---	278	272	275	232	224	227
MONTH	518	160	319	378	106	263	280	158	229	294	188	253

CUMBERLAND RIVER BASIN

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03408500 NEW RIVER AT NEW RIVER, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	228	222	225	232	216	226	250	244	248	281	276	279
2	232	224	228	218	206	211	256	248	253	290	281	285
3	234	224	228	212	204	208	264	256	259	296	285	292
4	242	232	238	212	204	207	268	262	265	301	291	297
5	240	198	231	220	210	216	272	266	269	302	296	299
6	210	164	193	226	218	222	274	268	272	300	296	298
7	164	156	160	230	222	226	276	270	274	301	295	297
8	166	158	162	234	226	230	278	266	272	307	296	300
9	166	160	163	236	228	233	282	256	272	312	301	306
10	178	166	171	242	232	237	272	254	260	315	307	312
11	186	172	179	248	238	243	252	206	237	316	312	314
12	194	182	189	252	242	246	226	216	220	316	284	300
13	200	192	197	258	244	250	220	216	218	294	285	288
14	204	198	201	262	242	257	228	218	223	299	291	294
15	210	200	205	238	188	215	234	226	230	306	297	302
16	220	210	214	190	170	179	236	230	233	307	301	304
17	214	132	181	176	166	172	---	---	---	306	301	304
18	122	102	112	180	174	176	---	---	---	310	305	308
19	150	122	136	204	174	184	---	---	---	313	299	306
20	164	148	156	174	154	159	---	---	---	312	301	308
21	178	164	171	172	160	166	---	---	---	322	308	314
22	192	180	186	182	170	176	---	---	---	326	320	324
23	202	190	196	192	182	187	---	---	---	327	161	256
24	216	202	209	200	190	195	---	---	---	151	122	138
25	224	214	218	208	200	203	---	---	---	140	111	125
26	238	224	231	218	208	213	---	---	---	148	139	144
27	240	232	236	224	216	220	---	---	---	166	146	157
28	234	230	232	230	224	227	---	---	---	179	165	174
29	---	---	---	234	226	231	278	276	277	176	170	172
30	---	---	---	246	234	238	281	276	278	184	176	180
31	---	---	---	248	242	245	---	---	---	195	184	189
MONTH	242	102	195	262	154	213	---	---	---	327	111	263
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	203	195	198	344	332	338	352	345	347	304	274	287
2	217	181	206	345	325	339	358	350	352	272	250	265
3	199	186	190	374	334	351	364	356	360	180	151	162
4	199	183	192	338	323	331	375	367	370	198	183	191
5	201	187	194	338	326	331	384	375	378	211	198	206
6	215	188	206	337	330	334	385	42	359	222	211	216
7	197	173	184	346	336	342	---	---	---	230	222	226
8	220	197	211	355	342	348	---	---	---	234	229	232
9	230	201	224	365	354	358	---	---	---	239	232	236
10	186	166	176	363	342	354	---	---	---	246	237	242
11	186	165	180	350	326	340	---	---	---	250	244	248
12	203	165	184	345	327	334	---	---	---	264	236	250
13	218	204	211	372	344	357	---	---	---	267	257	260
14	221	214	218	366	320	343	---	---	---	268	261	264
15	225	218	222	318	291	302	---	---	---	264	261	262
16	232	225	228	322	298	306	---	---	---	263	257	261
17	239	230	235	---	---	---	---	---	---	263	258	260
18	246	238	242	---	---	---	---	---	---	266	261	264
19	255	246	251	---	---	---	---	---	---	273	266	270
20	266	254	260	---	---	---	---	---	---	278	271	275
21	273	264	268	334	331	333	---	---	---	287	275	280
22	279	268	273	338	332	335	301	297	300	292	287	290
23	284	275	279	339	334	336	306	300	303	297	291	294
24	289	282	285	336	332	334	312	303	306	348	297	328
25	299	288	293	334	329	332	317	307	311	385	348	366
26	305	296	299	333	318	327	337	314	320	391	355	378
27	309	301	304	337	321	329	355	323	331	353	295	318
28	314	302	308	342	336	338	342	321	332	295	269	280
29	326	312	319	343	339	342	318	270	299	269	263	266
30	334	325	330	346	341	344	288	261	273	284	268	276
31	---	---	---	348	342	345	295	275	285	---	---	---
MONTH	334	165	239	374	291	337	---	---	---	391	151	265

CUMBERLAND RIVER BASIN

03408500 NEW RIVER AT NEW RIVER, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.3	7.6	7.5	7.1	7.1	7.6	7.6	7.6	7.5	7.4	7.4
2	7.3	7.1	7.5	7.5	7.3	7.2	7.7	7.6	7.6	7.5	7.4	7.3
3	7.3	7.3	7.6	7.5	7.3	7.3	7.7	7.6	7.5	7.5	7.3	7.3
4	7.4	7.3	7.6	7.5	7.4	7.3	7.7	7.6	7.5	7.5	7.3	7.3
5	7.4	7.4	7.6	7.6	7.4	7.4	7.6	7.6	7.5	7.3	7.3	7.3
6	7.4	7.4	7.6	7.5	7.4	7.4	7.6	7.6	7.4	7.3	7.3	7.3
7	7.4	7.3	7.5	7.5	7.4	7.4	7.6	7.5	7.4	7.3	7.4	7.3
8	7.4	7.3	7.5	7.5	7.4	7.4	7.6	7.6	7.4	7.3	7.4	7.4
9	7.4	7.3	7.6	7.5	7.4	7.4	7.6	7.6	7.3	7.3	7.4	7.4
10	7.4	7.3	7.6	7.5	7.4	7.4	7.6	7.5	7.4	7.3	7.4	7.4
11	7.4	7.3	7.6	7.5	7.4	7.4	7.6	7.6	7.4	7.4	7.4	7.3
12	7.4	7.3	7.5	7.5	7.4	7.4	7.6	7.6	7.5	7.4	7.3	7.3
13	7.3	7.3	7.5	7.5	7.5	7.4	7.6	7.6	7.5	7.5	7.3	7.3
14	---	---	7.6	7.5	7.5	7.5	7.6	7.6	7.5	7.5	7.4	7.3
15	---	---	7.6	7.5	7.5	7.5	7.6	7.6	7.5	7.5	7.4	7.2
16	7.3	7.1	7.6	7.5	7.5	7.5	7.6	7.6	7.5	7.5	7.3	7.2
17	7.3	7.2	7.5	7.5	7.5	7.4	7.6	7.6	7.5	7.2	7.2	7.2
18	7.3	7.2	7.6	7.5	7.5	7.4	7.6	7.6	7.2	7.0	7.2	7.2
19	7.4	7.3	7.6	7.6	7.5	7.5	7.6	7.5	7.1	7.0	7.4	7.2
20	7.4	7.3	7.6	7.5	7.6	7.5	7.6	7.6	7.2	6.9	7.4	7.2
21	7.3	7.3	7.5	7.5	7.6	7.5	7.6	7.6	7.1	7.0	7.3	7.2
22	7.4	7.2	7.5	7.5	7.6	7.5	7.6	7.6	7.1	7.1	7.3	7.3
23	7.5	7.4	7.5	7.4	7.6	7.6	7.6	7.5	7.2	7.1	7.3	7.3
24	7.6	7.5	7.4	7.4	7.6	7.6	7.6	7.5	7.2	7.2	7.3	7.3
25	7.6	7.5	7.4	7.4	7.6	7.6	7.6	7.5	7.3	7.2	7.3	7.3
26	7.5	7.5	7.5	7.4	7.6	7.6	7.6	7.5	7.3	7.3	7.3	7.3
27	7.6	7.5	7.5	7.4	7.6	7.6	7.6	7.6	7.3	7.3	7.3	7.3
28	7.6	7.5	7.3	6.8	7.6	7.6	7.6	7.4	7.4	7.3	7.4	7.3
29	7.6	7.5	7.0	6.8	7.6	7.6	7.6	7.4	---	---	7.4	7.4
30	7.6	7.6	7.1	7.0	7.6	7.6	7.6	7.5	---	---	7.4	7.4
31	7.6	7.6	---	---	7.6	7.6	7.6	7.5	---	---	7.4	7.4
MONTH	7.6	7.1	7.6	6.8	7.6	7.1	7.7	7.4	7.6	6.9	7.4	7.2
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.4	7.4	7.5	7.4	7.2	7.1	7.5	7.4	7.4	7.3	7.5	7.3
2	7.4	7.4	7.5	7.4	7.2	7.0	7.4	7.3	7.4	7.4	7.4	7.3
3	7.4	7.4	7.6	7.4	7.2	7.1	7.4	7.3	7.4	7.3	7.1	6.8
4	7.4	7.4	7.6	7.5	7.1	7.0	7.6	7.4	7.4	7.3	7.2	7.1
5	7.5	7.4	7.7	7.5	7.1	7.0	7.6	7.4	7.4	7.4	7.2	7.1
6	7.4	7.4	7.6	7.5	7.2	7.1	7.6	7.5	7.4	7.2	7.2	7.2
7	7.4	7.3	7.6	7.4	7.1	7.0	7.6	7.5	---	---	7.3	7.2
8	7.4	7.3	7.4	7.4	7.2	7.1	7.6	7.5	---	---	7.4	7.3
9	7.5	7.4	7.4	7.3	7.2	7.1	7.6	7.5	---	---	7.4	7.3
10	7.5	7.5	7.4	7.3	7.0	6.9	7.6	7.4	---	---	7.4	7.3
11	7.5	7.5	7.4	7.3	7.0	7.0	7.4	7.3	---	---	7.4	7.3
12	7.5	7.4	7.4	7.3	7.2	7.0	7.4	7.3	---	---	7.4	7.2
13	7.5	7.4	7.3	7.2	7.2	7.2	7.5	7.4	---	---	7.4	7.2
14	7.5	7.4	7.3	7.2	7.3	7.2	7.4	7.4	---	---	7.5	7.3
15	7.5	7.4	7.3	7.3	7.3	7.2	7.4	7.3	---	---	7.4	7.3
16	7.6	7.5	7.4	7.3	7.4	7.2	7.4	7.3	---	---	7.4	7.3
17	---	---	7.4	7.3	7.5	7.2	---	---	---	---	7.3	7.2
18	---	---	7.4	7.3	7.6	7.3	---	---	---	---	7.4	7.3
19	---	---	7.3	7.3	7.6	7.4	---	---	---	---	7.4	7.3
20	---	---	7.3	7.2	7.5	7.4	---	---	---	---	7.3	7.2
21	---	---	7.4	7.3	7.5	7.4	7.5	7.2	---	---	7.3	7.2
22	---	---	7.5	7.4	7.5	7.3	7.6	7.4	7.4	7.3	7.4	7.3
23	---	---	7.5	6.9	7.5	7.3	7.5	7.5	7.4	7.3	7.4	7.3
24	---	---	7.1	6.9	7.4	7.3	7.5	7.4	7.5	7.3	7.4	7.3
25	---	---	6.9	6.8	7.4	7.2	7.5	7.4	7.5	7.3	7.6	7.4
26	---	---	7.0	6.9	7.5	7.4	7.5	7.4	7.5	7.4	7.5	7.4
27	---	---	7.1	6.9	7.5	7.4	7.4	7.4	7.4	7.3	7.4	7.3
28	---	---	7.1	7.1	7.5	7.4	7.4	7.4	7.4	7.3	7.3	7.3
29	7.4	7.4	7.1	7.1	7.4	7.3	7.4	7.3	7.5	7.3	7.2	7.2
30	7.5	7.4	7.1	7.1	7.4	7.3	7.3	7.3	7.5	7.4	7.3	7.2
31	---	---	7.2	7.1	---	---	7.3	7.3	7.5	7.4	---	---
MONTH	---	---	7.7	6.8	7.6	6.9	---	---	---	---	7.6	6.8

03408500 NEW RIVER AT NEW RIVER, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.5	15.0	16.0	16.5	16.0	16.0	14.0	13.0	13.5	1.0	.5	.5
2	15.0	14.0	14.0	16.5	16.0	16.0	13.0	9.5	11.5	1.0	.5	1.0
3	14.5	14.5	14.5	16.0	15.5	16.0	9.5	7.0	8.0	2.5	1.0	2.0
4	16.0	14.5	15.0	15.5	13.0	14.5	6.5	6.0	6.0	3.5	2.5	3.0
5	16.0	15.0	15.5	13.0	11.0	12.0	6.0	6.0	6.0	3.5	3.0	3.0
6	15.0	14.0	14.5	11.0	10.5	10.5	6.0	5.5	6.0	2.5	2.0	2.5
7	14.5	13.5	14.0	10.0	9.5	10.0	5.5	5.0	5.5	2.5	1.5	2.0
8	14.5	13.0	13.5	9.5	9.0	9.5	5.5	5.0	5.0	1.5	.5	1.0
9	15.0	13.0	14.0	9.5	9.0	9.5	6.5	5.5	6.0	1.0	.0	.5
10	16.0	14.5	15.0	11.0	9.5	10.0	6.5	6.0	6.5	1.0	.5	.5
11	17.0	15.5	16.0	12.0	10.5	11.5	8.0	6.5	7.5	1.0	.5	.5
12	18.0	16.5	17.0	13.0	12.0	12.5	9.0	8.0	8.5	1.5	.5	.5
13	18.5	17.0	18.0	13.5	12.5	13.0	9.0	8.5	9.0	1.0	.5	.5
14	---	---	---	14.0	13.0	13.5	8.0	5.5	7.0	1.0	.5	.5
15	---	---	---	14.5	13.5	14.0	5.5	3.5	4.0	1.5	.5	.5
16	19.5	19.0	19.0	15.0	14.0	14.5	3.5	3.0	3.0	1.5	.5	1.0
17	19.5	17.5	18.5	14.5	14.0	14.5	3.5	3.0	3.0	1.5	1.0	1.5
18	19.5	18.0	18.5	15.5	14.5	15.0	3.5	2.5	3.0	3.0	1.5	2.0
19	20.0	18.0	19.0	16.0	15.0	15.5	2.5	1.5	2.0	4.0	3.0	3.5
20	20.0	18.5	19.0	15.5	14.5	15.5	1.5	1.5	1.5	4.5	4.0	4.0
21	20.0	19.0	19.5	14.5	13.0	14.0	1.5	.5	1.0	4.5	3.5	4.0
22	20.0	19.5	19.5	13.0	12.5	13.0	1.0	.5	.5	5.0	4.5	5.0
23	20.0	19.5	19.5	12.5	11.0	11.5	1.5	1.0	1.0	5.0	4.0	4.5
24	19.5	19.0	19.5	11.5	11.0	11.5	2.0	1.5	1.5	4.0	3.5	4.0
25	19.0	18.5	19.0	12.0	11.0	11.5	1.5	.5	1.0	4.0	3.5	3.5
26	18.5	17.5	18.0	13.5	12.0	13.0	.5	.0	.5	4.0	3.0	3.5
27	17.5	17.0	17.5	15.0	13.5	14.5	1.0	.5	.5	---	---	---
28	17.5	17.0	17.5	15.5	15.0	15.0	1.0	.5	.5	---	---	---
29	17.0	16.5	17.0	15.0	14.0	14.5	1.0	.5	.5	---	---	---
30	16.5	16.0	16.5	14.0	14.0	14.0	1.0	.0	.5	1.0	.5	.5
31	16.0	16.0	16.0	---	---	---	1.0	.5	.5	1.5	.5	1.0
MONTH	20.0	13.0	16.9	16.5	9.0	13.2	14.0	.0	4.2	5.0	.0	2.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.0	1.5	5.5	4.0	4.5	15.5	14.5	15.0	19.5	18.5	19.0
2	4.0	2.5	3.5	4.0	3.5	4.0	16.5	15.0	16.0	19.5	18.0	18.5
3	6.0	4.0	5.0	4.5	4.0	4.0	17.0	16.0	16.5	18.5	17.0	18.0
4	8.5	6.0	7.0	5.0	4.5	4.5	17.0	16.0	16.5	18.0	16.0	17.0
5	10.5	8.5	9.5	6.0	4.5	5.0	17.5	16.5	17.0	19.0	16.0	17.5
6	10.5	9.5	10.0	6.5	6.0	6.0	18.0	17.0	17.5	20.0	17.5	18.5
7	9.5	8.5	9.0	6.0	5.0	5.5	19.0	17.5	18.5	21.5	18.5	20.0
8	8.5	7.5	8.0	5.0	4.0	4.5	19.0	18.0	18.5	23.0	20.5	21.5
9	7.5	7.0	7.0	6.5	5.0	6.0	18.0	14.5	16.0	23.5	21.0	22.0
10	7.0	5.5	6.5	9.5	7.0	8.0	14.5	13.0	13.5	23.5	21.0	22.5
11	5.5	4.0	4.5	11.0	9.5	10.0	13.5	12.0	13.0	22.5	21.5	22.5
12	3.5	2.5	3.0	12.5	11.0	11.5	14.0	12.0	13.0	22.5	21.5	22.0
13	2.0	1.5	2.0	13.5	12.5	13.0	14.5	13.0	14.0	22.5	21.0	22.0
14	1.5	.5	1.0	13.5	13.0	13.5	16.0	14.5	15.0	23.0	21.0	22.0
15	1.5	.5	1.0	13.0	11.0	12.0	16.5	15.5	16.0	23.0	21.5	22.0
16	3.5	1.5	2.0	11.0	10.0	10.5	15.5	14.5	15.0	24.0	22.0	23.0
17	7.0	3.5	5.0	10.5	9.5	10.0	---	---	---	25.0	22.5	23.5
18	9.0	7.0	8.0	11.0	10.0	10.5	---	---	---	23.5	23.0	23.5
19	9.5	9.0	9.5	12.5	11.0	12.0	---	---	---	23.0	22.0	22.5
20	10.5	9.0	9.5	12.0	9.5	11.0	---	---	---	22.0	20.5	21.0
21	10.0	9.5	10.0	9.5	7.0	8.0	---	---	---	20.5	19.5	19.5
22	9.5	8.0	9.0	7.0	6.0	6.5	---	---	---	20.5	18.5	19.5
23	8.0	7.5	8.0	7.5	5.5	6.5	---	---	---	19.5	14.5	17.0
24	7.5	6.5	7.0	9.0	7.0	8.0	---	---	---	15.5	14.0	14.5
25	6.5	6.0	6.5	10.5	8.5	9.5	---	---	---	15.5	15.0	15.5
26	7.0	6.0	6.5	12.0	10.5	11.5	---	---	---	16.0	15.5	16.0
27	7.0	6.0	6.5	13.5	11.5	12.5	---	---	---	17.0	16.0	16.5
28	6.0	5.5	5.5	13.5	12.0	13.0	---	---	---	17.5	17.0	17.0
29	---	---	---	13.5	12.0	13.0	19.1	18.5	18.9	18.5	17.5	18.0
30	---	---	---	14.5	13.0	13.5	19.5	17.9	18.7	19.5	18.5	19.0
31	---	---	---	15.0	13.5	14.5	---	---	---	20.5	19.5	20.0
MONTH	10.5	.5	6.1	15.0	3.5	9.1	---	---	---	24.8	13.9	19.7

CUMBERLAND RIVER BASIN

03408500 NEW RIVER AT NEW RIVER, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.0	20.5	21.0	27.5	26.0	27.0	27.0	25.0	26.0	20.5	20.0	20.0
2	21.5	19.5	20.5	26.5	26.0	26.0	27.0	25.5	26.0	20.0	19.0	19.5
3	20.0	19.0	19.5	25.5	24.0	25.0	26.5	25.0	26.0	19.0	19.0	19.0
4	20.0	19.5	20.0	25.5	24.0	25.0	26.5	24.5	25.5	20.0	19.0	19.5
5	20.5	19.0	20.0	26.5	24.0	25.0	26.0	24.5	25.0	21.0	20.0	20.5
6	21.5	20.0	21.0	27.5	25.0	26.0	26.0	24.3	25.0	21.5	20.5	21.0
7	22.0	21.0	21.5	28.0	25.5	26.5	---	---	---	21.5	20.5	21.0
8	23.5	22.0	22.5	29.0	26.0	27.0	---	---	---	21.5	20.0	21.0
9	23.5	22.0	23.0	29.0	26.5	27.5	---	---	---	21.5	19.5	20.5
10	21.5	20.5	21.0	27.5	26.0	26.5	---	---	---	21.5	20.0	21.0
11	21.5	21.0	21.0	27.0	25.5	26.5	---	---	---	22.0	20.5	21.0
12	22.5	22.0	22.5	27.5	26.0	26.5	---	---	---	22.0	21.0	21.5
13	23.0	22.0	22.5	27.5	26.0	26.5	---	---	---	22.0	21.0	21.5
14	23.5	22.0	22.5	27.0	25.5	26.0	---	---	---	22.5	20.5	21.5
15	24.5	23.0	23.5	26.5	25.5	26.0	---	---	---	22.0	20.5	21.0
16	25.5	23.5	24.5	26.5	25.5	26.0	---	---	---	22.5	21.0	21.5
17	25.5	23.5	24.5	---	---	---	---	---	---	22.5	21.0	21.5
18	25.5	23.0	24.0	---	---	---	---	---	---	22.0	21.0	21.5
19	25.0	22.5	24.0	---	---	---	---	---	---	21.5	21.0	21.5
20	26.0	23.5	24.5	---	---	---	---	---	---	22.0	21.0	21.5
21	26.5	24.0	25.5	30.0	29.0	29.5	---	---	---	22.5	21.0	22.0
22	27.0	24.5	25.5	30.0	27.5	28.5	26.5	26.0	26.5	23.5	21.5	22.5
23	27.5	25.0	26.0	29.5	28.0	28.5	27.0	25.0	26.0	23.5	22.0	23.0
24	27.5	25.5	26.5	30.0	28.0	29.0	27.0	25.5	26.0	24.0	23.0	23.5
25	27.5	25.5	26.5	29.0	28.0	29.0	26.5	25.0	25.5	24.0	23.0	23.5
26	27.0	25.0	26.0	29.5	28.0	28.4	26.0	24.5	25.0	24.5	23.0	23.5
27	27.5	25.0	26.0	29.5	27.0	28.5	25.5	24.0	24.5	24.5	23.0	23.5
28	27.5	25.0	26.5	29.0	28.0	28.5	24.5	22.5	23.5	24.5	23.0	23.5
29	27.5	25.5	26.5	29.0	27.5	28.5	22.5	21.0	22.0	25.0	23.0	24.0
30	27.5	26.0	27.0	28.5	27.0	28.0	22.0	20.5	21.5	25.0	23.5	24.0
31	---	---	---	28.0	25.5	26.5	21.5	20.0	20.5	---	---	---
MONTH	27.5	19.2	23.5	30.0	24.0	27.0	---	---	---	25.0	19.0	21.7

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.2	8.3	8.9	8.8	8.6	8.7	9.2	8.9	9.2	13.2	13.1	13.1
2	9.1	8.7	8.8	8.7	8.5	8.6	10.2	9.2	9.7	13.3	13.0	13.2
3	9.4	9.0	9.2	8.9	8.4	8.6	11.2	10.2	10.8	13.1	12.6	12.9
4	9.1	8.4	8.8	9.3	8.6	9.0	11.7	11.2	11.5	12.7	12.4	12.6
5	9.1	8.8	8.9	10.2	9.3	9.8	11.7	11.4	11.6	12.5	12.3	12.4
6	8.9	7.7	8.1	10.7	10.2	10.6	11.6	11.4	11.5	12.7	12.4	12.6
7	8.0	7.6	7.8	10.9	10.6	10.8	11.8	11.5	11.7	12.9	12.5	12.7
8	8.5	8.1	8.3	11.3	10.9	11.1	11.8	11.7	11.7	12.9	12.5	12.7
9	9.2	8.5	8.8	11.5	11.1	11.3	11.8	11.5	11.7	13.3	12.7	13.0
10	9.6	9.1	9.4	11.3	11.1	11.2	11.7	11.4	11.5	13.2	12.8	13.0
11	9.6	9.1	9.4	11.1	10.7	11.0	11.6	11.2	11.4	13.0	12.7	12.9
12	9.5	8.8	9.3	10.8	10.3	10.6	11.3	10.6	10.9	13.0	12.7	12.8
13	9.3	8.8	9.0	10.5	9.8	10.2	10.7	10.5	10.6	12.9	12.6	12.7
14	---	---	---	10.2	9.6	9.9	11.6	10.7	11.1	12.9	12.5	12.7
15	---	---	---	10.3	9.5	9.8	12.6	11.6	12.1	12.9	12.7	12.8
16	8.3	8.1	8.2	9.7	9.2	9.5	12.8	12.5	12.7	12.9	12.7	12.8
17	8.3	7.1	7.9	9.4	9.0	9.2	12.9	12.6	12.7	12.9	12.6	12.8
18	8.3	8.0	8.1	9.4	9.1	9.2	12.7	12.3	12.5	12.7	12.4	12.6
19	8.3	7.8	8.1	9.3	9.0	9.1	13.0	12.6	12.8	12.4	11.6	12.0
20	8.3	7.9	8.1	9.3	9.0	9.1	13.1	12.9	13.0	11.7	11.5	11.6
21	8.1	7.8	7.9	9.5	9.2	9.4	13.3	13.0	13.1	12.5	11.5	11.9
22	7.9	7.8	7.8	9.7	9.5	9.6	13.4	13.1	13.3	12.4	12.0	12.1
23	8.1	7.8	7.9	10.1	9.6	9.9	13.2	12.9	13.1	12.1	11.9	12.0
24	8.1	7.9	8.0	10.4	9.9	10.2	12.9	12.6	12.8	12.3	12.0	12.2
25	8.3	8.1	8.2	10.5	10.2	10.3	13.0	12.6	12.8	12.3	12.1	12.2
26	8.4	7.7	8.0	10.3	9.7	9.9	13.2	12.9	13.1	12.2	12.0	12.1
27	8.4	8.2	8.3	9.7	8.9	9.3	13.3	13.1	13.2	12.6	12.1	12.3
28	8.4	8.2	8.6	9.0	8.0	8.6	13.2	13.0	13.2	---	---	---
29	8.7	8.4	8.5	9.1	8.0	8.5	13.3	13.1	13.2	---	---	---
30	8.7	8.3	8.5	9.2	8.8	9.0	13.4	12.7	13.2	13.2	12.9	13.1
31	8.9	8.4	8.6	---	---	---	13.3	13.1	13.2	13.3	13.0	13.2
MONTH	9.6	7.1	8.5	11.5	8.0	9.7	13.4	8.9	12.1	13.3	11.5	12.6

CUMBERLAND RIVER BASIN

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03408500 NEW RIVER AT NEW RIVER, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.2	13.0	13.1	12.5	12.0	12.2	9.9	9.4	9.6	9.5	8.7	9.1
2	13.0	12.5	12.8	12.8	12.3	12.6	9.6	9.1	9.4	9.6	8.5	9.1
3	12.5	11.8	12.2	12.6	12.3	12.5	9.5	9.0	9.3	10.2	8.9	9.3
4	12.0	11.1	11.5	12.6	12.1	12.3	9.4	9.0	9.3	9.8	9.0	9.5
5	11.1	9.8	10.5	12.3	12.1	12.2	9.5	8.9	9.2	10.0	9.3	9.6
6	10.4	9.9	10.1	12.1	11.6	11.8	9.4	8.6	9.1	9.8	9.2	9.4
7	10.6	10.2	10.5	12.1	11.7	11.9	9.2	8.5	8.9	9.4	8.8	9.1
8	11.1	10.6	10.8	12.5	12.0	12.3	9.0	8.4	8.7	9.0	8.2	8.6
9	11.4	11.0	11.2	12.5	12.0	12.2	9.3	8.5	8.9	8.4	7.9	8.2
10	11.4	11.1	11.2	12.1	11.2	11.5	9.9	9.2	9.5	8.5	7.8	8.1
11	12.0	11.3	11.6	11.1	10.5	10.8	10.2	9.1	9.9	8.3	7.6	7.9
12	12.6	11.9	12.3	10.5	10.0	10.3	10.3	9.9	10.0	8.1	7.6	7.8
13	12.9	12.5	12.7	10.1	9.6	9.8	10.2	9.6	9.9	7.9	7.5	7.7
14	12.9	12.6	12.8	9.9	9.6	9.7	9.9	9.4	9.7	8.0	7.5	7.7
15	13.1	12.8	12.9	10.2	9.6	10.0	9.9	9.2	9.5	8.1	7.5	7.8
16	13.0	12.5	12.8	10.8	10.1	10.5	9.8	9.5	9.6	8.1	7.4	7.8
17	12.4	10.7	11.7	10.9	10.5	10.7	---	---	---	8.1	7.5	7.8
18	10.9	10.3	10.6	10.8	10.5	10.7	---	---	---	7.8	7.4	7.6
19	10.4	10.2	10.2	10.6	9.5	10.1	---	---	---	7.7	7.4	7.5
20	10.8	10.2	10.4	10.7	9.8	10.2	---	---	---	7.6	7.1	7.3
21	10.7	10.4	10.5	11.7	10.8	11.3	---	---	---	8.0	7.1	7.6
22	11.0	10.5	10.8	12.1	11.6	11.9	---	---	---	8.8	7.8	8.3
23	11.4	10.9	11.2	12.1	11.8	12.0	---	---	---	9.1	8.1	8.5
24	11.5	11.2	11.4	12.0	11.4	11.6	---	---	---	9.3	8.4	9.1
25	11.9	11.4	11.6	11.5	10.9	11.2	---	---	---	9.2	8.3	9.0
26	11.9	11.6	11.7	10.9	10.3	10.6	---	---	---	9.1	8.5	9.0
27	11.7	11.3	11.5	10.4	10.0	10.2	---	---	---	9.1	8.7	8.9
28	12.1	11.5	11.8	10.2	9.9	10.0	---	---	---	8.9	8.7	8.8
29	---	---	---	10.2	10.0	10.1	9.4	8.8	9.1	8.9	8.6	8.7
30	---	---	---	10.2	9.8	10.0	9.5	9.0	9.3	8.9	8.4	8.6
31	---	---	---	9.9	9.7	9.8	---	---	---	8.5	8.3	8.4
MONTH	13.2	9.8	11.5	12.8	9.5	11.1	---	---	---	10.2	7.1	8.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	8.4	8.1	8.2	7.3	6.5	6.8	6.4	5.7	6.0	8.0	7.7	7.9
2	8.5	7.8	8.1	6.9	6.3	6.7	6.7	6.2	6.4	8.1	7.8	7.9
3	8.6	8.2	8.3	6.8	6.1	6.5	6.7	6.1	6.4	8.5	8.0	8.3
4	8.4	8.1	8.3	7.6	6.8	7.2	6.6	6.2	6.4	8.5	8.4	8.5
5	8.6	8.2	8.4	8.0	6.9	7.4	6.8	6.3	6.6	8.4	8.1	8.2
6	8.4	7.9	8.2	8.0	7.2	7.6	7.6	6.5	6.7	8.2	8.0	8.1
7	8.1	7.7	7.9	7.9	7.2	7.6	---	---	---	8.2	8.0	8.1
8	8.0	7.6	7.8	7.6	7.3	7.5	---	---	---	8.3	7.9	8.1
9	7.9	7.4	7.6	7.4	7.1	7.3	---	---	---	8.6	7.9	8.2
10	8.2	7.7	8.0	7.1	6.7	6.9	---	---	---	8.7	7.9	8.3
11	8.1	7.7	7.9	6.7	6.0	6.5	---	---	---	8.5	7.9	8.3
12	7.8	7.6	7.7	6.8	6.0	6.4	---	---	---	8.3	7.6	7.9
13	7.8	7.6	7.6	7.0	6.2	6.6	---	---	---	8.0	7.6	7.8
14	7.9	7.6	7.7	6.6	6.2	6.4	---	---	---	8.7	7.6	8.1
15	8.0	7.5	7.7	6.8	6.2	6.5	---	---	---	8.6	7.6	8.2
16	8.2	7.3	7.8	7.1	6.3	6.6	---	---	---	8.5	7.9	8.2
17	8.4	7.3	7.8	---	---	---	---	---	---	8.4	7.7	8.0
18	8.5	7.2	7.9	---	---	---	---	---	---	8.5	7.6	8.0
19	8.5	7.4	7.9	---	---	---	---	---	---	8.2	7.7	7.9
20	8.3	7.5	7.9	---	---	---	---	---	---	7.9	7.6	7.8
21	8.0	7.5	7.8	7.3	7.1	7.2	---	---	---	8.2	7.6	7.9
22	7.9	7.4	7.6	7.2	6.5	6.9	7.2	7.0	7.1	8.3	7.6	7.9
23	7.8	7.2	7.5	7.1	6.6	6.8	7.3	6.7	7.0	7.9	7.5	7.7
24	7.6	7.2	7.4	7.1	6.5	6.7	7.1	6.6	6.9	7.7	7.3	7.5
25	7.4	7.1	7.2	7.2	6.4	6.7	7.1	6.5	6.8	7.8	7.3	7.6
26	7.3	7.0	7.2	7.0	6.1	6.5	7.1	6.7	6.9	7.7	7.1	7.4
27	7.4	7.1	7.2	6.8	5.9	6.3	6.9	6.5	6.7	7.1	6.7	6.9
28	7.3	6.9	7.1	6.6	6.0	6.2	6.7	5.9	6.3	7.0	6.6	6.8
29	7.0	6.5	6.8	6.3	5.8	6.0	7.5	6.7	7.3	7.0	6.5	6.8
30	7.1	6.4	6.8	6.1	5.7	5.9	8.1	7.5	7.8	7.1	6.5	6.8
31	---	---	---	6.1	5.7	5.9	8.1	7.5	7.8	---	---	---
MONTH	8.6	6.4	7.7	8.0	5.7	6.7	---	---	---	8.7	6.5	7.8

CUMBERLAND RIVER BASIN

03408500 NEW RIVER AT NEW RIVER, TN--Continued

TURBIDITY (JTU), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	190	25	15	10	65	35	45	15	15	7	30	20
2	220	55	15	10	45	35	30	25	15	6	25	15
3	45	35	15	10	50	30	40	20	10	2	15	10
4	40	35	20	10	55	30	35	20	8	1	30	9
5	40	30	35	15	50	40	30	15	240	7	10	6
6	45	30	35	20	50	35	35	15	320	75	10	4
7	40	30	25	15	55	35	35	2	85	55	25	4
8	35	30	15	10	65	35	9	1	75	20	20	4
9	45	30	15	10	60	40	15	1	55	10	10	5
10	35	30	15	10	55	7	15	1	15	8	8	6
11	35	30	15	10	45	7	7	1	10	6	10	6
12	40	30	15	15	55	8	10	1	9	5	15	7
13	40	30	15	3	35	10	10	2	7	5	15	7
14	---	---	5	2	30	20	10	2	7	4	65	10
15	---	---	6	2	35	15	10	1	7	4	70	35
16	65	45	7	4	50	10	9	1	10	3	45	25
17	55	30	15	5	20	10	10	2	750	15	30	15
18	35	20	10	8	70	9	35	1	700	150	15	15
19	30	15	25	10	30	10	40	2	130	55	850	15
20	20	10	25	10	40	15	30	10	55	30	450	35
21	25	10	15	10	55	15	50	8	45	25	35	20
22	30	15	30	10	35	10	40	10	30	20	20	10
23	25	15	50	30	45	15	15	7	20	15	15	8
24	20	15	40	30	30	15	20	4	20	10	10	8
25	25	15	30	7	30	15	10	6	25	10	10	7
26	30	20	40	5	20	15	20	6	25	10	30	7
27	30	15	85	8	25	15	20	5	35	15	20	7
28	20	15	650	35	20	15	30	10	25	20	10	8
29	20	15	600	120	30	15	30	10	---	---	10	8
30	20	10	130	50	25	15	20	5	---	---	10	9
31	15	10	---	---	30	15	35	7	---	---	15	10
MONTH	220	10	650	2	70	7	50	1	750	1	850	4
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	15	8	8	3	15	10	5	2	7	3	90	75
2	10	7	7	2	700	10	20	3	8	2	150	85
3	10	7	6	2	320	55	15	7	8	3	900	110
4	10	8	6	2	90	40	15	10	7	3	120	60
5	15	8	6	2	75	30	10	9	7	3	55	35
6	10	8	5	1	80	25	10	9	150	3	40	30
7	10	8	5	1	100	25	15	10	---	---	40	30
8	20	8	6	2	40	25	20	10	---	---	45	35
9	40	20	7	2	360	20	15	15	---	---	50	40
10	55	35	6	2	460	100	30	15	---	---	45	45
11	35	20	6	2	210	70	30	20	---	---	50	45
12	20	15	---	---	90	35	30	25	---	---	100	50
13	15	15	---	---	50	35	50	25	---	---	95	75
14	15	15	---	---	50	25	80	30	---	---	85	75
15	20	15	---	---	25	15	65	50	---	---	85	80
16	20	15	---	---	20	10	65	55	---	---	95	80
17	---	---	---	---	15	9	---	---	---	---	100	9
18	---	---	---	---	15	7	---	---	---	---	15	7
19	---	---	---	---	15	6	---	---	---	---	25	7
20	---	---	---	---	10	5	---	---	---	---	15	9
21	---	---	---	---	10	5	6	3	---	---	20	15
22	---	---	---	---	10	5	7	3	40	15	30	20
23	---	---	---	---	10	6	6	2	30	15	35	25
24	---	---	---	---	10	4	5	3	30	15	55	40
25	---	---	---	---	8	0	6	3	30	15	55	45
26	---	---	---	---	5	1	8	3	45	20	80	55
27	---	---	40	30	3	1	9	2	60	25	100	80
28	---	---	45	25	4	2	6	2	55	40	100	95
29	8	4	25	20	6	2	5	3	70	55	95	90
30	8	3	20	15	4	2	7	3	85	60	95	90
31	---	---	15	15	---	---	8	2	90	55	---	---
MONTH	---	---	---	---	700	0	80	2	---	---	900	7

CUMBERLAND RIVER BASIN

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03408500 NEW RIVER AT NEW RIVER, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	1190	12	38	83	26	5.9	1340	69	253
2	1100	11	34	87	24	5.7	1160	47	147
3	520	28	39	141	23	8.8	872	33	77
4	564	34	53	258	26	19	730	25	50
5	318	25	21	804	46	103	636	24	42
6	220	23	14	553	31	47	596	23	37
7	168	24	11	387	24	25	472	20	25
8	135	22	8.0	313	20	17	410	16	18
9	113	20	6.0	244	18	12	373	13	13
10	100	15	4.1	204	19	10	331	11	9.9
11	90	11	2.7	182	21	10	303	8	6.4
12	82	11	2.4	167	19	8.4	353	7	7.0
13	75	10	2.1	152	17	6.8	594	14	25
14	73	10	2.0	140	16	5.9	878	51	122
15	79	10	2.1	133	15	5.4	799	43	92
16	77	9	2.0	136	15	5.7	712	30	57
17	73	9	1.8	361	25	26	603	17	28
18	68	7	1.3	398	19	21	506	9	13
19	60	7	1.1	322	18	15	387	7	6.9
20	56	7	1.1	277	16	12	356	7	6.6
21	55	7	.99	242	15	9.8	333	7	6.0
22	214	32	24	580	28	54	300	6	5.0
23	181	32	16	996	34	91	314	5	3.9
24	146	31	12	746	30	60	300	5	4.4
25	188	42	21	552	26	38	280	6	4.2
26	151	34	14	437	16	19	260	11	7.7
27	125	30	10	529	22	33	240	8	5.0
28	109	29	8.6	6210	563	13900	220	3	1.8
29	99	28	7.4	8000	401	11400	200	4	2.2
30	90	27	6.5	2200	132	718	190	3	1.8
31	82	29	6.4	---	---	---	180	3	1.3
TOTAL	6601	---	373.59	25834	---	26692.4	15228	---	1079.1
JANUARY			FEBRUARY			MARCH			
1	353	13	13	265	4	2.9	657	70	123
2	357	7	6.4	277	4	3.2	621	68	115
3	359	6	6.2	321	7	6.5	600	6	9.9
4	349	6	5.8	345	15	14	534	5	6.6
5	324	5	4.3	997	194	758	476	5	6.2
6	285	5	3.5	1980	153	876	442	5	6.1
7	266	11	7.7	1870	78	400	399	4	4.8
8	250	10	6.9	1390	49	185	344	4	3.7
9	240	5	3.5	1050	33	93	306	4	3.7
10	220	6	3.5	847	18	41	294	6	4.5
11	210	7	3.8	748	11	22	328	7	6.0
12	200	8	4.1	569	7	11	338	11	10
13	190	10	5.0	458	2	2.6	400	8	9.0
14	180	14	6.9	439	1	1.3	740	12	24
15	170	8	3.9	465	1	1.5	1090	32	97
16	160	5	2.3	514	3	4.0	1130	22	67
17	150	6	2.4	4370	155	3820	923	10	26
18	150	6	2.6	12200	264	9540	765	6	13
19	300	19	21	3410	59	551	1910	137	1170
20	543	17	26	1770	40	195	1710	145	673
21	424	11	12	1220	17	58	1060	103	295
22	387	10	10	943	8	20	802	76	164
23	352	9	8.1	782	6	13	659	53	94
24	313	8	6.3	683	3	5.6	555	34	51
25	306	6	5.3	662	9	15	464	12	16
26	358	7	6.6	552	8	11	403	5	5.5
27	344	7	6.2	637	8	14	376	4	3.8
28	330	6	5.0	728	10	20	340	4	3.5
29	310	6	4.8	---	---	---	303	4	3.5
30	280	5	4.0	---	---	---	279	4	3.2
31	269	4	3.0	---	---	---	262	6	3.9
TOTAL	8929	---	210.1	40492	---	16684.6	19510	---	3021.9

CUMBERLAND RIVER BASIN

03408500 NEW RIVER AT NEW RIVER, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	243	7	4.5	176	9	4.4	395	15	16
2	229	6	3.7	162	8	3.4	1270	344	1490
3	218	4	2.4	147	7	2.9	707	143	284
4	206	3	1.5	132	7	2.6	693	105	198
5	190	3	1.7	125	7	2.4	532	50	73
6	182	5	2.4	120	6	1.9	517	47	69
7	204	5	2.6	114	8	2.6	333	31	28
8	281	8	6.9	120	11	3.6	307	27	22
9	636	16	27	118	11	3.5	564	64	209
10	468	12	15	99	9	2.3	1130	174	589
11	396	7	7.5	89	8	1.9	930	71	180
12	348	4	4.0	86	8	1.8	640	57	99
13	307	4	3.2	103	10	2.8	398	41	43
14	278	4	3.1	100	7	2.0	278	39	29
15	261	3	1.9	90	8	1.8	214	27	15
16	241	3	1.7	78	8	1.6	173	19	8.9
17	217	2	1.4	68	7	1.2	141	15	5.8
18	204	2	.94	59	5	.88	117	12	3.9
19	187	2	1.0	67	9	1.9	100	10	2.7
20	176	4	1.7	90	15	3.8	87	11	2.5
21	270	12	9.1	97	16	4.3	79	10	2.2
22	321	10	8.4	74	14	2.8	70	8	1.5
23	278	4	3.0	1890	428	7330	61	8	1.3
24	242	1	.91	4840	466	8890	55	8	1.2
25	225	4	2.5	3880	201	2280	49	12	1.6
26	215	5	3.0	1670	58	282	42	9	1.0
27	204	4	2.5	1450	34	136	38	8	.80
28	199	5	2.6	1260	27	91	50	9	1.2
29	242	12	8.3	1010	24	65	97	16	4.2
30	212	11	6.5	744	16	31	78	13	2.7
31	---	---	---	535	15	22	---	---	---
TOTAL	7880	---	140.95	19593	---	19183.38	10145	---	3385.50
JULY			AUGUST			SEPTEMBER			
1	80	16	3.5	19	9	.45	175	26	12
2	105	13	3.9	16	6	.25	1450	305	1200
3	229	15	9.3	14	4	.16	2150	444	3480
4	136	11	3.9	14	6	.22	580	68	108
5	81	10	2.1	12	7	.22	371	38	38
6	59	10	1.6	11	7	.20	255	28	19
7	47	10	1.3	9.2	6	.15	175	24	12
8	39	10	1.0	9.6	5	.14	126	23	7.8
9	32	8	.73	9.6	4	.11	99	23	6.1
10	34	11	1.0	11	3	.09	82	20	4.4
11	91	11	2.7	642	179	310	70	26	4.9
12	111	12	3.7	465	119	149	179	94	56
13	109	19	5.9	170	64	29	213	43	26
14	174	28	14	99	45	12	125	24	8.0
15	213	38	23	69	30	5.6	90	21	5.2
16	165	30	13	50	22	3.0	116	25	8.0
17	166	17	7.8	48	18	2.4	131	19	6.9
18	153	18	7.4	48	15	1.9	105	14	4.0
19	90	14	3.4	49	12	1.6	87	12	2.9
20	64	11	1.9	47	15	1.9	107	12	3.6
21	49	8	1.1	142	42	16	117	14	4.4
22	47	7	.94	70	34	6.3	106	14	4.1
23	38	6	.64	50	27	3.7	92	11	2.7
24	30	5	.38	38	18	1.9	331	16	14
25	24	9	.56	29	14	1.1	170	16	7.2
26	24	12	.75	28	11	.83	119	17	5.5
27	22	10	.59	41	7	.83	90	20	4.7
28	19	8	.39	135	40	14	73	20	3.9
29	22	5	.33	210	44	25	69	16	3.1
30	32	6	.50	116	21	6.5	76	16	3.4
31	24	7	.44	90	9	2.3	---	---	---
TOTAL	2509	---	117.75	2761.4	---	596.85	7929	---	5065.8

TOTAL LOAD FOR YEAR: 76551.92

03409500 CLEAR FORK NEAR ROBBINS, TN

LOCATION.--Lat 36°23'18", long 84°37'49", Scott County, Hydrologic Unit 05130104, on right bank 300 ft downstream from Burnt Mill Bridge, 3.3 mi northwest of Robbins, and at mile 3.7.

DRAINAGE AREA.--272 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to September 1971, July 1975 to current year. Published as Clear Fork River near Robbins, October 1951 to September 1954.

REVISED RECORDS.--WSP 1306: 1931(M), 1936-37(M), 1943-44(M). WSP 1436: Drainage area. WSP 1910: 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 1,081.46 ft, Sandy Hook datum. Prior to Aug. 10, 1940, nonrecording gage at site 300 ft upstream at datum 1.00 ft higher.

REMARKS.--Estimated daily discharge, Water Year 1986: Dec. 19-22, 25-30, Jan. 2, 6-10, 14, 16, 27-31. Records good, except periods of estimated daily discharge, which are poor.
Estimate daily discharge, Water Year 1987: Feb. 24 to Mar. 4. Records good.

AVERAGE DISCHARGE.--53 years (water years 1931-71, 1976-87), 472 ft³/s, 23.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s Feb. 3, 1939, gage height, 18.5 ft from floodmarks, site and datum then in use, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement of peak flow; minimum observed, 0.2 ft³/s Sept. 19-21, 1932; minimum gage height observed, 0.28 ft Oct. 1-3, 1936, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 23, 1929 reached a stage of 22.1 ft, former site and datum, from information by local residents, and flood of May 27, 1973, reached a stage of 18.92 ft, present site and datum, from floodmark; discharge 35,700 ft³/s, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement at gage height 18.5 ft.

EXTREMES FOR WATER YEARS 1986-1987.--Peak discharges above base of 6,500 ft³/s and maximum (*):

Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1986	Nov. 28, 1985	2230	9080	10.43	1987	Nov. 9, 1986	1430	*13700	*12.45
	Feb. 18, 1986	0430	*11300	*11.50		Nov. 26, 1986	1700	7690	9.69
	May 23, 1986	2200	7990	9.86					
	May 24, 1986	2200	7280	9.46					

Water year 1986: Minimum discharge, 2.9 ft³/s, Aug. 7.

Water year 1987: Minimum discharge, 2.7 ft³/s, Aug. 31, Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4430	77	1060	182	175	417	154	133	521	29	5.2	42
2	3470	79	951	190	185	374	146	125	378	68	4.5	330
3	1030	85	693	172	210	360	139	114	340	128	3.9	984
4	770	123	551	164	248	334	132	102	269	101	3.6	301
5	509	319	467	157	649	305	124	93	390	61	3.4	200
6	354	281	440	155	1220	294	118	88	353	43	3.2	149
7	268	226	358	150	1530	280	117	84	286	31	3.3	103
8	210	201	316	140	1090	244	157	88	264	24	3.3	69
9	172	172	288	135	792	220	293	91	624	20	3.2	50
10	147	154	257	130	623	211	221	85	1630	20	3.4	41
11	132	141	234	125	559	217	185	72	1040	20	5.1	33
12	120	131	261	121	432	225	169	66	663	17	49	48
13	108	124	358	120	350	303	156	65	442	23	71	119
14	100	118	448	115	358	599	143	72	302	25	35	108
15	108	111	387	110	387	594	138	74	218	21	22	71
16	153	116	360	108	380	726	132	62	166	34	28	79
17	124	162	330	105	3780	600	123	52	128	35	48	89
18	106	194	295	105	8650	505	117	47	101	27	23	76
19	95	191	260	146	3050	524	110	50	82	20	15	62
20	89	174	240	240	1640	528	106	58	68	17	13	67
21	87	162	230	205	1120	414	157	68	56	14	12	109
22	86	218	220	186	834	354	225	58	47	12	10	87
23	85	317	219	176	660	322	198	2040	41	11	9.2	69
24	91	308	207	162	563	296	167	4750	35	9.6	9.5	59
25	106	269	200	159	532	264	153	4080	30	7.9	7.0	50
26	102	236	190	181	456	239	145	3510	25	7.1	5.8	42
27	91	346	180	210	474	224	136	2990	22	7.5	7.3	36
28	86	3870	170	200	504	211	134	3280	21	7.4	14	30
29	81	5260	160	190	---	191	160	2190	25	6.0	60	27
30	78	1820	150	180	---	176	156	1260	22	6.3	40	24
31	76	---	152	178	---	165	---	775	---	6.0	26	---
TOTAL	13464	15985	10632	4897	31451	10716	4611	26622	8589	858.8	546.9	3554
MEAN	434	533	343	158	1123	346	154	859	286	27.7	17.6	118
MAX	4430	5260	1060	240	8650	726	293	4750	1630	128	71	984
MIN	76	77	150	105	175	165	106	47	21	6.0	3.2	24
CFSM	1.60	1.96	1.26	.58	4.13	1.27	.57	3.16	1.05	.10	.06	.44
IN.	1.84	2.19	1.45	.67	4.30	1.47	.63	3.64	1.17	.12	.07	.49

CAL YR 1985 TOTAL 133824.0 MEAN 367 MAX 5260 MIN 11 CFSM 1.35 IN. 18.30
WTR YR 1986 TOTAL 131926.6 MEAN 361 MAX 8650 MIN 3.2 CFSM 1.33 IN. 18.04

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

[illegible]

CUMBERLAND RIVER BASIN

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03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1977-82, October 1983 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1983 to September 1986.

pH: October 1983 to September 1986.

WATER TEMPERATURE: October 1983 to September 1986.

DISSOLVED OXYGEN: October 1983 to September 1986.

TURBIDITY: October 1983 to September 1986.

SUSPENDED SEDIMENT DISCHARGE: October 1983 to September 1986.

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler since Oct. 1, 1983.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 254 microsiemens, July 29, 1984; minimum, 27 microsiemens, May 26, 1986.

pH: Maximum, 8.1 units, Sept. 11, 1984, July 20, 1985; minimum, 5.2 units, April 6, 1977.

WATER TEMPERATURE: Maximum observed, 34.0°C, July 16, 1980; minimum, 0.5°C, many days most years.

DISSOLVED OXYGEN: Maximum, 14.2 mg/L Dec. 25, 26, 30, 31, 1983, Jan. 20, 21, 1984, Jan. 9, 1986; minimum, 5.4 mg/L

Aug. 1, 3, 1986.

TURBIDITY: Maximum, 550 JTU, Oct. 1, 1985; minimum, 0 JTU, many days most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 353 mg/L, May 7, 1984; minimum daily mean, 0 mg/L, on several days during October 1985.

SEDIMENT LOADS: Maximum daily, 16,900 tons, May 7, 1984; minimum daily, 0.02 tons, Oct. 11, 12, 1985, Aug. 3, 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 142 microsiemens, Aug. 15; minimum, 27 microsiemens, May 26.

pH: Maximum, 7.9 units, July 13; minimum, 6.2 units, May 26.

WATER TEMPERATURES: Maximum, 33.0°C July 27, 29; minimum, 0.5°C, many days.

DISSOLVED OXYGEN: Maximum, 14.2 mg/L, Jan. 9; minimum, 5.4 mg/L, Aug. 1, 3.

TURBIDITY: Maximum, 550 JTU, Oct. 1; minimum, 0 JTU, Dec. 20-22, 26, 27.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 321 mg/L, Feb. 18; minimum daily mean, 0 mg/L, several days.

SEDIMENT LOADS: Maximum daily, 8,340 tons, Feb. 18; minimum daily, 0.02 ton, Oct. 11, 12, Aug. 3.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	78	48	54	88	86	87	49	47	47	44	42	43
2	52	48	51	88	88	88	49	47	47	44	42	42
3	38	38	38	88	86	87	45	43	45	44	40	41
4	42	38	41	86	76	81	44	44	44	44	40	41
5	44	42	43	88	74	80	48	44	46	46	42	42
6	44	42	43	78	68	73	46	44	46	42	42	42
7	44	42	44	68	60	63	51	45	46	44	42	42
8	46	44	45	60	60	60	47	47	47	42	42	42
9	52	46	47	58	58	58	50	48	49	46	42	45
10	52	48	50	60	58	59	50	50	50	44	42	43
11	54	52	53	62	60	61	54	50	53	44	42	44
12	56	54	55	64	62	63	54	54	54	46	44	44
13	60	56	57	64	64	64	54	52	54	46	44	44
14	62	58	60	64	62	63	54	50	52	46	44	45
15	62	62	62	66	64	65	50	48	48	46	44	45
16	70	62	65	68	66	68	48	46	48	46	44	44
17	82	64	73	66	64	65	46	44	46	44	44	44
18	80	78	79	70	64	67	44	40	42	46	42	43
19	84	80	82	64	64	64	44	38	40	46	42	45
20	88	84	86	64	64	64	38	38	38	46	42	45
21	90	88	88	64	62	63	44	38	39	46	44	45
22	90	88	88	62	60	60	44	40	41	46	46	46
23	90	88	89	64	56	59	44	38	40	48	46	47
24	90	88	89	56	54	56	44	40	41	48	44	46
25	88	86	87	54	52	54	44	40	41	44	44	44
26	88	86	87	54	52	54	44	40	41	44	42	44
27	86	84	85	65	55	58	42	40	42	42	40	41
28	84	82	83	61	37	50	46	40	42	40	40	40
29	84	82	84	46	38	43	46	42	43	40	40	40
30	84	82	83	46	44	46	44	42	43	42	40	40
31	84	84	84	---	---	---	44	42	43	42	40	41
MONTH	90	38	67	88	37	64	54	38	45	48	40	43

CUMBERLAND RIVER BASIN

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	40	40	40	46	44	44	64	60	62	60	58	58
2	40	38	39	49	45	45	66	62	64	58	56	57
3	---	---	---	45	45	45	70	66	68	59	57	58
4	---	---	---	50	46	46	70	68	68	58	56	57
5	---	---	---	52	46	48	70	68	69	62	57	60
6	---	---	---	48	46	48	72	70	71	64	60	62
7	---	---	---	48	46	46	76	72	73	67	63	65
8	---	---	---	52	46	47	76	74	75	68	65	67
9	---	---	---	52	48	50	74	72	73	69	65	67
10	---	---	---	52	50	51	72	66	69	70	66	68
11	---	---	---	56	52	54	70	68	69	71	69	70
12	---	---	---	60	56	58	72	68	70	73	68	70
13	---	---	---	60	58	58	72	68	70	72	69	70
14	---	---	---	60	54	56	68	66	68	74	69	72
15	---	---	---	64	56	60	68	68	68	82	74	77
16	---	---	---	58	54	56	68	64	66	87	82	85
17	---	---	---	58	52	55	64	62	63	92	86	89
18	---	---	---	52	50	51	66	62	64	92	87	89
19	40	36	38	52	50	51	68	64	66	89	84	87
20	36	34	36	54	50	50	68	68	68	83	74	78
21	39	37	38	50	48	49	70	68	70	73	70	72
22	39	39	39	50	46	48	70	68	70	72	69	71
23	40	40	40	52	46	47	---	---	---	75	34	57
24	40	40	40	50	48	49	---	---	---	42	33	37
25	47	41	42	52	50	51	---	---	---	35	32	34
26	45	41	43	54	52	53	---	---	---	33	27	31
27	46	44	46	56	54	55	---	---	---	39	34	36
28	46	44	45	56	54	55	---	---	---	39	36	38
29	---	---	---	58	56	57	---	---	---	39	37	38
30	---	---	---	64	56	59	61	60	61	41	38	39
31	---	---	---	62	58	60	---	---	---	43	40	41
MONTH	---	---	---	64	44	52	---	---	---	92	27	61

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	46	43	44	95	90	93	100	90	94	99	89	94
2	49	46	47	103	87	94	99	91	95	90	89	89
3	51	49	50	122	101	110	100	90	95	98	63	73
4	51	50	51	122	93	107	98	88	93	72	65	68
5	71	52	59	108	93	100	101	89	95	69	65	66
6	70	58	64	113	105	109	99	90	94	73	69	70
7	57	55	56	115	106	110	97	90	93	75	73	74
8	62	56	59	116	108	111	101	91	95	76	74	74
9	64	58	62	114	107	110	99	92	95	78	74	75
10	50	33	38	113	103	107	97	89	93	82	78	79
11	48	43	43	109	102	105	97	81	93	85	81	82
12	51	47	49	107	100	103	96	89	93	88	81	84
13	52	49	50	115	94	102	112	86	97	90	80	83
14	55	49	53	106	98	100	134	111	124	97	90	94
15	57	54	56	103	97	100	142	128	134	92	85	89
16	61	56	59	99	96	97	131	103	121	87	84	85
17	62	59	61	107	98	103	103	94	97	84	81	83
18	64	62	63	117	106	111	100	96	98	82	81	81
19	68	62	65	123	114	118	104	97	101	87	83	85
20	72	66	69	126	117	121	112	102	109	85	83	84
21	74	69	72	119	99	102	115	109	112	93	85	88
22	78	71	75	104	96	100	121	111	115	101	94	98
23	81	74	78	106	97	100	119	109	114	98	96	97
24	83	78	80	106	98	102	117	104	110	101	96	99
25	85	78	82	107	99	103	115	101	107	102	98	100
26	86	79	83	107	99	102	108	97	102	103	98	100
27	90	81	85	107	98	102	103	91	96	104	97	100
28	92	85	88	106	98	100	93	80	87	103	97	100
29	94	88	91	107	96	100	79	75	77	104	97	100
30	96	90	92	106	92	97	95	76	88	104	99	101
31	---	---	---	93	89	92	98	93	95	---	---	---
MONTH	96	33	64	126	87	104	142	75	100	104	63	86

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	6.7	7.3	7.2	---	---	7.1	7.1	7.1	7.0	7.1	6.9
2	6.9	6.7	7.3	7.2	---	---	7.1	7.1	7.1	7.0	7.1	7.0
3	6.8	6.8	7.3	7.2	---	---	7.1	7.0	7.0	6.9	7.1	7.0
4	6.9	6.7	7.2	7.2	---	---	7.1	7.0	---	---	7.1	7.0
5	7.0	6.9	7.4	7.2	---	---	7.1	7.0	---	---	7.0	6.6
6	7.1	6.9	7.3	7.3	---	---	7.1	7.1	---	---	6.8	6.7
7	7.1	6.9	7.2	7.1	---	---	7.1	7.1	---	---	6.8	6.7
8	7.1	7.0	7.2	7.1	---	---	7.1	7.1	---	---	6.8	6.7
9	7.1	7.0	7.2	7.2	---	---	7.1	7.1	---	---	6.8	6.7
10	7.1	7.0	7.2	7.2	---	---	7.1	7.1	---	---	6.8	6.7
11	7.1	7.0	7.2	7.1	---	---	7.1	7.1	---	---	6.8	6.7
12	7.1	7.0	7.2	7.1	---	---	7.1	7.1	---	---	6.8	6.7
13	7.0	7.0	7.2	7.1	---	---	7.2	7.1	---	---	6.8	6.6
14	7.0	7.0	---	---	---	---	7.2	7.1	---	---	6.7	6.5
15	7.0	6.9	---	---	---	---	7.2	7.1	---	---	6.8	6.6
16	7.1	7.0	---	---	---	---	7.2	7.1	---	---	6.8	6.6
17	7.1	7.0	---	---	---	---	7.1	7.1	---	---	6.8	6.6
18	7.1	7.0	---	---	7.1	7.1	7.1	7.1	---	---	6.9	6.5
19	7.1	7.0	---	---	7.1	7.0	7.1	7.1	6.5	6.5	6.8	6.5
20	7.0	7.0	---	---	7.1	7.0	7.2	7.1	6.7	6.5	6.9	6.5
21	7.1	7.0	---	---	7.1	7.0	7.2	7.1	6.7	6.6	6.9	6.6
22	7.1	7.0	---	---	7.1	7.0	7.1	7.0	6.8	6.7	6.9	6.6
23	7.1	7.0	---	---	7.1	7.0	7.1	7.0	6.9	6.8	6.9	6.6
24	7.1	7.1	---	---	7.1	7.0	7.1	7.0	6.9	6.8	6.9	6.6
25	7.1	7.1	---	---	7.1	7.0	7.1	7.0	7.0	6.8	6.9	6.6
26	7.2	7.1	---	---	7.1	7.1	7.1	7.0	7.0	6.9	6.9	6.6
27	7.2	7.1	---	---	7.1	7.1	7.2	7.1	7.0	6.9	6.9	6.6
28	7.2	7.1	---	---	7.1	7.0	7.2	7.1	7.1	6.9	6.9	6.6
29	7.3	7.2	---	---	7.1	7.0	7.2	7.1	---	---	6.9	6.6
30	7.3	7.2	---	---	7.1	7.0	7.1	7.1	---	---	6.9	6.6
31	7.3	7.2	---	---	7.1	7.0	7.1	7.0	---	---	6.9	6.6
MONTH	7.5	6.7	---	---	---	---	7.2	7.0	---	---	7.1	6.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	6.6	6.9	6.7	6.9	6.6	7.1	6.8	7.2	6.9	7.3	7.2
2	7.0	6.7	7.0	6.7	6.9	6.6	7.3	6.8	7.3	6.9	7.4	6.9
3	6.9	6.7	7.0	6.7	7.0	6.7	7.2	6.9	7.3	6.9	7.2	6.8
4	6.9	6.7	7.0	6.8	6.9	6.7	7.3	7.1	7.3	6.9	6.9	6.8
5	6.9	6.7	7.0	6.8	7.1	6.7	7.3	7.1	7.4	6.9	6.9	6.8
6	6.9	6.7	6.9	6.7	7.0	6.9	7.3	7.1	7.4	6.9	7.0	6.8
7	6.9	6.7	6.9	6.7	7.0	6.7	7.4	7.0	7.6	6.9	7.1	6.9
8	6.9	6.7	6.8	6.7	7.0	6.7	7.4	7.0	7.4	6.9	7.1	6.9
9	7.0	6.7	6.9	6.6	7.0	6.7	7.4	7.0	7.4	6.9	7.2	7.0
10	7.1	6.8	6.9	6.6	6.6	6.3	7.5	6.9	7.5	6.9	7.2	7.0
11	7.1	6.8	6.8	6.7	6.9	6.5	7.2	6.9	7.5	6.9	7.3	7.0
12	7.0	6.9	7.1	6.7	7.0	6.7	7.3	6.9	7.2	6.9	7.4	7.0
13	7.0	6.8	7.0	6.8	7.2	6.7	7.9	6.9	7.3	7.0	7.2	6.9
14	7.0	6.8	7.0	6.8	7.2	6.7	7.2	6.9	7.4	7.2	7.2	7.1
15	6.9	6.7	7.0	6.9	7.2	6.7	7.2	6.9	7.6	7.2	7.3	7.1
16	6.9	6.8	7.1	6.9	7.1	6.8	7.2	6.9	7.8	7.2	7.2	7.1
17	7.0	6.9	7.1	6.9	7.0	6.8	7.2	7.0	7.4	7.1	7.2	7.0
18	7.0	6.9	7.0	6.8	7.1	6.8	7.3	7.0	7.4	7.1	7.2	7.0
19	7.0	6.9	7.0	6.7	7.1	6.8	7.4	7.0	7.5	7.1	7.3	7.0
20	7.0	6.8	7.0	6.9	7.0	6.8	7.4	7.0	7.6	7.1	7.2	7.0
21	6.9	6.7	7.1	6.9	7.0	6.9	7.2	7.0	7.6	7.1	7.2	7.0
22	6.8	6.6	7.2	7.0	7.0	6.8	7.3	7.0	7.5	7.1	7.3	7.1
23	---	---	7.5	6.4	7.0	6.8	7.3	6.9	7.5	7.1	7.2	7.1
24	---	---	6.8	6.3	7.0	6.7	7.3	6.9	7.5	7.1	7.3	7.1
25	---	---	6.5	6.4	7.1	6.7	7.4	7.0	7.4	7.0	7.3	7.1
26	---	---	6.5	6.2	7.1	6.7	7.4	6.9	7.4	7.0	7.3	7.0
27	---	---	6.6	6.4	7.1	6.7	7.3	6.9	7.5	7.0	7.3	7.0
28	---	---	6.6	6.5	7.1	6.7	7.3	6.9	7.2	7.0	7.4	7.0
29	---	---	6.6	6.4	7.1	6.7	7.3	6.9	7.3	7.0	7.3	7.0
30	7.0	6.8	6.7	6.5	7.2	6.8	7.3	7.0	7.4	7.2	7.4	7.0
31	---	---	6.8	6.6	---	---	7.2	6.9	7.4	7.2	---	---
MONTH	---	---	7.5	6.2	7.2	6.3	7.9	6.8	7.8	6.9	7.4	6.8

CUMBERLAND RIVER BASIN

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.0	14.5	15.5	16.0	15.5	16.0	13.5	13.0	13.0	1.0	.5	1.0
2	14.5	14.0	14.0	16.0	16.0	16.0	12.5	9.0	11.0	1.0	.5	1.0
3	14.5	14.0	14.0	16.0	15.0	15.5	9.0	6.5	7.5	1.5	1.0	1.0
4	16.0	14.5	15.0	15.0	12.5	14.0	6.5	6.0	6.0	1.5	1.0	1.0
5	15.5	15.0	15.0	12.5	11.0	11.5	6.5	6.0	6.5	1.5	1.5	1.5
6	14.5	13.5	14.0	11.0	10.5	11.0	6.5	6.0	6.5	1.5	.5	1.0
7	13.5	12.0	13.0	11.0	10.0	10.5	6.0	5.0	5.5	1.5	1.0	1.0
8	13.0	12.0	12.5	10.0	9.5	9.5	5.5	5.0	5.0	1.0	.5	1.0
9	14.0	12.5	13.5	9.0	8.5	9.0	6.5	5.5	6.0	1.0	.5	1.0
10	15.0	14.0	14.5	10.5	9.0	9.5	7.0	6.0	6.5	1.0	.5	1.0
11	16.0	14.5	15.5	12.0	10.5	11.0	8.0	6.5	7.5	1.0	.5	1.0
12	16.5	15.5	16.0	12.5	12.0	12.0	8.5	8.0	8.5	1.5	.5	1.0
13	17.5	16.5	17.0	12.5	12.0	12.5	8.5	7.5	8.0	1.0	.5	1.0
14	18.0	17.5	18.0	13.5	13.0	13.5	7.5	5.0	6.5	1.5	.5	1.0
15	18.5	18.0	18.0	14.0	13.5	14.0	4.5	3.5	3.5	1.5	.5	1.0
16	18.5	17.5	18.0	14.5	14.5	14.5	3.0	3.0	3.0	1.5	.5	1.0
17	18.0	16.5	17.0	14.5	13.5	13.5	3.0	2.5	3.0	1.5	1.0	1.0
18	18.0	17.0	17.5	14.0	13.0	13.5	3.0	2.0	2.5	1.5	1.0	1.5
19	18.5	17.5	18.0	14.5	13.5	14.0	2.0	1.0	1.0	2.5	2.0	2.0
20	18.5	18.0	18.0	14.5	13.5	14.0	1.0	1.0	1.0	3.0	2.5	2.5
21	19.5	18.5	19.0	13.5	12.0	12.5	1.0	.5	1.0	3.0	2.0	2.5
22	19.5	18.5	19.0	12.0	11.5	11.5	1.0	.5	1.0	4.0	3.0	3.5
23	19.0	18.5	18.5	11.5	10.5	10.5	1.0	1.0	1.0	4.0	3.5	3.5
24	19.0	18.5	18.5	10.5	10.5	10.5	1.5	1.0	1.5	3.5	2.5	3.0
25	19.0	18.0	18.5	12.0	10.5	11.0	1.0	.5	1.0	3.0	2.5	3.0
26	18.0	17.0	17.5	13.0	12.0	12.5	1.0	.5	.5	3.0	2.5	3.0
27	17.0	16.5	16.5	14.0	13.0	13.5	1.0	.5	.5	2.5	.5	1.0
28	17.0	16.5	16.5	15.5	14.0	14.5	1.0	.5	.5	1.0	.5	.5
29	16.5	16.0	16.5	14.5	13.5	14.0	1.0	.5	1.0	1.0	.5	.5
30	16.0	15.5	16.0	14.0	13.5	13.5	1.0	.5	1.0	1.0	.5	1.0
31	16.0	15.5	16.0	---	---	---	1.0	.5	1.0	1.5	.5	1.0
MONTH	19.5	12.0	16.3	16.0	8.5	12.6	13.5	.5	4.1	4.0	.5	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.0	1.0	1.5	5.0	4.0	4.5	14.5	13.0	14.0	19.0	18.0	18.5
2	3.0	2.0	2.5	4.0	2.5	3.5	15.5	13.5	14.5	18.0	16.5	17.5
3	3.5	3.0	3.0	4.0	3.5	3.5	15.5	14.5	15.0	18.0	16.5	17.0
4	---	---	---	4.5	4.0	4.0	15.5	14.5	15.0	17.0	15.5	16.5
5	---	---	---	5.5	4.0	5.0	16.5	15.0	15.5	18.0	16.0	17.0
6	---	---	---	6.0	5.5	5.5	17.0	16.0	16.5	19.5	17.5	18.5
7	---	---	---	5.5	4.5	5.0	18.0	16.5	17.5	21.5	19.0	20.0
8	---	---	---	5.0	3.5	4.5	18.0	17.5	17.5	22.5	20.5	21.5
9	---	---	---	7.0	4.5	5.5	17.5	14.0	15.5	23.0	21.0	22.0
10	---	---	---	8.5	7.0	7.5	14.0	12.5	13.0	23.0	21.0	22.0
11	---	---	---	10.5	8.5	9.5	14.0	12.0	13.0	22.5	21.5	22.0
12	---	---	---	11.5	10.0	10.5	14.5	12.5	13.5	22.0	21.0	21.5
13	---	---	---	12.5	11.5	12.0	14.5	13.0	14.0	22.5	21.0	21.5
14	---	---	---	12.5	12.0	12.0	15.5	13.5	14.5	22.5	21.0	22.0
15	---	---	---	12.5	11.5	12.0	16.0	15.0	15.5	23.0	21.5	22.0
16	---	---	---	11.5	10.0	11.0	15.5	13.0	14.0	24.0	22.0	23.0
17	---	---	---	10.5	9.5	10.0	13.0	11.5	12.0	25.5	22.5	24.0
18	---	---	---	10.5	9.5	10.0	13.5	11.0	12.5	24.0	22.5	23.5
19	9.0	9.0	9.0	11.5	10.5	11.0	15.0	13.0	14.0	23.0	21.5	22.5
20	9.5	8.5	9.0	11.0	9.5	10.5	15.5	14.5	15.0	21.5	19.5	20.5
21	9.0	8.5	9.0	9.5	8.0	8.5	16.0	15.5	16.0	19.5	18.5	19.0
22	8.5	7.5	8.0	8.0	6.0	7.0	18.0	15.0	15.5	20.0	18.0	19.0
23	7.5	6.5	7.0	8.0	6.0	7.0	---	---	---	19.0	14.0	16.5
24	7.0	6.0	6.5	9.0	7.0	8.0	---	---	---	15.5	14.0	14.5
25	6.5	5.5	6.0	10.5	8.0	9.0	---	---	---	15.5	15.0	15.0
26	6.5	5.0	6.0	11.0	10.0	10.5	---	---	---	15.5	15.0	15.5
27	6.5	6.0	6.5	12.5	11.0	12.0	---	---	---	16.0	15.0	15.5
28	6.0	5.5	5.5	12.5	11.0	12.0	---	---	---	16.0	16.0	16.0
29	---	---	---	13.0	11.0	12.0	---	---	---	17.0	16.0	16.5
30	---	---	---	14.0	11.5	13.0	19.0	18.0	18.5	18.5	16.5	17.5
31	---	---	---	14.5	12.0	13.5	---	---	---	19.5	17.0	18.0
MONTH	---	---	---	14.5	2.5	8.7	---	---	---	25.5	14.0	19.2

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.0	18.0	19.0	29.0	26.5	27.5	31.1	25.4	27.8	21.0	20.2	20.5
2	20.5	19.0	19.5	27.5	26.0	26.5	30.0	25.2	27.2	20.2	20.1	20.2
3	20.5	19.5	20.0	26.0	25.0	25.5	30.2	24.2	27.0	20.0	18.5	19.0
4	20.5	19.5	20.0	25.5	24.0	25.0	29.2	23.4	26.0	20.5	19.5	20.0
5	20.5	19.0	19.5	26.5	24.0	25.5	30.1	23.3	26.5	21.0	20.5	20.5
6	21.5	19.5	20.5	28.5	25.0	26.5	29.3	23.9	26.2	22.0	20.5	21.0
7	22.5	20.5	21.5	29.5	26.0	27.5	28.8	23.8	26.2	22.0	20.5	21.5
8	23.5	22.0	22.5	30.5	27.0	28.5	30.1	24.6	26.8	22.0	20.5	21.0
9	23.0	22.0	22.5	30.5	27.0	28.5	28.6	24.4	26.3	22.0	20.0	21.0
10	21.5	19.0	19.5	28.5	26.5	27.5	27.9	24.6	26.0	22.5	21.0	21.5
11	21.0	19.0	20.0	29.5	26.0	27.5	28.2	24.2	25.9	22.5	21.0	21.5
12	22.0	20.5	21.0	30.0	26.5	27.5	28.0	24.1	25.8	23.5	21.5	22.5
13	22.0	20.5	21.0	29.5	26.5	28.0	26.2	24.6	25.2	22.5	21.0	22.0
14	23.0	20.5	22.0	29.5	26.5	27.5	27.4	24.6	26.1	22.0	20.5	21.5
15	23.5	22.5	23.0	30.0	26.5	28.0	29.3	25.2	27.0	22.5	21.0	21.5
16	24.5	22.5	23.5	28.5	26.5	27.0	27.8	24.5	25.9	22.5	21.0	21.5
17	24.5	23.0	24.0	30.0	26.5	28.0	26.1	24.4	25.2	22.0	21.0	21.5
18	24.5	23.0	23.5	31.0	27.5	29.0	27.0	24.7	25.6	22.0	21.0	21.5
19	25.0	22.5	24.0	31.5	28.0	29.5	28.0	24.6	26.0	21.5	21.0	21.0
20	26.0	23.5	25.0	32.5	28.0	30.0	28.3	24.7	26.2	22.0	20.5	21.0
21	27.0	24.5	26.0	31.7	28.0	30.6	27.5	24.9	26.0	22.5	21.0	22.0
22	28.0	25.0	26.5	32.0	27.6	29.5	29.2	24.8	26.8	23.5	21.5	22.5
23	28.5	25.5	27.0	31.7	27.5	29.3	29.0	25.4	26.9	23.5	22.0	23.0
24	29.0	26.5	27.5	32.0	27.5	29.6	29.6	24.5	26.7	24.5	22.5	23.5
25	29.5	26.0	27.5	32.3	27.8	29.7	29.5	24.3	26.5	24.5	23.0	23.5
26	29.0	25.0	27.0	31.0	27.6	29.2	27.9	24.4	25.9	25.5	23.0	24.0
27	29.5	25.5	27.0	33.0	28.0	30.0	27.9	24.1	25.7	26.0	23.0	24.5
28	30.0	26.0	27.5	32.0	28.0	30.0	26.1	22.5	24.0	26.0	23.5	24.5
29	30.0	27.0	28.0	33.0	28.0	30.0	23.5	21.5	22.4	26.0	23.0	24.5
30	30.0	27.0	28.0	32.5	26.2	28.9	23.7	21.5	22.1	26.0	23.5	24.5
31	---	---	---	27.5	25.4	26.4	21.6	20.7	21.2	---	---	---
MONTH	30.0	18.0	23.4	33.0	24.0	28.2	31.1	20.7	25.8	26.0	18.5	21.9

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.6	9.0	9.4	9.1	8.9	9.0	9.4	9.3	9.4	13.4	13.2	13.3
2	9.7	9.6	9.7	9.0	8.8	8.9	10.8	9.4	10.2	13.5	13.3	13.3
3	9.7	9.6	9.7	9.1	8.9	9.0	11.9	10.8	11.5	13.3	13.1	13.2
4	9.8	9.3	9.6	9.8	9.1	9.4	12.4	11.9	12.1	13.2	13.1	13.2
5	9.7	9.3	9.5	10.4	9.8	10.1	11.9	11.6	11.8	13.1	12.9	13.0
6	10.1	9.5	9.9	10.6	10.4	10.5	12.0	11.6	11.8	13.4	13.1	13.2
7	10.5	9.6	10.1	10.7	10.4	10.5	12.5	11.9	12.2	14.0	13.2	13.6
8	10.5	10.1	10.3	11.1	10.7	10.9	12.4	12.1	12.2	14.1	13.9	14.0
9	10.3	10.0	10.1	11.3	11.0	11.1	12.1	11.8	11.9	14.2	14.0	14.1
10	10.0	9.7	9.8	11.2	10.9	11.0	12.2	11.6	11.9	14.0	13.9	13.9
11	9.7	9.4	9.5	10.8	10.6	10.7	11.8	11.1	11.5	14.0	13.8	13.9
12	9.4	9.1	9.2	10.6	10.3	10.3	11.0	10.8	11.9	13.9	13.8	13.8
13	9.1	8.8	8.9	10.3	10.1	10.1	10.9	10.6	10.7	13.9	13.7	13.8
14	8.9	8.5	8.6	10.2	9.9	10.1	12.2	10.9	11.6	13.9	13.8	13.9
15	8.5	8.3	8.4	10.2	9.8	10.0	13.1	12.2	12.7	14.0	13.8	14.0
16	8.7	8.3	8.5	9.8	9.2	9.4	13.2	12.7	12.9	14.0	13.9	14.0
17	9.0	8.5	8.7	10.1	9.2	9.7	13.2	12.8	13.0	13.9	13.8	13.8
18	8.9	8.7	8.8	10.1	9.6	9.9	13.2	12.8	13.2	13.8	13.6	13.7
19	8.8	8.6	8.7	9.9	9.4	9.8	13.6	13.1	13.4	---	---	---
20	8.6	8.4	8.5	9.6	9.1	9.4	13.5	13.4	13.4	---	---	---
21	8.6	8.3	8.4	10.3	9.5	9.9	13.7	13.3	13.5	---	---	---
22	8.4	8.2	8.3	10.4	9.9	10.1	13.6	13.4	13.5	---	---	---
23	8.4	8.3	8.3	10.9	10.1	10.5	13.3	13.1	13.2	---	---	---
24	8.5	8.3	8.4	10.9	10.4	10.7	13.1	13.0	13.1	---	---	---
25	8.7	8.4	8.5	10.8	10.3	10.6	13.5	13.0	13.3	---	---	---
26	9.0	8.6	8.8	10.2	9.7	10.0	13.5	13.4	13.5	---	---	---
27	9.0	8.8	8.9	9.6	9.0	9.3	13.4	13.3	13.4	---	---	---
28	9.0	8.9	9.0	9.3	7.3	8.8	13.5	13.3	13.4	---	---	---
29	9.0	8.8	8.9	9.3	8.8	9.2	13.5	13.3	13.4	---	---	---
30	9.2	9.0	9.1	9.5	9.3	9.4	13.5	13.4	13.5	---	---	---
31	9.2	9.0	9.1	---	---	---	13.4	13.2	13.3	---	---	---
MONTH	10.5	8.2	9.1	11.3	7.3	9.9	13.7	9.3	12.5	---	---	---

CUMBERLAND RIVER BASIN

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	12.9	12.0	12.5	10.4	9.8	10.1	8.9	8.5	8.7
2	---	---	---	13.1	12.4	12.8	10.2	9.8	10.0	9.2	8.7	9.0
3	---	---	---	12.8	12.4	12.6	10.0	9.4	9.7	9.3	8.8	9.1
4	---	---	---	12.6	12.3	12.5	10.9	9.5	9.8	9.4	9.0	9.2
5	---	---	---	12.7	12.1	12.4	9.9	9.4	9.7	9.2	9.0	9.1
6	---	---	---	12.3	10.7	11.5	9.6	9.2	9.4	9.0	8.7	8.8
7	---	---	---	12.1	10.3	11.2	9.5	9.0	9.2	8.7	8.4	8.6
8	---	---	---	12.4	10.1	11.2	9.2	8.7	9.0	8.4	8.2	8.3
9	---	---	---	12.3	10.7	11.5	10.1	8.8	9.5	8.4	8.0	8.2
10	---	---	---	11.7	10.2	11.0	10.7	9.8	10.2	8.4	8.0	8.2
11	---	---	---	11.3	10.0	10.6	10.7	9.9	10.2	8.3	8.1	8.2
12	---	---	---	11.1	10.6	10.8	10.5	9.9	10.2	8.4	8.0	8.2
13	---	---	---	10.6	10.2	10.4	10.3	9.7	10.0	8.4	8.1	8.2
14	---	---	---	10.6	10.1	10.3	10.0	9.6	9.8	8.4	8.1	8.2
15	---	---	---	10.8	10.1	10.4	9.8	9.3	9.6	8.3	8.0	8.2
16	---	---	---	11.3	10.4	10.8	10.1	9.3	9.7	8.2	7.9	8.1
17	---	---	---	11.6	10.6	11.1	10.7	10.0	10.3	8.1	7.7	7.9
18	---	---	---	11.7	10.8	11.4	10.9	10.5	10.7	8.0	7.4	7.7
19	11.6	11.4	11.5	10.9	10.5	10.7	10.5	9.9	10.2	7.9	7.4	7.6
20	11.5	11.1	11.4	11.3	10.5	10.9	9.9	9.6	9.8	8.2	7.6	8.0
21	11.3	11.1	11.2	12.0	10.9	11.6	---	---	---	8.6	8.2	8.4
22	11.6	10.9	11.4	12.5	11.5	12.1	---	---	---	8.7	8.5	8.6
23	12.1	11.6	11.8	12.5	11.7	12.1	---	---	---	9.3	8.5	8.8
24	12.0	11.6	11.8	12.3	11.5	11.9	---	---	---	9.4	9.0	9.3
25	12.4	11.9	12.1	11.9	11.1	11.5	---	---	---	9.3	9.0	9.2
26	12.2	11.6	12.0	11.5	10.7	11.1	---	---	---	9.2	8.7	9.1
27	11.8	11.4	11.6	11.1	10.4	10.7	---	---	---	9.2	8.8	9.1
28	12.4	11.7	12.1	11.2	10.2	10.7	---	---	---	9.1	9.0	9.0
29	---	---	---	11.1	10.3	10.7	---	---	---	9.2	8.8	9.1
30	---	---	---	10.8	10.1	10.5	9.2	8.9	9.1	9.1	8.7	9.0
31	---	---	---	10.6	9.9	10.3	---	---	---	9.1	8.7	8.9
MONTH	---	---	---	13.1	9.9	11.3	---	---	---	9.4	7.4	8.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	9.0	8.6	8.8	7.2	6.5	6.8	7.0	5.4	6.1	8.2	7.7	7.9
2	8.9	8.5	8.7	6.9	6.6	6.8	7.1	5.5	6.2	8.2	8.0	8.0
3	8.9	8.4	8.6	7.5	6.8	7.1	7.1	5.4	6.3	9.0	8.0	8.8
4	8.8	8.4	8.6	7.6	7.2	7.4	7.3	5.7	6.4	8.8	8.5	8.6
5	9.0	8.5	8.7	7.5	7.2	7.4	7.3	5.7	6.4	8.6	8.2	8.4
6	8.7	8.2	8.5	7.4	7.0	7.2	7.9	5.6	6.7	8.5	8.2	8.3
7	8.5	7.9	8.2	7.7	6.8	7.2	7.8	6.0	6.8	8.6	8.1	8.4
8	8.1	7.7	7.9	7.6	6.8	7.2	7.7	6.0	6.7	8.6	8.2	8.5
9	7.8	7.1	7.6	7.6	6.7	7.1	7.9	6.0	6.9	8.7	8.4	8.5
10	8.6	7.3	8.5	7.3	6.6	6.9	7.6	6.0	6.7	8.8	8.3	8.5
11	8.6	8.2	8.6	7.2	6.5	6.8	7.6	6.0	6.8	8.8	8.1	8.4
12	8.5	8.0	8.3	7.5	6.6	7.0	7.4	6.2	6.9	8.6	7.8	8.1
13	8.6	8.0	8.3	7.4	6.7	7.0	7.6	6.9	7.3	8.5	7.6	8.0
14	8.9	7.9	8.2	7.4	6.7	7.0	7.7	7.0	7.3	8.5	8.1	8.3
15	8.5	7.8	8.3	7.5	6.8	7.1	7.8	6.7	7.2	8.5	8.0	8.2
16	8.3	7.8	8.1	7.4	6.8	7.1	7.7	6.3	6.9	8.4	8.1	8.2
17	8.1	7.7	8.0	7.5	6.9	7.2	6.9	6.6	6.8	8.4	7.9	8.2
18	8.2	7.6	7.9	7.7	6.9	7.3	7.5	6.5	7.0	8.3	8.0	8.2
19	7.9	7.6	7.9	7.6	6.7	7.1	7.7	6.5	7.0	8.5	8.0	8.2
20	7.8	7.4	7.6	7.5	6.6	7.0	7.8	6.4	7.0	8.5	8.1	8.3
21	7.6	7.2	7.4	7.5	6.3	7.0	7.9	5.8	7.1	8.4	7.6	8.2
22	7.5	7.1	7.3	7.2	6.1	6.6	7.8	6.5	7.1	8.3	7.9	8.1
23	7.5	6.9	7.2	7.2	6.0	6.5	7.8	6.5	7.0	8.1	7.8	7.9
24	7.4	6.7	7.0	7.3	5.9	6.5	7.8	6.4	7.0	8.0	7.6	7.8
25	7.6	6.7	7.1	7.3	5.9	6.5	7.7	6.2	6.8	7.9	7.4	7.6
26	7.6	6.8	7.2	7.1	5.7	6.2	7.7	6.1	6.7	7.9	7.2	7.5
27	7.6	6.8	7.2	7.0	5.6	6.2	7.5	6.2	6.7	7.9	7.1	7.4
28	7.5	6.6	7.0	7.0	5.6	6.2	7.2	6.3	6.6	7.9	6.9	7.3
29	7.5	6.6	7.0	7.0	5.6	6.2	7.9	6.7	7.7	7.9	6.8	7.2
30	7.4	6.6	6.9	7.0	5.6	6.2	8.2	7.8	8.0	8.1	6.7	7.2
31	---	---	---	6.8	5.6	6.1	8.2	7.4	7.8	---	---	---
MONTH	9.0	6.6	7.9	7.7	5.6	6.8	8.2	5.4	6.9	9.0	6.7	8.1

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TURBIDITY (JTU), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	550	45	9	6	---	---	---	---	---	---	9	7
2	120	45	20	5	---	---	---	---	---	---	9	6
3	45	25	9	6	---	---	---	---	---	---	8	6
4	25	20	35	1	---	---	---	---	---	---	8	6
5	20	15	35	20	---	---	---	---	---	---	10	4
6	15	10	45	25	---	---	---	---	---	---	10	6
7	15	10	25	20	---	---	---	---	---	---	7	5
8	15	15	25	20	---	---	---	---	---	---	---	---
9	15	9	30	15	---	---	---	---	---	---	---	---
10	10	10	15	15	---	---	---	---	---	---	---	---
11	10	6	20	9	---	---	---	---	---	---	---	---
12	8	6	10	8	---	---	---	---	---	---	---	---
13	9	6	10	9	---	---	---	---	---	---	---	---
14	8	4	---	---	---	---	---	---	---	---	---	---
15	6	4	---	---	---	---	---	---	---	---	---	---
16	7	5	---	---	---	---	---	---	---	---	---	---
17	10	5	---	---	---	---	---	---	---	---	---	---
18	15	1	---	---	---	---	---	---	---	---	15	2
19	4	1	---	---	20	1	---	---	25	20	15	7
20	6	3	---	---	3	0	---	---	20	15	15	9
21	9	5	---	---	3	0	---	---	20	9	15	10
22	20	4	---	---	6	0	---	---	10	8	15	10
23	6	4	---	---	7	4	---	---	9	8	---	---
24	8	6	---	---	7	3	---	---	9	7	---	---
25	15	7	---	---	6	2	---	---	10	7	---	---
26	25	7	---	---	2	0	---	---	9	7	---	---
27	9	7	---	---	3	0	---	---	9	7	---	---
28	15	8	---	---	3	1	---	---	9	6	---	---
29	25	7	---	---	6	1	---	---	---	---	---	---
30	10	2	---	---	6	3	---	---	---	---	---	---
31	7	4	---	---	6	3	---	---	---	---	---	---
MONTH	550	1	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	15	6						
2	10	3	---	---	8	6						
3	15	9	---	---	10	8						
4	10	7	---	---	10	8						
5	10	8	---	---	---	---						
6	10	7	---	---	---	---						
7	---	---	---	---	---	---						
8	---	---	---	---	---	---						
9	---	---	---	---	---	---						
10	---	---	---	---	---	---						
11	---	---	---	---	15	8						
12	---	---	---	---	15	9						
13	---	---	10	9	10	7						
14	---	---	7	6	9	5						
15	---	---	7	4	7	5						
16	---	---	7	4	9	4						
17	---	---	---	---	7	5						
18	---	---	---	---	10	5						
19	---	---	---	---	---	---						
20	---	---	---	---	---	---						
21	---	---	---	---	---	---						
22	---	---	---	---	---	---						
23	---	---	---	---	---	---						
24	---	---	---	---	---	---						
25	---	---	---	---	---	---						
26	---	---	---	---	---	---						
27	---	---	---	---	---	---						
28	---	---	30	15	---	---						
29	---	---	15	10	---	---						
30	---	---	15	8	---	---						
31	---	---	10	8	---	---						
MONTH	---	---	---	---	---	---						

CUMBERLAND RIVER BASIN

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	4430	14	168	77	2	.36	1060	14	40
2	3470	12	112	79	2	.49	951	13	33
3	1030	11	29	85	2	.48	693	7	14
4	770	8	16	123	4	1.6	551	5	7.6
5	509	4	5.5	319	15	13	467	3	4.3
6	354	1	1.3	281	7	5.6	440	2	3.0
7	268	0	.22	226	5	3.2	358	2	2.4
8	210	0	.17	201	5	2.9	316	2	2.1
9	172	1	.24	172	5	2.5	288	2	1.5
10	147	1	.41	154	5	2.3	257	1	.96
11	132	0	.02	141	5	1.8	234	1	.78
12	120	0	.02	131	4	1.4	261	3	2.0
13	108	0	.05	124	4	1.3	358	4	3.4
14	100	0	.11	118	4	1.2	448	4	4.7
15	108	7	1.9	111	3	.75	387	4	3.8
16	153	6	2.6	116	3	.84	360	3	3.2
17	124	1	.38	162	8	3.7	330	3	2.6
18	106	1	.20	194	5	2.5	295	4	2.9
19	95	0	.08	191	4	1.9	260	6	4.4
20	89	1	.15	174	4	1.7	240	6	3.7
21	87	2	.36	162	2	.80	230	4	2.5
22	86	1	.15	218	3	1.7	220	3	1.8
23	85	1	.20	317	7	5.7	219	1	.54
24	91	1	.25	308	9	7.9	207	1	.53
25	106	1	.29	269	6	4.2	200	1	.45
26	102	1	.20	236	3	2.0	190	1	.48
27	91	1	.20	346	28	27	180	4	1.7
28	86	1	.23	3870	214	3540	170	2	.72
29	81	1	.26	5260	163	2540	160	1	.44
30	73	1	.23	1820	60	324	150	1	.26
31	76	1	.27	---	---	---	152	1	.26
TOTAL	13464	---	340.99	15985	---	6502.83	10632	---	150.02
JANUARY				FEBRUARY			MARCH		
1	182	2	.93	175	8	3.7	417	3	3.8
2	190	2	.93	185	3	1.6	374	3	2.7
3	172	1	.36	210	5	2.7	360	2	1.8
4	164	1	.40	248	14	9.5	334	2	1.6
5	157	1	.30	649	196	474	305	3	2.8
6	155	2	.77	1220	149	495	294	2	2.0
7	150	4	1.7	1530	76	318	280	4	2.8
8	140	5	1.7	1090	50	146	244	4	2.6
9	135	8	2.9	792	32	68	220	3	1.5
10	130	8	2.7	623	18	30	211	1	.84
11	125	5	1.5	559	13	19	217	2	.98
12	121	5	1.5	432	8	9.6	225	2	1.2
13	120	4	1.3	350	3	2.7	303	4	4.0
14	115	2	.74	358	3	3.0	599	10	17
15	110	2	.60	387	3	3.5	594	4	6.1
16	108	3	.77	380	6	6.0	726	6	12
17	105	3	.95	3780	109	2280	600	5	8.7
18	105	2	.65	8650	321	8340	505	6	7.7
19	146	2	.84	3050	63	567	524	6	8.1
20	240	3	2.2	1640	19	86	528	4	6.1
21	205	3	1.8	1120	13	40	414	4	4.3
22	186	4	1.9	834	8	17	354	5	4.8
23	176	5	2.3	660	5	9.3	322	3	3.0
24	162	6	2.8	563	4	5.7	296	2	1.5
25	159	1	.62	532	3	4.5	264	1	1.1
26	181	5	2.7	456	3	3.5	239	2	1.0
27	210	6	3.5	474	3	4.3	224	2	1.2
28	200	8	4.2	504	4	5.5	211	2	1.3
29	190	1	.70	---	---	---	191	3	1.7
30	180	2	.93	---	---	---	176	3	1.5
31	178	5	2.6	---	---	---	165	2	1.0
TOTAL	4897	---	47.79	31451	---	12955.1	10716	---	116.72

03409500 CLEAR FORK NEAR ROBBINS, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	154	3	1.2	133	6	2.0	521	8	11
2	146	4	1.6	125	9	2.9	378	5	5.4
3	139	2	.77	114	8	2.4	340	9	8.1
4	132	2	.58	102	6	1.7	269	8	5.9
5	124	1	.45	93	5	1.1	390	12	14
6	118	1	.37	88	5	1.2	353	10	9.6
7	117	1	.18	84	6	1.4	286	7	5.6
8	157	3	1.3	88	6	1.5	264	6	4.1
9	293	4	2.9	91	5	1.1	624	61	301
10	221	3	1.8	85	4	.96	1630	117	602
11	185	2	1.1	72	4	.72	1040	18	49
12	169	3	1.2	66	4	.71	663	17	30
13	156	3	1.3	65	5	.81	442	11	13
14	143	2	.88	72	7	1.3	302	8	6.7
15	138	2	.73	74	8	1.5	218	6	3.7
16	132	2	.74	62	9	1.5	166	6	2.7
17	123	3	1.1	52	5	.76	128	5	1.7
18	117	4	1.2	47	3	.40	101	4	1.0
19	110	2	.68	50	3	.35	82	5	1.1
20	106	3	.84	58	4	.70	68	5	.86
21	157	8	3.6	68	4	.80	56	4	.56
22	225	10	6.2	58	3	.46	47	3	.34
23	198	8	4.2	2040	199	2210	41	3	.29
24	167	7	2.9	4750	207	3160	35	2	.20
25	153	5	2.2	4080	110	1240	30	3	.22
26	145	4	1.5	3510	93	1000	25	6	.43
27	136	2	.83	2990	48	394	22	5	.27
28	134	1	.49	3280	48	433	21	4	.20
29	160	6	2.8	2190	23	133	25	5	.34
30	156	8	3.4	1260	17	59	22	3	.17
31	---	---	---	775	11	22	---	---	---
TOTAL	4611	---	49.04	26622	---	8677.27	8589	---	1079.48
JULY			AUGUST			SEPTEMBER			
1	29	10	.85	5.2	3	.05	42	9	1.0
2	68	11	2.3	4.5	3	.04	330	67	99
3	128	15	5.2	3.9	2	.02	984	80	240
4	101	6	1.6	3.6	3	.03	301	26	23
5	61	4	.66	3.4	4	.04	200	11	6.0
6	43	3	.35	3.2	4	.04	149	6	2.7
7	31	8	.67	3.3	6	.05	103	4	1.1
8	24	4	.28	3.3	4	.04	69	3	.64
9	20	3	.19	3.2	4	.04	50	3	.37
10	20	7	.37	3.4	15	.16	41	3	.28
11	20	6	.33	5.1	16	.21	33	3	.23
12	17	6	.26	49	11	2.6	48	6	.84
13	23	17	1.2	71	5	.98	119	11	3.0
14	25	13	.88	35	4	.41	108	5	1.3
15	21	7	.41	22	4	.22	71	4	.70
16	34	8	.81	28	105	14	79	11	2.3
17	35	7	.68	48	40	5.3	89	29	7.1
18	27	7	.54	23	14	.88	76	30	6.3
19	20	7	.39	15	7	.29	62	16	2.7
20	17	7	.31	13	15	.52	67	5	.88
21	14	15	.53	12	21	.67	109	10	3.1
22	12	16	.53	10	9	.26	87	4	.89
23	11	11	.35	9.2	5	.11	69	3	.60
24	9.6	9	.22	9.5	5	.12	59	4	.63
25	7.9	7	.15	7.0	4	.08	50	3	.36
26	7.1	8	.15	5.8	4	.06	42	2	.22
27	7.5	6	.12	7.3	17	.42	36	2	.15
28	7.4	4	.07	14	12	.44	30	1	.11
29	6.0	2	.04	60	8	1.4	27	2	.13
30	6.3	6	.11	40	6	.64	24	3	.17
31	6.0	4	.07	26	7	.53	---	---	---
TOTAL	858.8	---	20.62	546.9	---	30.65	3554	---	405.80

TOTAL LOAD FOR YEAR: 30375.95

CUMBERLAND RIVER BASIN

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN

LOCATION.--Lat 36°28'38", long 84°40'09", Scott County, Hydrologic Unit 05130104, on left bank at bridge on State Route 297, 1.0 mile above Anderson Branch, 1.3 miles below North White Oak Creek, 10.1 miles southwest of Oneida, and at mile 70.1.

DRAINAGE AREA.--806 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to September 1987 (discontinued). Occasional discharge measurements, water years 1961-62, 1979-80.

GAGE.--Water stage recorder. Datum of gage is 862.79 ft, Sandy Hook datum.

REMARKS.--Estimated daily discharges, Water Year 1986: Oct. 5-23, Dec. 27-31, Jan. 8-18, 27-30. Records good except for periods of estimated daily discharges, which are poor. Estimated daily discharges, Water Year 1987: Feb. 11 to Mar. 5. Records fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,100 ft³/s May 7, 1984, gage height, 31.22 ft; minimum discharge, 19 ft³/s Sept. 23-26, 1984.

EXTREMES FOR WATER YEARS 1986-1987.--Peak discharges above base of 20,000 ft³/s and maximum (*):

Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1986	Nov. 29, 1985	0300	22000	20.05	1987	Nov. 9, 1986	1600	*29700	*22.83
	Feb. 18, 1986	0500	*29500	*22.75		Nov. 26, 1986	2000	26000	21.41
	May 24, 1986	0130	21100	19.29		Dec. 9, 1986	2330	27000	21.79
						Jan. 19, 1987	1730	20600	19.10

Water year 1986: Minimum daily discharge, 33 ft³/s Aug. 7.
Water year 1987: Minimum discharge, 28 ft³/s Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9050	237	3170	627	605	1360	558	438	1190	130	67	365
2	4700	238	2750	713	618	1270	528	403	1760	164	55	1570
3	2580	275	2010	697	672	1220	503	364	1350	354	48	4060
4	1250	464	1620	689	766	1140	473	330	1090	369	42	1220
5	880	1230	1410	647	1740	1040	436	305	1080	217	36	755
6	680	1140	1340	587	3840	981	416	290	1050	153	34	513
7	570	874	1130	558	4010	919	415	277	924	123	33	359
8	470	742	1020	550	3230	819	484	291	746	104	37	276
9	400	630	936	510	2340	735	965	306	884	91	45	214
10	350	547	838	490	1820	706	854	278	3580	82	46	165
11	320	495	766	470	1600	715	726	242	2940	90	406	140
12	300	450	816	454	1290	755	656	221	1790	161	960	185
13	270	414	1170	452	1060	907	599	230	1150	159	437	397
14	250	390	1640	440	1020	1580	554	249	823	202	269	286
15	280	367	1520	410	1070	2270	528	242	615	287	186	192
16	260	367	1380	400	1080	2580	496	215	494	256	158	197
17	300	556	1220	380	8360	2010	444	186	394	268	199	251
18	280	850	1070	360	24000	1620	425	167	341	247	154	236
19	260	738	886	495	8370	2330	400	169	287	187	129	184
20	240	659	795	958	4220	2930	375	221	239	130	113	190
21	230	597	767	839	3050	1840	496	233	211	105	154	235
22	220	805	643	755	2240	1420	683	212	188	87	169	227
23	400	1610	733	713	1800	1220	633	4080	168	86	119	190
24	340	1370	724	652	1540	1080	554	12900	149	79	100	298
25	368	1110	669	628	1480	952	509	10300	132	73	89	277
26	367	924	617	687	1290	849	492	6000	117	63	83	180
27	321	1010	580	760	1330	798	461	5590	101	67	105	144
28	287	9290	560	720	1530	747	439	5810	94	64	168	115
29	262	15500	540	710	---	678	528	3940	113	55	324	97
30	255	4920	520	680	---	631	534	2570	163	52	287	93
31	243	---	500	621	---	593	---	1630	---	72	206	---
TOTAL	26983	48799	34340	18652	85971	38695	16164	58689	24163	4577	5258	13611
MEAN	870	1627	1108	602	3070	1248	539	1893	805	148	170	454
MAX	9050	15500	3170	958	24000	2930	965	12900	3580	369	960	4060
MIN	220	237	500	360	605	593	375	167	94	52	33	93
CFSM	1.08	2.02	1.37	.75	3.81	1.55	.67	2.35	.99	.18	.21	.56
IN.	1.25	2.25	1.58	.86	3.97	1.79	.75	2.71	1.12	.21	.24	.63

CAL YR 1985 TOTAL 413060 MEAN 1132 MAX 15500 MIN 75 CFSM 1.40 IN. 19.06
WTR YR 1986 TOTAL 375902 MEAN 1030 MAX 24000 MIN 33 CFSM 1.28 IN. 17.34

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	296	1570	848	2190	7000	2350	818	821	212	42	72
2	96	265	1580	779	2040	4500	1850	699	577	190	42	55
3	99	244	1790	712	1960	3000	1680	634	529	696	40	46
4	108	227	1600	633	1640	2400	1650	4710	590	749	38	39
5	106	223	1340	583	1450	1900	1520	3480	584	1040	38	34
6	91	223	1220	539	1310	1660	1580	1830	365	1460	40	31
7	80	310	1100	512	1210	1440	2820	1270	281	1300	50	33
8	75	2050	1140	493	1150	1290	2990	1010	231	1400	48	36
9	71	22700	12500	469	1020	1260	2190	780	190	850	42	41
10	65	9500	17500	467	800	1300	1620	625	164	1000	42	46
11	82	6550	6610	473	750	1080	1330	512	145	689	47	52
12	130	6720	4380	450	700	1000	1190	444	129	816	43	107
13	1570	3660	3200	420	650	936	1100	444	175	518	74	87
14	3400	2360	2250	382	600	817	1060	529	241	510	79	62
15	2090	1810	1770	398	700	766	9720	418	263	431	57	95
16	1040	1580	1430	434	800	871	6420	404	216	322	47	79
17	639	1320	1250	425	2800	1260	5190	382	274	255	46	68
18	438	1140	1480	444	3200	1190	4170	330	379	213	80	55
19	335	987	1650	11700	2600	1380	3130	293	321	181	161	59
20	276	888	1380	8180	2200	1670	2230	271	332	153	164	81
21	233	1060	1220	3870	2000	1500	1710	583	1160	140	95	63
22	201	1010	1070	2880	1900	1310	1390	1240	1380	122	74	54
23	182	952	991	2300	6500	1130	1310	876	1280	106	58	75
24	166	1560	1870	1730	5400	1020	1740	1050	1360	103	44	70
25	237	3170	2610	2150	4000	938	2560	838	2680	94	36	56
26	1310	14500	1990	5810	2200	850	1840	669	1300	89	30	47
27	1090	10800	1590	3750	10000	769	1460	508	759	89	29	42
28	705	4280	1340	2890	9500	763	1260	408	476	63	47	40
29	513	2820	1170	2290	---	731	1080	604	335	57	67	40
30	405	1960	1070	2480	---	713	948	899	258	51	102	85
31	341	---	966	2550	---	2430	---	887	---	46	102	---
TOTAL	16265	105165	82627	62041	71270	48874	71088	28445	17795	13945	1904	1750
MEAN	525	3505	2665	2001	2545	1577	2370	918	593	450	61.4	58.3
MAX	3400	22700	17500	11700	10000	7000	9720	4710	2680	1460	164	107
MIN	65	223	966	382	600	713	948	271	129	46	29	31
CFSM	.65	4.35	3.31	2.48	3.16	1.96	2.94	1.14	.74	.56	.08	.07
IN.	.75	4.85	3.81	2.86	3.29	2.26	3.28	1.31	.82	.64	.09	.08
CAL YR 1986	TOTAL 469837	MEAN 1287	MAX 24000	MIN 33	CFSM 1.60	IN. 21.68						
WTR YR 1987	TOTAL 521169	MEAN 1428	MAX 22700	MIN 29	CFSM 1.77	IN. 24.05						

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to July 1980, February 1984 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1985 to May 1986.

pH: October 1985 to May 1986.

WATER TEMPERATURE: October 1985 to May 1986.

DISSOLVED OXYGEN: October 1985 to May 1986.

TURBIDITY: October 1985 to May 1986.

SUSPENDED SEDIMENT DISCHARGE: October 1985 to September 1986.

INSTRUMENTATION.--Five parameter water-quality monitor and sediment pumping sampler since October 1985.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 308 microsiemens, Oct. 27; minimum, 72 microsiemens, Oct. 1, 2.

pH: Maximum, 7.7 units, Oct. 26-28, Nov. 19; minimum, 6.5 units, several days.

WATER TEMPERATURE: Maximum, 24°C, May 17; minimum, 0.5°C, several days.

DISSOLVED OXYGEN: Maximum, 14.0 mg/L, Jan. 8; minimum, 7.1 mg/L, May 23.

TURBIDITY: Maximum, 1800 JTU, Mar. 20; minimum, 0 JTU, several days.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 418 mg/L, Nov. 29; minimum daily mean, 1 mg/L, on several days during the year.

SEDIMENT LOADS: Maximum daily, 25,100 tons, Feb. 18; minimum daily, 0.27 ton, Aug. 7.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	80	72	76	196	188	192	104	100	102	166	150	155
2	84	72	80	196	190	192	108	100	104	190	168	181
3	98	86	90	204	194	198	108	102	105	192	186	190
4	128	100	118	202	190	196	126	104	111	194	188	191
5	138	124	128	258	200	226	120	106	113	194	182	189
6	144	138	142	258	222	246	122	108	115	182	166	175
7	136	126	132	220	180	196	132	116	124	168	160	164
8	128	120	124	178	160	170	128	104	116	168	160	164
9	126	120	124	160	156	158	110	98	104	170	160	166
10	126	118	122	158	152	154	108	100	104	160	146	153
11	130	120	126	158	146	152	134	122	128	170	148	155
12	132	124	128	154	150	152	130	112	117	192	156	171
13	134	130	132	158	150	154	134	112	123	198	158	168
14	134	132	134	154	148	153	150	124	137	206	160	185
15	134	130	132	154	148	151	128	108	118	214	160	187
16	146	130	140	---	---	---	108	98	104	---	---	---
17	148	133	144	---	---	---	100	88	93	---	---	---
18	144	136	140	---	---	---	90	82	86	---	---	---
19	150	144	146	190	186	189	138	82	135	---	---	---
20	150	146	148	190	186	187	134	128	131	---	---	---
21	150	146	148	186	174	181	134	128	132	---	---	---
22	152	146	150	174	150	160	138	132	136	184	180	182
23	240	152	196	188	162	182	136	132	134	184	176	181
24	254	236	248	176	144	159	140	132	137	176	160	167
25	248	236	244	144	130	139	146	140	142	158	154	157
26	288	248	278	130	126	128	152	144	150	154	152	153
27	308	276	294	132	124	127	148	142	145	154	100	144
28	294	260	282	132	80	110	148	144	145	156	96	134
29	256	218	236	94	76	88	156	150	154	150	92	125
30	216	206	210	100	90	96	162	156	158	150	90	102
31	204	196	200	---	---	---	158	152	155	106	94	98
MONTH	308	72	161	258	76	164	162	82	124	---	---	---

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	148	94	126	---	---	---	156	148	152	174	162	169
2	144	142	143	---	---	---	---	---	---	171	164	169
3	146	142	143	---	---	---	---	---	---	168	162	166
4	150	144	146	---	---	---	---	---	---	171	165	168
5	150	120	134	---	---	---	---	---	---	173	166	169
6	154	120	139	---	---	---	---	---	---	175	168	171
7	116	104	106	---	---	---	---	---	---	179	168	175
8	108	104	107	---	---	---	---	---	---	178	169	174
9	106	106	106	---	---	---	---	---	---	175	167	171
10	108	106	107	140	138	139	---	---	---	178	170	174
11	112	108	110	142	138	140	---	---	---	175	170	173
12	116	112	115	158	144	151	---	---	---	173	169	171
13	118	114	115	152	126	136	---	---	---	170	163	167
14	118	104	115	148	132	141	---	---	---	175	163	171
15	124	116	119	150	132	141	162	154	157	187	175	182
16	124	120	122	134	116	123	160	152	157	183	178	182
17	---	---	---	116	112	115	162	154	158	185	180	182
18	---	---	---	114	110	112	164	152	160	187	182	185
19	---	---	---	166	108	121	168	156	163	187	180	184
20	---	---	---	168	124	142	166	160	164	181	168	173
21	---	---	---	124	124	124	170	160	163	187	171	177
22	---	---	---	130	124	126	170	162	167	197	188	192
23	---	---	---	138	130	132	172	162	166	196	74	160
24	---	---	---	146	138	142	170	162	165	152	96	133
25	---	---	---	150	130	138	172	164	169	112	82	101
26	---	---	---	134	132	133	178	164	172	148	81	122
27	---	---	---	138	132	136	184	172	178	80	73	76
28	---	---	---	146	134	141	182	168	176	84	75	79
29	---	---	---	148	140	143	174	162	169	---	---	---
30	---	---	---	146	140	144	174	164	170	---	---	---
31	---	---	---	152	144	147	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	197	73	161

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.8	6.7	7.5	7.4	6.6	6.5	7.3	7.3	7.5	7.3	---	---
2	6.8	6.6	7.5	7.4	6.6	6.6	7.4	7.3	7.5	7.3	---	---
3	6.8	6.7	7.5	7.4	6.9	6.6	7.4	7.4	7.5	7.3	---	---
4	7.0	6.8	7.4	7.4	6.8	6.7	7.4	7.4	7.6	7.3	---	---
5	7.1	7.0	7.6	7.4	6.7	6.7	7.4	7.4	7.6	7.2	---	---
6	7.2	7.1	7.6	7.5	6.7	6.7	7.4	7.3	7.4	7.3	---	---
7	7.2	7.1	7.5	7.4	6.7	6.7	7.3	7.3	7.4	7.2	---	---
8	7.2	7.1	7.4	7.4	7.1	6.6	7.4	7.3	7.3	7.2	---	---
9	7.2	7.1	7.4	7.3	7.1	7.1	7.4	7.4	7.3	7.2	---	---
10	7.2	7.1	7.4	7.3	7.2	7.1	7.4	7.4	7.3	7.2	---	---
11	7.3	7.1	7.4	7.2	7.2	7.1	7.4	7.4	7.3	7.2	7.2	7.1
12	7.3	7.1	7.3	7.2	7.2	7.1	7.4	7.4	7.4	7.3	7.2	7.1
13	7.3	7.2	7.4	7.2	7.2	7.1	7.4	7.4	7.4	7.3	7.1	7.0
14	7.3	7.1	7.5	7.3	7.3	7.2	7.5	7.4	7.4	7.3	7.1	7.0
15	7.2	7.1	7.6	7.3	7.3	7.3	---	---	7.5	7.3	7.1	7.1
16	7.3	7.1	---	---	7.3	7.2	---	---	---	---	7.1	7.0
17	7.3	7.2	---	---	7.2	7.2	---	---	---	---	7.2	7.0
18	7.3	7.2	---	---	7.2	7.2	---	---	---	---	7.1	7.0
19	7.3	7.2	7.7	7.4	7.3	7.2	---	---	---	---	7.1	7.0
20	7.2	7.2	7.6	7.4	7.2	7.2	---	---	---	---	7.2	7.1
21	7.2	7.1	7.6	7.4	7.2	7.2	---	---	---	---	7.2	7.1
22	7.2	7.1	7.5	7.4	7.2	7.2	---	---	---	---	7.1	7.0
23	7.4	7.2	7.5	7.4	7.2	7.2	7.5	7.4	---	---	7.0	7.0
24	7.5	7.4	7.4	7.3	7.2	7.2	7.5	7.4	---	---	7.0	6.9
25	7.5	7.4	7.4	7.3	7.3	7.2	7.4	7.4	---	---	7.1	6.9
26	7.7	7.5	7.4	7.2	7.3	7.2	7.5	7.3	---	---	7.2	7.1
27	7.7	7.6	7.4	7.2	7.3	7.3	7.5	7.3	---	---	7.2	7.1
28	7.7	7.6	7.3	6.6	7.3	7.2	7.5	7.4	---	---	7.2	7.1
29	7.6	7.5	6.7	6.5	7.3	7.3	7.4	7.4	---	---	7.2	7.2
30	7.6	7.5	6.6	6.5	7.3	7.3	7.5	7.4	---	---	7.2	7.2
31	7.6	7.5	---	---	7.3	7.3	7.5	7.4	---	---	7.3	7.2
MONTH	7.7	6.6	7.7	6.5	7.3	6.5	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.2	7.1	7.2	7.1								
2	---	---	7.3	7.1								
3	---	---	7.3	7.1								
4	---	---	7.3	7.2								
5	---	---	7.5	7.2								
6	---	---	7.5	7.3								
7	---	---	7.4	7.2								
8	---	---	7.3	7.2								
9	---	---	7.3	7.2								
10	---	---	7.3	7.2								
11	---	---	7.3	7.2								
12	---	---	7.2	7.2								
13	---	---	7.2	7.1								
14	---	---	7.3	7.1								
15	7.4	7.3	7.3	7.2								
16	7.3	7.3	7.3	7.2								
17	7.4	7.3	7.3	7.2								
18	7.4	7.3	7.2	7.2								
19	7.4	7.3	7.2	7.1								
20	7.4	7.3	7.2	7.1								
21	7.4	7.3	7.2	7.1								
22	7.4	7.2	7.3	7.2								
23	7.4	7.2	7.3	6.5								
24	7.3	7.2	6.7	6.5								
25	7.3	7.2	6.6	6.5								
26	7.3	7.1	6.6	6.5								
27	7.3	7.1	6.5	6.5								
28	7.2	7.1	6.6	6.5								
29	7.3	7.1	---	---								
30	7.4	7.1	---	---								
31	---	---	7.5	6.5								

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	15.0	15.0	16.0	16.0	16.0	14.0	13.5	13.5	1.5	1.0	1.0
2	15.0	14.5	14.5	16.0	16.0	16.0	13.5	10.5	12.0	1.5	1.0	1.0
3	14.5	14.0	14.5	16.0	15.5	16.0	10.5	8.0	9.5	2.0	1.5	1.5
4	16.0	14.5	15.0	15.5	13.5	14.5	8.0	7.0	7.5	2.0	1.5	2.0
5	16.0	15.5	15.5	13.5	12.0	12.5	7.0	5.0	7.0	2.5	2.0	2.0
6	15.0	14.5	14.5	12.0	11.5	11.5	7.0	6.5	7.0	2.0	1.5	1.5
7	14.5	13.5	14.0	11.5	10.5	11.0	6.5	6.5	6.5	2.0	1.5	1.5
8	14.5	13.5	14.0	10.5	10.0	10.0	6.5	6.0	6.0	3.0	1.0	2.0
9	15.0	13.5	14.5	10.0	9.0	9.5	6.5	6.0	6.0	1.0	.5	1.0
10	15.5	14.5	15.0	10.5	9.5	10.0	6.5	6.5	6.5	1.5	.5	1.0
11	16.5	15.5	16.0	11.5	10.5	11.0	7.5	6.5	7.0	1.0	.5	1.0
12	17.0	16.5	16.5	12.0	12.0	12.0	8.5	7.5	8.5	1.0	.5	1.0
13	18.0	17.0	17.5	13.0	12.5	12.5	8.5	8.0	8.5	1.0	1.0	1.0
14	18.5	18.0	18.0	13.5	13.0	13.0	8.0	6.0	7.0	1.0	.5	1.0
15	18.5	18.5	18.5	14.0	13.5	14.0	6.0	4.5	5.0	---	---	---
16	19.0	18.5	18.5	---	---	---	4.5	3.5	4.0	---	---	---
17	18.5	18.0	18.5	---	---	---	3.5	3.5	3.5	---	---	---
18	18.5	18.0	18.0	---	---	---	3.5	2.5	3.0	---	---	---
19	18.5	18.0	18.5	15.0	14.0	14.5	2.5	1.5	1.5	---	---	---
20	19.0	18.5	19.0	15.0	14.5	14.5	2.0	1.5	1.5	---	---	---
21	19.5	19.0	19.0	14.0	13.0	13.5	1.5	1.0	1.5	---	---	---
22	19.0	19.0	19.0	13.0	12.0	12.5	1.0	1.0	1.0	---	---	---
23	19.5	19.0	19.0	12.0	11.5	12.0	1.5	1.0	1.5	4.5	4.0	4.0
24	19.0	19.0	19.0	11.5	11.0	11.5	2.0	1.5	1.5	4.0	3.5	3.5
25	19.0	18.5	19.0	12.0	11.5	11.5	1.5	1.0	1.0	3.5	3.5	3.5
26	18.5	18.0	18.0	13.0	12.0	12.5	1.0	.5	1.0	3.5	3.0	3.5
27	18.0	17.5	17.5	14.0	13.0	13.5	1.0	.5	1.0	3.0	1.0	2.0
28	17.5	17.5	17.5	15.0	14.0	14.5	1.0	1.0	1.0	1.0	.5	.5
29	17.5	16.5	17.0	15.0	14.0	14.5	1.0	1.0	1.0	1.0	.5	.5
30	16.5	16.0	16.5	14.0	14.0	14.0	1.0	1.0	1.0	1.0	.5	1.0
31	16.0	16.0	16.0	---	---	---	1.0	1.0	1.0	1.5	1.0	1.0
MONTH	19.5	13.5	16.9	16.0	9.0	12.9	14.0	.5	4.6	---	---	---

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

TEMPERATURE, WATER, DEGREES, CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.0	1.0	1.5	---	---	---	14.5	13.5	13.5	19.0	18.5	18.5
2	3.0	2.0	2.5	---	---	---	---	---	---	19.0	18.0	18.5
3	4.5	3.0	3.5	---	---	---	---	---	---	18.5	17.5	17.5
4	6.5	4.5	5.5	---	---	---	---	---	---	17.5	16.5	17.0
5	9.0	6.5	7.5	---	---	---	---	---	---	18.0	16.5	17.5
6	10.0	9.0	9.5	---	---	---	---	---	---	19.0	17.5	18.5
7	9.5	8.5	9.0	---	---	---	---	---	---	20.5	19.0	19.5
8	8.5	7.5	8.0	---	---	---	---	---	---	21.5	20.0	21.0
9	7.5	6.5	7.0	---	---	---	---	---	---	22.5	21.0	21.5
10	6.5	5.0	6.0	8.0	6.5	7.5	---	---	---	22.5	21.5	22.0
11	5.0	3.5	4.5	9.5	8.0	9.0	---	---	---	22.5	21.5	22.0
12	3.5	2.0	2.5	11.0	9.5	10.5	---	---	---	22.0	21.5	21.5
13	2.0	2.0	2.0	12.0	11.0	12.0	---	---	---	22.0	21.0	21.5
14	2.0	1.0	1.0	12.0	12.0	12.0	---	---	---	22.0	21.0	21.5
15	1.5	1.0	1.0	12.0	11.0	11.5	16.0	15.0	15.5	22.5	21.5	22.0
16	2.0	1.0	1.5	11.0	10.0	10.5	15.5	14.0	14.5	23.5	22.0	23.0
17	---	---	---	10.5	9.5	10.0	14.0	12.5	13.0	24.0	23.0	23.5
18	---	---	---	10.5	9.5	10.0	13.5	12.0	12.5	23.5	23.0	23.5
19	---	---	---	12.0	11.0	11.0	15.0	13.0	14.0	23.0	22.0	22.5
20	---	---	---	11.5	10.5	11.0	15.0	14.5	14.5	22.0	20.5	21.0
21	---	---	---	10.5	8.5	9.0	15.0	14.0	14.5	20.5	19.5	20.0
22	---	---	---	8.0	7.0	7.5	14.0	13.5	13.5	20.0	19.0	19.5
23	---	---	---	7.5	6.5	7.0	13.5	12.5	13.0	20.0	15.0	18.0
24	---	---	---	8.5	7.5	8.0	14.0	12.5	13.5	16.0	15.0	15.5
25	---	---	---	10.0	8.5	9.0	15.5	13.5	14.5	16.0	15.5	16.0
26	---	---	---	11.0	10.0	10.5	17.0	15.0	16.0	16.0	16.0	16.0
27	---	---	---	12.0	11.0	11.5	18.5	16.5	17.5	16.5	16.0	16.0
28	---	---	---	12.5	11.5	12.0	18.5	18.0	18.0	17.0	16.0	16.5
29	---	---	---	13.0	12.0	12.5	18.5	17.5	18.0	---	---	---
30	---	---	---	14.0	12.5	13.0	19.5	17.5	18.5	---	---	---
31	---	---	---	14.0	13.0	13.5	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	24.0	15.0	19.7

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.0	9.2	9.7	9.4	9.0	9.3	8.6	8.2	8.4	13.6	13.4	13.5
2	10.0	8.8	9.6	9.3	9.0	9.2	9.0	8.4	8.7	13.6	13.4	13.5
3	9.7	9.6	9.7	9.4	9.1	9.2	11.2	8.2	9.7	13.4	13.2	13.3
4	9.7	9.2	9.5	9.9	9.3	9.5	10.5	10.1	10.3	13.5	13.2	13.3
5	9.5	9.2	9.3	10.5	9.0	10.2	10.2	10.0	10.1	13.4	13.2	13.3
6	9.8	9.3	9.5	10.7	10.3	10.6	10.1	9.8	10.0	13.5	13.3	13.4
7	9.9	9.5	9.6	10.9	10.3	10.7	9.8	8.8	9.3	13.6	13.4	13.5
8	9.9	9.5	9.8	11.3	10.9	11.1	12.0	8.4	10.2	14.0	12.0	13.8
9	10.0	9.7	9.9	11.4	11.0	11.2	12.1	11.9	12.0	13.7	13.6	13.7
10	9.9	9.6	9.7	11.3	11.0	11.2	12.3	11.6	12.0	13.5	12.3	13.3
11	9.7	9.4	9.5	11.1	10.8	11.0	11.7	11.4	11.6	13.5	12.8	13.3
12	9.5	9.3	9.4	10.9	10.5	10.7	11.4	11.2	11.3	13.4	13.3	13.4
13	9.4	9.0	9.2	10.7	10.2	10.4	11.4	11.1	11.2	13.4	13.2	13.2
14	9.2	8.7	9.0	10.6	10.2	10.4	12.1	11.4	11.8	13.1	12.5	12.8
15	9.0	8.5	8.9	10.6	10.0	10.3	12.7	12.1	12.4	---	---	---
16	9.1	8.8	9.0	10.2	9.9	10.0	12.9	12.6	12.8	---	---	---
17	9.3	8.9	9.1	10.5	9.8	10.2	13.0	12.8	12.9	---	---	---
18	9.2	9.0	9.1	10.4	10.0	10.2	13.1	12.8	13.0	---	---	---
19	9.2	8.9	9.1	10.5	9.9	10.2	13.4	13.1	13.2	---	---	---
20	9.0	8.8	8.9	10.0	9.7	9.8	13.8	13.6	13.7	---	---	---
21	8.8	8.7	8.8	10.5	9.9	10.2	13.9	13.7	13.8	---	---	---
22	8.8	8.5	8.7	10.5	10.2	10.4	13.9	13.7	13.9	---	---	---
23	8.8	7.9	8.6	10.9	10.3	10.6	13.7	13.5	13.6	13.0	12.7	12.8
24	8.8	8.6	8.7	10.9	10.6	10.8	13.5	13.4	13.4	13.1	12.7	12.8
25	9.1	8.5	8.9	10.9	10.3	10.6	13.8	13.4	13.6	12.8	12.6	12.7
26	9.3	8.8	9.1	10.6	10.2	10.4	14.0	13.8	13.9	12.8	12.4	12.6
27	9.4	9.0	9.2	10.3	9.9	10.1	13.8	13.7	13.8	13.4	12.5	13.0
28	9.4	9.1	9.2	10.1	9.3	9.7	13.9	13.7	13.8	13.8	13.3	13.5
29	9.4	9.0	9.2	10.3	7.4	8.8	13.8	13.5	13.7	13.6	13.1	13.3
30	9.4	9.2	9.3	8.6	8.3	8.4	13.7	13.5	13.6	13.7	13.2	13.4
31	9.5	9.0	9.4	---	---	---	13.6	13.5	13.5	13.7	13.2	13.4
MONTH	10.0	7.9	9.25	11.4	7.4	10.2	14.0	8.2	12.1	---	---	---

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

[illegible]

TURBIDITY (JTU), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	85	60	40	15	95	20	---	---	---	---	---	---
2	75	30	40	15	70	40	---	---	---	---	---	---
3	35	10	40	15	60	40	---	---	---	---	---	---
4	40	9	45	20	60	25	---	---	---	---	---	---
5	35	10	50	15	---	---	---	---	---	---	---	---
6	45	20	55	25	---	---	---	---	---	---	---	---
7	50	25	60	15	---	---	---	---	---	---	---	---
8	25	9	50	10	---	---	---	---	---	---	---	---
9	35	2	70	15	---	---	---	---	---	---	---	---
10	35	20	85	35	---	---	---	---	---	---	100	80
11	40	10	85	25	---	---	---	---	---	---	100	85
12	30	10	45	6	---	---	---	---	---	---	110	85
13	40	10	40	5	---	---	---	---	---	---	110	100
14	35	0	35	8	---	---	---	---	---	---	140	100
15	50	20	40	7	---	---	---	---	---	---	170	120
16	30	20	---	---	---	---	---	---	---	---	140	120
17	25	20	---	---	---	---	---	---	---	---	130	70
18	20	10	---	---	---	---	---	---	---	---	110	95
19	25	1	75	20	---	---	---	---	---	---	260	100
20	40	0	80	40	---	---	---	---	---	---	1800	230
21	25	4	80	50	---	---	---	---	---	---	220	110
22	30	0	85	50	---	---	---	---	---	---	110	85
23	35	1	95	60	---	---	---	---	---	---	95	80
24	45	15	85	60	---	---	---	---	---	---	100	85
25	50	45	95	55	---	---	---	---	---	---	120	85
26	45	35	95	35	---	---	---	---	---	---	110	100
27	50	45	60	10	---	---	---	---	---	---	110	100
28	45	20	230	40	---	---	---	---	---	---	120	95
29	40	20	240	50	---	---	---	---	---	---	110	95
30	50	20	90	35	---	---	---	---	---	---	110	100
31	30	15	---	---	---	---	---	---	---	---	110	9
MONTH	85	0	240	5	---	---	---	---	---	---	---	---

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

TURBIDITY (JTU), WATER YEAR COTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	35	25	6	2								
2	---	---	4	0								
3	---	---	2	0								
4	---	---	3	0								
5	---	---	6	0								
6	---	---	7	1								
7	---	---	10	5								
8	---	---	10	8								
9	---	---	15	8								
10	---	---	15	9								
11	---	---	15	10								
12	---	---	15	10								
13	---	---	20	1								
14	---	---	25	15								
15	35	25	25	15								
16	40	25	25	15								
17	40	25	20	15								
18	35	20	20	15								
19	35	20	20	10								
20	50	20	20	15								
21	30	20	15	10								
22	35	20	20	15								
23	35	10	210	15								
24	20	9	250	25								
25	30	9	50	10								
26	20	6	20	5								
27	20	0	10	7								
28	20	6	20	5								
29	25	9	---	---								
30	20	2	---	---								
31	---	---	---	---								
MONTH	---	---	260	0								

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	9050	371	9060	237	7	4.2	3170	39	333
2	4700	135	1720	238	6	3.8	2750	46	339
3	2580	57	395	275	7	5.0	2010	41	222
4	1250	35	118	464	13	19	1620	28	122
5	880	26	63	1230	31	109	1410	16	60
6	680	22	41	1140	27	82	1340	13	49
7	570	21	32	874	23	54	1130	11	34
8	470	19	24	742	20	39	1020	9	25
9	400	17	13	630	16	28	936	8	21
10	350	15	14	547	13	19	838	7	16
11	320	10	8.8	495	10	13	766	4	8.0
12	300	10	7.7	450	7	8.1	816	1	2.7
13	270	9	6.9	414	5	5.5	1170	5	15
14	250	10	6.7	390	4	4.7	1640	7	31
15	280	14	11	367	5	5.1	1520	3	14
16	260	23	16	367	20	20	1380	2	8.7
17	300	25	20	556	11	16	1220	3	10
18	280	24	18	850	8	17	1070	3	8.6
19	260	23	16	738	6	12	886	2	5.0
20	240	20	13	659	5	9.5	795	3	5.8
21	230	16	10	597	5	8.3	767	2	4.8
22	220	16	9.5	805	9	25	643	5	9.0
23	400	21	23	1610	31	133	733	7	13
24	340	9	8.3	1370	21	77	724	2	3.9
25	368	11	11	1110	15	46	669	2	3.0
26	367	13	13	924	11	27	617	4	6.1
27	321	12	10	1010	22	66	580	2	2.7
28	287	10	8.1	9290	316	14900	560	2	3.2
29	262	9	6.5	15500	418	20500	540	2	2.5
30	255	8	5.7	4920	59	774	520	1	.94
31	243	7	4.7	---	---	---	500	1	1.2
TOTAL	26983	---	11718.9	48799	---	37030.2	34340	---	1380.14

CUMBERLAND RIVER BASIN

03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	627	4	8.3	605	1	1.6	1360	29	108
2	713	3	6.8	618	1	1.9	1270	16	53
3	697	4	7.4	672	1	1.9	1220	7	22
4	689	2	2.8	766	1	2.0	1140	4	11
5	647	2	3.2	1740	26	193	1040	3	9.5
6	587	3	5.2	3840	108	1120	981	4	10
7	558	2	3.4	4010	58	629	919	3	7.8
8	550	2	3.2	3230	29	257	819	2	4.5
9	510	2	2.2	2340	13	87	735	2	4.2
10	490	2	2.7	1820	6	30	706	2	3.2
11	470	3	3.4	1600	4	19	715	2	3.2
12	454	2	2.5	1290	5	18	755	2	4.4
13	452	2	2.1	1060	7	21	907	2	5.6
14	440	2	2.8	1020	5	15	1580	11	46
15	410	1	1.2	1070	4	10	2270	27	177
16	400	1	1.2	1080	3	9.3	2580	30	210
17	380	1	1.5	8360	134	5860	2010	10	56
18	360	2	2.0	24000	353	25100	1620	4	16
19	495	9	15	8370	35	810	2330	66	624
20	958	34	88	4220	16	185	2930	105	902
21	839	24	55	3050	11	93	1840	6	28
22	755	10	19	2240	11	63	1420	3	12
23	713	6	12	1800	10	51	1220	2	7.3
24	652	3	5.6	1540	10	43	1080	2	6.7
25	628	1	2.2	1480	11	44	952	2	6.3
26	687	2	3.0	1290	10	33	849	2	5.7
27	760	2	4.0	1330	29	110	798	2	4.9
28	720	2	3.2	1530	44	183	747	2	4.0
29	710	2	3.6	---	---	---	678	2	3.2
30	680	2	3.4	---	---	---	631	2	2.7
31	621	2	2.6	---	---	---	593	1	2.3
TOTAL	18652	---	278.5	85971	---	34990.7	38695	---	2360.5
APRIL				MAY			JUNE		
1	558	2	2.5	438	3	3.7	1190	3	9.7
2	528	2	2.7	403	4	4.3	1760	22	146
3	503	2	3.4	364	4	3.8	1350	17	61
4	473	3	3.9	330	3	2.9	1090	19	57
5	436	3	3.5	305	3	2.2	1080	15	43
6	416	2	2.7	290	3	2.3	1050	15	43
7	415	2	1.8	277	3	2.5	924	12	30
8	484	5	6.5	291	3	2.6	746	8	16
9	965	6	17	306	3	2.7	884	14	59
10	854	5	12	278	3	2.4	3580	72	718
11	726	7	14	242	3	1.9	2940	64	517
12	656	8	13	221	3	1.7	1790	26	128
13	599	6	9.3	230	3	1.7	1150	17	53
14	554	4	6.5	249	3	1.7	823	16	35
15	528	3	4.1	242	3	1.8	615	15	24
16	496	4	5.3	215	2	1.4	494	13	18
17	444	4	5.3	186	3	1.3	394	11	12
18	425	4	4.4	167	2	.97	341	9	8.6
19	400	4	3.9	169	3	1.5	287	7	5.6
20	375	7	6.9	221	5	3.1	239	6	3.8
21	496	19	26	233	5	3.1	211	6	3.3
22	683	16	29	212	8	4.4	188	6	3.0
23	633	12	21	4080	101	2980	168	6	2.7
24	554	11	17	12900	156	7550	149	5	2.0
25	509	10	14	10300	42	1090	132	5	1.6
26	492	9	12	6000	51	833	117	5	1.4
27	461	8	10	5590	56	839	101	4	1.1
28	439	7	8.6	5810	26	408	94	4	.96
29	528	8	12	3940	9	98	113	6	2.1
30	534	10	14	2570	6	40	163	5	2.5
31	---	---	---	1630	3	13	---	---	---
TOTAL	16164	---	292.3	58689	---	13904.97	24163	---	2008.36

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	130	4	1.4	67	4	.67	365	25	25
2	164	4	1.7	55	3	.51	1570	163	1500
3	354	6	6.2	48	3	.42	4060	240	3150
4	369	4	4.2	42	3	.36	1220	81	262
5	217	2	1.2	36	3	.31	755	65	133
6	153	2	.67	34	3	.28	513	52	72
7	123	1	.36	33	3	.27	359	40	38
8	104	1	.38	37	5	.49	276	31	23
9	91	1	.36	45	8	.96	214	24	14
10	82	1	.29	46	6	.80	165	20	8.7
11	90	2	.44	406	24	62	140	17	6.2
12	161	7	2.9	960	17	46	185	19	10
13	159	4	1.5	437	8	10	397	31	34
14	202	7	3.9	269	4	3.3	286	22	17
15	287	15	12	186	4	1.9	192	17	8.7
16	256	7	5.1	158	5	2.3	197	16	8.8
17	268	9	6.7	199	10	5.6	251	18	12
18	247	11	7.6	154	7	2.9	236	15	9.5
19	187	11	5.5	129	5	1.8	184	13	6.6
20	130	9	3.3	113	4	1.4	190	14	7.0
21	105	9	2.5	154	12	6.6	235	16	10
22	87	8	1.9	169	11	5.3	227	15	9.1
23	86	8	1.8	119	7	2.4	190	11	5.5
24	79	7	1.5	100	5	1.5	298	32	35
25	73	6	1.2	89	5	1.1	277	23	18
26	63	5	.90	83	5	1.0	180	10	5.1
27	67	5	.95	105	8	2.3	144	8	3.0
28	64	4	.68	168	11	5.0	115	6	1.8
29	55	3	.38	324	14	12	97	4	1.1
30	52	2	.29	287	12	9.1	93	5	1.2
31	72	4	.75	206	11	6.2	---	---	---
TOTAL	4577	---	78.55	5258	---	194.77	13611	---	5435.3
TOTAL LOAD FOR YEAR: 109672.11									

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY
(National stream-quality accounting network station)

LOCATION.--Lat 36°37'37", long 84°32'00", McCreary County, Hydrologic Unit 05130104, on right bank 1,000 ft below confluence of Bear Creek, 400 ft upstream from Salt Branch, 5.5 mi southwest of Stearns, and at mile 49.6. Records include flow of Bear Creek.

DRAINAGE AREA.--954 mi², includes that of Bear Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1113: 1946(M). WSP 1436: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 763.83 ft above National Geodetic Vertical Datum of 1929; prior to Oct. 1, 1980 at site 1,000 ft upstream at datum 0.98 ft higher.

REMARKS.--Estimated daily discharges, Water year 1986: Dec. 19, 20, 25-31, Jan. 9-18, Jan. 28 to Feb. 1. Records good, except for periods of estimated daily discharges, which are poor.
Estimated daily discharges, Water Year 1987: Jan. 26-29. Records good, except for periods of estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--45 years, 1,763 ft³/s, 25.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93,200 ft³/s May 28, 1973, gage height, 46.29 ft present datum, from floodmarks; minimum discharge, 11 ft³/s Oct. 4, 1948, Sept. 17, 18, 19, 20, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929, reached a stage of 52.9 ft from information by local residents.

EXTREMES FOR WATER YEARS 1986-1987.--Peak discharges above base of 22,000 ft³/s and maximum (*):

Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1986	Nov. 29, 1985	0600	23900	21.52	1987	Nov. 9, 1986	2000	*31000	*24.77
	Feb. 18, 1986	0900	*32700	*25.20		Nov. 27, 1986	0100	26300	22.68
						Dec. 10, 1986	0400	28400	23.61

Water year 1986: Minimum daily discharge, 41 ft³/s Aug. 7, 1986.

Water year 1987: Minimum daily discharge, 50 ft³/s Aug. 28, 1987.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5640	229	3630	650	650	1620	615	478	1440	157	71	404
2	8310	229	2990	1060	637	1480	576	425	1540	140	78	734
3	3030	243	2340	593	722	1420	552	379	1670	188	66	4730
4	1970	394	1900	592	840	1320	526	350	1160	375	57	1580
5	1390	996	1620	566	1660	1170	498	322	1100	285	50	855
6	942	1320	1470	559	4320	1110	471	304	1090	192	45	637
7	709	963	1260	549	4680	1040	462	294	1550	146	41	464
8	507	781	1080	489	3880	931	472	290	1100	121	52	344
9	465	670	971	460	2820	848	797	309	962	106	54	256
10	400	572	877	440	2210	800	967	288	3060	96	54	208
11	355	505	800	430	1910	808	786	255	3470	103	69	175
12	321	467	805	425	1560	845	710	221	2160	106	914	165
13	289	435	1100	420	1240	1010	645	228	1390	172	504	327
14	271	409	1680	410	1150	1730	587	244	956	170	288	393
15	322	392	1710	400	1180	2610	549	246	717	221	195	267
16	307	387	1520	390	1180	3190	514	229	568	271	143	224
17	325	486	1350	380	7280	2550	479	197	458	240	168	265
18	234	805	1170	370	28200	2070	447	172	369	237	182	282
19	253	731	960	460	11200	2020	431	172	302	215	142	243
20	235	693	320	841	5480	3590	408	217	259	164	120	221
21	232	617	821	902	3610	2220	481	224	226	129	107	264
22	223	661	709	783	2690	1700	689	225	198	106	148	285
23	355	1490	730	742	2180	1410	696	1110	177	91	149	248
24	373	1510	759	691	1850	1220	606	14900	156	87	111	240
25	344	1210	690	552	1720	1070	542	11700	138	80	95	393
26	330	1010	550	684	1520	950	514	7150	123	73	85	263
27	333	959	460	750	1530	885	489	6560	112	66	109	206
28	293	5720	453	740	1760	835	465	7370	104	64	149	169
29	261	19000	440	710	---	761	514	5030	103	66	193	145
30	248	6500	425	700	---	701	543	3130	138	62	294	131
31	241	---	420	670	---	652	---	2080	---	58	257	---
TOTAL	29673	50435	35510	18508	99659	44566	17031	65099	26796	4587	4990	15118
MEAN	957	1681	1178	597	3559	1438	568	2100	893	148	161	504
MAX	8310	19000	3630	1060	28200	3590	967	14900	3470	375	914	4730
MIN	223	229	420	370	637	652	408	172	103	58	41	131
CFSM	1.00	1.76	1.23	.63	3.73	1.51	.60	2.20	.94	.16	.17	.53
IN.	1.16	1.97	1.42	.72	3.89	1.74	.66	2.54	1.04	.18	.19	.59

CAL YR 1985 TOTAL 468142 MEAN 1283 MAX 19000 MIN 88 CFSM 1.34 IN. 18.25
WTR YR 1986 TOTAL 412972 MEAN 1131 MAX 28200 MIN 41 CFSM 1.19 IN. 16.10

CUMBERLAND RIVER BASIN

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03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	341	2010	1060	2620	10900	2790	945	915	243	66	111
2	119	302	1880	963	2320	6360	2180	817	685	221	68	87
3	110	277	2160	887	2190	4070	1950	733	592	262	67	73
4	111	256	2060	800	1860	2980	1880	3800	620	999	63	64
5	125	249	1780	734	1570	2340	1730	4780	713	792	60	60
6	114	243	1540	692	1390	1960	1760	2370	486	1310	58	55
7	97	262	1360	658	1290	1650	2620	1630	343	1410	59	54
8	87	1160	1280	624	1190	1450	3210	1200	267	1460	66	56
9	82	22200	8910	595	1070	1370	2620	932	222	929	72	76
10	77	13900	21900	574	929	1370	2070	761	194	912	72	70
11	75	7520	8440	569	844	1190	1690	647	173	741	71	64
12	93	8430	5420	559	829	1070	1520	565	162	839	67	105
13	868	4550	3810	523	788	1020	1360	537	188	649	66	119
14	3030	2800	2820	494	753	938	1320	597	235	525	82	91
15	2600	2120	2290	501	791	877	9060	555	271	473	92	79
16	1200	1850	1920	531	939	967	8580	493	236	376	77	104
17	747	1540	1650	541	2870	1370	6060	475	284	284	70	97
18	535	1300	1680	557	3130	1360	5100	416	341	229	98	84
19	413	1100	2070	10400	2760	1470	3680	354	377	195	114	80
20	332	988	1780	11500	2320	2010	2750	321	314	171	188	101
21	279	1050	1540	4960	2060	1810	2180	437	846	152	147	99
22	240	1100	1320	3330	2210	1570	1800	1300	1380	138	108	81
23	211	1010	1190	2650	9940	1350	1660	1050	1260	124	86	72
24	192	1360	1820	2040	6960	1190	1900	1030	1280	113	73	81
25	222	3040	3080	2040	4270	1070	2920	956	3030	105	63	82
26	903	11700	2530	3600	3070	974	2340	840	1680	97	57	72
27	1290	15200	2110	3000	9510	864	1890	640	911	91	52	66
28	795	5470	1790	2600	14300	789	1560	500	584	83	50	63
29	579	3400	1520	2500	---	780	1280	571	405	80	67	63
30	452	2490	1340	2680	---	804	1090	823	303	75	83	90
31	388	---	1190	3060	---	2120	---	970	---	71	108	---
TOTAL	16490	117208	96190	66222	84773	60043	82550	32045	19297	14149	2470	2399
MEAN	532	3907	3103	2136	3028	1937	2752	1034	643	456	79.7	80.0
MAX	3030	22200	21900	11500	14300	10900	9060	4780	3030	1460	188	119
MIN	75	243	1190	494	753	780	1090	321	162	71	50	54
CFSM	.56	4.10	3.25	2.24	3.17	2.03	2.88	1.08	.67	.48	.08	.08
IN	.64	4.57	3.75	2.58	3.31	2.34	3.22	1.25	.75	.55	.10	.09
CAL YR 1986	TOTAL 526242		MEAN 1442	MAX 28200	MIN 41	CFSM 1.51	IN 20.52					
WTR YR 1987	TOTAL 593836		MEAN 1627	MAX 22200	MIN 50	CFSM 1.71	IN 23.16					

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-72, 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1980 to current year.

pH: May 1980 to current year.

WATER TEMPERATURE: May 1980 to current year.

DISSOLVED OXYGEN: May 1980 to current year.

TURBIDITY: May 1980 to current year.

SUSPENDED SEDIMENT DISCHARGE: May 1980 to current year.

INSTRUMENTATION.--Five parameter water quality monitor and sediment pumping sampler since May 1980.

REMARKS.--Miscellaneous samples prior to 1979. Interruptions in daily record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 434 microsiemens, July 17, 1985; minimum, 40 microsiemens, May 7, 1984.

pH: Maximum, 8.3 units, Oct. 30, 1986; minimum, 5.2 units, May 19, Nov. 24, 1980.

WATER TEMPERATURE: Maximum, 33.0°C, July 17, 1980; minimum, 0.0°C, Dec. 25-27, 1983.

DISSOLVED OXYGEN: Maximum, 14.3 mg/L, Dec. 21, 1981, Jan. 1, 2, 1984; minimum, 4.5 mg/L, May 22, 1980, Aug. 17, 1985.

TURBIDITY: Maximum, >1,000 JTU, Aug. 1, 1982; minimum, 0 JTU, many days.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,980 mg/L, Aug. 9, 1981; minimum daily mean, 1 mg/L, on several days in 1983-84, 87.

SEDIMENT LOADS: Maximum daily, 200,000 tons, Sept. 2, 1982; minimum daily, 0.18 tons, Sept. 28, 29, 1987.

EXTREMES FOR WATER YEAR 1986.--

SPECIFIC CONDUCTANCE: Maximum, 338 microsiemens, Aug. 16; minimum, 61 microsiemens, May 28.

pH: Maximum, 7.7 units, Aug. 15; minimum, 5.8 units, Oct. 1.

WATER TEMPERATURE: Maximum, 32.0°C, July 24; minimum, 0.5°C, on several days during winter months.

DISSOLVED OXYGEN: Maximum, 13.8 mg/L, Jan. 9; minimum, 6.3 mg/L, May 23, July 8.

TURBIDITY: Maximum, 850 JTU, Oct. 1; minimum, 0 JTU, several days.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 683 mg/L, Oct. 1; minimum daily mean, 2 mg/L, Oct. 18.

SEDIMENT LOADS: Maximum daily, 35,700 tons, Nov. 29; minimum daily, 0.25 tons, Aug. 6.

EXTREMES FOR WATER YEAR 1987.--

SPECIFIC CONDUCTANCE: Maximum, 268 microsiemens, July 6; minimum, 58 microsiemens, June 26.

pH: Maximum, 7.9 units, Oct. 28-30; minimum, 6.1 units, April 15.

WATER TEMPERATURE: Maximum, 31.5°C, July 26-28, Aug. 3, 7, and 8; minimum, 2.0°C, Jan. 25.

DISSOLVED OXYGEN: Maximum, 13.0 mg/L, Jan. 26; minimum, 4.7 mg/L, April 16.

TURBIDITY: Maximum, 410 JTU, Nov. 9 and 10; minimum, 0 JTU, several days during the year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 491 mg/L, Nov. 9; minimum daily mean, 1 mg/L, June 11, 12, and Sept. 28, 29.

SEDIMENT LOADS: Maximum daily, 32,500 tons, Nov. 9; minimum daily, 0.18 ton, Sept. 28, 29.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	228	66	137	254	242	249	92	88	91	138	132	135
2	74	64	69	260	254	257	98	92	95	142	138	141
3	76	72	74	260	240	252	102	98	101	144	142	143
4	88	80	83	238	194	217	106	102	104	166	144	155
5	114	88	100	194	160	174	110	106	108	176	168	173
6	118	114	116	210	166	185	112	108	110	176	174	176
7	122	114	117	238	212	230	114	112	113	180	178	178
8	132	122	127	236	212	227	116	100	115	180	170	175
9	132	128	131	210	178	194	118	102	115	170	164	167
10	128	122	125	178	160	167	120	102	118	164	156	160
11	122	116	119	160	148	154	124	120	122	156	150	152
12	118	112	115	148	142	144	126	124	125	152	150	151
13	114	110	112	142	138	140	128	124	126	152	146	150
14	112	110	111	138	138	138	136	124	129	146	140	141
15	116	110	112	138	136	138	146	136	142	144	140	142
16	110	108	110	138	134	136	148	146	147	148	144	147
17	112	108	111	138	126	133	146	120	139	148	148	148
18	116	112	114	136	128	131	134	120	129	150	148	149
19	118	116	118	144	136	140	126	122	123	150	144	147
20	120	118	119	178	144	162	122	116	120	144	140	142
21	122	120	121	180	178	179	122	118	120	148	144	146
22	126	122	124	178	172	175	122	118	120	174	146	162
23	126	122	125	170	150	166	122	118	120	176	172	173
24	130	124	126	182	148	168	124	118	122	172	168	170
25	134	130	133	182	162	175	124	122	122	168	164	167
26	136	134	135	160	142	150	126	122	124	166	154	161
27	168	138	150	142	128	135	130	126	128	152	142	146
28	214	172	195	128	106	121	132	130	130	142	140	141
29	222	216	220	94	76	83	136	130	134	142	138	140
30	224	220	222	86	82	85	136	132	135	140	138	139
31	242	224	232	---	---	---	134	130	132	138	134	137
MONTH	242	64	129	260	76	167	148	88	121	180	132	153

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	136	132	134	130	120	126	134	130	132	166	164	164
2	138	134	135	130	128	128	134	132	132	164	162	164
3	136	128	132	130	126	128	136	132	134	160	156	158
4	126	122	124	130	122	126	138	134	137	160	156	158
5	122	108	116	122	120	121	140	138	139	160	158	158
6	130	108	114	122	118	120	142	140	141	160	156	160
7	106	92	96	120	118	120	144	142	143	160	158	158
8	96	92	94	122	120	120	146	144	146	158	154	156
9	96	94	94	126	122	124	154	146	150	156	154	156
10	96	94	94	126	120	126	168	156	162	158	156	156
11	98	94	96	124	120	123	188	170	180	162	158	160
12	102	98	100	124	122	123	188	186	186	164	160	162
13	104	98	102	124	120	122	184	182	183	165	162	163
14	104	98	102	126	116	121	182	174	178	165	162	164
15	104	102	104	118	114	116	176	168	172	163	160	161
16	110	78	96	120	114	118	166	154	160	161	160	160
17	86	70	80	114	102	107	154	148	151	161	160	160
18	76	70	72	102	98	101	148	146	148	161	159	160
19	82	76	78	100	98	98	150	146	148	160	157	159
20	86	82	84	160	100	134	150	146	148	159	155	157
21	92	84	88	150	116	131	150	146	147	157	155	156
22	96	90	94	118	114	116	148	144	145	162	158	160
23	102	96	99	116	114	115	154	146	150	163	145	159
24	106	102	103	116	114	115	156	154	155	129	80	96
25	108	104	107	118	116	116	158	156	158	81	64	73
26	116	108	112	120	118	118	158	154	156	78	65	72
27	118	114	116	120	118	119	156	152	154	73	64	69
28	120	114	117	122	118	120	158	154	156	70	61	67
29	---	---	---	126	120	123	160	156	158	77	68	73
30	---	---	---	130	124	125	164	158	160	82	77	79
31	---	---	---	132	130	130	---	---	---	87	82	84
MONTH	138	35	75.0	160	98	120	188	130	154	166	61	138

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	92	87	90	139	136	138	279	274	277	170	158	165
2	101	92	95	141	138	139	274	269	271	205	160	171
3	169	102	128	143	139	141	269	266	267	208	149	174
4	171	158	163	151	144	147	266	262	263	147	136	140
5	158	137	149	159	151	155	263	260	261	130	129	130
6	147	137	142	173	160	166	260	257	259	134	129	131
7	146	88	113	188	174	181	259	245	256	144	134	139
8	106	93	102	201	189	195	254	244	250	148	144	146
9	109	99	103	209	202	206	253	250	252	149	148	148
10	124	106	114	212	210	211	251	247	249	149	148	149
11	121	76	91	212	211	212	250	240	244	152	149	150
12	92	86	89	213	211	212	244	232	237	156	151	153
13	99	94	98	215	210	213	251	230	236	157	155	156
14	98	96	97	220	216	218	314	254	286	157	155	156
15	105	98	102	226	220	224	335	315	327	160	155	157
16	113	105	110	227	222	225	338	336	337	165	160	163
17	115	113	114	223	210	216	337	329	334	166	160	163
18	120	114	118	211	207	209	328	309	318	172	160	165
19	121	120	120	234	211	222	308	294	301	182	172	178
20	123	120	122	254	236	246	294	282	288	183	181	182
21	125	122	124	266	255	260	282	270	276	182	179	181
22	126	124	125	271	266	268	270	251	262	179	171	175
23	128	126	127	275	270	272	250	234	241	171	168	169
24	130	127	129	279	275	277	233	222	228	173	170	171
25	131	129	130	283	279	281	222	213	217	174	171	172
26	132	130	131	286	283	285	213	206	210	174	170	172
27	134	131	132	289	286	288	205	194	200	177	173	176
28	135	133	134	289	287	288	211	185	196	180	177	178
29	136	134	135	287	286	287	185	168	177	182	179	180
30	137	135	136	286	284	285	167	151	157	185	180	182
31	---	---	---	284	278	281	162	146	150	---	---	---
MONTH	171	76	119	289	136	224	338	146	252	208	129	162

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	5.8	7.5	7.4	6.9	6.8	7.2	7.2	7.3	7.2	7.1	7.1
2	7.0	6.9	7.5	7.4	7.0	6.8	7.3	7.2	7.3	7.2	7.1	7.1
3	7.0	6.9	7.5	7.4	7.0	7.0	7.3	7.2	7.3	7.2	7.1	7.1
4	7.0	6.8	7.4	7.2	7.0	7.0	7.3	7.3	7.3	7.2	7.1	7.1
5	7.0	6.9	7.3	7.2	7.1	7.0	7.4	7.3	7.2	7.0	7.1	7.1
6	7.1	7.0	7.4	7.3	7.1	7.0	7.4	7.3	7.1	7.0	7.1	7.0
7	7.2	7.1	7.5	7.4	7.1	7.1	7.4	7.3	7.1	6.9	7.1	7.1
8	7.2	7.1	7.5	7.4	7.1	7.1	7.4	7.4	7.0	7.0	7.1	7.1
9	7.2	7.1	7.4	7.4	7.1	7.1	7.4	7.3	7.0	6.9	7.1	7.1
10	7.2	7.1	7.4	7.3	7.1	7.1	7.3	7.3	7.0	6.9	7.1	7.1
11	7.2	7.1	7.4	7.3	7.1	7.1	7.3	7.3	7.1	7.0	7.1	7.0
12	7.2	7.1	7.3	7.2	7.1	7.1	7.3	7.3	7.1	7.1	7.1	7.1
13	7.1	7.0	7.3	7.2	7.1	7.0	7.3	7.3	7.1	7.1	7.1	7.0
14	7.1	7.0	7.3	7.2	7.2	7.0	7.3	7.3	7.1	7.1	7.1	7.0
15	7.0	6.9	7.3	7.2	7.3	7.2	7.3	7.3	7.2	7.1	7.0	7.0
16	6.9	6.9	7.4	7.2	7.3	7.2	7.3	7.3	7.1	6.7	7.1	7.0
17	7.0	6.9	7.3	7.2	7.3	7.2	7.3	7.3	6.9	6.6	7.0	7.0
18	7.0	6.9	7.3	7.2	7.2	7.2	7.3	7.3	6.7	6.5	7.0	7.0
19	7.0	7.0	7.3	7.2	7.2	7.2	7.3	7.2	6.7	6.6	7.0	7.0
20	7.1	7.0	7.4	7.3	7.2	7.2	7.3	7.2	6.7	6.6	7.3	7.0
21	7.0	7.0	7.4	7.3	7.2	7.2	7.3	7.3	6.8	6.7	7.3	7.2
22	7.0	7.0	7.4	7.3	7.2	7.2	7.4	7.3	6.9	6.8	7.2	7.1
23	7.1	7.0	7.3	7.3	7.2	7.2	7.4	7.3	6.9	6.9	7.2	7.1
24	7.1	7.0	7.4	7.3	7.2	7.2	7.4	7.3	6.9	6.9	7.2	7.1
25	7.1	7.0	7.4	7.3	7.2	7.2	7.4	7.3	7.0	6.9	7.2	7.1
26	7.2	7.1	7.3	7.2	7.2	7.2	7.3	7.3	7.0	7.0	7.2	7.1
27	7.2	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.0	7.0	7.2	7.1
28	7.3	7.2	7.2	6.8	7.2	7.2	7.3	7.3	7.1	7.0	7.2	7.1
29	7.4	7.3	6.9	6.6	7.2	7.2	7.3	7.3	---	---	7.2	7.1
30	7.4	7.3	6.9	6.7	7.2	7.2	7.3	7.3	---	---	7.2	7.1
31	7.5	7.3	---	---	7.2	7.2	7.3	7.3	---	---	7.2	7.1
MONTH	7.6	5.8	7.5	6.6	7.3	6.8	7.4	7.2	7.3	6.5	7.3	7.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.2	7.1	7.3	7.2	6.9	6.8	7.2	7.1	7.5	7.3	7.0	6.9
2	7.2	7.1	7.3	7.2	7.0	6.9	7.2	7.0	7.5	7.3	7.2	6.6
3	7.2	7.1	7.4	7.2	7.1	6.9	7.2	7.1	7.5	7.3	7.2	6.9
4	7.2	7.1	7.4	7.3	7.1	7.0	7.2	7.1	7.6	7.4	6.9	6.9
5	7.2	7.1	7.4	7.3	7.0	7.0	7.3	7.1	7.6	7.4	7.0	6.9
6	7.2	7.1	7.3	7.2	7.0	7.0	7.3	7.1	7.5	7.4	7.1	7.0
7	7.3	7.1	7.3	7.2	7.0	6.7	7.4	7.2	7.6	7.3	7.2	7.1
8	7.3	7.1	7.2	7.1	6.9	6.8	7.4	7.2	7.5	7.4	7.2	7.1
9	7.3	7.2	7.3	7.1	6.9	6.8	7.5	7.2	7.5	7.3	7.3	7.2
10	7.4	7.2	7.3	7.1	7.0	6.9	7.4	7.2	7.5	7.3	7.3	7.2
11	7.4	7.3	7.3	7.1	6.9	6.6	7.4	7.2	7.4	7.1	7.3	7.1
12	7.4	7.3	7.2	7.1	6.8	6.7	7.4	7.2	7.3	7.2	7.4	7.2
13	7.4	7.3	7.3	7.1	6.9	6.8	7.3	7.2	7.4	7.3	7.4	7.1
14	7.4	7.3	7.3	7.1	7.0	6.9	7.4	7.2	7.5	7.4	7.4	7.2
15	7.4	7.3	7.3	7.1	7.1	6.9	7.4	7.2	7.7	7.4	7.4	7.2
16	7.4	7.3	7.3	7.2	7.2	6.9	7.4	7.3	7.6	7.5	7.4	7.1
17	7.3	7.3	7.3	7.1	7.3	7.0	7.4	7.3	7.6	7.4	7.4	7.2
18	7.4	7.3	7.2	7.1	7.4	7.0	7.4	7.2	7.5	7.4	7.3	7.2
19	7.4	7.3	7.2	7.1	7.4	7.1	7.4	7.2	7.5	7.4	7.3	7.2
20	7.3	7.3	7.2	7.1	7.3	7.1	7.4	7.2	7.5	7.3	7.4	7.2
21	7.3	7.1	7.2	7.1	7.3	7.0	7.4	7.3	7.4	7.3	7.4	7.2
22	7.3	7.2	7.3	7.2	7.3	7.0	7.5	7.3	7.4	7.3	7.3	7.2
23	7.3	7.2	7.3	6.8	7.3	7.0	7.5	7.3	7.4	7.2	7.3	7.2
24	7.4	7.3	6.8	6.6	7.3	7.0	7.6	7.3	7.4	7.2	7.3	7.2
25	7.4	7.3	6.7	6.6	7.3	7.0	7.6	7.3	7.4	7.2	7.3	7.2
26	7.3	7.2	6.6	6.5	7.3	7.1	7.6	7.3	7.4	7.2	7.3	7.2
27	7.3	7.2	6.6	6.5	7.4	7.1	7.6	7.3	7.4	7.2	7.3	7.2
28	7.3	7.2	6.6	6.5	7.3	7.1	7.5	7.3	7.2	6.9	7.4	7.2
29	7.3	7.2	6.7	6.6	7.3	7.1	7.5	7.3	7.3	7.1	7.4	7.2
30	7.4	7.2	6.8	6.7	7.3	7.1	7.6	7.3	7.3	7.2	7.4	7.2
31	---	---	6.8	6.8	---	---	7.4	7.3	7.2	6.9	---	---
MONTH	7.4	7.1	7.4	6.5	7.4	6.6	7.6	7.0	7.6	6.9	7.4	6.6

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.5	15.5	17.0	17.5	17.0	17.0	15.0	14.0	14.0	1.0	1.0	1.0
2	15.5	14.5	15.0	17.5	17.0	17.0	13.5	11.5	12.5	1.5	.5	1.0
3	14.5	14.5	14.5	17.0	16.0	16.5	11.5	9.0	10.0	1.5	1.0	1.5
4	15.5	15.5	15.5	16.0	14.5	15.5	9.0	8.0	8.0	2.0	1.5	1.5
5	16.0	15.5	15.5	14.5	13.5	14.0	8.0	7.0	7.5	2.0	1.5	2.0
6	16.0	15.0	15.5	13.5	12.5	13.0	7.0	6.5	7.0	1.5	1.5	1.5
7	15.5	14.5	15.0	12.5	11.5	12.0	6.5	6.0	6.0	2.0	1.5	1.5
8	15.5	14.5	15.0	11.5	11.0	11.0	6.0	6.0	6.0	1.5	1.0	1.0
9	15.5	14.5	15.0	11.0	10.5	10.5	6.5	6.0	6.0	1.0	.5	1.0
10	16.0	15.0	15.5	11.0	10.5	11.0	6.5	6.0	6.5	1.0	.5	1.0
11	17.0	15.5	16.0	11.5	11.0	11.5	7.5	6.5	7.0	1.0	.5	1.0
12	17.5	16.5	17.0	12.0	11.5	11.5	7.5	7.5	7.5	1.5	1.0	1.0
13	18.0	17.0	17.5	13.0	12.0	12.5	8.0	7.5	7.5	1.5	1.0	1.0
14	18.5	17.5	18.0	13.5	12.5	13.0	7.5	6.5	7.0	1.5	.5	1.0
15	18.5	18.0	18.0	14.0	13.0	13.5	6.5	5.0	6.0	1.0	.5	1.0
16	19.0	18.0	18.5	14.5	14.0	14.0	5.0	4.5	5.0	1.5	1.0	1.0
17	18.5	17.5	18.0	14.0	14.0	14.0	4.5	4.0	4.0	2.0	1.5	1.5
18	19.0	18.0	18.5	14.5	14.0	14.0	4.0	3.0	3.5	2.5	2.0	2.0
19	19.5	18.5	19.0	15.0	14.5	14.5	3.0	2.0	2.5	2.5	2.5	2.5
20	20.0	19.0	19.5	15.0	14.5	15.0	2.5	2.0	2.0	2.5	2.5	2.5
21	20.0	19.5	20.0	14.5	13.5	14.0	2.0	1.5	1.5	3.0	2.5	2.5
22	20.0	19.5	19.5	13.5	13.0	13.5	1.5	1.0	1.0	3.5	3.0	3.5
23	19.5	19.5	19.5	13.0	12.0	12.5	2.0	1.5	1.5	4.0	3.5	3.5
24	19.5	19.5	19.5	12.0	12.0	12.0	1.5	1.5	1.5	4.0	3.0	3.5
25	20.0	19.0	19.5	12.0	12.0	12.0	1.5	.5	1.0	4.0	4.0	4.0
26	19.0	18.5	19.0	13.0	12.0	12.5	.5	.5	.5	4.0	3.5	4.0
27	19.0	18.5	19.0	13.5	13.0	13.5	1.0	.5	1.0	3.5	1.5	2.5
28	19.0	18.5	18.5	15.5	13.5	14.0	1.0	.5	1.0	1.5	1.0	1.0
29	18.5	17.5	18.0	17.0	14.5	15.5	1.0	.5	1.0	1.5	1.0	1.0
30	17.5	17.0	17.5	15.0	14.5	14.5	1.0	.5	.5	1.5	1.0	1.5
31	17.5	17.0	17.5	---	---	---	1.0	.5	1.0	2.0	1.0	1.5
MONTH	20.0	14.5	17.5	17.5	10.5	13.5	15.0	.5	4.74	4.0	.5	1.81
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.5	2.0	2.0	6.0	5.0	5.5	15.0	13.5	14.5	19.5	19.0	19.0
2	3.0	2.5	3.0	5.0	4.5	5.0	16.0	14.5	15.5	20.0	18.5	19.0
3	4.0	3.0	3.5	5.0	4.5	4.5	16.0	15.0	15.5	19.5	18.0	18.5
4	5.5	4.0	5.2	4.5	4.5	4.5	16.5	15.0	16.0	19.5	17.0	18.5
5	7.6	5.5	6.5	5.0	4.0	4.5	17.0	15.5	16.5	20.0	17.5	18.5
6	9.8	7.7	9.0	6.0	5.0	5.5	18.0	16.5	17.0	20.5	18.5	19.5
7	9.7	8.8	9.1	5.5	5.0	5.5	19.0	17.0	18.0	21.5	19.5	20.5
8	8.7	7.9	8.3	6.0	4.5	5.5	19.0	18.0	18.0	22.5	20.5	21.5
9	7.9	6.8	7.4	7.0	5.5	6.0	18.0	16.5	17.0	23.0	20.5	22.0
10	6.8	5.4	6.0	8.0	6.5	7.5	17.0	15.5	16.0	23.0	21.0	22.0
11	5.3	4.0	4.5	9.0	8.0	8.5	16.5	15.0	16.0	23.0	21.5	22.5
12	4.0	3.0	3.4	10.0	8.5	9.5	16.5	14.5	15.5	22.5	22.0	22.5
13	3.2	2.0	2.7	11.5	10.0	10.5	16.5	14.5	15.5	23.5	22.0	22.5
14	2.1	1.6	1.9	12.5	11.5	12.0	16.0	15.0	15.5	24.0	22.0	23.0
15	2.4	1.7	1.9	12.5	12.0	12.5	16.5	15.5	16.0	24.0	22.5	23.0
16	4.6	2.3	3.1	12.0	11.5	11.5	15.5	14.5	15.0	25.0	22.5	24.0
17	11.6	5.5	9.0	11.5	10.5	11.0	14.5	13.5	14.0	25.0	23.0	24.5
18	11.0	8.9	9.5	11.0	10.5	11.0	15.5	13.5	14.0	24.5	24.0	24.0
19	11.6	9.2	9.5	11.5	11.0	11.5	16.0	14.0	15.0	23.5	23.0	23.5
20	9.5	9.5	9.5	12.0	11.0	11.5	15.5	15.0	15.5	22.5	21.5	22.0
21	9.5	9.5	9.5	11.0	9.5	10.5	15.0	14.5	15.0	21.5	21.0	21.5
22	9.5	8.5	9.0	9.5	8.5	9.0	15.0	14.0	14.5	22.0	20.0	21.0
23	8.5	8.0	8.0	8.5	8.0	8.0	15.0	13.0	14.0	21.0	18.5	20.0
24	8.0	7.5	7.5	9.0	8.0	8.5	15.5	13.0	14.5	17.5	15.0	15.5
25	7.5	7.0	7.0	10.0	8.0	9.0	16.0	14.0	15.0	16.0	15.5	16.0
26	7.0	6.5	7.0	10.5	9.5	10.0	17.5	15.0	16.5	16.0	16.0	16.0
27	7.0	6.5	7.0	12.0	10.5	11.5	18.5	16.5	17.5	16.5	16.0	16.0
28	6.5	6.0	6.0	13.0	11.0	12.0	18.0	17.5	17.5	17.0	16.5	16.5
29	---	---	---	13.5	11.5	12.5	19.0	17.5	18.0	17.5	17.0	17.0
30	---	---	---	14.5	12.5	13.5	20.0	17.5	19.0	19.0	17.5	18.0
31	---	---	---	15.0	13.0	14.0	---	---	---	20.0	18.5	19.0
MONTH	11.6	1.6	6.29	15.0	4.0	9.10	20.0	13.0	15.9	25.0	15.0	20.2

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	19.5	20.0	29.5	28.0	28.5	29.2	26.6	27.9	22.4	22.1	22.3
2	21.5	20.5	20.5	29.0	28.0	28.0	29.3	27.1	28.2	22.3	21.6	22.0
3	22.0	21.0	21.5	28.5	27.0	27.5	29.3	26.8	28.0	21.5	20.3	20.6
4	22.0	21.0	21.5	28.0	26.5	27.5	28.8	26.2	27.5	20.2	20.1	20.1
5	21.5	21.0	21.0	28.5	26.5	27.5	28.7	26.0	27.3	21.5	20.5	21.0
6	22.0	21.0	21.5	28.5	26.5	27.5	28.1	26.2	27.1	22.5	21.0	21.5
7	21.5	21.0	21.5	29.5	27.0	28.0	28.4	26.1	27.2	22.0	21.0	21.5
8	22.5	21.0	21.5	30.5	27.5	29.0	28.5	26.5	27.4	22.5	21.5	22.0
9	22.5	21.5	22.0	30.5	28.5	29.5	28.4	26.4	27.3	22.5	21.0	21.5
10	23.5	22.5	23.0	29.5	28.5	29.0	28.8	26.7	27.6	23.0	21.5	22.5
11	22.0	21.0	21.5	30.5	27.5	29.0	28.0	26.4	27.1	23.0	22.0	22.5
12	22.5	21.0	21.5	30.5	28.5	29.0	26.7	26.1	26.5	24.0	22.5	23.0
13	23.0	22.0	22.5	29.5	28.5	29.0	26.9	25.8	26.4	23.5	22.0	23.0
14	23.5	22.0	23.0	29.5	28.0	28.5	27.2	25.9	26.6	23.5	22.0	23.0
15	24.5	23.0	23.5	29.5	27.5	28.5	28.0	26.1	27.0	23.5	22.5	23.0
16	25.5	23.0	24.0	29.5	28.0	28.5	27.3	26.5	26.9	24.0	22.5	23.0
17	25.5	24.0	24.5	30.0	28.0	29.0	27.5	26.2	26.7	24.0	22.5	23.5
18	26.0	24.0	24.5	30.5	28.5	29.5	27.3	26.3	26.7	23.5	23.0	23.0
19	26.5	24.0	25.0	30.5	28.5	29.5	27.5	26.0	26.7	23.0	22.5	23.0
20	27.0	24.5	25.5	31.0	29.0	30.0	27.8	25.9	26.7	23.5	22.5	23.0
21	27.5	25.5	26.5	31.5	29.0	30.0	27.4	25.8	26.6	24.5	23.0	23.5
22	28.0	25.5	26.5	31.7	29.0	30.2	27.5	25.9	26.8	24.5	23.0	24.0
23	28.5	26.5	27.5	31.5	29.2	30.3	27.8	26.6	27.1	24.5	23.5	24.5
24	29.0	27.0	28.0	32.0	29.1	30.4	28.9	26.6	27.4	25.5	24.0	24.5
25	29.5	26.5	28.0	31.7	29.4	30.5	28.3	25.4	26.8	25.5	24.0	25.0
26	29.0	26.5	27.5	31.3	29.3	30.3	27.0	25.5	26.3	25.5	24.5	25.0
27	29.5	26.5	28.0	31.6	29.2	30.4	27.3	25.6	26.3	25.5	24.5	25.0
28	30.0	27.5	28.5	30.8	29.3	30.1	26.1	24.5	25.3	26.0	24.5	25.5
29	30.0	28.0	28.5	31.6	28.9	30.1	25.2	23.3	24.3	26.5	25.0	25.5
30	30.0	28.0	29.0	31.2	28.2	29.6	24.6	23.1	23.9	26.5	25.0	26.0
31	---	---	---	29.3	27.2	27.8	23.7	22.1	23.1	---	---	---
MONTH	30.0	19.5	24.2	31.8	26.5	29.1	29.3	22.1	26.7	26.5	20.1	23.1

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.2	8.5	8.8	8.8	8.6	8.7	9.5	8.5	9.1	13.4	13.3	13.4
2	9.8	9.5	9.6	8.8	8.5	8.7	10.1	9.4	9.7	13.5	13.3	13.4
3	9.8	9.6	9.7	8.8	8.6	8.7	10.7	9.9	10.3	13.4	13.2	13.3
4	9.6	9.3	9.4	9.1	8.7	8.9	11.2	10.8	11.0	13.3	13.1	13.2
5	9.4	9.4	9.4	9.4	9.1	9.2	11.6	11.0	11.4	13.3	13.1	13.2
6	9.6	9.5	9.5	9.9	9.5	9.7	11.6	11.4	11.5	13.7	13.1	13.4
7	9.7	9.5	9.6	10.2	9.9	10.0	11.8	11.6	11.7	13.6	13.4	13.5
8	9.9	9.7	9.8	10.5	10.2	10.4	11.8	11.6	11.7	13.7	13.5	13.6
9	10.0	9.7	9.8	10.7	10.5	10.6	11.8	11.7	11.7	13.8	13.6	13.7
10	9.9	9.6	9.8	10.8	10.6	10.7	11.8	11.6	11.7	13.7	13.6	13.6
11	9.6	9.4	9.6	10.7	10.5	10.6	12.1	11.5	11.8	13.7	13.6	13.6
12	9.6	9.2	9.4	10.6	10.4	10.5	11.9	11.5	11.7	13.6	13.5	13.6
13	9.3	9.0	9.2	10.5	10.3	10.4	11.6	11.0	11.5	13.6	13.4	13.5
14	9.3	8.9	9.1	10.4	10.1	10.2	11.7	11.4	11.5	13.5	13.4	13.5
15	8.9	8.7	8.8	10.2	10.0	10.1	12.2	11.7	12.0	13.6	13.4	13.5
16	8.9	8.7	8.7	9.9	9.7	9.8	12.6	12.3	12.4	13.6	13.4	13.5
17	8.8	8.6	8.7	9.9	9.6	9.8	12.7	12.5	12.6	13.5	13.3	13.4
18	8.7	8.6	8.6	9.9	9.7	9.8	12.8	12.6	12.7	13.4	13.2	13.3
19	8.6	8.4	8.5	9.9	9.6	9.7	13.0	12.7	12.8	13.1	12.9	13.0
20	8.5	8.2	8.4	9.8	9.6	9.7	13.2	12.8	13.0	13.0	12.9	12.9
21	8.3	8.1	8.2	10.1	9.7	9.9	13.4	13.2	13.3	12.9	12.7	12.8
22	8.2	8.0	8.1	10.1	9.9	10.0	13.5	13.3	13.4	12.8	12.6	12.7
23	8.1	8.0	8.0	10.3	9.9	10.1	13.3	13.2	13.3	12.9	12.6	12.7
24	8.1	8.0	8.0	10.4	10.3	10.4	13.3	13.2	13.2	12.9	12.8	12.8
25	8.3	7.9	8.1	10.5	10.4	10.4	13.4	13.2	13.3	12.7	12.6	12.7
26	8.3	8.1	8.2	10.4	10.0	10.3	13.5	13.4	13.4	12.7	12.5	12.6
27	8.4	8.1	8.2	10.2	10.0	10.1	13.5	13.4	13.4	12.9	12.5	12.7
28	8.4	8.2	8.3	10.0	8.2	9.1	13.5	13.4	13.5	13.3	12.9	13.1
29	8.5	8.2	8.3	9.6	8.4	9.0	13.5	13.4	13.5	13.4	13.2	13.3
30	8.5	8.2	8.4	9.8	8.3	9.2	13.5	13.4	13.5	13.6	13.3	13.5
31	8.9	8.3	8.5	---	---	---	13.4	13.4	13.4	13.7	13.5	13.6
MONTH	10.0	7.9	8.6	10.8	8.3	9.8	13.5	8.5	12.2	13.8	12.5	13.2

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.6	13.4	13.5	12.3	12.0	12.2	10.4	10.1	10.3	9.2	8.8	9.0
2	13.4	13.2	13.3	12.5	12.3	12.4	10.2	9.9	10.1	9.2	8.7	8.9
3	13.2	12.8	13.0	12.5	12.3	12.4	10.1	9.8	10.0	9.4	8.9	9.1
4	12.7	12.6	12.6	12.4	12.3	12.4	10.0	9.7	9.9	9.5	9.2	9.3
5	12.3	10.2	11.4	12.4	12.2	12.3	10.0	9.6	9.8	9.5	9.2	9.3
6	10.3	8.3	9.6	12.6	12.0	12.3	9.7	9.4	9.6	9.4	9.0	9.2
7	12.5	11.1	11.8	12.6	12.5	12.5	9.6	9.2	9.5	9.2	8.5	8.9
8	11.5	10.5	11.0	12.8	12.7	12.7	9.3	9.0	9.2	8.9	8.5	8.7
9	11.0	10.6	10.8	12.8	12.5	12.7	9.4	9.1	9.2	8.7	8.3	8.5
10	11.3	10.6	10.9	12.6	12.2	12.5	9.5	9.2	9.4	8.6	8.3	8.4
11	11.9	11.1	11.4	12.1	11.7	12.0	9.7	9.5	9.6	8.6	8.2	8.3
12	12.2	11.4	11.8	11.8	11.3	11.6	9.8	9.6	9.7	8.5	8.1	8.3
13	12.0	11.6	11.8	12.0	10.9	11.3	9.9	9.7	9.8	8.2	8.0	8.1
14	12.1	11.6	11.9	11.0	10.5	10.7	9.9	9.6	9.7	8.2	7.9	8.0
15	12.2	11.8	12.1	10.5	10.3	10.3	9.8	9.7	9.7	8.2	7.8	8.0
16	---	---	---	10.7	10.1	10.5	9.8	9.6	9.7	8.2	7.7	7.9
17	---	---	---	11.0	10.8	10.9	10.1	9.7	9.9	8.0	7.6	7.8
18	---	---	---	11.0	10.7	10.9	10.2	10.0	10.1	7.8	7.4	7.6
19	---	---	---	10.8	10.6	10.7	10.1	9.8	10.0	7.8	7.4	7.6
20	10.9	10.7	10.8	10.6	9.9	10.4	9.8	9.6	9.7	8.1	7.6	7.8
21	11.1	10.9	11.0	11.1	10.6	10.8	9.7	9.5	9.6	8.3	7.8	8.0
22	11.4	11.0	11.2	11.7	11.1	11.5	9.9	9.6	9.7	8.4	8.0	8.2
23	12.6	11.3	11.7	12.2	11.8	12.0	9.9	9.7	9.8	8.3	6.3	8.0
24	12.1	11.6	11.7	12.2	12.0	12.1	9.9	9.7	9.8	10.0	8.3	9.5
25	11.9	11.6	11.8	12.1	11.7	12.0	9.8	9.5	9.7	9.8	9.4	9.7
26	12.0	11.8	11.9	11.7	11.3	11.6	9.5	9.2	9.4	9.7	9.2	9.6
27	11.8	11.7	11.7	11.4	11.0	11.2	9.3	9.0	9.2	9.6	9.3	9.5
28	12.0	11.8	11.9	11.1	10.8	11.0	9.5	9.2	9.4	9.6	9.3	9.5
29	---	---	---	10.9	10.5	10.8	9.5	9.1	9.3	9.5	9.2	9.3
30	---	---	---	10.6	10.3	10.5	9.4	9.0	9.2	9.3	8.7	9.0
31	---	---	---	10.4	10.4	10.4	---	---	---	8.9	8.6	8.8
MONTH	---	---	---	12.8	9.9	11.5	10.4	9.0	9.7	10.0	6.3	8.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	8.7	8.5	8.5	7.1	6.6	6.8	7.6	6.9	7.4	8.2	7.9	8.0
2	8.6	7.7	8.4	7.1	6.5	6.7	7.6	6.9	7.4	8.2	7.9	8.0
3	8.4	8.0	8.2	7.1	6.6	6.9	7.8	7.0	7.4	8.3	7.0	7.9
4	8.0	7.9	7.9	7.1	6.8	6.9	7.9	7.1	7.5	8.4	8.3	8.3
5	8.1	7.9	8.0	7.1	6.7	6.9	7.9	7.2	7.6	8.6	8.4	8.5
6	8.0	7.9	8.0	7.1	6.6	6.8	7.8	7.1	7.5	8.5	8.1	8.4
7	8.0	7.9	8.0	7.0	6.5	6.7	7.6	7.2	7.4	8.5	8.4	8.4
8	8.1	7.9	8.0	6.9	6.3	6.6	7.4	6.7	7.1	8.5	8.2	8.4
9	8.0	7.7	7.9	7.3	6.7	7.0	7.7	6.8	7.2	8.6	8.3	8.4
10	7.9	7.5	7.7	7.2	6.7	6.9	7.5	6.9	7.2	8.6	8.2	8.4
11	8.2	7.9	8.1	7.4	6.7	6.9	7.5	6.5	7.1	8.6	8.1	8.3
12	8.1	7.6	8.0	7.3	6.7	7.0	7.2	6.8	7.1	8.5	7.9	8.2
13	8.1	7.7	8.0	7.3	6.9	7.0	7.7	7.2	7.4	8.5	8.0	8.2
14	8.2	7.9	8.1	7.5	7.0	7.2	7.7	7.3	7.5	8.4	7.9	8.1
15	8.2	7.9	8.0	7.4	6.9	7.1	7.9	7.3	7.5	8.3	7.8	8.0
16	8.2	7.8	8.0	7.4	7.0	7.3	7.6	7.2	7.4	8.2	7.7	7.9
17	8.1	7.6	7.8	7.6	7.0	7.3	7.7	7.2	7.4	8.6	7.6	8.2
18	8.2	7.6	7.8	7.4	6.9	7.1	7.7	7.1	7.4	8.4	8.0	8.2
19	8.1	7.5	7.8	7.3	6.8	7.1	7.7	7.2	7.4	8.4	8.0	8.2
20	7.9	7.4	7.6	7.2	6.7	6.9	7.7	7.1	7.4	8.5	8.0	8.2
21	7.8	7.2	7.5	7.3	6.5	6.9	7.7	7.2	7.4	8.4	7.9	8.1
22	7.6	7.0	7.3	7.3	6.7	6.4	7.6	7.1	7.4	8.2	7.7	7.9
23	7.4	6.8	7.1	7.3	6.6	6.9	7.6	7.1	7.4	8.0	7.5	7.7
24	7.3	6.6	6.9	7.4	6.6	7.0	7.6	7.0	7.3	7.9	7.4	7.6
25	7.2	6.6	6.9	7.5	6.6	7.0	7.0	7.2	7.4	7.7	7.3	7.5
26	7.7	6.6	7.1	7.4	6.6	6.9	7.7	7.1	7.3	7.7	7.1	7.4
27	7.6	7.0	7.3	7.4	6.6	7.0	7.7	7.1	7.4	7.5	7.0	7.2
28	7.4	6.8	7.1	7.3	6.6	6.9	7.7	7.1	7.5	7.5	7.0	7.2
29	7.4	6.6	7.0	7.5	6.6	7.0	8.0	7.5	7.7	7.4	6.9	7.1
30	7.3	6.7	7.0	7.6	6.8	7.1	8.0	7.7	7.8	7.3	6.8	7.0
31	---	---	---	7.3	6.9	7.0	8.1	7.7	7.9	---	---	---
MONTH	8.7	6.6	7.7	7.6	6.3	6.9	8.1	6.5	7.4	8.6	6.8	8.0

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TURBIDITY (JTU), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	850	5	2	1	60	30	4	3	7	6	4	3
2	130	45	3	1	30	20	10	3	7	6	5	4
3	50	35	3	2	20	15	5	3	8	6	6	4
4	20	15	4	2	20	15	4	4	9	7	5	3
5	15	9	10	3	15	10	5	4	35	8	4	2
6	10	6	9	6	10	9	5	3	110	20	6	2
7	6	4	7	6	8	6	4	3	110	40	7	6
8	5	3	8	5	8	6	5	4	40	30	7	6
9	4	1	7	5	6	5	5	4	30	15	8	5
10	3	1	6	5	7	6	5	4	15	10	9	6
11	2	1	7	4	8	5	6	3	10	10	9	6
12	3	1	5	3	6	5	4	3	10	9	8	6
13	2	1	4	3	6	5	4	3	10	8	9	7
14	3	1	3	1	8	5	5	3	8	7	10	9
15	2	1	3	1	9	8	5	4	9	8	20	10
16	2	1	3	2	10	8	5	2	150	8	30	20
17	2	1	3	2	10	9	4	3	310	80	25	15
18	7	0	4	1	9	6	4	2	220	75	15	15
19	7	0	2	2	7	5	4	2	75	45	15	10
20	1	0	3	2	6	4	5	3	40	30	350	15
21	1	0	3	2	6	5	5	3	35	20	440	65
22	1	0	4	3	6	5	6	4	25	15	60	25
23	2	1	9	3	6	5	9	6	15	9	35	15
24	2	1	10	8	6	5	10	8	10	7	55	9
25	3	1	15	10	6	4	9	7	8	5	9	8
26	2	1	15	8	5	4	10	9	5	4	9	7
27	1	0	8	7	5	4	9	7	5	4	8	6
28	1	0	340	6	5	4	7	5	6	3	7	6
29	2	1	360	230	5	4	6	5	---	---	7	6
30	1	0	230	65	6	3	7	6	---	---	8	6
31	3	0	---	---	4	4	8	6	---	---	7	5
MONTH	850	0	360	1	60	3	10	2	310	3	440	2
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5	4	3	2	10	9	6	2	5	3	10	5
2	5	4	3	2	15	7	4	2	4	3	110	5
3	5	3	3	2	15	8	4	2	5	3	470	60
4	5	3	3	2	150	30	4	3	5	3	450	290
5	5	4	3	2	110	75	3	2	5	3	260	130
6	5	4	3	2	90	30	4	2	4	3	120	55
7	5	3	8	3	55	30	4	2	7	2	50	30
8	5	3	4	3	25	10	8	2	4	3	25	20
9	5	3	5	3	15	9	4	2	4	2	20	15
10	4	3	3	2	100	9	4	2	4	2	15	10
11	5	3	3	2	210	100	4	2	20	3	15	10
12	6	5	4	2	120	35	4	2	50	4	15	9
13	8	6	4	2	50	30	4	2	4	3	10	7
14	25	8	4	2	30	20	4	2	4	4	8	5
15	8	6	10	3	20	15	4	2	4	3	7	4
16	6	4	4	3	15	9	4	2	5	3	5	4
17	4	3	4	2	10	6	3	2	4	3	8	4
18	3	2	2	1	6	5	3	2	3	3	6	4
19	3	2	4	1	5	4	3	2	4	2	6	3
20	4	2	2	1	5	3	4	2	6	3	7	4
21	4	3	3	1	5	4	3	1	4	3	6	4
22	4	3	4	1	5	4	4	1	4	3	7	4
23	3	3	180	1	5	4	4	2	3	2	6	3
24	3	2	460	75	6	4	4	2	3	3	5	3
25	4	3	260	100	4	3	4	2	4	2	5	3
26	3	2	110	75	4	2	4	3	4	2	4	3
27	4	3	130	35	4	2	4	3	4	3	3	3
28	4	3	35	25	4	2	5	3	25	3	4	2
29	4	3	35	25	4	2	5	3	6	4	4	2
30	3	2	25	15	4	2	5	3	6	5	3	2
31	---	---	15	10	---	---	5	3	15	4	---	---
MONTH	25	2	460	1	210	2	8	1	50	2	470	2

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	5640	683	10100	229	4	2.6	3630	58	583
2	8310	474	10600	229	4	2.5	2990	55	440
3	3030	115	944	243	5	3.6	2340	24	154
4	1970	64	338	394	14	16	1900	29	151
5	1390	34	126	996	24	63	1620	28	120
6	942	34	86	1320	16	58	1470	24	96
7	709	27	52	963	23	57	1260	17	57
8	567	13	20	781	33	70	1080	16	46
9	465	11	13	670	22	40	971	15	38
10	400	9	9.5	572	16	25	877	13	31
11	355	5	5.0	505	12	17	800	10	22
12	321	4	3.3	467	11	14	805	3	7.1
13	289	5	3.8	436	11	13	1100	10	32
14	271	6	4.3	409	11	12	1680	38	177
15	322	13	11	392	11	12	1710	29	137
16	307	16	13	387	12	12	1520	11	44
17	325	12	11	486	12	16	1350	8	29
18	284	13	10	805	14	30	1170	11	35
19	253	4	2.6	781	13	28	960	9	23
20	235	6	3.8	693	13	25	820	7	16
21	232	9	5.4	617	13	22	821	7	16
22	223	11	6.9	661	13	24	709	4	8.3
23	355	20	21	1490	30	129	730	4	8.9
24	378	7	7.5	1510	22	89	759	6	11
25	344	5	4.8	1210	15	50	690	4	7.9
26	380	5	5.3	1010	17	46	550	3	4.5
27	333	5	4.8	959	14	37	460	3	3.5
28	293	5	4.2	5720	162	7080	453	3	3.6
29	261	5	3.4	19000	679	35700	440	3	3.8
30	248	5	3.1	6500	227	4350	425	3	3.3
31	241	4	2.9	---	---	---	420	3	3.3
TOTAL	29673	---	22425.6	50435	---	48043.7	36510	---	2312.2
JANUARY			FEBRUARY			MARCH			
1	650	2	4.3	650	3	5.7	1620	32	142
2	1060	5	15	637	2	4.0	1480	26	104
3	593	3	5.5	722	3	6.5	1420	23	90
4	592	4	6.2	840	6	14	1320	24	85
5	566	4	6.7	1660	23	121	1170	23	74
6	559	5	7.6	4320	72	873	1110	14	43
7	549	5	7.2	4680	82	1050	1040	6	16
8	489	5	6.3	3880	46	490	931	4	11
9	460	9	11	2820	35	264	848	4	8.8
10	440	9	11	2210	32	190	800	3	7.3
11	430	8	9.0	1910	29	149	808	3	5.6
12	425	7	8.0	1560	27	114	845	5	12
13	420	7	8.3	1240	26	87	1010	8	24
14	410	7	7.7	1150	25	78	1730	14	65
15	400	5	5.9	1180	21	66	2610	20	160
16	390	6	6.1	1180	14	44	3190	32	281
17	380	8	7.9	7280	65	2490	2550	14	96
18	370	19	19	28200	360	28200	2070	10	55
19	460	11	13	11200	133	4100	2020	16	145
20	841	64	165	5480	94	1360	3590	90	1040
21	902	56	139	3610	77	751	2220	11	70
22	783	21	44	2690	64	466	1700	5	24
23	742	8	16	2180	53	309	1410	3	12
24	691	6	12	1850	41	206	1220	2	7.5
25	652	6	11	1720	31	144	1070	3	8.2
26	684	7	13	1520	14	59	950	3	8.9
27	750	9	18	1530	14	62	885	3	8.1
28	740	5	10	1760	62	297	835	5	11
29	710	4	8.2	---	---	---	761	5	9.5
30	700	4	7.5	---	---	---	701	5	10
31	670	4	6.5	---	---	---	652	4	6.7
TOTAL	18508	---	615.9	99659	---	42000.2	44566	---	2640.6

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	615	5	8.9	478	3	4.4	1440	15	59
2	576	6	10	425	3	3.0	1540	34	190
3	552	9	14	379	4	4.1	1670	34	155
4	526	9	12	350	6	5.7	1160	26	83
5	498	6	8.2	322	4	3.2	1100	27	81
6	471	5	6.8	304	5	4.4	1090	18	53
7	462	11	14	294	9	7.2	1550	37	159
8	472	14	18	290	4	3.3	1100	20	60
9	797	14	36	309	6	5.0	962	22	56
10	967	7	19	288	6	4.4	3060	64	603
11	786	4	8.7	255	5	3.4	3470	148	1400
12	710	4	7.3	221	5	2.9	2160	78	466
13	645	5	9.1	228	3	1.9	1390	30	114
14	587	6	9.1	244	3	2.2	956	18	46
15	549	6	8.2	246	5	3.0	717	12	23
16	514	3	4.7	229	7	4.1	568	8	13
17	479	4	5.4	197	8	4.2	458	6	7.8
18	447	3	4.2	172	6	2.7	369	5	5.2
19	431	3	3.9	172	5	2.1	302	4	3.6
20	408	3	3.6	217	4	2.5	259	4	2.5
21	481	11	14	224	5	3.1	226	4	2.5
22	689	28	53	225	4	2.2	198	3	1.9
23	696	13	25	1110	33	563	177	4	1.8
24	606	3	5.5	14900	434	17600	156	4	1.6
25	542	3	4.1	11700	154	4830	138	4	1.5
26	514	4	6.4	7150	121	2350	123	4	1.2
27	489	3	4.7	6560	84	1490	112	3	1.0
28	465	2	3.1	7370	44	886	104	3	.83
29	514	9	13	5030	33	457	103	4	1.1
30	543	5	6.8	3130	25	213	138	6	2.5
31	---	---	---	2080	18	99	---	---	---
TOTAL	17031	---	346.7	65099	---	28567.0	26796	---	3596.03
JULY			AUGUST			SEPTEMBER			
1	157	4	1.7	71	4	.71	404	15	17
2	140	3	1.3	78	4	.94	734	41	158
3	188	3	1.9	66	3	.57	4730	319	4560
4	375	7	7.4	57	3	.38	1580	60	262
5	285	3	2.3	50	2	.26	855	39	90
6	192	3	1.4	45	2	.25	637	32	55
7	146	3	1.3	41	3	.28	464	27	34
8	121	3	1.1	52	8	1.2	344	23	22
9	106	3	.85	54	11	1.6	256	19	13
10	96	2	.55	54	5	.76	208	11	6.4
11	103	6	1.7	69	12	2.5	175	10	4.7
12	106	2	.60	914	17	36	165	10	4.4
13	172	3	1.4	504	7	10	327	29	30
14	170	3	1.5	288	6	4.3	393	31	34
15	221	4	2.6	195	5	2.9	267	15	11
16	271	5	3.9	143	5	2.0	224	7	4.2
17	240	4	2.7	168	10	4.6	265	14	10
18	237	5	3.5	182	11	5.3	282	12	9.2
19	215	3	1.7	142	6	2.1	243	8	5.5
20	164	2	.81	120	6	1.8	221	5	3.2
21	129	2	.54	107	6	1.6	264	7	5.2
22	106	2	.46	148	14	6.3	285	8	5.8
23	91	2	.61	149	5	2.2	248	6	4.2
24	87	2	.55	111	4	1.3	240	10	9.3
25	80	3	.60	95	4	1.1	393	41	46
26	73	2	.48	85	3	.75	263	18	13
27	66	3	.51	109	6	1.8	206	10	5.4
28	64	3	.47	149	10	4.1	169	6	2.9
29	66	2	.33	193	8	4.5	145	6	2.3
30	62	2	.41	294	8	6.1	131	5	1.7
31	58	4	.57	257	12	8.7	---	---	---
TOTAL	4587	---	45.74	4990	---	116.90	15118	---	5429.4

TOTAL LOAD FOR YEAR: 156139.97

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

WATER QUALITY DATA WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /S)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	FECAL COLI- FORM 24-HR MEM.FIL (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 1986 30...	1330	440	210	7.0	14.5	9.5	97	730	6.4	738	14
DEC 10...	1345	21800	90	7.2	11.5	10.1	95	739	130	554	4600
FEB 1987 04...	1330	1740	116	7.1	6.0	12.2	100	750	1.6	10	1
APR 08...	1300	3080	144	7.4	8.0	11.4	99	740	5.3	73	210
JUN 04...	0930	610	105	7.1	24.0	7.7	93	752	5.8	26	--
AUG 04...	1135	64	160	7.0	29.0	7.1	95	746	0.60	4	23
DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 1986 30...	85	53	21	8.0	7.9	2.2	39	0	32	32	65
DEC 10...	35	24	8.2	3.5	1.5	1.2	14	0	13	11	27
FEB 1987 04...	42	29	9.4	4.5	3.2	1.0	16	0	15	13	31
APR 08...	56	41	12	6.2	3.8	1.2	18	0	16	15	43
JUN 04...	39	21	9.3	3.8	3.3	1.7	22	0	18	18	25
AUG 04...	58	33	13	6.2	6.5	1.9	30	0	25	25	41
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
OCT 1986 30...	3.8	<0.1	4.6	125	0.10	<0.01	0.20	0.02	0.02	0.01	30
DEC 10...	1.7	<0.1	5.0	61	0.30	0.03	0.30	0.02	0.02	<0.01	90
FEB 1987 04...	2.5	<0.1	4.8	59	0.25	0.01	0.50	0.01	<0.01	<0.01	--
APR 08...	2.1	<0.1	5.3	78	0.13	0.02	0.20	0.02	<0.01	<0.01	40
JUN 04...	2.8	<0.1	4.6	69	0.24	0.02	0.60	0.04	0.03	<0.01	<10
AUG 04...	4.4	0.1	2.5	94	<0.10	0.08	0.80	0.01	<0.01	<0.01	--

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

WATER QUALITY DATA WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 1986 30...	<1	33	<0.5	3	<1	<3	6	65	<5	6	42
DEC 10...	<1	21	<0.5	<1	<1	<3	4	89	<5	<4	110
FEB 1987 04...	--	--	--	--	--	--	--	--	--	--	--
APR 08...	<1	24	<0.5	1	<1	<3	<1	26	<5	7	110
JUN 04...	<1	29	<0.5	<1	3	<3	5	87	<5	<4	130
AUG 04...	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1986 30...	<0.1	<10	6	<1	<1	58	<6	12	10	12	E100
DEC 10...	<0.1	<10	3	<1	<1	25	<6	9	293	17200	--
FEB 1987 04...	--	--	--	--	--	--	--	--	2	9.4	E100
APR 08...	<0.1	<10	4	<1	<1	38	<6	17	16	133	78
JUN 04...	<0.1	<10	2	<1	<1	37	<6	4	6	9.9	99
AUG 04...	--	--	--	--	--	--	--	--	--	--	--

E-Estimated

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	193	184	189	180	169	174	115	113	114	---	---	---
2	207	193	200	169	164	166	117	114	116	---	---	---
3	218	207	211	164	163	163	118	114	117	---	---	---
4	231	218	224	164	162	163	117	113	114	---	---	---
5	241	232	236	164	162	163	127	117	122	---	---	---
6	247	242	245	164	163	163	133	127	130	---	---	---
7	252	247	249	164	163	164	135	133	134	---	---	---
8	254	251	253	181	159	165	134	131	132	---	---	---
9	256	254	255	165	71	112	132	109	124	---	---	---
10	257	256	257	92	73	86	123	88	95	---	---	---
11	258	256	257	91	82	88	95	88	91	---	---	---
12	257	251	255	99	81	90	106	95	101	---	---	---
13	259	186	239	102	99	100	112	106	109	---	---	---
14	201	172	184	100	99	100	114	111	113	---	---	---
15	199	177	186	103	101	103	116	114	115	158	154	157
16	203	182	195	109	103	106	121	116	119	158	152	157
17	180	160	168	114	110	112	126	119	123	158	153	157
18	160	155	157	117	114	115	129	125	127	158	156	157
19	155	152	154	123	116	120	149	129	136	156	101	121
20	152	150	151	127	123	125	164	150	158	110	80	87
21	151	150	150	132	127	130	174	161	169	84	80	82
22	151	150	150	135	131	132	158	143	148	88	82	86
23	151	149	150	146	136	143	144	139	142	94	88	91
24	150	146	149	148	145	146	139	129	134	100	94	98
25	154	149	151	150	137	145	144	128	135	101	92	99
26	153	147	150	---	---	---	145	142	144	95	89	93
27	217	152	173	---	---	---	---	---	---	101	94	96
28	257	221	243	---	---	---	---	---	---	110	102	106
29	260	240	253	---	---	---	---	---	---	111	109	110
30	238	203	219	---	---	---	---	---	---	110	108	109
31	203	181	191	---	---	---	---	---	---	112	108	110
MONTH	260	146	201	181	71	131	174	88	125	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	87	72	77	166	130	157	114	112	113
2	---	---	---	89	87	88	156	123	136	118	114	116
3	---	---	---	92	88	90	121	108	114	121	118	119
4	114	113	114	96	92	94	111	108	110	144	106	121
5	118	114	116	100	96	98	118	111	114	143	92	106
6	123	118	120	105	100	103	118	115	116	91	88	89
7	124	122	123	109	105	107	125	117	118	92	90	91
8	124	123	124	113	109	112	147	128	140	97	92	94
9	126	124	125	117	113	115	130	119	123	101	97	99
10	128	126	127	123	117	120	119	118	119	107	101	104
11	129	127	128	128	122	125	120	114	119	111	107	108
12	131	129	130	131	128	130	121	118	120	114	111	113
13	131	129	130	132	129	130	122	118	120	117	114	115
14	132	130	131	135	131	133	124	121	122	126	117	121
15	135	131	132	139	135	138	122	98	109	132	126	129
16	138	135	136	139	131	136	94	82	85	135	132	134
17	183	133	147	138	129	133	85	82	84	148	135	141
18	182	135	157	137	132	135	93	84	88	159	149	154
19	134	106	116	132	130	131	97	93	95	161	160	161
20	105	101	103	149	132	138	100	97	99	161	157	159
21	103	101	102	155	150	152	104	101	102	161	151	156
22	104	96	102	150	138	146	108	103	106	150	136	145
23	92	84	88	137	124	129	108	108	108	196	149	180
24	88	83	86	124	121	122	---	---	---	207	178	190
25	86	83	85	122	120	121	---	---	---	199	124	154
26	90	87	88	123	121	122	---	---	---	124	112	118
27	91	74	81	126	118	124	---	---	---	111	101	103
28	90	72	81	129	125	127	106	106	106	101	99	101
29	---	---	---	132	129	130	108	106	107	101	97	98
30	---	---	---	134	132	133	111	108	110	99	94	96
31	---	---	---	134	130	133	---	---	---	125	99	113
MONTH	183	72	115	155	72	122	166	82	113	207	80	124

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	126	113	119	119	112	116	163	163	163	195	194	194
2	126	110	117	123	119	122	164	161	163	194	192	193
3	108	102	107	129	123	127	162	161	162	192	191	191
4	110	103	105	130	124	128	161	159	160	193	192	192
5	125	111	118	182	122	136	162	160	162	197	193	196
6	137	126	133	268	188	234	164	162	163	203	197	201
7	137	122	130	229	183	192	164	163	164	209	204	207
8	125	120	121	192	164	179	167	164	166	216	210	212
9	141	125	133	173	164	169	166	162	166	228	216	223
10	153	142	148	171	164	166	165	164	165	239	229	235
11	156	153	155	167	160	164	166	164	164	251	240	247
12	157	156	157	160	143	150	165	164	164	263	252	256
13	159	157	158	143	137	139	164	164	164	267	263	266
14	159	151	155	153	144	149	165	164	164	267	261	264
15	150	133	141	153	146	150	165	164	165	261	253	257
16	132	118	124	146	146	146	165	165	165	252	235	244
17	124	117	119	146	145	145	165	162	164	235	222	228
18	132	124	128	146	145	146	169	163	166	222	217	219
19	126	122	124	147	146	146	164	163	163	217	214	215
20	143	125	135	150	147	148	164	163	163	221	216	218
21	198	143	157	154	151	152	163	160	161	227	221	224
22	231	183	209	157	154	156	163	160	161	230	227	229
23	238	182	215	160	157	159	166	163	164	232	230	231
24	181	123	168	161	160	161	168	166	167	233	232	233
25	116	61	89	162	161	162	170	168	169	232	229	231
26	94	58	69	162	161	162	172	170	171	229	225	226
27	108	97	106	162	161	162	176	173	174	224	220	222
28	106	93	101	162	161	162	178	176	177	220	218	219
29	95	90	91	163	161	162	183	178	181	218	211	215
30	111	96	103	163	162	162	190	184	187	214	212	213
31	---	---	---	163	162	163	194	190	192	---	---	---
MONTH	238	58	131	268	112	155	194	160	167	267	191	223

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.3	7.2	7.5	7.4	7.2	6.9	---	---	---	---	6.8	6.7
2	7.4	7.2	7.4	7.4	7.2	7.1	---	---	---	---	6.8	6.7
3	7.4	7.2	7.4	7.3	7.2	7.2	---	---	---	---	6.7	6.7
4	7.4	7.3	7.4	7.3	7.3	7.2	---	---	7.3	7.2	6.8	6.7
5	7.4	7.3	7.3	7.2	7.3	7.3	---	---	7.3	7.2	6.9	6.7
6	7.5	7.4	7.3	7.2	7.4	7.3	---	---	7.3	7.2	6.9	6.8
7	7.5	7.4	7.3	7.2	7.4	7.4	---	---	7.3	7.3	6.9	6.8
8	7.6	7.4	7.2	6.9	7.4	7.3	---	---	7.3	7.3	6.9	6.9
9	7.6	7.4	7.1	6.5	7.3	7.1	---	---	7.4	7.3	6.9	6.9
10	7.6	7.4	6.7	6.4	7.3	7.0	---	---	7.4	7.3	7.0	6.9
11	7.6	7.4	6.7	6.6	7.2	7.0	---	---	7.4	7.3	7.0	7.0
12	7.5	7.4	6.8	6.7	7.2	7.1	---	---	7.4	7.3	7.0	7.0
13	7.4	7.2	7.0	6.7	7.2	7.2	---	---	7.4	7.3	7.0	7.0
14	7.3	7.2	7.1	6.9	7.2	7.2	---	---	7.4	7.3	7.1	7.0
15	7.3	7.2	7.2	7.1	7.2	7.2	7.4	7.4	7.4	7.3	7.1	7.0
16	7.3	7.3	7.3	7.2	7.3	7.2	7.4	7.4	7.4	7.2	7.0	7.0
17	7.3	7.3	7.3	7.2	7.3	7.2	7.4	7.4	7.4	7.2	7.1	6.9
18	7.3	7.2	7.3	7.2	7.3	7.2	7.4	7.3	7.4	7.0	7.1	7.0
19	7.3	7.3	7.3	7.2	7.4	7.3	7.3	6.4	7.1	7.0	7.0	7.0
20	7.4	7.3	7.3	7.2	7.4	7.4	7.1	7.0	7.0	6.9	7.1	7.0
21	7.4	7.4	7.4	7.3	7.5	7.4	7.0	6.9	7.0	6.9	7.2	7.1
22	7.5	7.4	7.4	7.3	7.5	7.4	7.1	7.0	6.9	6.6	7.2	7.1
23	7.5	7.4	7.5	7.3	7.4	7.4	7.2	7.1	6.9	6.7	7.2	7.1
24	7.4	7.3	7.4	7.4	7.4	7.2	7.2	7.1	6.8	6.7	7.1	7.0
25	7.4	7.3	7.5	7.4	7.4	7.4	7.2	7.1	6.8	6.7	7.1	7.0
26	7.4	7.3	---	---	7.4	7.4	7.1	7.0	6.8	6.8	7.1	7.0
27	7.5	7.4	---	---	---	---	7.2	7.1	6.8	6.6	7.1	7.0
28	7.9	7.5	---	---	---	---	7.2	7.2	6.8	6.7	7.1	7.0
29	7.9	7.6	---	---	---	---	7.2	7.2	---	---	7.1	7.0
30	7.9	7.3	---	---	---	---	7.2	7.2	---	---	7.1	6.9
31	7.5	7.4	---	---	---	---	7.2	7.2	---	---	7.1	6.9
MONTH	7.9	7.2	7.5	6.4	7.5	6.9	---	---	7.4	6.6	7.2	6.7

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.2	7.0	7.0	6.9	7.1	7.0	7.2	7.0	7.2	7.1	7.4	7.3
2	7.1	7.1	7.0	6.9	7.1	7.0	7.3	7.0	7.2	7.1	7.5	7.3
3	7.1	7.0	7.0	6.9	7.1	7.0	7.2	7.0	7.2	7.0	7.5	7.3
4	7.0	7.0	7.0	6.5	7.1	6.9	7.2	7.1	7.2	7.0	7.5	7.3
5	7.0	7.0	7.0	6.8	7.3	7.0	7.3	7.1	7.3	7.1	7.5	7.3
6	7.0	7.0	6.9	6.8	7.4	7.1	7.4	7.3	7.3	7.1	7.4	7.3
7	7.1	7.0	6.9	6.8	7.4	7.1	7.4	7.3	7.3	7.1	7.4	7.3
8	7.1	7.0	6.9	6.9	7.4	7.1	7.3	7.2	7.2	7.1	7.4	7.3
9	7.0	7.0	7.0	6.9	7.4	7.1	7.2	7.2	7.2	7.1	7.4	7.3
10	7.1	7.0	7.0	6.9	7.4	7.1	7.3	7.2	7.2	7.0	7.4	7.3
11	7.1	7.0	7.0	6.9	7.3	7.1	7.3	7.1	7.2	7.1	7.4	7.3
12	7.0	6.9	7.0	6.9	7.3	7.1	7.2	7.1	7.2	7.0	7.4	7.3
13	7.0	6.9	7.1	6.9	7.2	7.1	7.2	7.1	7.2	7.1	7.4	7.3
14	7.0	6.9	7.2	7.0	7.2	7.1	7.3	7.2	7.2	7.1	7.4	7.3
15	6.9	6.1	7.2	7.0	7.2	7.1	7.3	6.9	7.3	7.1	7.5	7.3
16	6.8	6.6	7.2	7.0	7.2	7.0	7.4	7.2	7.2	7.1	7.5	7.3
17	6.8	6.8	7.3	7.1	7.2	7.0	7.5	7.2	7.2	7.1	7.5	7.3
18	6.9	6.8	7.3	7.1	7.1	7.0	7.6	7.2	7.2	7.0	7.5	7.3
19	6.8	6.8	7.3	7.1	7.1	7.0	7.6	7.2	7.3	7.1	7.4	7.3
20	6.9	6.8	7.2	7.0	7.1	7.0	7.6	7.2	7.2	7.1	7.4	7.3
21	6.9	6.8	7.1	7.0	7.2	7.0	7.5	7.2	7.3	7.2	7.4	7.3
22	6.9	6.8	7.1	7.0	7.2	7.2	7.4	7.2	7.4	7.2	7.4	7.3
23	6.9	6.9	7.2	7.1	7.3	7.2	7.4	7.2	7.4	7.2	7.5	7.3
24	---	---	7.2	7.2	7.2	7.1	7.4	7.2	7.4	7.2	7.5	7.4
25	---	---	7.2	7.0	7.0	6.8	7.4	7.1	7.4	7.2	7.5	7.3
26	---	---	7.0	7.0	6.9	6.7	7.4	7.1	7.4	7.2	7.5	7.3
27	---	---	7.0	6.9	7.0	6.9	7.3	7.1	7.4	7.2	7.5	7.3
28	7.0	6.9	7.0	6.9	7.0	7.0	7.3	7.1	7.3	7.2	7.5	7.3
29	7.0	6.9	7.0	6.9	7.0	6.9	7.3	7.1	7.4	7.2	7.4	7.3
30	7.0	6.9	7.0	6.9	7.2	6.9	7.3	7.1	7.4	7.2	7.4	7.3
31	---	---	7.1	6.9	---	---	7.3	7.1	7.4	7.2	---	---
MONTH	7.2	6.1	7.3	6.5	7.4	6.7	7.6	6.9	7.4	7.0	7.5	7.3

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.0	25.0	25.5	15.0	14.5	15.0	17.0	11.3	14.1	---	---	---
2	26.5	25.0	26.0	15.5	14.5	15.0	12.5	11.5	12.0	---	---	---
3	26.5	25.5	26.0	15.5	15.0	15.0	12.0	11.0	11.5	---	---	---
4	26.0	25.0	25.5	15.5	14.5	15.0	11.0	10.0	10.5	---	---	---
5	25.5	24.0	25.0	15.5	15.0	15.0	10.0	8.5	9.5	---	---	---
6	24.0	22.5	23.5	15.5	15.0	15.0	8.5	7.5	8.0	---	---	---
7	23.0	21.5	22.0	15.0	15.0	15.0	7.5	6.5	7.0	---	---	---
8	22.5	20.5	21.5	15.5	15.0	15.0	7.0	6.5	6.5	---	---	---
9	22.5	21.0	21.5	16.0	15.5	16.0	10.0	7.0	8.0	---	---	---
10	22.0	20.5	21.5	16.0	15.5	16.0	11.5	10.5	11.0	---	---	---
11	21.5	21.0	21.5	16.0	15.0	15.5	11.0	9.5	10.5	---	---	---
12	21.0	20.5	20.5	15.0	15.0	15.0	9.5	8.5	9.0	---	---	---
13	20.5	20.0	20.0	14.8	10.8	12.8	8.5	7.0	7.5	---	---	---
14	20.0	17.5	18.5	10.5	9.0	9.5	7.0	6.0	6.5	---	---	---
15	17.5	16.5	17.0	9.0	8.5	8.5	6.0	5.5	5.5	4.5	4.5	4.5
16	16.5	16.0	16.5	8.5	8.0	8.5	6.0	5.5	5.5	5.0	4.5	4.5
17	16.0	15.5	15.5	9.0	8.5	9.0	6.5	6.0	6.5	5.0	4.5	5.0
18	16.0	15.0	15.5	10.0	9.0	9.5	7.5	6.5	7.0	5.5	5.0	5.5
19	15.5	14.5	15.0	10.5	10.0	10.0	7.5	7.0	7.5	8.5	5.5	7.5
20	15.5	14.5	15.0	10.5	10.5	10.5	7.5	7.5	7.5	10.5	8.0	9.0
21	15.5	14.5	15.0	10.5	10.0	10.5	7.5	6.5	7.0	9.5	6.5	6.5
22	15.5	14.5	15.0	10.0	9.5	10.0	6.5	5.5	6.0	6.5	5.5	6.0
23	15.5	14.5	15.0	10.0	9.5	10.0	5.5	5.5	5.5	5.5	4.5	5.0
24	15.5	15.0	15.0	10.0	9.5	10.0	5.5	5.0	5.5	4.5	3.5	4.0
25	15.5	15.0	15.5	10.5	9.5	10.0	6.0	5.5	6.0	4.0	2.0	3.5
26	16.0	15.0	15.5	---	---	---	6.5	6.0	6.5	3.5	2.5	3.0
27	15.0	15.0	15.0	---	---	---	---	---	---	5.0	3.5	4.0
28	15.5	14.5	15.0	---	---	---	---	---	---	5.5	4.5	5.0
29	15.5	14.5	15.0	---	---	---	---	---	---	6.0	5.5	5.5
30	15.5	14.5	15.0	---	---	---	---	---	---	6.5	6.0	6.0
31	15.5	14.5	15.0	---	---	---	---	---	---	6.5	6.0	6.5
MONTH	26.5	14.5	18.5	16.0	8.0	12.4	17.0	5.0	8.0	---	---	---

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	9.0	8.5	9.0	11.0	10.0	10.0	17.5	16.0	17.0
2	---	---	---	9.5	9.0	9.0	9.5	8.0	9.0	19.0	17.0	18.0
3	---	---	---	9.0	8.5	9.0	8.0	7.0	7.5	19.5	18.0	19.0
4	6.5	6.0	6.5	8.5	8.0	8.0	7.0	6.0	6.5	19.0	18.0	18.5
5	6.5	6.0	6.5	8.0	7.5	7.5	6.0	6.0	6.0	17.5	16.0	16.5
6	6.5	6.0	6.0	8.0	7.0	7.5	6.5	5.5	6.0	16.5	15.5	16.0
7	6.5	5.5	6.0	8.5	7.5	8.0	7.5	6.5	7.0	17.0	16.0	16.5
8	6.0	5.0	5.5	9.0	8.5	8.5	9.5	8.5	8.5	18.0	16.5	17.0
9	5.0	4.5	4.5	9.5	9.0	9.0	10.5	9.0	10.0	18.0	16.5	17.5
10	4.5	4.0	4.0	9.0	8.5	8.5	11.5	10.0	11.0	19.0	17.5	18.0
11	4.5	3.5	4.0	8.5	8.0	8.0	13.0	11.5	12.0	19.5	18.0	18.5
12	5.0	4.0	4.5	8.0	7.5	7.5	13.0	12.5	12.5	20.0	18.5	19.0
13	5.5	4.5	5.0	8.0	7.0	7.5	14.0	12.5	13.0	20.5	19.0	19.5
14	5.0	4.5	5.0	8.0	7.0	7.5	14.0	13.5	14.0	21.0	19.5	20.5
15	6.0	5.0	5.5	8.5	7.5	8.0	14.0	13.5	13.5	21.5	20.5	21.0
16	6.0	5.5	6.0	8.5	8.0	8.5	13.0	12.5	12.5	23.0	21.0	22.0
17	6.5	6.0	6.0	9.5	8.5	9.0	12.5	12.0	12.0	23.5	22.0	22.5
18	7.0	6.5	6.5	10.5	9.5	10	12.5	12.0	12.0	24.0	22.5	23.5
19	6.5	6.0	6.5	11.5	10.5	11.0	14.0	12.5	13.0	24.5	23.0	24.0
20	6.5	6.0	6.0	12.5	11.5	12.0	15.5	13.5	14.5	24.5	23.5	24.0
21	6.5	6.0	6.5	12.5	11.5	12.0	16.5	15.0	15.5	24.0	23.5	23.5
22	6.5	6.5	6.5	12.0	11.5	11.5	17.0	16.0	16.5	23.5	23.0	23.5
23	7.0	6.5	6.5	12.5	11.0	11.5	---	---	---	24.0	23.0	23.5
24	7.0	6.5	6.5	11.5	11.5	11.5	---	---	---	23.0	22.5	23.0
25	7.0	6.5	6.5	12.5	11.0	11.5	---	---	---	23.0	22.5	22.5
26	7.5	6.5	7.0	13.0	11.5	12.5	---	---	---	23.0	22.0	22.5
27	8.5	7.0	7.5	13.0	12.0	12.5	---	---	---	23.5	22.0	22.5
28	8.5	8.0	8.5	14.0	12.0	13.0	16.0	15.5	16.0	23.5	22.5	23.0
29	---	---	---	14.5	13.0	13.5	16.5	15.0	15.5	24.5	23.0	23.5
30	---	---	---	14.0	13.0	13.5	17.0	16.0	16.5	25.0	23.5	24.0
31	---	---	---	12.5	11.0	12.0	---	---	---	25.5	24.0	24.5
MONTH	8.5	3.5	5.6	14.5	7.0	9.9	17.0	5.5	11.6	25.5	15.5	20.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	24.5	24.0	24.0	26.0	25.0	25.5	30.5	28.0	29.5	26.5	25.0	25.5
2	25.0	23.5	24.5	26.5	25.0	25.5	30.5	28.5	29.5	26.5	23.0	24.5
3	25.0	24.0	24.5	26.5	25.0	26.0	31.5	28.5	30.0	26.0	23.0	24.5
4	25.0	23.5	24.5	26.0	25.5	26.0	31.0	30.0	30.0	26.0	23.0	24.5
5	25.0	23.5	24.0	26.5	26.0	26.0	30.5	29.0	30.0	25.5	23.5	24.5
6	25.5	23.0	24.5	25.5	25.0	25.5	31.0	28.5	30.0	25.0	23.5	24.5
7	25.5	23.5	24.5	25.0	24.0	24.5	31.5	28.5	30.0	25.0	24.0	24.5
8	26.0	24.0	25.0	24.5	24.0	24.0	31.5	29.0	30.0	26.0	24.0	24.5
9	26.5	24.5	25.5	25.5	24.0	25.0	31.0	29.0	30.0	25.5	23.5	24.5
10	26.5	25.0	25.5	25.5	24.5	25.0	31.0	29.0	29.5	25.5	23.5	24.5
11	26.5	25.0	25.5	26.0	25.0	25.5	30.5	28.0	29.0	25.5	24.0	24.5
12	26.5	25.0	26.0	26.0	25.0	25.5	29.5	27.5	28.5	25.0	24.0	24.5
13	27.5	25.5	26.5	26.5	25.0	25.5	29.5	28.0	29.0	25.0	23.5	24.0
14	28.0	26.0	27.0	26.5	25.0	25.5	30.0	27.5	29.0	26.0	23.5	24.5
15	27.5	26.5	27.0	26.5	25.0	25.5	30.5	27.5	28.5	25.5	23.5	24.5
16	28.0	26.5	27.0	26.5	25.0	25.5	29.0	27.5	28.5	25.5	24.0	24.5
17	28.0	26.5	27.0	27.5	25.0	26.0	28.0	26.5	27.0	26.0	24.0	24.5
18	27.5	26.5	27.0	27.5	25.5	26.5	28.0	26.0	27.0	26.0	24.0	25.0
19	27.0	26.5	27.0	28.0	25.5	27.0	29.5	26.5	27.5	25.0	23.5	24.0
20	27.0	26.0	26.5	28.5	26.0	27.5	28.5	26.5	27.5	24.5	22.5	23.5
21	27.0	26.0	26.5	28.5	27.0	27.5	28.5	26.0	27.0	24.0	22.0	23.0
22	26.0	25.5	25.5	29.5	27.0	28.0	29.0	26.5	27.5	22.5	21.5	22.0
23	26.0	25.0	25.5	30.0	27.0	28.5	29.5	27.0	28.0	22.5	20.5	21.5
24	25.0	24.0	24.5	30.5	27.5	29.0	28.5	26.0	27.5	22.5	20.0	21.5
25	24.0	22.5	23.0	31.0	28.0	29.5	28.5	25.5	27.0	22.5	20.0	21.0
26	23.5	22.5	23.0	31.5	28.0	29.5	28.5	26.0	27.5	22.5	20.0	21.5
27	25.0	23.5	24.0	31.5	28.5	30.0	29.0	26.5	27.5	22.0	20.5	21.0
28	25.0	23.5	24.0	31.5	28.5	29.5	28.0	26.5	27.0	22.5	20.5	21.5
29	25.5	23.5	24.5	31.0	28.0	29.5	27.5	26.0	26.5	21.5	20.5	21.0
30	26.0	24.5	25.0	30.5	28.0	29.0	27.0	24.5	26.0	21.0	20.0	20.5
31	---	---	---	30.5	28.0	29.0	25.5	24.0	25.0	---	---	---
MONTH	28.0	22.5	25.3	31.5	24.0	26.8	31.5	24.0	28.3	26.5	20.0	24.1

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued
 OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.2	6.7	6.9	9.7	9.6	9.6	9.8	8.1	8.6	---	---	---
2	7.1	6.6	6.7	9.7	9.5	9.6	9.5	8.4	9.2	---	---	---
3	7.8	7.4	7.5	9.6	9.4	9.5	9.5	9.2	9.4	---	---	---
4	7.7	7.3	7.5	9.6	9.3	9.4	9.6	9.3	9.5	---	---	---
5	7.9	7.3	7.6	9.3	9.1	9.2	9.9	9.5	9.7	---	---	---
6	8.2	7.6	7.9	9.3	9.1	9.2	10.0	9.8	9.9	---	---	---
7	8.5	7.9	8.2	9.3	9.1	9.2	10.5	10.0	10.4	---	---	---
8	8.8	8.3	8.5	9.2	8.9	9.1	10.6	10.4	10.5	---	---	---
9	8.8	8.3	8.5	---	---	---	10.4	8.5	9.8	---	---	---
10	8.9	8.4	8.6	---	---	---	10.6	8.1	9.5	---	---	---
11	8.8	8.3	8.5	---	---	---	11.2	8.8	10.0	---	---	---
12	8.6	8.3	8.4	---	---	---	11.5	11.0	11.3	---	---	---
13	8.6	8.3	8.5	---	---	---	11.9	11.6	11.7	---	---	---
14	9.2	8.4	8.8	11.1	9.5	10.8	12.4	11.9	12.2	---	---	---
15	9.3	9.2	9.3	11.4	11.1	11.3	12.7	12.4	12.6	12.7	12.5	12.6
16	9.5	9.3	9.4	11.5	11.4	11.4	12.7	12.5	12.6	12.5	12.4	12.4
17	9.5	9.5	9.5	11.5	11.2	11.3	12.5	12.2	12.4	12.5	12.3	12.4
18	9.6	9.5	9.5	11.2	10.8	11.0	12.2	11.9	12.0	12.3	12.0	12.2
19	9.8	9.7	9.7	10.8	10.6	10.8	11.9	11.6	11.7	12.0	10.0	11.2
20	9.8	9.7	9.7	10.6	10.5	10.6	11.9	11.7	11.8	11.4	8.8	10.1
21	10.0	9.8	9.9	10.7	10.4	10.6	12.0	11.8	11.9	12.0	9.2	11.4
22	10.1	9.9	10.0	10.8	10.6	10.7	12.2	12.0	12.1	11.8	10.9	11.5
23	10.2	9.9	10.0	10.8	10.7	10.8	12.4	12.4	12.4	12.1	11.6	11.8
24	10.0	9.7	9.9	11.0	10.8	10.9	12.3	12.0	12.2	12.5	12.1	12.4
25	9.8	9.6	9.7	11.0	10.7	10.9	12.1	11.8	11.9	12.6	10.1	12.3
26	9.9	9.7	9.8	---	---	---	11.8	11.6	11.7	13.0	12.6	12.8
27	9.8	9.6	9.7	---	---	---	---	---	---	12.6	12.3	12.4
28	9.9	9.7	9.8	---	---	---	---	---	---	12.3	12.2	12.2
29	9.9	9.7	9.8	---	---	---	---	---	---	12.2	11.8	11.9
30	9.8	9.7	9.7	---	---	---	---	---	---	11.8	11.6	11.7
31	9.8	9.6	9.7	---	---	---	---	---	---	11.7	11.6	11.6
MONTH	10.2	6.6	8.9	---	---	---	12.7	8.1	11.0	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	12.9	11.0	12.3	11.1	10.6	10.9	9.8	9.5	9.7
2	---	---	---	12.3	11.2	11.8	11.4	11.1	11.3	9.6	9.3	9.5
3	---	---	---	11.6	10.5	11.0	11.8	11.4	11.6	9.5	7.1	9.3
4	11.9	11.8	11.8	12.9	10.6	11.5	12.1	11.7	11.9	9.4	8.9	9.3
5	12.0	11.7	11.8	11.4	9.2	10.2	12.2	12.0	12.1	9.9	8.3	8.5
6	12.0	11.8	11.9	11.8	11.3	11.6	12.3	12.1	12.2	9.9	9.6	9.8
7	12.1	12.0	12.0	11.6	11.4	11.5	12.1	11.8	12.0	9.9	9.7	9.8
8	12.1	12.0	12.0	11.5	11.2	11.3	11.8	11.2	11.5	9.8	9.6	9.7
9	12.4	12.1	12.3	11.2	11.0	11.1	11.2	10.9	11.1	9.8	9.4	9.7
10	12.6	12.3	12.5	11.3	11.0	11.1	11.0	10.5	10.8	9.8	9.5	9.7
11	12.7	12.5	12.6	11.5	11.1	11.3	10.6	10.4	10.5	9.8	9.5	9.7
12	12.6	12.5	12.6	11.8	11.4	11.6	10.3	10.1	10.2	9.4	8.9	9.2
13	12.5	11.3	12.4	11.9	11.7	11.8	10.2	10.1	10.2	8.9	8.7	8.8
14	12.4	11.9	12.3	11.8	11.6	11.8	10.1	9.9	10.0	9.0	8.3	8.6
15	12.2	12.0	12.1	11.7	11.5	11.6	10.2	8.9	9.9	8.9	8.4	8.6
16	12.0	11.9	11.9	11.5	11.2	11.4	10.2	4.7	8.9	8.8	8.3	8.5
17	11.9	11.6	11.8	11.3	11.0	11.2	9.7	8.8	9.1	8.5	8.1	8.3
18	11.8	11.6	11.7	10.9	10.7	10.8	10.1	9.1	9.6	8.3	8.0	8.2
19	12.0	11.8	11.9	10.7	10.5	10.5	10.5	10.1	10.3	8.2	7.8	7.9
20	12.1	11.9	12.0	10.4	10.2	10.3	10.2	9.7	10.0	8.0	7.7	7.9
21	12.0	11.8	11.9	10.4	10.1	10.2	9.9	9.5	9.8	7.9	7.7	7.8
22	11.8	11.7	11.8	10.4	10.1	10.3	9.6	9.4	9.5	7.8	7.6	7.7
23	11.7	10.1	11.4	10.5	10.2	10.3	---	---	---	7.8	7.6	7.7
24	11.8	11.6	11.7	10.7	10.2	10.4	---	---	---	7.8	7.6	7.7
25	11.7	10.5	11.3	10.7	10.4	10.5	---	---	---	7.9	7.7	7.8
26	11.7	11.5	11.6	10.6	10.4	10.5	---	---	---	7.9	7.8	7.8
27	11.5	9.8	10.9	10.5	10.3	10.4	---	---	---	8.1	7.9	8.0
28	11.3	9.5	10.2	10.4	10.2	10.3	---	---	---	8.1	7.8	8.0
29	---	---	---	10.3	10.0	10.2	---	---	---	8.0	7.6	7.8
30	---	---	---	10.0	9.8	9.9	9.5	9.4	9.4	7.7	7.5	7.6
31	---	---	---	10.5	9.9	10.2	---	---	---	7.8	7.5	7.7
MONTH	12.7	9.5	11.9	12.9	9.2	10.9	---	---	---	9.9	7.1	8.6

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.8	7.5	7.6	8.1	7.4	7.7	7.6	6.9	7.2	8.0	7.3	7.6
2	7.8	7.5	7.6	8.1	7.4	7.7	7.4	6.8	7.1	8.1	7.6	7.8
3	7.9	7.6	7.8	8.0	7.3	7.7	7.5	6.8	7.2	8.2	7.6	7.9
4	8.1	7.2	7.7	7.6	7.3	7.5	7.3	6.7	7.0	8.2	7.6	7.9
5	8.2	7.7	7.9	7.6	7.2	7.4	7.3	6.5	6.9	8.2	7.5	7.9
6	8.3	7.7	8.0	7.6	7.3	7.4	7.4	6.6	7.0	8.0	7.5	7.7
7	8.4	7.7	8.0	7.6	7.4	7.6	7.5	6.7	7.0	7.9	7.4	7.7
8	8.3	7.7	8.0	7.6	7.5	7.6	7.5	6.7	7.1	7.9	7.3	7.6
9	8.3	7.6	7.9	7.6	7.4	7.5	7.4	6.7	7.0	7.9	7.3	7.6
10	8.1	7.4	7.7	7.5	7.4	7.5	7.4	6.7	7.0	7.9	7.3	7.6
11	8.0	7.4	7.7	7.4	7.2	7.3	7.6	6.9	7.2	7.8	7.3	7.5
12	7.8	7.2	7.5	7.3	7.1	7.2	7.7	6.9	7.3	7.7	7.3	7.5
13	7.7	7.1	7.3	7.2	7.1	7.1	7.8	7.1	7.4	7.9	7.4	7.6
14	7.5	7.0	7.2	7.3	7.0	7.1	7.7	7.1	7.4	7.9	7.4	7.6
15	7.4	6.9	7.1	7.7	7.0	7.3	7.9	7.3	7.5	8.0	7.4	7.6
16	7.4	6.8	7.2	7.8	7.3	7.5	7.7	7.2	7.4	7.8	7.3	7.5
17	7.4	6.9	7.2	8.1	7.4	7.7	7.5	7.2	7.4	7.8	7.3	7.5
18	7.3	6.9	7.1	8.2	7.4	7.8	7.7	7.4	7.5	7.8	7.2	7.4
19	7.3	6.8	7.1	8.3	7.4	7.8	7.7	7.1	7.4	7.6	7.1	7.3
20	7.4	6.9	7.1	8.3	7.4	7.8	7.6	7.2	7.4	7.9	7.3	7.6
21	7.2	7.0	7.1	8.1	7.3	7.7	7.9	7.2	7.5	8.0	7.5	7.7
22	7.2	7.1	7.2	8.1	7.3	7.6	7.8	7.2	7.5	8.2	7.6	7.9
23	7.3	7.1	7.2	7.9	7.1	7.5	7.8	7.1	7.4	8.3	7.8	8.0
24	7.5	7.2	7.4	7.9	7.1	7.5	7.9	7.1	7.4	8.4	7.8	8.1
25	7.9	7.5	7.7	7.8	7.0	7.3	7.9	7.1	7.5	8.4	7.9	8.1
26	8.0	7.7	7.9	7.7	7.0	7.3	7.8	7.1	7.4	8.5	7.9	8.2
27	7.8	7.6	7.7	7.6	6.8	7.1	7.5	7.0	7.2	8.5	7.9	8.2
28	7.9	7.6	7.8	7.6	6.8	7.2	7.5	6.9	7.1	8.5	8.0	8.2
29	7.9	7.6	7.7	7.6	6.8	7.2	7.7	6.9	7.3	8.2	7.9	8.0
30	8.0	7.5	7.7	7.7	6.9	7.3	7.8	7.2	7.4	8.6	7.8	8.2
31	---	---	---	7.6	6.9	7.2	7.7	7.2	7.5	---	---	---
MONTH	8.4	6.8	7.5	8.3	6.8	7.5	7.9	6.5	7.3	8.6	7.1	7.8

TURBIDITY (J1U), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3	3	9	6	170	35	---	---	---	---	4	3
2	4	2	7	5	70	10	---	---	---	---	4	3
3	4	2	6	3	15	6	---	---	---	---	4	3
4	5	2	5	4	8	5	---	---	8	6	4	3
5	3	2	8	3	6	4	---	---	9	6	4	3
6	4	1	4	3	6	4	---	---	8	6	4	3
7	3	1	5	3	7	5	---	---	7	4	4	3
8	5	1	85	3	5	4	---	---	5	2	4	3
9	2	1	410	90	85	4	---	---	2	2	4	3
10	4	2	410	90	290	120	---	---	15	1	4	3
11	4	2	100	30	130	55	---	---	3	1	4	3
12	5	2	140	30	60	40	---	---	2	1	4	3
13	80	5	40	25	45	30	---	---	3	0	4	3
14	80	30	30	20	30	25	---	---	1	1	4	3
15	95	75	35	15	40	25	10	8	1	0	4	3
16	85	65	25	10	25	15	10	7	3	0	4	3
17	70	50	15	10	15	10	8	6	20	1	4	3
18	50	30	10	8	15	10	8	6	55	20	4	3
19	30	20	25	9	15	10	260	8	40	15	4	3
20	20	15	95	7	15	10	260	60	15	10	4	3
21	15	10	9	7	25	15	65	30	10	4	4	3
22	15	10	9	8	25	15	30	15	40	3	4	3
23	10	7	20	7	15	7	15	10	120	20	4	3
24	9	7	10	8	15	10	15	10	95	3	7	3
25	8	6	55	10	25	15	20	10	4	3	3	0
26	30	6	---	---	30	25	20	10	4	1	3	2
27	20	15	---	---	---	---	15	9	4	3	5	3
28	15	15	---	---	---	---	15	10	4	3	5	4
29	20	15	---	---	---	---	20	15	---	---	5	4
30	20	0	---	---	---	---	15	8	---	---	5	4
31	15	9	---	---	---	---	10	8	---	---	5	2
MONTH	95	1	410	3	290	4	---	---	120	0	7	0

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

TURBIDITY (JTU), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20	0	---	---	---	---	---	---	---	---	---	---
2	25	10	---	---	---	---	---	---	---	---	---	---
3	8	0	---	---	---	---	---	---	---	---	---	---
4	3	1	---	---	---	---	---	---	---	---	---	---
5	4	3	---	---	---	---	---	---	---	---	---	---
6	4	3	---	---	---	---	---	---	---	---	---	---
7	4	1	---	---	---	---	---	---	---	---	---	---
8	25	0	---	---	---	---	---	---	---	---	---	---
9	25	15	---	---	---	---	---	---	---	---	---	---
10	15	8	---	---	---	---	---	---	---	---	---	---
11	8	7	---	---	---	---	---	---	---	---	---	---
12	8	6	---	---	---	---	---	---	---	---	---	---
13	7	6	---	---	---	---	---	---	---	---	---	---
14	8	4	---	---	---	---	---	---	---	---	---	---
15	370	8	---	---	---	---	---	---	---	---	---	---
16	310	50	---	---	---	---	---	---	---	---	---	---
17	50	20	---	---	---	---	---	---	---	---	---	---
18	40	20	---	---	---	---	---	---	---	---	---	---
19	35	20	---	---	---	---	---	---	---	---	---	---
20	20	15	---	---	---	---	---	---	---	---	---	---
21	15	10	---	---	---	---	---	---	---	---	---	---
22	10	9	---	---	---	---	---	---	---	---	15	3
23	9	9	---	---	---	---	---	---	---	---	10	0
24	---	---	---	---	---	---	---	---	---	---	10	0
25	---	---	---	---	---	---	---	---	---	---	15	1
26	---	---	---	---	---	---	---	---	---	---	15	0
27	---	---	---	---	---	---	---	---	---	---	10	0
28	---	---	---	---	---	---	---	---	---	---	15	0
29	---	---	---	---	---	---	---	---	---	---	6	0
30	---	---	---	---	---	---	---	---	---	---	10	0
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	124	4	1.3	341	11	9.8	2010	89	483
2	119	4	1.3	302	10	7.8	1880	49	248
3	110	5	1.4	277	10	7.8	2160	26	154
4	111	5	1.4	256	11	7.9	2060	19	108
5	125	7	2.2	249	11	7.3	1780	16	76
6	114	8	2.4	243	9	5.9	1540	11	47
7	97	7	2.0	262	9	7.0	1360	9	35
8	87	7	1.6	1160	28	205	1280	10	36
9	82	7	1.6	22200	491	32500	8910	104	4380
10	77	7	1.5	13900	376	14700	21900	275	16800
11	75	7	1.4	7520	317	6700	8440	126	3010
12	93	11	3.0	8430	407	9630	5420	71	1060
13	868	30	97	4550	122	1600	3810	46	471
14	3030	63	535	2800	39	300	2820	35	268
15	2600	81	559	2120	23	134	2290	25	158
16	1200	60	196	1850	21	103	1920	17	87
17	747	42	85	1540	15	62	1650	13	57
18	535	25	37	1300	14	48	1680	27	126
19	413	17	19	1100	12	36	2070	62	348
20	332	14	12	988	11	29	1780	43	205
21	279	13	10	1050	22	63	1540	29	123
22	240	12	8.0	1100	20	58	1320	17	62
23	211	10	5.6	1010	15	42	1190	10	31
24	192	8	4.0	1360	28	104	1820	9	48
25	222	8	4.8	3040	54	468	3080	20	171
26	903	24	94	11700	179	8230	2530	11	80
27	1290	18	67	15200	169	7700	2110	7	39
28	795	13	28	5470	109	1600	1790	7	32
29	579	16	25	3400	105	956	1520	6	24
30	452	15	18	2490	101	674	1340	6	20
31	388	11	12	---	---	---	1190	6	19
TOTAL	16490	---	1837.5	117208	---	85995.5	96190	---	28806

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
JANUARY			FEBRUARY			MARCH			
1	1060	8	22	2620	9	65	10900	62	1700
2	963	8	22	2320	15	93	6360	43	782
3	887	9	21	2190	10	59	4070	25	277
4	800	8	18	1860	6	33	2980	15	123
5	734	10	19	1570	4	19	2340	8	53
6	692	12	22	1390	5	17	1960	7	36
7	658	12	22	1290	5	18	1650	7	32
8	624	12	20	1190	5	15	1450	8	31
9	595	12	19	1070	4	12	1370	8	28
10	574	11	17	929	8	19	1370	8	28
11	569	11	17	844	9	20	1190	7	22
12	559	13	19	829	8	18	1070	5	14
13	523	12	16	788	8	16	1020	4	9.8
14	494	11	15	753	5	10	938	3	7.8
15	501	11	14	791	6	12	877	3	6.1
16	531	10	15	939	5	13	967	3	8.6
17	541	8	12	2870	19	173	1370	5	19
18	557	10	15	3130	24	199	1360	3	13
19	10400	317	12200	2760	15	114	1470	4	15
20	11500	156	5750	2320	10	60	2010	6	35
21	4960	69	929	2060	8	46	1810	5	22
22	3330	24	219	2210	12	97	1570	14	61
23	2650	8	59	9940	120	3510	1350	7	26
24	2040	5	26	6960	56	1110	1190	4	13
25	2040	4	23	4270	23	263	1070	3	9.2
26	3600	---	700	3070	11	89	974	3	7.7
27	3000	35	287	9510	40	1430	864	6	13
28	2600	24	171	14300	101	3880	789	7	14
29	2500	13	85	---	---	---	780	5	9.7
30	2680	10	71	---	---	---	804	3	6.5
31	3060	16	137	---	---	---	2120	8	57
TOTAL	66222	---	20982	84773	---	11410	60043	---	3479.4
APRIL			MAY			JUNE			
1	2790	18	127	945	4	11	915	12	30
2	2180	20	122	817	4	8.1	685	10	19
3	1950	7	39	733	3	6.2	592	7	12
4	1880	3	17	3800	80	1440	620	6	11
5	1730	3	13	4780	489	6950	713	7	13
6	1760	3	15	2370	115	766	486	5	6.1
7	2620	18	160	1630	20	91	343	5	4.3
8	3210	25	219	1200	11	37	267	4	2.6
9	2620	11	75	932	6	16	222	3	2.0
10	2070	4	24	761	5	11	194	3	1.4
11	1690	3	12	647	5	9.2	173	1	.54
12	1520	3	10	565	5	8.3	162	1	.43
13	1360	2	7.3	537	5	6.7	188	2	1.3
14	1320	2	8.3	597	12	19	235	4	2.7
15	9060	171	3770	555	11	17	271	3	2.3
16	8580	250	6170	493	11	15	236	2	1.6
17	6060	40	659	475	13	17	284	14	12
18	5100	36	495	416	13	15	341	20	19
19	3680	22	221	354	8	7.8	377	21	21
20	2750	12	88	321	6	5.2	314	20	17
21	2180	8	46	437	6	7.7	846	29	80
22	1800	5	26	1300	31	115	1380	55	214
23	1660	6	26	1050	14	39	1260	59	204
24	1900	5	24	1030	39	115	1280	55	191
25	2920	16	126	956	31	79	3030	137	1140
26	2340	7	47	840	25	57	1680	61	293
27	1890	5	23	640	12	21	911	27	68
28	1560	3	13	500	7	9.8	584	20	31
29	1280	2	8.2	571	9	14	405	18	20
30	1090	3	9.7	823	10	22	303	10	8.3
31	---	---	---	970	11	30	---	---	---
TOTAL	82550	---	12600.5	32045	---	9966.0	19297	---	2428.57

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
JULY			AUGUST			SEPTEMBER			
1	243	6	3.9	66	9	1.6	111	5	1.4
2	221	5	3.1	68	11	2.0	87	3	.81
3	262	6	5.5	67	13	2.4	73	3	.62
4	999	10	30	63	22	3.9	64	3	.52
5	792	11	28	60	24	3.9	60	7	1.1
6	1310	21	79	58	16	2.5	55	4	.61
7	1410	50	200	59	15	2.3	54	3	.46
8	1460	59	244	66	15	2.7	56	2	.37
9	929	40	101	72	11	2.1	76	12	2.6
10	912	34	87	72	9	1.7	70	12	2.3
11	741	22	44	71	9	1.7	64	4	.66
12	839	24	56	67	9	1.6	105	6	1.9
13	649	19	33	66	10	1.8	119	3	.93
14	525	15	21	82	10	2.2	91	5	1.2
15	473	20	26	92	7	1.7	79	4	.91
16	376	15	15	77	6	1.2	104	3	.71
17	284	11	8.7	70	5	.99	97	2	.62
18	229	9	5.7	98	6	1.6	84	2	.55
19	195	9	4.7	114	7	2.2	80	2	.52
20	171	10	4.7	188	8	4.3	101	3	.69
21	152	9	3.6	147	6	2.4	99	3	.76
22	138	10	3.8	108	5	1.5	81	2	.48
23	124	11	3.8	86	5	1.2	72	2	.33
24	113	10	3.2	73	5	.91	81	2	.47
25	105	10	2.9	63	4	.77	82	2	.50
26	97	13	3.3	57	4	.61	72	2	.39
27	91	13	3.1	52	4	.56	66	2	.27
28	83	7	1.6	50	4	.55	63	1	.18
29	80	7	1.6	67	6	1.1	63	1	.18
30	75	11	2.2	83	5	1.0	90	5	1.4
31	71	10	2.0	108	7	2.1	---	---	---
TOTAL	14149	---	1031.4	2470	---	57.09	2399	---	24.44

TOTAL LOAD FOR YEAR: 178618.40

CUMBERLAND RIVER BASIN

03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN

LOCATION.--Lat 36°24'58", Long 85°01'35", Fentress County, Hydrologic Unit 05130105, on right bank 200 ft upstream from bridge on State Highway 52, 0.5 mi upstream from Poplar Cove Creek, 5.3 mi west of Jamestown, and at mile 12.7.

DRAINAGE AREA.--202 mi², includes 6.0 mi² without surface drainage.

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 1276: 1944, 1946(M). WSP 1506: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.30 ft, Sandy Hook Datum. Feb. 24 to Apr. 7, 1943, nonrecording gage 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--45 years, 416 ft³/s, 27.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft³/s, May 27, 1973, gage height, 30.46 ft, from rating curve extended above 32,000 ft³/s, on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s, Sept. 26-28, 1948; minimum gage height, 0.55 ft, Sept. 12-17, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in march 1929 reached a stage of about 30.7 ft, from flood profile by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 9	0915	*10,200	*14.82	No other peak greater than base discharge.			

Minimum discharge, 9.6 ft³/s, Sept. 5, 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	49	375	204	415	2720	643	138	302	48	15	14
2	15	45	382	193	392	1470	544	126	225	43	14	13
3	16	42	411	175	376	990	511	123	168	41	14	12
4	16	39	370	160	331	732	475	142	181	49	13	11
5	16	39	322	151	297	569	424	124	160	143	14	10
6	16	41	285	145	274	469	381	109	107	251	15	10
7	15	51	256	139	262	398	341	97	78	251	14	9.9
8	15	396	271	126	249	355	307	87	61	189	13	11
9	14	5760	3090	120	222	353	274	78	49	118	12	11
10	14	1610	2990	120	200	343	244	71	42	86	25	11
11	16	1640	1470	125	191	298	231	64	37	71	41	14
12	18	1260	974	120	187	278	227	60	38	124	32	15
13	116	691	669	115	177	256	217	57	98	103	55	17
14	274	437	499	115	173	239	247	58	109	121	62	16
15	252	349	404	121	204	227	1300	64	66	110	34	15
16	134	310	347	130	290	348	1620	77	50	79	25	15
17	88	267	311	128	510	388	1770	65	51	59	22	15
18	67	230	305	139	562	354	1170	56	75	47	23	14
19	50	198	306	2570	515	385	832	48	69	39	21	17
20	41	185	273	1620	452	399	612	44	100	33	18	20
21	36	226	244	941	422	367	476	55	126	29	16	16
22	32	213	218	673	697	335	394	86	118	26	15	16
23	30	202	207	504	2240	301	331	84	144	24	14	15
24	28	524	371	388	1300	273	302	129	399	22	13	15
25	48	854	439	1070	888	253	273	109	591	20	12	15
26	188	3750	386	1910	662	228	234	101	309	18	11	14
27	150	1850	353	1090	2690	205	206	83	164	17	11	14
28	104	983	313	781	3270	193	187	67	106	17	12	13
29	80	643	280	609	---	179	168	71	74	17	12	15
30	65	468	254	580	---	254	152	271	63	16	13	30
31	56	---	229	483	---	696	---	733	---	15	14	---
TOTAL	2026	23352	17604	15745	18448	14855	15093	3477	4160	2226	625	433.9
MEAN	65.4	778	568	508	659	479	503	112	139	71.8	20.2	14.5
MAX	274	5760	3090	2570	3270	2720	1770	733	591	251	62	30
MIN	14	39	207	115	173	179	152	44	37	15	11	9.9
CFSM	.32	3.85	2.81	2.51	3.26	2.37	2.49	.56	.69	.36	.10	.07
IN.	.37	4.30	3.24	2.90	3.40	2.74	2.78	.64	.77	.41	.12	.08

CAL YR 1986 TOTAL 108382.4 MEAN 297 MAX 5760 MIN 8.8 CFSM 1.47 IN. 19.95
WTR YR 1987 TOTAL 118044.9 MEAN 323 MAX 5760 MIN 9.9 CFSM 1.60 IN. 21.73

03416000 WOLF RIVER NEAR BYRDSTOWN, TN

LOCATION.--Lat 36°33'37", long 85°04'23", Pickett County, Hydrologic Unit 05130105, on right bank 0.3 mi upstream from bridge on county road, 0.5 mi upstream from Widow Creek, 3.2 mi east of Byrdstown, 5.4 mi upstream from Lick Creek, and at mile 26.2.

DRAINAGE AREA.--106 mi².

PERIOD OF RECORD.--October 1942 to current year. Prior to June 1943 monthly discharge only, published in WSP 1306.

REVISED RECORD.--WSP 1276: 1943. WSP 1910: Drainage area. WDR TN-82: 1944-81(M).

GAGE.--Water-stage recorder. Datum of gage is 707.54 ft, Sandy Hook datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--45 years, 188 ft³/s, 24.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s, Sept. 2, 1982, gage height, 17.14 ft, from rating curve extended above 7,300 ft³/s on basis of slope-area measurement at gage height 10.09 ft and 17.14 ft; minimum, 2.0 ft³/s, Sept. 17, 1954, gage height, 0.50 ft result of construction at mill dam upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of about 10.8 ft, discharge, about 12,400 ft³/s from information by local resident. From flood marks, flood of June 30, 1928, reached a stage 1.5 ft higher than that in March 1929 at a point 12.5 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	0645	*5,420	*7.14	No other peak greater than base discharge.			

Minimum discharge, 6.2 ft³/s, Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	182	105	251	999	275	91	185	44	11	7.2
2	13	15	315	99	235	527	248	84	172	40	11	6.7
3	13	14	422	88	202	359	241	82	104	37	11	6.6
4	15	14	346	80	169	270	229	393	94	44	11	6.4
5	25	16	265	75	147	226	211	299	84	46	11	6.5
6	18	17	216	71	135	188	190	205	59	65	11	6.5
7	15	21	181	68	127	160	175	158	47	65	10	6.7
8	14	447	173	64	119	147	157	127	40	50	9.8	7.2
9	13	2680	1160	61	105	140	141	105	35	40	9.7	7.6
10	13	521	1080	62	93	125	126	92	32	33	14	7.8
11	13	953	567	60	89	110	122	81	30	45	11	8.1
12	15	606	397	55	87	104	124	72	32	45	11	9.6
13	36	311	293	52	82	96	129	67	64	86	11	10
14	102	210	236	52	80	92	173	62	67	62	10	11
15	58	166	201	54	79	88	959	58	44	45	10	10
16	39	139	172	56	91	144	721	57	36	35	9.5	9.0
17	31	118	155	53	137	174	738	53	36	30	13	8.5
18	26	101	152	62	192	155	516	48	41	26	16	8.2
19	23	86	138	1150	203	154	392	45	36	23	13	12
20	21	80	126	610	184	141	308	43	41	21	12	12
21	19	83	113	398	176	130	257	40	92	20	10	13
22	17	78	102	308	391	118	224	40	82	18	9.3	11
23	16	82	103	245	1070	108	192	40	87	17	8.5	10
24	16	221	201	195	576	101	184	48	134	16	8.0	10
25	22	275	208	316	410	95	166	48	557	15	7.8	9.5
26	23	1470	183	475	319	85	145	85	230	14	7.6	9.0
27	25	701	166	337	1140	79	131	55	136	14	7.5	8.8
28	21	396	150	280	1320	75	120	42	94	14	7.8	8.7
29	19	280	137	242	---	68	107	37	69	13	7.8	12
30	17	221	128	288	---	151	99	90	51	12	7.5	13
31	16	---	114	281	---	378	---	287	---	12	7.4	---
TOTAL	727	10337	8382	6342	8209	5787	7800	3034	2811	1047	315.2	272.6
MEAN	23.5	345	270	205	293	187	260	97.9	93.7	33.8	10.2	9.09
MAX	102	2680	1160	1150	1320	999	959	393	557	86	16	13
MIN	13	14	102	52	79	68	99	37	30	12	7.4	6.4
CFSM	.22	3.25	2.55	1.93	2.77	1.76	2.45	.92	.88	.32	.10	.09
IN.	.26	3.63	2.94	2.23	2.88	2.03	2.74	1.06	.99	.37	.11	.10

CAL YR 1986 TOTAL 49165.0 MEAN 135 MAX 2680 MIN 7.7 CFSM 1.27 IN. 17.25
WTR YR 1987 TOTAL 55063.7 MEAN 151 MAX 2680 MIN 6.4 CFSM 1.42 IN. 19.32

CUMBERLAND RIVER BASIN

03417500 CUMBERLAND RIVER AT CELINA, TN

LOCATION.--Lat 36°33'15", long 85°30'52", Clay County, Hydrologic Unit 05130106, on right bank at State Highway 52 bridge, 0.5 mi northwest of courthouse in Celina, 600 ft downstream from Obey River, and at mile 380.8.

DRAINAGE AREA.--7,307 mi².

PERIOD OF RECORD.--October 1922 to current year. Gage-height records collected at same site 1903-54 are in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 893: 1923-38. WSP 1276: 1924. WSP 1306: 1943 (monthly runoff). WSP 2110: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 489.00 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1930, nonrecording gage at site 400 ft downstream at same datum. Since Feb. 2, 1973, auxiliary water-stage recorder 15.8 mi downstream from base gage at same datum.

REMARKS.--Estimated daily discharges: Nov. 8-24, Dec. 23, 24, Jan. 14-20, April 29. Records fair, except those for periods of low fall, which are poor. Flow regulated by Lake Cumberland and Dale Hollow Lake (see page 141). Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1923-1980, 1982-1987), 11,670 ft³/s, 21.69 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 145,000 ft³/s, Dec. 29, 1926, maximum gage height, 57.25 ft, Dec. 29, 1926, from graph based on gage readings; minimum daily, 69 ft³/s, Sept. 2, 11-14, 1925; minimum gage height observed, 0.20 ft, Sept. 2, 11-14, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 59.2 ft in March 1826, from Cumberland River profile.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,700 ft³/s, Dec. 9, gage height, 23.86 ft; minimum daily, 533 ft³/s, May 11; minimum recorded gage height, 10.86 ft, Mar. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6580	4970	14100	23400	7700	12600	12700	14600	1530	9940	18900	5780
2	6230	2650	16600	23700	2850	3990	12000	12000	4850	7750	14600	6540
3	6290	1670	19100	23000	2180	5670	5070	5430	8590	7760	12800	6660
4	5710	3890	17900	20900	3190	6490	4360	2060	6870	5700	16200	6750
5	3280	5120	16700	22000	3060	13600	4690	5350	5940	2660	14700	5050
6	1680	5850	16500	24500	2890	16700	3760	7450	4610	4420	9890	3540
7	2290	5650	16400	24100	2430	16000	3590	7260	2170	13900	8660	3250
8	4210	6780	16400	24500	2580	15100	3210	6830	3680	18300	9890	4480
9	3750	3990	24600	24300	4060	13900	3360	7400	8390	14400	7640	6300
10	3520	2370	29700	23500	12500	14200	3490	2800	10800	13800	5750	7060
11	3650	4960	22000	18900	14900	14700	2870	533	8230	11900	10900	6820
12	2230	6650	19000	11100	14300	15600	2020	4720	12900	5930	9600	6430
13	1810	7370	17000	12700	13600	14900	1480	6770	13000	6350	8660	4850
14	3450	14000	16500	12600	12700	12600	4290	6930	5440	14900	8280	3800
15	3630	16900	17100	17000	8270	3990	21800	7030	2000	18900	8230	4610
16	4000	15900	17500	15000	2430	2790	17900	7120	5160	19000	6460	5540
17	3550	13300	17500	12600	2540	5520	18100	3090	7770	18600	5780	5050
18	3240	14700	17200	10800	3180	4130	16900	1020	7680	16400	9100	4990
19	2140	17500	17300	9150	7640	4290	16300	4210	7490	11800	9060	4460
20	1690	17100	18700	7980	4550	4520	18800	6400	6800	12500	8300	4030
21	4900	17400	18800	6480	2970	4310	21100	6460	3660	17400	8270	2960
22	6170	12700	19400	5510	2650	2990	22700	8140	2440	18900	7310	4300
23	5990	5060	25000	4780	6840	3020	19800	7920	5020	18900	5530	5050
24	5870	2120	26600	6590	8450	4610	19000	5150	6420	19000	5120	5430
25	5840	2270	25000	5260	5460	4980	18900	2510	7130	17500	6910	5070
26	3210	16500	23800	5140	3640	10200	17200	4150	6620	11000	7830	4900
27	2120	20000	22100	10800	8060	7290	10600	5080	5310	9120	8430	4020
28	4530	15900	20200	13500	14300	4790	9490	5200	2130	15600	9050	2660
29	5700	14800	21400	13100	---	2270	10200	4880	3900	18200	7420	4000
30	5640	14000	22800	13300	---	3820	10200	4400	8070	19300	5660	4800
31	5580	---	23500	12400	---	8340	---	1430	---	20300	4540	---
TOTAL	128480	292070	616400	458590	179920	257910	335880	174323	184600	420130	279470	149180
MEAN	4145	9736	19880	14790	6426	8320	11200	5623	6153	13550	9015	4973
MAX	6580	20000	29700	24500	14900	16700	22700	14600	13000	20300	18900	7060
MIN	1680	1670	14100	4780	2180	2270	1480	533	1530	2660	4540	2660

CAL YR 1986 TOTAL 2765710 MEAN 7577 MAX 29700 MIN 1410 MEAN+ 8338 CFSM+ 1.14 IN.+ 15.49
WTR YR 1987 TOTAL 3476950 MEAN 9526 MAX 29700 MIN 533 MEAN+ 9457 CFSM+ 1.29 IN.+ 17.57

+ Adjusted for change in contents in Lake Cumberland and Dale Hollow Lake.

NOTE.--Contents (cfs/days) for adjustments furnished by U.S. Army Corps of Engineers.

CUMBERLAND RIVER BASIN

85

03418070 ROARING RIVER ABOVE GAINESBORO, TN

LOCATION.--Lat 36°21'04", long 85°32'45", Jackson County, Hydrologic Unit 05130106, near left bank of downstream end of county road bridge, 1.1 mi upstream from Blackburn Fork, 6.3 mi east of Gainesboro, and at mile 9.1.

DRAINAGE AREA.--210 mi², includes 34 mi² without surface drainage.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 520.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair, except those below 5.0 ft³/s, which are poor. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--13 years, 253 ft³/s, 16.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s, Mar. 12, 1975, gage height, 21.83 ft, from high-water marks; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	0315	*7,790	*14.62	No other peak greater than base discharge.			

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	210	92	272	1870	201	47	141	.00	.00	.00
2	.00	.00	244	78	248	1090	156	42	51	3.5	.00	.00
3	.00	.00	328	62	209	791	159	39	31	5.0	.00	.00
4	.00	.00	275	53	157	615	145	38	18	638	.00	.00
5	.00	.00	203	47	122	505	124	30	7.3	556	.00	.00
6	.00	.00	155	44	102	418	103	26	.66	757	.00	.00
7	.00	.00	120	40	91	339	85	22	.00	769	.00	.00
8	.00	480	142	37	82	295	71	20	.00	359	.00	89
9	.00	4430	2590	34	68	291	61	16	.00	165	.00	48
10	.00	1110	2180	36	59	226	54	13	.00	89	5.7	.02
11	.00	1370	1010	34	55	180	56	8.9	.00	58	.55	.00
12	.00	1030	690	30	53	159	51	4.7	.00	321	.00	.00
13	9.3	542	493	28	47	131	46	1.4	49	149	2.3	.00
14	22	342	375	28	48	113	535	.58	12	231	.02	.00
15	1.1	248	299	30	52	99	2150	.96	.08	113	.00	.00
16	.00	180	229	29	166	170	1170	.36	.00	60	.00	.00
17	.00	119	186	27	471	185	1250	.00	.00	45	.00	.00
18	.00	76	169	38	449	144	855	.00	.00	30	.00	.00
19	.00	56	134	1580	446	140	630	.00	.15	20	.00	.00
20	.00	52	99	1050	378	127	487	.00	32	9.1	.00	.00
21	.00	50	77	659	342	104	380	214	37	1.5	.00	.00
22	.00	40	62	507	542	93	298	135	358	.14	.00	.00
23	.00	40	84	388	1740	79	229	350	84	.00	.00	.00
24	.00	136	509	287	999	69	189	534	30	.00	.00	.00
25	16	405	476	572	710	69	142	138	310	.00	.00	.00
26	9.7	1510	366	1120	547	59	103	66	95	.00	.00	.00
27	.33	1020	290	677	2420	53	79	41	37	.00	.00	.00
28	.00	573	227	521	2470	53	65	40	17	.00	.00	.00
29	.00	399	181	445	---	49	57	28	6.1	.00	.00	.00
30	.00	285	154	418	---	58	52	253	.41	.00	.00	.00
31	.00	---	116	331	---	203	---	318	---	.00	.00	---
TOTAL	58.43	14493.00	12673	9322	13345	8777	9983	2426.90	1316.70	4379.24	8.57	137.02
MEAN	1.88	483	409	301	477	283	333	78.3	43.9	141	.28	4.57
MAX	22	4430	2590	1580	2470	1870	2150	534	358	769	5.7	89
MIN	.00	.00	62	27	47	49	46	.00	.00	.00	.00	.00
CFSM	.01	2.30	1.95	1.43	2.27	1.35	1.58	.37	.21	.67	.00	.02
IN.	.01	2.57	2.24	1.65	2.36	1.55	1.77	.43	.23	.78	.00	.02

CAL YR 1986 TOTAL 55805.50 MEAN 153 MAX 4430 MIN .00 CFSM .73 IN. 9.89
WTR YR 1987 TOTAL 76919.73 MEAN 211 MAX 4430 MIN .00 CFSM 1.00 IN. 13.62

LOCATION.--Lat 36°17'12", long 85°56'27", Smith County, Hydrologic Unit 05130108, on right bank in powerhouse at Cordell Hull Dam, 2.7 mi north of Carthage, and at mile 313.5.

WATER-DISCHARGE RECORDS

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 52,900 ft³/s, Nov. 9; minimum daily, 2,180 ft³/s, May 11.

CAL	YR	1986	TOTAL	3114700	MEAN	8533	MAX	52900	MIN	2270
WTR	YR	1987	TOTAL	4085040	MEAN	11190	MAX	52900	MIN	2180

CUMBERLAND RIVER BASIN

87

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1980 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1980 to current year.

WATER TEMPERATURE: October 1980 to current year.

DISSOLVED OXYGEN: October 1980 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1980.

REMARKS.--Flow regulated by Cordell Hull Dam and other reservoirs above station. Interruptions in the record were due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 255 microsiemens, Dec. 30, 31, 1981; minimum, 140 microsiemens, Sept. 3, 1984.

WATER TEMPERATURE: Maximum, 23.5°C, July 31, 1986; minimum, 2.0°C, Jan. 12, 15-21, 1981.

DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Mar. 4, 1983; minimum, 4.1 mg/L, Sept. 13, 23, 1984, June 29, 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 228 microsiemens, Oct. 3, 14, Dec. 17, 30, Jan. 1; minimum, 141 microsiemens, Nov. 13.

WATER TEMPERATURE: Maximum, 22.6°C, July 8; minimum, 5.0°C, Jan. 28-31.

DISSOLVED OXYGEN: Maximum, 13.0 mg/L, May 5; minimum, 4.5 mg/L, Oct. 15.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	222	189	204	203	191	193	205	193	197	228	219	223
2	226	186	209	209	190	196	212	206	208	222	211	218
3	228	189	206	208	192	199	215	213	214	219	215	218
4	216	190	193	211	193	200	216	214	215	224	216	218
5	200	191	194	206	197	200	218	216	217	223	216	218
6	197	191	193	208	190	197	221	218	220	221	215	216
7	197	192	193	213	189	198	221	219	220	217	207	215
8	203	192	195	202	188	192	224	222	223	215	211	213
9	197	193	194	191	187	189	226	224	225	211	210	210
10	198	193	195	192	182	188	226	223	225	211	209	210
11	222	192	198	189	162	173	224	206	212	211	210	210
12	221	192	197	200	145	162	210	193	202	211	209	210
13	224	191	210	159	141	148	205	193	198	211	209	210
14	228	195	217	148	142	144	217	205	213	212	210	211
15	226	199	216	157	143	148	223	217	220	212	212	212
16	225	194	214	174	158	165	226	222	224	214	212	213
17	205	194	199	180	174	176	228	224	226	215	213	214
18	208	190	201	183	177	180	227	224	225	214	211	212
19	203	193	198	182	176	179	224	223	224	212	210	211
20	204	192	199	182	178	181	225	223	224	215	211	212
21	202	193	197	184	180	182	225	222	223	213	211	212
22	203	192	197	190	185	187	225	222	223	219	210	213
23	205	193	196	202	188	192	224	221	222	216	211	212
24	197	190	193	203	191	195	223	220	222	221	211	213
25	198	188	191	209	192	197	224	221	222	221	208	211
26	206	190	196	200	187	193	224	222	223	213	209	211
27	209	190	198	200	189	194	223	219	222	215	211	213
28	212	193	201	205	201	203	225	220	223	219	216	217
29	212	192	197	205	199	202	226	222	224	220	219	220
30	200	189	192	202	191	198	228	216	222	220	217	219
31	199	191	193	---	---	---	226	216	222	218	214	216
MONTH	228	186	199	213	141	185	228	193	219	228	207	214

CUMBERLAND RIVER BASIN

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	214	212	213	214	207	210	214	198	206	193	187	189
2	221	211	213	218	205	209	214	190	205	189	185	187
3	218	211	214	207	203	205	214	192	200	193	174	187
4	219	212	215	206	199	202	219	197	205	205	184	189
5	219	211	214	201	187	193	216	195	201	202	183	188
6	223	208	213	187	181	184	213	196	202	193	182	184
7	216	210	212	193	178	185	215	199	205	210	183	187
8	220	211	213	196	192	194	216	196	203	207	182	184
9	219	211	214	194	189	192	211	191	200	203	181	186
10	218	209	212	192	188	190	201	188	195	202	181	189
11	215	207	211	189	186	187	202	186	193	206	190	196
12	219	213	215	187	184	185	202	190	193	208	191	195
13	215	207	211	187	185	186	202	192	196	209	190	193
14	211	200	205	185	184	185	205	187	195	211	189	194
15	212	198	201	184	182	183	197	185	190	206	190	196
16	211	196	199	199	182	185	196	189	193	210	194	198
17	209	194	198	208	181	189	198	183	188	209	192	199
18	208	195	199	204	180	192	193	185	191	211	192	197
19	205	195	197	204	181	193	189	184	185	202	193	196
20	203	195	198	202	174	191	202	186	194	207	197	199
21	207	194	197	196	190	192	206	200	203	205	198	201
22	209	193	199	206	191	195	206	200	203	209	200	202
23	201	192	194	210	194	200	204	202	203	207	200	203
24	207	196	200	202	195	197	204	201	203	212	202	204
25	213	203	208	208	195	200	204	201	203	214	203	206
26	220	209	212	202	199	201	203	200	201	213	201	206
27	224	207	211	204	202	203	---	---	---	211	202	204
28	216	206	210	205	203	204	---	---	---	213	196	204
29	---	---	---	212	201	207	194	191	192	209	201	205
30	---	---	---	210	197	204	195	189	191	212	201	205
31	---	---	---	211	201	205	---	---	---	216	202	206
MONTH	224	192	207	218	174	195	219	183	198	216	174	196

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	215	198	205	196	180	187	202	190	192	211	202	204
2	209	190	198	198	187	191	202	191	194	212	201	203
3	213	200	207	205	191	196	204	191	195	216	201	203
4	220	196	204	201	183	191	204	190	194	213	202	203
5	199	192	195	199	189	194	198	190	192	209	197	202
6	194	179	192	201	181	194	202	190	193	212	199	202
7	195	190	191	198	179	189	213	190	200	215	198	203
8	194	184	189	190	179	184	217	192	198	210	200	204
9	200	186	190	194	179	187	208	194	197	214	199	202
10	197	187	191	195	181	186	219	196	200	210	198	203
11	200	187	191	197	182	188	215	196	201	213	191	200
12	200	189	192	199	193	196	215	196	201	209	192	196
13	194	188	190	205	193	199	207	197	200	205	193	201
14	199	187	192	200	176	187	206	197	200	210	193	190
15	204	191	196	184	177	181	204	196	199	208	194	197
16	204	191	196	187	182	184	211	196	199	207	195	197
17	212	190	197	187	183	185	217	197	201	210	195	198
18	198	187	191	192	184	186	210	196	200	214	195	202
19	198	184	190	203	188	192	211	196	199	215	195	195
20	207	188	193	196	188	191	217	197	200	208	194	202
21	207	174	181	202	187	191	205	198	200	207	195	196
22	188	172	180	191	187	188	206	198	200	209	194	192
23	192	175	182	190	185	187	210	198	201	209	195	201
24	199	175	182	191	184	186	211	198	200	201	193	193
25	206	175	181	192	185	187	209	199	201	200	193	195
26	196	175	181	198	186	188	212	202	205	200	193	194
27	191	177	181	193	186	188	210	201	204	200	192	197
28	196	181	189	193	185	188	211	201	204	200	195	197
29	200	185	192	193	185	187	208	202	204	204	196	198
30	200	179	189	189	186	187	208	201	204	221	195	198
31	---	---	---	194	185	189	209	201	204	---	---	---
MONTH	220	172	191	205	176	189	219	190	199	221	191	199

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.5	18.5	19.5	16.0	15.5	15.5	12.5	12.5	12.5	10.0	9.5	9.5
2	20.5	18.5	19.5	16.0	15.5	15.5	12.5	12.0	12.0	9.5	9.5	9.5
3	21.0	19.5	20.0	15.5	15.0	15.5	12.0	12.0	12.0	9.5	9.0	9.0
4	21.0	19.5	20.0	15.5	15.0	15.5	12.0	12.0	12.0	10.0	9.0	9.5
5	19.5	19.0	19.5	15.5	15.0	15.5	12.0	11.5	11.5	10.0	9.0	9.5
6	20.0	18.5	19.5	15.5	15.0	15.5	11.5	11.0	11.5	9.0	9.0	9.0
7	20.0	19.0	19.5	15.5	15.5	15.5	11.0	11.0	11.0	9.0	9.0	9.0
8	21.0	19.5	20.0	15.5	15.5	15.5	11.0	10.5	10.5	9.5	9.0	9.0
9	21.0	19.5	20.0	15.5	14.5	15.0	11.0	10.5	11.0	9.0	9.0	9.0
10	20.5	19.5	20.0	15.0	14.5	14.5	11.5	11.0	11.5	9.0	9.0	9.0
11	20.5	19.5	20.0	15.0	15.0	15.0	11.5	11.5	11.5	9.0	8.5	8.5
12	20.0	19.5	20.0	15.0	14.5	14.5	11.5	10.2	11.0	8.5	8.5	8.5
13	20.0	19.5	20.0	14.5	13.5	14.0	11.0	10.5	10.5	8.5	8.0	8.5
14	19.5	19.0	19.0	13.5	13.0	13.0	10.5	9.5	10.0	8.5	8.0	8.5
15	19.5	18.5	19.0	13.0	12.5	12.5	10.0	9.5	10.0	8.5	8.5	8.5
16	19.0	18.5	18.5	12.5	12.0	12.0	10.0	9.5	10.0	8.5	8.0	8.0
17	18.5	18.0	18.5	12.0	11.5	12.0	10.5	10.0	10.0	8.0	8.0	8.0
18	18.5	18.0	18.5	11.5	11.5	11.5	10.5	10.5	10.5	8.5	8.0	8.5
19	18.5	18.0	18.0	11.5	11.5	11.5	11.0	10.0	10.5	8.5	8.5	8.5
20	19.0	17.5	18.0	12.0	11.5	12.0	11.0	10.5	11.0	8.5	8.0	8.5
21	18.0	17.5	17.5	12.0	12.0	12.0	11.0	10.5	11.0	8.5	8.0	8.0
22	17.5	17.5	17.5	12.0	12.0	12.0	11.0	10.5	10.5	8.0	7.5	8.0
23	17.5	17.5	17.5	12.0	12.0	12.0	10.5	9.5	10.5	7.5	7.0	7.5
24	17.5	17.0	17.0	12.0	12.0	12.0	10.5	10.0	10.5	7.5	7.0	7.0
25	17.5	17.0	17.0	12.5	12.0	12.0	10.5	10.0	10.5	7.0	6.5	7.0
26	17.0	16.5	17.0	12.5	12.0	12.0	10.5	9.5	10.5	6.5	6.0	6.5
27	17.5	16.0	16.5	12.5	12.0	12.0	10.5	10.0	10.0	6.0	5.5	5.5
28	16.5	16.0	16.5	12.0	12.0	12.0	10.5	10.0	10.5	5.5	5.0	5.0
29	16.0	16.0	16.0	12.5	12.0	12.0	10.5	10.0	10.0	5.0	5.0	5.0
30	16.0	16.0	16.0	12.5	12.0	12.5	10.0	10.0	10.0	5.5	5.0	5.0
31	16.0	15.5	15.5	---	---	---	10.0	9.5	10.0	5.5	5.0	5.5
MONTH	21.0	15.5	18.4	16.0	11.5	13.4	12.5	9.5	10.8	10.0	5.0	7.94
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	6.5	5.5	6.0	8.0	8.0	8.0	12.0	12.0	12.0	16.0	13.5	15.0
2	6.5	5.5	5.7	8.5	8.0	8.0	12.0	10.5	11.0	16.0	15.0	15.5
3	7.0	6.0	7.0	8.5	8.0	8.5	10.5	10.0	10.5	16.0	15.0	15.5
4	7.0	6.0	6.5	9.0	8.0	8.5	10.0	9.5	10.0	16.0	15.0	15.5
5	7.5	6.5	7.0	10.0	8.5	9.0	9.5	9.0	9.5	17.0	15.0	15.5
6	7.5	6.5	7.0	10.0	9.5	10.0	9.5	9.0	9.5	16.0	15.0	15.5
7	7.5	6.5	7.5	10.5	10.0	10.0	9.5	9.0	9.5	17.0	15.5	16.0
8	7.5	6.5	7.0	10.0	9.5	9.5	9.5	9.0	9.5	17.0	16.0	16.5
9	7.5	6.5	7.0	9.5	8.5	9.0	10.0	9.0	9.5	17.0	15.5	16.5
10	7.0	6.5	7.0	8.5	8.5	8.5	10.0	9.0	9.5	18.0	16.0	16.5
11	7.0	7.0	7.0	8.5	8.0	8.0	10.5	10.0	10.0	18.2	16.5	16.6
12	7.5	7.0	7.0	8.0	7.5	8.0	11.0	10.5	10.5	17.5	16.5	16.5
13	7.0	7.0	7.0	8.5	8.0	8.0	11.5	10.5	11.0	17.0	16.0	16.5
14	7.0	6.0	7.0	8.5	7.5	8.0	13.0	11.0	12.0	18.5	16.5	17.5
15	7.5	6.0	7.0	9.0	8.5	8.5	13.0	11.0	12.0	18.5	16.7	17.4
16	7.5	6.5	7.5	9.0	8.5	9.0	13.0	12.5	13.0	---	---	---
17	7.5	6.5	7.5	10.0	8.5	9.0	13.0	13.0	13.0	---	---	---
18	7.5	7.0	7.5	10.0	9.0	9.5	13.0	13.0	13.0	17.6	17.1	17.2
19	7.5	7.0	7.5	10.5	9.5	10.0	13.0	13.0	13.0	18.0	16.5	17.5
20	7.5	7.5	7.5	11.0	10.0	10.5	13.0	13.0	13.0	17.0	16.5	17.0
21	7.5	7.0	7.5	11.0	10.0	10.5	13.0	12.5	13.0	19.1	17.3	17.9
22	7.5	7.0	7.0	11.5	10.0	11.0	13.5	13.0	13.0	19.9	17.5	18.4
23	7.0	7.0	7.0	12.0	10.5	11.0	13.5	13.0	13.5	21.0	17.8	18.6
24	7.0	7.0	7.0	12.0	11.5	12.0	13.5	13.0	13.0	19.7	17.8	18.6
25	7.5	7.0	7.0	12.0	11.5	11.5	13.0	12.5	13.0	18.8	18.1	18.4
26	7.5	7.0	7.0	12.5	12.0	12.0	13.0	12.5	12.5	19.1	18.2	18.6
27	7.5	7.5	7.5	13.0	12.5	12.5	---	---	---	19.9	18.1	18.9
28	8.0	7.5	8.0	13.0	12.5	13.0	---	---	---	20.4	18.4	19.1
29	---	---	---	13.5	12.5	13.0	14.0	14.0	14.0	20.6	18.6	19.3
30	---	---	---	13.5	12.5	13.0	15.0	13.5	14.0	19.9	18.5	19.0
31	---	---	---	12.5	12.0	12.0	---	---	---	20.1	18.4	18.8
MONTH	8.0	5.5	7.08	13.5	7.5	9.97	15.0	9.0	11.7	21.0	13.5	15.1

CUMBERLAND RIVER BASIN

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

TEMPERATURE, WATER, (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.4	18.6	19.0	20.8	18.8	19.7	18.9	18.3	18.5	20.6	19.3	19.8
2	19.2	18.6	19.0	20.5	19.3	19.9	18.5	17.9	18.3	20.9	18.8	19.9
3	20.4	18.3	19.4	20.9	19.4	19.9	18.8	17.5	18.1	21.5	19.5	20.1
4	19.8	18.5	19.1	21.1	19.3	19.9	18.2	17.1	17.8	22.1	19.4	20.5
5	20.4	18.0	19.1	20.4	19.5	19.9	18.1	16.9	17.6	20.6	19.9	20.4
6	19.9	18.4	19.4	21.7	19.5	20.3	18.0	17.0	17.4	20.4	19.0	19.6
7	21.7	17.8	19.6	21.7	20.1	21.0	17.6	17.0	17.3	21.2	19.9	20.2
8	20.8	18.0	19.6	22.6	21.3	22.1	17.7	16.8	17.3	20.5	19.7	20.2
9	21.1	19.5	20.2	21.2	20.0	20.8	17.6	16.6	17.0	20.1	19.1	19.9
10	22.4	19.5	20.8	22.4	20.4	21.5	18.1	16.7	17.4	20.3	19.1	19.6
11	21.7	19.9	20.9	21.4	20.7	21.2	19.3	16.8	17.5	19.7	18.9	19.5
12	21.6	20.2	20.9	21.1	20.3	20.6	19.6	16.9	18.0	19.2	17.8	18.6
13	21.9	20.6	21.6	20.9	20.0	20.4	19.7	17.4	18.6	20.0	17.6	18.4
14	21.4	20.3	20.9	20.6	19.7	20.2	20.0	17.8	18.8	18.7	17.8	18.4
15	21.4	20.0	20.5	22.0	20.6	21.0	19.7	17.9	18.6	19.2	17.3	18.2
16	21.9	19.7	20.3	22.4	19.3	20.7	20.3	18.3	18.9	19.7	17.9	18.7
17	20.2	18.8	19.6	22.3	19.2	20.7	19.9	18.1	18.9	19.3	18.1	18.6
18	20.4	18.5	19.3	21.1	19.3	20.2	20.1	18.6	19.1	19.5	17.7	18.6
19	20.5	18.1	19.2	20.3	18.9	19.7	20.0	18.3	19.2	19.6	17.4	19.2
20	20.3	17.9	19.1	20.9	18.3	19.4	20.3	18.5	19.4	21.5	17.6	19.1
21	19.5	17.4	18.0	20.0	18.0	19.0	20.8	18.9	19.8	19.6	17.8	18.2
22	18.2	17.5	17.8	20.9	17.9	19.2	19.9	19.1	19.4	19.4	18.1	18.7
23	18.4	17.5	17.8	20.0	18.0	19.0	20.2	18.9	19.3	19.6	17.7	19.0
24	19.9	17.5	18.2	19.0	17.8	18.4	19.8	18.2	19.1	19.2	17.0	18.7
25	19.4	17.3	18.6	19.1	17.8	18.5	20.4	18.7	19.5	19.3	18.1	18.8
26	19.5	18.4	19.1	19.0	17.6	18.2	20.6	19.2	19.6	19.7	18.5	19.0
27	18.8	17.6	18.3	18.7	17.4	18.0	20.9	18.9	19.7	20.5	18.6	19.2
28	18.8	17.1	18.1	18.7	16.9	17.9	20.6	19.0	19.7	19.7	18.5	19.1
29	20.0	18.4	18.8	20.4	17.3	18.7	20.8	19.2	19.9	19.7	18.8	19.3
30	20.1	18.3	19.0	20.3	17.5	18.7	20.9	19.1	19.9	19.3	18.4	19.0
31	---	---	---	19.8	18.1	18.9	20.2	19.2	19.9	---	---	---
MONTH	22.4	17.1	19.4	22.6	16.9	19.8	20.9	16.6	18.7	22.1	17.0	19.2

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.9	5.8	6.4	9.2	7.8	9.0	8.4	8.2	8.3	9.9	9.8	9.8
2	7.0	4.6	6.0	9.3	7.3	8.7	8.7	8.3	8.4	10.0	9.8	9.9
3	7.0	5.1	6.2	8.9	7.2	8.4	9.8	8.7	9.2	10.0	9.9	9.9
4	6.6	5.2	6.1	8.7	7.4	8.2	11.1	10.0	10.5	10.1	9.9	10.0
5	6.1	5.2	5.6	8.8	7.2	8.3	12.1	10.9	11.6	10.1	10.0	10.1
6	6.5	5.5	5.9	8.9	7.4	8.4	---	---	---	10.3	10.1	10.2
7	6.5	5.1	5.9	8.7	7.5	8.3	---	---	---	10.4	10.2	10.3
8	7.2	5.6	6.1	8.5	8.1	8.3	---	---	---	10.4	9.8	10.2
9	7.2	5.1	5.9	8.5	8.3	8.4	---	---	---	9.8	9.7	9.8
10	6.7	5.7	6.1	8.3	7.4	7.9	---	---	---	9.9	9.8	9.9
11	7.3	5.6	6.2	7.5	7.1	7.3	---	---	---	10.0	9.9	10.0
12	6.8	5.9	6.3	7.2	6.7	7.1	9.1	8.8	9.0	10.0	9.9	10.0
13	6.2	5.4	5.7	7.9	7.1	7.4	9.0	8.9	8.9	10.1	10.0	10.0
14	5.5	4.7	5.1	7.7	7.5	7.6	9.0	9.0	9.0	10.0	10.0	10.0
15	6.2	4.5	5.3	8.0	7.7	7.9	9.1	9.0	9.1	10.0	9.9	10.0
16	6.5	5.7	6.1	8.4	8.0	8.2	9.2	9.0	9.1	10.1	10.0	10.1
17	7.2	5.7	6.6	8.5	8.4	8.5	9.1	9.1	9.1	10.2	10.1	10.2
18	7.6	6.6	7.1	8.7	8.4	8.5	9.3	9.1	9.2	10.3	10.2	10.2
19	7.5	6.8	7.2	8.5	8.3	8.4	9.3	9.2	9.2	10.4	10.2	10.3
20	7.6	6.6	7.1	8.3	8.2	8.3	9.2	9.2	9.2	10.4	10.2	10.3
21	7.7	6.9	7.3	8.4	8.3	8.4	9.3	9.1	9.2	10.4	10.3	10.4
22	8.1	7.1	7.7	8.5	8.3	8.4	9.3	9.2	9.3	10.5	9.8	10.4
23	8.1	7.1	7.9	8.4	8.1	8.3	9.4	9.2	9.3	10.6	10.3	10.6
24	8.4	7.8	8.1	8.4	7.5	8.2	9.5	9.4	9.4	10.6	10.2	10.6
25	8.6	7.8	8.3	8.4	7.4	8.2	9.7	9.5	9.5	10.7	10.2	10.6
26	8.3	7.3	8.1	8.6	8.3	8.4	9.7	9.6	9.6	10.8	10.2	10.6
27	8.2	6.9	7.9	8.6	8.4	8.5	9.7	9.5	9.6	11.0	10.7	10.9
28	8.4	7.3	8.0	8.9	8.6	8.7	9.6	9.6	9.6	11.2	10.9	11.1
29	8.5	7.1	8.3	8.9	8.7	8.9	9.6	9.5	9.6	11.3	11.2	11.3
30	9.1	8.0	8.8	8.7	8.4	8.5	10.5	9.6	9.8	11.5	11.3	11.4
31	9.2	8.5	8.9	---	---	---	9.9	9.8	9.9	11.6	11.5	11.6
MONTH	9.2	4.5	6.8	9.3	6.7	8.2	---	---	---	11.6	9.7	10.3

CUMBERLAND RIVER BASIN

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03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	11.5	11.3	11.4	11.5	11.1	11.4	11.7	11.1	11.4	12.2	9.4	11.3
2	11.4	10.7	11.2	11.4	10.8	11.2	11.6	11.4	11.4	12.5	11.1	11.9
3	11.3	10.7	11.2	11.2	10.6	11.0	11.6	11.4	11.5	12.6	9.8	11.5
4	11.3	10.3	11.0	11.2	10.3	10.9	11.6	10.8	11.4	12.8	9.9	11.5
5	11.4	10.9	11.2	10.9	10.5	10.7	11.6	10.7	11.4	13.0	9.7	11.8
6	11.3	10.8	11.1	10.7	10.5	10.6	11.8	10.2	11.4	---	---	---
7	11.3	10.9	11.2	10.9	10.5	10.6	11.9	10.9	11.6	---	---	---
8	11.5	10.5	11.2	11.5	10.9	11.2	12.4	11.1	12.0	---	---	---
9	11.4	10.7	11.2	11.5	11.3	11.4	12.6	11.2	12.1	---	---	---
10	11.4	11.2	11.4	11.5	10.7	11.4	12.6	11.7	12.3	---	---	---
11	11.5	11.3	11.4	11.5	11.3	11.5	12.7	10.3	12.2	---	---	---
12	11.5	11.4	11.5	11.5	11.2	11.4	12.6	9.4	12.1	---	---	---
13	11.7	11.5	11.6	11.6	11.4	11.5	12.7	10.5	12.0	---	---	---
14	11.7	11.5	11.6	11.7	11.5	11.6	12.8	10.2	12.2	---	---	---
15	11.6	10.8	11.4	11.8	11.6	11.7	12.6	11.7	12.0	---	---	---
16	11.5	10.9	11.4	11.9	11.0	11.7	11.6	10.9	11.4	---	---	---
17	11.5	10.5	11.3	11.9	9.7	11.5	11.0	10.1	10.6	---	---	---
18	11.4	10.6	11.3	11.9	9.4	11.6	10.3	9.9	10.2	---	---	---
19	11.5	11.1	11.3	11.9	11.0	11.7	10.1	9.9	10.0	---	---	---
20	11.4	11.2	11.3	12.2	10.8	11.9	10.8	9.8	10.3	---	---	---
21	11.3	10.8	11.2	12.4	10.6	11.9	11.0	10.6	10.9	11.4	8.5	10.1
22	11.4	10.2	11.1	12.4	10.5	12.0	12.0	11.0	11.3	10.3	7.5	9.1
23	11.4	11.3	11.4	12.7	10.9	12.1	11.6	11.3	11.4	9.7	7.0	8.7
24	11.6	11.4	11.4	12.5	10.7	11.9	11.7	11.0	11.3	8.8	6.9	8.1
25	11.9	11.0	11.6	11.6	9.4	11.2	11.9	10.8	11.5	7.9	6.0	7.2
26	12.0	11.3	11.8	11.4	11.2	11.3	12.0	11.5	11.7	7.8	6.1	7.0
27	12.0	11.2	11.7	11.9	11.2	11.5	---	---	---	8.5	6.5	7.6
28	11.6	11.4	11.5	12.2	11.5	11.8	---	---	---	8.7	7.1	7.9
29	---	---	---	12.0	10.5	11.5	11.1	10.4	10.7	8.5	6.9	7.8
30	---	---	---	12.0	10.4	11.4	11.4	9.6	10.7	8.1	6.8	7.5
31	---	---	---	11.4	10.8	11.2	---	---	---	8.1	6.8	7.4
MONTH	12.0	10.2	11.4	12.7	9.4	11.4	12.8	9.4	11.4	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	8.6	5.5	7.2	9.6	6.9	8.6	10.0	8.6	9.4	7.9	6.4	7.4
2	8.0	6.0	7.2	8.9	6.8	8.3	10.2	7.7	9.4	9.3	6.6	7.6
3	8.6	6.1	7.5	9.1	6.4	8.1	10.5	8.4	9.7	8.8	6.7	7.7
4	9.0	6.0	7.5	9.0	6.3	8.2	10.4	8.8	9.7	8.3	6.8	7.6
5	7.5	6.5	7.0	8.9	7.4	8.1	10.6	9.3	10.0	7.4	6.4	7.2
6	6.8	5.8	6.5	9.9	6.7	8.4	10.5	8.4	9.8	7.3	6.2	6.9
7	8.7	5.4	6.3	9.7	6.7	8.5	10.0	8.5	9.7	7.5	6.0	6.9
8	8.5	5.3	6.6	10.1	8.6	9.4	---	---	---	7.5	6.0	6.9
9	7.7	6.0	7.0	10.1	7.1	9.0	---	---	---	7.3	5.9	6.6
10	8.4	6.1	7.4	10.5	7.5	9.4	11.2	8.5	9.2	8.9	8.1	8.3
11	---	---	---	10.6	7.7	9.6	9.7	7.1	8.7	8.4	7.2	7.9
12	---	---	---	10.1	7.2	9.2	9.4	6.7	8.4	8.2	6.5	7.7
13	---	---	---	10.0	6.2	8.9	8.6	7.0	8.0	8.0	6.7	8.0
14	---	---	---	8.8	6.4	7.9	8.3	6.1	7.6	7.9	6.7	7.6
15	---	---	---	8.8	7.7	8.1	8.1	6.0	7.3	9.2	7.1	8.1
16	---	---	---	9.5	7.6	8.4	7.2	5.1	6.5	9.2	7.0	8.6
17	---	---	---	9.8	8.1	8.9	7.2	5.0	6.3	8.1	6.4	7.3
18	---	---	---	9.6	8.2	8.9	8.0	5.8	6.8	7.6	6.6	6.8
19	---	---	---	9.9	7.9	8.9	7.3	6.0	6.9	7.1	6.7	6.8
20	---	---	---	10.4	8.1	9.3	7.7	5.8	6.8	8.3	6.5	6.9
21	---	---	---	10.2	8.3	9.3	8.2	6.3	7.4	7.5	6.4	7.1
22	---	---	---	10.6	9.0	9.7	8.7	6.1	7.6	7.1	6.2	6.6
23	---	---	---	10.5	9.1	9.7	8.7	7.0	7.9	7.0	6.1	6.5
24	8.9	7.8	8.5	10.1	8.7	9.5	8.4	6.8	8.0	7.1	6.2	6.7
25	8.8	6.5	8.2	10.4	8.7	9.6	8.7	6.9	8.0	7.3	6.4	6.8
26	8.7	6.3	8.1	10.3	8.8	9.6	8.6	6.8	7.6	7.6	6.6	7.1
27	8.3	7.1	8.0	10.3	8.1	9.5	9.8	6.4	7.6	7.7	6.3	7.0
28	8.5	5.8	7.9	10.4	8.5	9.6	8.2	6.5	7.5	7.5	6.7	7.1
29	8.9	6.5	7.8	10.6	9.2	9.9	7.8	6.4	7.2	7.8	6.6	7.1
30	9.2	5.9	8.0	10.4	9.4	9.8	8.1	6.4	7.2	7.3	6.8	7.0
31	---	---	---	10.2	8.8	9.7	8.1	6.4	7.3	---	---	---
MONTH	---	---	---	10.6	6.2	9.0	11.2	5.0	8.1	9.3	5.9	7.3

CUMBERLAND RIVER BASIN

03421000 COLLINS RIVER NEAR MCMINNVILLE, TN

LOCATION.--Lat 35°42'32", long 85°43'46", Warren County, Hydrologic Unit 05130107, on left bank at downstream side of bridge on U.S. Highway 70S, 1.8 mi downstream from Barren Fork River, 2.5 mi northeast of McMinnville, and at mile 19.5.

DRAINAGE AREA.--640 mi².

PERIOD OF RECORD.--October 1924 to current year. Prior to April 1925 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 873: 1929, 1932(M), 1934-35, 1936(M), 1937. WSP 1276: 1925-26, 1928(M), 1933, 1936, 1940. WSP 2110: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.78 ft, Sandy Hook datum. Prior to Oct. 16, 1926, nonrecording gage on upstream side of bridge at same datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--63 years, 1,153 ft³/s, 24.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,300 ft³/s, Mar. 23, 1929, gage height, 39.1 ft, from rating curve extended above 42,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 35 ft³/s, Sept. 21, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1854 is believed to have been about equal to that of Mar. 23, 1929, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	1830	13,900	16.42	Feb. 27	2030	*17,300	*18.84
Dec. 10	0730	14,600	16.95				

Minimum discharge, 64 ft³/s, Sept. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	492	1760	1070	1250	8520	1970	502	331	168	102	73
2	147	418	1560	984	1500	5520	1660	491	267	170	110	72
3	139	363	1450	900	2900	3630	1450	452	234	168	120	68
4	137	321	1300	834	2440	2730	1360	421	207	226	111	66
5	136	304	1150	780	1930	2190	1260	399	185	214	108	65
6	129	284	1030	734	1620	1850	1200	368	171	179	144	66
7	122	342	940	692	1430	1610	1170	344	160	176	177	69
8	118	1920	1050	655	1280	1480	1110	322	149	167	148	86
9	116	9680	7190	623	1130	1890	1030	299	142	158	233	115
10	113	5550	13000	611	999	2020	942	283	137	159	202	80
11	111	2810	7440	611	919	1670	893	267	146	191	150	78
12	125	2520	4720	595	876	1530	917	254	134	232	128	77
13	184	2020	3210	569	827	1410	985	245	140	193	119	153
14	484	1600	2450	559	797	1290	1070	251	135	194	107	229
15	716	1390	2000	567	946	1200	4240	260	130	185	100	107
16	528	1300	1700	594	2100	1130	4480	248	126	166	96	88
17	398	1180	1520	607	3620	1050	3050	236	128	155	99	82
18	317	1050	1580	676	2880	1030	2330	218	145	146	148	84
19	255	935	1570	5570	2230	1310	1830	209	141	139	108	87
20	212	881	1400	5970	1800	1350	1500	202	144	137	95	86
21	184	1050	1260	3570	1660	1240	1290	212	140	127	103	82
22	169	1220	1140	2500	2160	1150	1120	259	147	124	98	76
23	156	1140	1110	1970	5840	1040	994	537	217	121	89	73
24	161	3290	3210	1600	3910	958	887	700	254	119	85	72
25	661	4430	3070	1610	2860	915	803	876	238	116	81	72
26	2830	6480	2430	3080	2290	880	732	579	629	113	79	70
27	2390	7540	1960	2530	11300	824	673	466	414	110	77	69
28	1420	4400	1660	2040	10600	790	621	412	276	109	75	69
29	966	2770	1450	1760	---	747	572	322	214	125	71	69
30	742	2090	1310	1620	---	884	532	298	180	108	73	71
31	603	---	1180	1420	---	2040	---	398	---	104	74	---
TOTAL	14924	69770	77800	47901	74094	55878	42671	11330	6061	4799	3510	2554
MEAN	481	2326	2510	1545	2646	1803	1422	365	202	155	113	85.1
MAX	2830	9680	13000	5970	11300	8520	4480	876	629	232	233	229
MIN	111	284	940	559	797	747	532	202	126	104	71	65
CFSM	.75	3.63	3.92	2.41	4.13	2.82	2.22	.57	.32	.24	.18	.13
IN.	.87	4.06	4.52	2.78	4.31	3.25	2.48	.66	.35	.28	.20	.15

CAL YR 1986	TOTAL 340057	MEAN 932	MAX 13000	MIN 83	CFSM 1.46	IN. 19.76
WTR YR 1987	TOTAL 411292	MEAN 1127	MAX 13000	MIN 65	CFSM 1.76	IN. 23.90

03422500 CANEY FORK NEAR ROCK ISLAND, TN

LOCATION.--Lat 35°48'26", long 85°37'44", White County, Hydrologic Unit 05130108, on right bank 180 ft downstream from powerhouse of Tennessee Valley Authority, 0.8 mi downstream from Great Falls Dam, 0.9 mi downstream from Collins River, 1.5 mi northwest of Rock Island, and at mile 90.3.

DRAINAGE AREA.--1,678 mi².

PERIOD OF RECORD.--November 1911 to April 1913, July 1913 to May 1914, August 1914 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 1276: 1934, 1937. WSP 1910: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 647.09 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 30, 1924, at sites from 80 ft to 0.5 mi upstream at different datums. Apr. 12, 1925, to Sept. 9, 1930, at present site at datum 5.00 ft higher and Sept. 10, 1930, to Sept. 18, 1964, 3.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, Jan. 15 to Feb. 25, May 1-2, 9-10, 14-21, 21-29, July 22-24, which are poor. Flow regulated since Dec. 8, 1916, by Great Falls Lake (station 03422000). Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--73 years (1915-87), 3,138 ft³/s, 25.40 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 210,000 ft³/s, Mar. 23, 1929, gage height, 43.6 ft, present datum, from floodmark, from rating curve extended above 110,000 ft³/s; minimum daily, 25 ft³/s, several days August to October 1951.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1902 reached a stage about 10 ft lower than the flood of Mar. 23, 1929, at a point 8 mi downstream, from profile by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45,400 ft³/s, Nov. 9, gage-height, 22.49 ft; minimum daily, 35 ft³/s Sept. 23-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	568	2520	3350	3010	3230	19500	2980	186	1390	509	540	152
2	551	2480	3070	2960	3080	12500	2990	188	1380	268	713	115
3	561	2440	3120	2970	3900	9030	2990	1550	1450	63	162	106
4	565	2160	3160	2950	4650	6610	2980	1630	589	60	153	108
5	548	2030	3130	2920	3450	5370	3000	2340	666	60	46	111
6	514	1630	3110	2900	2850	4140	2990	2420	585	736	46	75
7	507	592	3060	1900	3100	3660	3000	2050	585	1320	46	181
8	388	1060	3030	2700	3100	3480	2980	2050	502	1260	166	205
9	373	18200	16100	2760	3100	3440	2970	172	493	629	330	113
10	404	20300	30700	1480	3060	3670	2950	162	507	987	385	193
11	402	9840	16400	1160	3030	3610	2910	1170	389	1430	327	189
12	349	7650	10800	1530	3030	3510	2730	985	405	678	318	40
13	656	5850	8230	1500	2790	3480	2560	1690	271	926	213	164
14	1270	2980	4710	1610	2250	3400	2280	735	260	1260	224	180
15	779	1730	4520	1120	2970	3340	1640	678	381	741	47	330
16	770	1770	3390	1120	2950	3310	9570	698	367	687	48	146
17	753	1050	3160	1130	3010	3270	8580	704	323	812	140	186
18	813	1750	3150	1060	3050	3290	6780	1100	316	48	133	147
19	790	1740	5490	3900	3060	3260	4410	200	310	375	390	110
20	795	1730	5560	13700	3080	3240	3660	180	442	469	277	114
21	779	1740	3480	8250	3100	3240	3190	1100	430	350	249	507
22	780	1740	1970	4800	3530	3130	3090	1650	426	70	48	545
23	778	1750	2990	4620	13900	3090	3090	2000	421	55	48	35
24	846	4150	3010	3640	9450	3070	3080	1700	785	55	357	35
25	1270	10400	3150	3700	5850	3010	3070	1800	517	175	288	35
26	1310	16700	5300	9400	6100	2970	3050	1200	1060	172	47	35
27	1340	17700	4220	6500	27500	2950	3030	1100	1030	172	125	35
28	1350	10400	3440	4850	25200	1590	3010	900	1010	149	48	35
29	1360	7490	3130	4250	---	1480	1650	650	1050	180	48	36
30	1850	5430	3060	3800	---	1390	691	904	526	224	172	175
31	2820	---	3040	3500	---	2330	---	1230	---	186	157	---
TOTAL	26839	167002	174030	111690	157370	133360	101901	35122	18866	15106	6291	4438
MEAN	866	5567	5614	3603	5620	4302	3397	1133	629	487	203	148
MAX	2820	20300	30700	13700	27500	19500	9570	2420	1450	1430	713	545
MIN	349	592	1970	1060	2250	1390	691	162	260	48	46	35
(+)	+ 600	+ 4000	- 400	+1600	- 1300	-9200	+1900	-8700	-1100	- 200	- 300	+ 300
MEAN†	885	5700	5601	3655	5574	4005	3460	852	592	481	193	158
CFSM†	.53	3.40	3.34	2.18	3.32	2.39	2.06	.51	.35	.29	.12	.09
IN.†	.61	3.79	3.85	2.51	3.46	2.75	2.30	.59	.39	.33	.13	.11

CAL YR 1986	TOTAL	763681	MEAN	2092	MAX	35800	MIN	37	MEAN†	2127	CFSM†	1.27	IN.†	17.20
WTR YR 1987	TOTAL	952015	MEAN	2608	MAX	30700	MIN	35	MEAN†	2573	CFSM†	1.53	IN.†	20.82

† Change in contents, in cfs-days, in Great Falls Lake.

‡ Adjusted for change in contents.

NOTE.--Contents (cfs-days) for adjustment furnished by Tennessee Valley Authority.

CUMBERLAND RIVER BASIN

03425000 CUMBERLAND RIVER AT CARTHAGE, TN
(National stream-quality accounting network station)

LOCATION.--Lat 36°14'53", long 85°57'19", Smith County, Hydrologic Unit 05130201, on left bank of Cordell Hull Bridge on State Highway 25, at Carthage, 1.0 mi downstream from Caney Fork River, and at mile 308.2.

DRAINAGE AREA.--10,690 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1922 to current year. Gage-height records collected in this vicinity since 1885 are in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 893: 1923-39. WSP 1276: 1927, 1929(M), 1937(M). WSP 1306: 1943 (monthly runoff). WSP 2110: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 437.53 ft above National Geodetic Vertical Datum of 1929. Prior to May 12, 1936 nonrecording gage at site 1,000 ft downstream at same datum. May 12 to July 17, 1936, non-recording gage at present site and datum. Since Oct. 1, 1957, auxiliary water-stage recorder 15.8 mi downstream from base gage at same datum.

REMARKS.--Records good except for estimated daily discharges, Oct. 27, 28, June 5, 8, July 3 to Aug. 11, which are fair. Flow regulated by five upstream lakes or reservoirs, (see p.141). U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--65 years, 17,370 ft³/s, 22.06 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 210,000 ft³/s, Dec. 30, 1926; maximum gage height, 59.8 ft, Dec. 30, 1926; minimum daily discharge, 366 ft³/s, Oct. 29, 1940; minimum gage height since filling of Old Hickory Lake on Dec. 30, 1956, 4.3 ft, Oct. 28, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, that of Dec. 30, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 77,400 ft³/s, Nov. 9; maximum gage height, 29.76 ft, Nov. 9; minimum daily discharge, 2,590 ft³/s, May 11; minimum gage height, 5.99 ft, May 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10400	8350	28400	34700	15200	28400	17700	13800	3790	10700	18300	5420
2	11500	6320	28100	34700	11300	17100	18100	15200	5800	11500	15200	5920
3	12000	5310	33300	33600	9100	25300	14600	7500	10200	7830	14500	7000
4	10500	7410	33500	30000	6320	25800	7560	3570	9130	8140	11400	7230
5	7410	8840	28900	31600	8440	29100	7330	2830	8130	3750	16100	4890
6	5920	10400	28600	35000	7860	33000	10400	5610	4500	7190	9180	3660
7	7600	11600	28600	37100	8710	34700	8620	8790	3390	14700	8900	3150
8	7990	22000	30000	36600	6460	28900	9110	6660	6910	22000	6960	4750
9	7350	68600	48200	34900	14800	24800	9100	5960	9070	15400	7270	5940
10	7440	41600	63300	29200	20500	34000	8960	5840	12300	16400	7220	6710
11	6070	23600	45000	26400	25000	33100	7300	2590	10800	10900	8340	8650
12	5050	18000	35300	19300	27300	28300	5520	3370	12700	5740	11000	6660
13	4180	19000	31000	18500	28600	30000	5500	4720	19300	9290	8960	5030
14	6680	27600	31300	18100	21800	24200	7940	6520	7280	13700	8950	4540
15	8370	28800	29600	18000	15100	13800	41700	7250	3530	20700	6800	6320
16	6910	25500	31300	16400	9600	9850	28400	6270	4000	20400	6050	5370
17	7120	19400	33600	13400	10100	11900	26000	4300	6480	20900	6250	5260
18	6320	21100	32200	12800	12300	10300	21100	3280	8580	17400	8120	5450
19	5110	24600	32300	26600	14300	11100	19200	4260	8160	14400	10900	4830
20	4900	23600	31100	22200	14600	11300	20100	5420	8460	14600	9310	3830
21	7400	24300	31400	13000	9600	9110	29800	7020	5080	15900	9570	4710
22	8560	20000	33900	11900	6790	7610	38700	7690	4000	20600	7770	4940
23	9720	9370	33500	10500	21700	6880	33500	7910	4570	21000	6270	4790
24	10000	6910	42300	12000	20900	9760	19600	7610	7780	18800	5560	5970
25	10600	8960	44400	10900	14900	12900	19800	4350	9370	16300	7060	5180
26	8170	31700	41600	18600	15600	16600	18300	4540	8910	12100	8190	6170
27	6000	42700	40000	25100	25300	13000	13300	6160	5960	13300	8970	4290
28	7000	33200	36200	23300	30700	10500	10700	7080	3740	18500	9750	4410
29	7770	24800	34000	24500	---	6240	9290	7020	5080	20800	8510	5340
30	9530	28300	37800	22500	---	5400	9710	5140	8220	18900	6210	5860
31	9130	---	38500	22300	---	10900	---	3200	---	23400	4190	---
TOTAL	242700	651870	1097200	723700	432880	573850	496940	191460	225220	465240	281760	162270
MEAN	7829	21730	35390	23350	15460	18510	16560	6176	7507	15010	9089	5409
MAX	12000	68600	63300	37100	30700	34700	41700	15200	19300	23400	18300	8650
MIN	4180	5310	28100	10500	6320	5400	5500	2590	3390	3750	4190	3150

CAL YR 1986 TOTAL 4365230 MEAN 11960 MAX 68600 MIN 3080 MEAN+ 12890 CFSM+ 1.21 IN.+ 16.37
WTR YR 1987 TOTAL 5545090 MEAN 15190 MAX 68600 MIN 2590 MEAN+ 15070 CFSM+ 1.41 IN.+ 19.14

† Adjusted for changes in contents in Lake Cumberland, Dale Hollow Lake, Cordell Hull Reservoir, Great Falls, and Center Hill Lakes.

NOTE.--Contents (cfs-days) for adjustments furnished by U.S. Army Corps of Engineers.

CUMBERLAND RIVER BASIN

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03425000 CUMBERLAND RIVER AT CARTHAGE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1981.

WATER TEMPERATURE: October 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 338 microsiemens, Sept. 5, 1981; minimum, 89 microsiemens, July 2, 1980.

WATER TEMPERATURES: Maximum, 29.5°C, Oct. 10, 1977; minimum, 2.0°C, Jan 20, 22, 23, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 27...	1030	12100	195	7.71	16.5	753	1.4	8.5	88	K56
DEC 18...	1100	31200	205	8.00	10.0	756	3.2	8.9	79	46
FEB 10...	0845	35900	203	8.20	7.0	758	3.9	11.7	97	K6
APR 15...	0915	43100	204	8.18	11.0	746	8.5	10.8	100	250
JUN 09...	1130	6060	195	8.40	15.5	756	7.6	8.4	85	110
AUG 11...	0945	6620	168	7.20	16.0	750	1.5	9.9	102	K230

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 27...	K28	90	34	25	6.7	6.1	13	0.3	1.9	--
DEC 18...	31	78	6	23	5.0	5.1	12	0.3	1.7	74
FEB 10...	K6	91	30	26	6.3	5.1	11	0.2	1.5	61
APR 15...	460	89	28	25	6.3	4.6	10	0.2	1.6	69
JUN 09...	110	74	10	23	4.0	3.5	9	0.2	2.0	61
AUG 11...	170	77	13	24	4.0	2.4	6	0.1	1.5	64

DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT 27...	2.1	31	4.8	<0.10	3.3	129	110	0.18	4210	0.010
DEC 18...	1.4	29	4.3	<0.10	3.8	129	120	0.18	10900	0.010
FEB 10...	0.7	32	4.3	0.10	4.4	111	120	0.15	10800	<0.010
APR 15...	0.8	31	3.4	0.10	3.8	116	120	0.16	13500	0.010
JUN 09...	0.5	17	3.9	<0.10	3.4	100	94	0.14	1640	<0.010
AUG 11...	7.8	13	3.6	0.10	3.2	95	90	0.13	1700	<0.010

K--Results based on non-ideal colony count.

CUMBERLAND RIVER BASIN

03425000 CUMBERLAND RIVER AT CARTHAGE, TN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTMEBER 1987

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 27...	0.320	0.100	0.040	0.50	0.030	0.010	<0.010	11	359	75
DEC 18...	0.400	0.030	0.050	0.40	0.020	<0.010	<0.010	14	1180	82
FEB 10...	0.450	0.010	<0.010	0.50	0.040	0.010	<0.010	16	1550	87
APR 15...	0.310	0.020	0.050	0.40	0.080	0.020	0.010	43	5000	65
JUN 09...	0.510	0.030	0.060	0.70	0.080	0.030	0.020	23	376	64
AUG 11...	0.370	<0.010	<0.010	0.50	0.210	0.020	<0.010	4	71	96

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 27...	<10	<1	21	<0.5	<1	1	<3	1	<3	<5
FEB 10...	30	<1	28	<0.5	<1	3	<3	1	28	10
APR 15...	<10	<1	25	<0.5	1	<1	<3	3	16	<5
AUG 11...	<10	<1	24	<0.5	<1	<1	<3	2	8	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 27...	5	5	1.6	<10	<1	<1	<1	100	<6	12
FEB 10...	<4	28	<0.1	<10	1	<1	<1	98	<6	9
APR 15...	6	17	0.1	<10	1	<1	<1	95	<6	<3
AUG 11...	<4	5	0.2	<10	<1	<1	<1	86	<6	11

03425400 CUMBERLAND RIVER AT HUNTERS POINT, TN

LOCATION (REVISED).--Lat 36°17'57", long 86°15'49", Wilson County, Hydrologic Unit 05130201, on left bank pier of bridge on U.S. Highway 231, at Hunters Point, 2.1 mi upstream from Rocky Creek, 6.5 mi northeast of Lebanon, and at mile 262.9.

DRAINAGE AREA.--11,107 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage encoder. Datum of gage is 400.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.-- Records good. Site located in Old Hickory Lake. Stage regulated by five reservoirs above site (see p. 141). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 49.03 ft, Nov. 9; minimum, 43.51 ft, Nov. 5.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	44.66	44.43	---	---	45.91	45.56	44.78	44.54	46.51	45.31
2	---	---	44.69	44.28	---	---	---	---	44.72	44.40	45.27	43.85
3	---	---	44.70	44.08	---	---	---	---	44.80	44.44	44.92	43.88
4	---	---	44.38	43.71	---	---	45.84	45.24	44.84	44.46	45.21	44.62
5	---	---	44.28	43.51	---	---	45.44	45.06	44.68	44.41	45.46	44.80
6	---	---	44.48	43.59	---	---	45.46	45.16	44.88	44.50	45.42	44.91
7	---	---	44.76	43.72	---	---	45.66	45.11	44.75	44.38	45.34	45.08
8	---	---	48.12	44.42	---	---	45.84	45.42	44.73	44.42	45.22	44.60
9	---	---	49.03	48.24	---	---	45.92	45.60	---	---	44.65	44.31
10	---	---	48.84	45.73	48.48	48.00	45.88	45.27	45.09	44.81	45.27	44.17
11	44.44	44.12	45.63	44.50	47.97	46.32	45.24	44.90	---	---	45.61	44.97
12	44.38	44.04	45.34	44.94	46.54	45.71	45.02	44.52	45.36	44.92	45.65	44.97
13	44.29	43.89	---	---	45.82	45.42	44.54	44.31	45.28	44.77	45.17	44.69
14	44.28	44.01	---	---	45.42	45.21	44.85	44.43	45.01	44.71	44.91	44.73
15	44.57	44.08	---	---	---	---	44.88	44.70	44.80	44.24	44.80	44.26
16	44.62	44.36	---	---	45.08	44.71	44.74	44.64	44.62	44.36	44.35	43.99
17	44.57	44.28	---	---	45.30	44.92	44.74	44.52	44.66	44.45	44.62	44.31
18	44.49	44.10	---	---	45.41	44.98	44.79	44.45	45.00	---	44.70	44.38
19	44.48	44.07	---	---	45.44	45.04	46.32	44.84	45.32	45.00	44.44	44.10
20	44.44	43.90	---	---	45.32	45.09	46.32	45.21	45.08	44.85	44.56	44.22
21	44.33	44.04	---	---	45.26	44.94	45.20	44.68	44.87	44.56	44.67	44.35
22	44.55	44.24	---	---	45.38	44.98	44.93	44.36	45.26	44.47	44.87	44.46
23	44.71	44.36	---	---	45.53	45.04	44.92	44.55	45.68	45.24	44.80	44.34
24	44.56	44.39	---	---	46.83	45.56	44.88	44.63	45.67	45.05	44.80	---
25	44.87	44.48	---	---	46.92	46.38	---	---	45.19	44.65	---	44.54
26	44.93	44.56	---	---	46.58	46.24	---	---	44.76	44.39	44.84	44.55
27	44.80	44.28	---	---	46.49	46.05	45.68	45.04	45.94	44.71	44.58	44.28
28	44.58	44.15	---	---	46.27	45.78	---	44.68	46.70	45.68	44.67	44.34
29	44.76	44.34	---	---	46.02	45.68	44.88	44.47	---	---	44.47	44.03
30	44.69	44.42	---	---	45.79	45.45	44.73	44.46	---	---	44.52	44.12
31	44.67	44.48	---	---	45.88	45.47	44.80	44.54	---	---	44.82	44.25
MONTH	---	---	---	---	---	---	45.92	44.31	46.70	44.24	46.51	43.85

CUMBERLAND RIVER BASIN

03425400 CUMBERLAND RIVER AT HUNTERS POINT, TN--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	45.04	44.74	44.73	44.40	44.50	44.27	44.82	44.42	44.90	44.44	44.62	44.32
2	45.19	44.86	44.98	44.62	44.62	44.38	45.05	44.75	44.99	44.52	44.66	44.36
3	44.98	44.48	44.88	44.41	44.78	44.58	45.02	44.66	44.54	44.04	44.70	44.50
4	44.64	44.35	44.58	44.06	44.76	44.46	44.92	44.57	44.84	44.49	44.70	44.44
5	44.66	44.23	44.31	43.97	44.76	44.24	44.99	44.64	45.12	44.62	44.50	44.35
6	44.86	44.28	44.34	43.97	44.53	44.22	44.82	44.46	45.02	44.42	44.57	44.24
7	45.00	44.50	44.88	44.33	44.36	44.04	44.89	44.48	44.38	44.12	44.36	44.05
8	44.99	44.49	44.96	44.55	44.24	43.82	45.38	44.86	44.40	44.22	44.40	44.14
9	45.37	44.92	44.73	44.40	44.49	43.93	45.07	44.64	44.50	44.32	44.53	44.25
10	45.54	45.15	44.94	44.52	44.72	44.37	44.67	44.39	44.72	44.35	44.64	44.35
11	45.44	45.12	44.68	44.24	44.99	44.41	44.83	44.43	44.60	44.42	44.61	44.32
12	45.25	44.78	44.47	44.06	44.76	44.50	44.64	44.24	44.71	44.46	44.80	44.42
13	45.06	44.56	44.38	44.20	46.04	44.69	44.40	44.18	44.80	44.46	44.55	44.31
14	44.80	44.42	44.48	44.19	45.84	44.60	44.76	44.36	44.58	44.34	44.48	44.27
15	46.41	44.48	44.69	44.31	45.12	44.38	45.21	44.64	44.60	44.35	44.65	44.35
16	46.39	45.21	44.62	44.24	44.69	44.28	45.10	44.91	44.58	44.33	44.75	44.44
17	45.38	44.85	44.48	44.22	44.89	44.38	44.92	44.48	---	44.31	44.64	44.26
18	45.42	44.91	44.51	44.10	44.80	44.44	44.98	44.71	44.71	44.49	44.44	44.23
19	45.04	44.74	44.47	44.17	44.89	44.46	44.70	44.37	44.88	44.52	44.42	44.20
20	45.00	44.72	44.54	44.34	44.49	44.37	44.77	44.48	44.68	44.44	44.46	44.17
21	45.12	44.83	44.72	44.45	44.51	44.25	44.82	44.48	44.71	44.41	44.35	44.09
22	45.66	45.14	44.73	44.42	44.43	44.09	45.13	44.82	44.74	44.39	44.42	44.17
23	45.77	45.49	44.81	44.46	44.42	44.08	---	---	44.53	44.34	44.44	44.27
24	45.55	44.40	44.97	44.64	44.58	44.03	---	---	44.57	44.27	44.52	44.27
25	44.79	44.20	44.64	44.43	44.79	44.59	44.84	44.50	44.57	44.30	44.54	44.37
26	44.88	44.65	44.62	44.29	45.12	44.64	44.87	44.50	44.64	44.38	44.54	44.32
27	45.01	44.46	---	44.17	44.74	44.43	44.84	44.48	44.70	44.41	44.56	44.26
28	44.53	44.07	44.50	44.28	44.50	44.12	45.16	44.78	44.63	44.50	44.45	44.25
29	44.44	44.12	44.60	44.35	44.35	44.04	45.37	44.84	44.78	44.47	44.55	44.32
30	44.60	44.12	44.74	44.48	44.46	44.28	45.40	44.74	44.64	44.31	44.68	44.48
31	---	---	---	---	---	---	44.88	44.34	44.50	44.30	---	---
MONTH	46.41	44.07	44.98	43.97	46.04	43.82	45.40	44.18	45.12	44.04	44.80	44.05

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LOCATION.--Lat 36°17'47", long 86°39'28", Davidson County, Hydrologic Unit 05130202, at right bank in powerhouse, at Old Hickory Dam, 2.0 mi west of Hendersonville, and at mile 216.2.

WATER-DISCHARGE RECORDS

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 85,200 ft³/s Nov. 9; minimum daily discharge, 3,370 ft³/s Aug. 31.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7490	8200	28600	33000	16900	43500	17200	12400	4340	9750	18500	4400
2	9310	6910	28600	33000	14100	29000	21100	14300	5950	11700	17500	5220
3	9900	7690	28700	32800	8560	20500	16700	10800	9760	12700	14400	7230
4	8220	8830	33100	32300	8970	23400	10100	5860	10700	9620	11300	7980
5	5140	8140	33900	30700	8970	30100	6400	4340	9530	7000	14200	5300
6	5140	8800	30600	32800	9720	32100	7810	3780	5750	8580	14700	4340
7	4340	8830	28400	33100	10100	34700	11800	5190	4520	12300	9000	4300
8	4330	37600	29000	32800	8150	32300	5860	9560	5270	20900	5560	4320
9	5160	85200	46000	32800	12600	25400	6050	5640	6570	20200	6600	4780
10	7290	69300	70700	32700	18100	27500	10500	5350	9580	16700	5970	7400
11	5170	31000	56800	28100	24600	28100	10300	5480	12700	13100	7530	7190
12	4530	23600	40100	23600	29000	32300	9210	3890	12800	9300	10300	8470
13	4220	19800	34200	18400	28400	29700	6970	4440	14000	7610	10500	5180
14	4570	24300	31400	16600	23900	24400	13600	5970	13000	10500	9040	4460
15	4120	26400	32100	18700	16800	18700	29800	7310	9670	16800	6530	4730
16	6680	27900	32000	16600	12300	8710	36900	6970	5870	22300	6440	6200
17	7020	24000	31400	15300	9870	11200	26100	3750	7420	20900	5660	6840
18	5090	18900	30300	13500	11300	13000	25300	4400	7530	17600	8070	6000
19	3570	19000	31300	23400	16600	13100	21000	3850	11000	15100	10500	4550
20	3600	22600	32500	31800	18500	10700	21000	4070	9640	14400	10500	4780
21	4780	24400	30000	16800	13400	7870	27800	7630	6180	12300	9950	4340
22	7010	21100	31400	14000	9890	8200	32700	8860	5630	18100	8490	4340
23	8870	13100	33900	11900	26100	7320	32300	7160	5480	20700	5970	4340
24	9520	6090	38800	13800	27000	11200	28100	9170	4640	22000	6440	4630
25	9060	6030	48700	13100	21600	14600	17500	6870	8710	17900	6040	5380
26	10300	36000	41900	18400	20200	16500	17100	7610	9520	11800	9600	4870
27	7090	45800	42400	25100	27700	13700	17300	5790	7900	10800	8060	4770
28	4900	45000	38800	27900	56200	13500	13700	7450	5640	12600	9520	4870
29	6820	29000	33400	26200	---	7120	9380	8230	4380	15300	9050	4480
30	8980	28600	37200	23500	---	6570	8020	6120	6400	23500	7270	4870
31	9010	---	35500	21900	---	8460	---	4100	---	21700	3370	---
TOTAL	201230	742120	1121700	744600	509530	603450	517600	206340	240080	463760	286560	160560
MEAN	6491	24740	36180	24020	18200	19470	17250	6656	8003	14960	9244	5352
MAX	10300	85200	70700	33100	56200	43500	36900	14300	14000	23500	18500	8470
MIN	3570	6030	28400	11900	8150	6570	5860	3750	4340	7000	3370	4300
CAL YR 1986	TOTAL 4869290		MEAN 13450	MAX 85200		MIN 2070						
WTR YR 1987	TOTAL 5797530		MEAN 15880	MAX 85200		MIN 3370						

CUMBERLAND RIVER BASIN

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1979 to current year.

pH: April 1979 to current year.

WATER TEMPERATURE: April 1979 to current year.

DISSOLVED OXYGEN: April 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1979.

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station. Periods of missing record were due to monitor malfunction. Supersaturation of dissolved oxygen may occur due to local hydraulic conditions.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 254 microsiemens, Dec. 14, 1983; minimum, 146 microsiemens, May 6, 1979.

pH: Maximum, 9.0 units, Jan. 11-13, 15, 16, 1986; minimum, 6.8 units, Sept. 15, 1980, Sept. 26, Oct. 5, 16, 18, 20, 23, 1984, June 2, 3, 11, 30, July 1, Sept. 18, 1987.

WATER TEMPERATURE: Maximum, 27.5°C, July 5, 6, Sept. 7, 1980, Aug. 13, 1981, July 24, 1985, July 31, 1986; minimum, 2.5°C, Jan. 12-14, 1981, Jan. 21, 22, 1984, Feb. 2-4, 1985.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L, April 6, 1983; minimum, 3.0 mg/L, Sept. 15, 1980, July 26, 1985, June 23, 24, 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 237 microsiemens, Oct. 17,; minimum, 177 microsiemens, Apr. 4.

pH: Maximum, 8.8 units, Mar. 27, 28; minimum, 6.8 units, June 2, 3, 11, 30, July 1, Sept. 18.

WATER TEMPERATURE: Maximum, 25.7°C, July 8; minimum, 5.0°C, Jan. 27.

DISSOLVED OXYGEN: Maximum, 15.1 mg/L, Mar. 23; minimum, 3.3 mg/L, Sept. 9.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	207	204	205	205	202	203	218	215	216	219	216	218
2	208	205	206	207	206	206	222	217	220	218	215	216
3	210	208	209	208	206	207	222	219	221	218	216	217
4	212	210	211	207	199	205	221	213	217	217	215	216
5	215	213	214	206	204	205	215	209	212	218	216	217
6	216	215	216	205	203	204	215	210	212	218	215	216
7	217	215	216	203	201	202	219	215	217	217	215	216
8	219	217	218	208	195	201	223	220	221	215	213	214
9	220	218	219	207	195	202	226	220	223	213	211	212
10	222	220	221	192	184	187	221	219	220	210	208	210
11	224	222	223	196	189	193	223	219	220	211	208	210
12	227	225	226	200	197	198	223	221	222	210	208	209
13	229	227	228	205	202	201	229	223	226	210	207	208
14	231	230	230	212	205	208	230	228	229	208	206	207
15	233	232	232	225	213	220	228	220	224	208	207	207
16	235	234	234	230	224	228	218	213	216	208	206	207
17	237	199	200	228	222	226	213	208	210	208	206	207
18	202	199	200	224	217	221	211	208	210	207	205	206
19	201	199	200	218	204	208	214	211	212	209	207	208
20	201	200	201	208	194	200	214	212	213	206	205	205
21	202	200	201	195	190	193	213	211	212	206	205	206
22	202	200	201	195	189	192	213	211	212	207	204	206
23	202	199	200	199	194	196	212	210	211	208	206	207
24	201	199	200	199	197	198	212	210	211	207	206	207
25	200	198	199	199	196	198	213	210	212	208	207	208
26	200	199	199	200	196	198	217	212	215	208	206	207
27	200	199	199	211	199	204	222	216	219	218	208	212
28	201	200	200	219	210	215	223	220	221	223	218	220
29	201	200	200	220	213	218	223	220	221	222	217	220
30	202	199	200	220	216	218	221	219	220	218	212	214
31	203	201	202	---	---	---	221	217	219	215	213	214
MONTH	237	198	210	230	184	205	230	208	217	223	204	211

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	213	208	211	230	223	228	188	187	188	201	198	200
2	208	206	207	229	218	223	---	---	---	202	199	201
3	206	205	206	220	217	219	180	179	179	202	200	201
4	206	205	205	217	216	217	179	177	178	204	200	203
5	206	205	206	227	218	221	181	179	180	203	199	201
6	207	205	206	233	227	230	181	180	181	205	201	203
7	208	206	207	233	204	217	184	181	182	206	204	205
8	208	207	208	202	194	198	187	184	185	205	203	204
9	209	208	208	196	187	192	190	186	188	207	204	205
10	210	208	209	189	185	186	190	186	188	207	204	205
11	213	209	211	185	182	183	192	189	191	204	200	202
12	213	209	211	186	181	183	195	192	193	202	201	201
13	209	203	206	186	185	186	196	193	195	203	201	202
14	203	195	200	184	180	181	197	194	195	204	202	203
15	194	190	191	181	179	180	197	195	196	204	203	203
16	191	187	189	181	179	180	198	194	196	208	203	206
17	190	188	189	180	179	179	194	188	191	207	206	206
18	190	188	189	180	179	180	193	190	191	208	206	207
19	195	189	191	179	178	179	196	194	194	210	207	209
20	195	192	193	180	179	179	200	196	198	210	205	209
21	196	194	195	180	178	179	205	202	203	211	210	211
22	195	193	194	182	180	180	206	200	203	213	211	212
23	196	194	195	181	179	180	200	195	197	214	212	213
24	208	195	202	184	179	181	199	196	198	215	214	214
25	212	209	210	186	183	185	200	197	199	217	215	216
26	217	212	214	188	186	187	199	195	197	217	216	217
27	218	217	217	190	188	189	197	195	196	219	217	217
28	223	216	220	191	188	189	196	195	195	218	216	217
29	---	---	---	190	187	189	198	197	197	217	215	216
30	---	---	---	191	188	190	201	198	200	217	215	216
31	---	---	---	189	187	188	---	---	---	217	215	216
MONTH	223	187	203	233	178	193	206	177	192	219	198	208

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	217	214	216	191	188	189	199	197	198	201	199	200
2	214	211	212	191	190	190	199	195	198	201	200	200
3	212	210	212	192	188	191	196	192	194	201	199	200
4	214	210	212	194	192	193	194	191	192	206	199	203
5	214	211	213	194	190	192	194	192	193	206	204	205
6	215	212	213	192	191	191	193	190	192	206	204	205
7	215	213	214	193	192	192	191	189	190	205	204	205
8	213	212	213	195	193	194	191	186	188	205	202	203
9	212	209	211	196	192	195	188	186	187	204	201	203
10	215	208	209	194	192	193	189	186	188	202	200	201
11	213	206	208	194	193	194	189	187	188	201	199	200
12	212	206	207	197	194	196	219	186	189	201	198	200
13	216	204	207	199	194	196	187	183	186	201	199	200
14	210	199	202	198	195	196	187	185	186	201	199	200
15	199	196	198	196	194	195	187	185	186	201	195	198
16	198	194	196	197	195	196	188	187	187	199	196	197
17	195	189	192	198	196	197	189	187	188	200	198	199
18	190	186	188	198	197	198	191	188	189	201	194	198
19	188	185	187	201	198	200	191	189	190	196	194	195
20	186	185	185	202	197	200	192	188	190	197	195	196
21	184	183	184	199	196	198	191	189	190	199	197	198
22	184	182	183	200	196	198	193	187	190	200	197	199
23	185	182	184	202	200	201	191	186	189	199	197	198
24	185	183	184	201	198	200	191	189	190	199	197	198
25	191	183	186	200	198	199	193	188	190	200	198	199
26	192	190	191	201	199	200	192	189	190	200	198	200
27	193	192	192	200	198	199	202	188	196	201	199	201
28	193	191	192	200	197	199	202	199	201	203	200	202
29	192	189	190	201	198	199	204	199	200	203	201	202
30	189	188	189	201	199	199	201	199	200	203	202	202
31	---	---	---	199	197	198	201	199	200	---	---	---
MONTH	217	182	199	202	188	196	219	183	191	206	194	200

CUMBERLAND RIVER BASIN

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	8.0	7.7	7.5	7.5	7.5	7.4	7.8	7.7	7.9	7.7
2	---	---	7.8	7.6	7.5	7.5	7.6	7.4	7.8	7.7	7.8	7.7
3	---	---	7.7	7.2	7.6	7.5	7.5	7.4	7.8	7.6	7.8	7.6
4	---	---	7.4	7.1	7.6	7.5	7.6	7.5	7.8	7.4	7.8	7.6
5	---	---	7.3	7.2	7.6	7.5	7.6	7.4	7.8	7.5	7.7	7.6
6	---	---	7.3	7.1	7.6	7.5	7.6	7.5	7.7	7.4	7.7	7.6
7	---	---	7.3	7.1	7.7	7.6	7.6	7.5	7.7	7.4	7.9	7.7
8	---	---	---	---	7.7	7.6	7.6	7.5	7.6	7.2	8.0	7.9
9	---	---	---	---	7.9	7.7	7.6	7.5	7.5	7.2	8.2	8.1
10	---	---	---	---	7.9	7.8	7.6	7.6	7.6	7.3	8.2	8.1
11	---	---	---	---	7.6	7.5	7.6	7.6	7.5	7.2	8.2	8.1
12	---	---	---	---	7.6	7.5	7.7	7.6	7.7	7.3	8.3	8.2
13	---	---	7.4	7.3	7.6	7.5	7.7	7.6	7.6	7.3	8.4	8.3
14	---	---	7.5	7.3	7.6	7.5	7.7	7.6	7.4	7.3	8.5	8.3
15	---	---	7.6	7.4	7.7	7.5	7.7	7.5	7.4	7.1	8.5	8.4
16	---	---	7.5	7.5	7.5	7.5	7.6	7.5	7.3	7.1	8.5	8.3
17	---	---	7.6	7.5	7.5	7.5	7.6	7.5	7.2	6.9	8.5	8.4
18	---	---	7.6	7.5	7.5	7.4	7.6	7.5	7.2	6.9	8.5	8.3
19	---	---	7.6	7.5	7.5	7.4	7.7	7.4	7.8	7.0	8.4	8.4
20	---	---	7.6	7.5	7.5	7.4	7.7	7.6	7.9	7.8	8.5	8.4
21	---	---	7.6	7.6	7.5	7.4	7.6	7.5	7.9	7.8	8.5	8.4
22	---	---	7.6	7.5	7.5	7.4	7.7	7.5	7.9	7.7	8.5	8.4
23	8.1	7.8	7.6	7.5	7.5	7.4	7.7	7.5	8.0	7.9	8.6	8.5
24	8.0	7.8	7.5	7.5	7.6	7.5	7.7	7.5	8.0	7.8	8.6	8.4
25	7.8	7.6	7.6	7.4	7.6	7.6	7.7	7.5	8.0	7.9	8.7	8.4
26	7.8	7.6	7.6	7.5	7.6	7.6	7.7	7.6	8.0	7.9	8.7	8.3
27	7.7	7.6	7.6	7.6	7.6	7.6	7.8	7.6	8.0	7.8	8.8	8.4
28	7.7	7.5	7.7	7.5	7.6	7.6	7.7	7.7	8.0	7.8	8.8	8.2
29	7.8	7.5	7.6	7.5	7.6	7.5	7.9	7.7	---	---	8.7	8.1
30	7.9	7.6	7.5	7.4	7.6	7.5	7.9	7.8	---	---	8.4	7.5
31	8.1	7.6	---	---	7.6	7.5	7.9	7.8	---	---	8.0	7.5
MONTH	---	---	8.0	7.1	7.9	7.4	7.9	7.4	8.0	6.9	8.8	7.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.7	8.3	7.6	7.1	6.9	7.8	6.8	7.9	7.4	8.0	7.4
2	---	---	8.0	7.6	7.3	6.8	7.5	7.0	7.7	6.9	8.0	7.5
3	8.2	7.8	8.4	7.9	7.1	6.8	7.8	7.4	7.4	6.9	8.3	7.6
4	8.3	7.9	8.3	7.6	7.3	7.0	7.6	7.3	---	---	8.0	7.5
5	8.2	7.7	8.4	7.9	7.5	7.1	7.5	7.1	---	---	7.7	7.4
6	8.3	7.9	8.4	7.2	7.6	7.2	7.5	7.1	---	---	7.5	7.3
7	8.2	7.9	8.0	7.2	7.4	7.2	7.6	7.0	7.6	7.2	7.5	7.2
8	8.2	7.7	8.1	7.5	7.4	7.2	7.7	7.0	7.5	7.0	7.4	7.1
9	8.2	7.9	8.0	7.1	7.4	7.0	7.8	7.2	---	---	7.5	7.0
10	8.5	7.9	8.1	7.3	7.4	6.9	7.8	7.4	---	---	7.7	7.4
11	8.4	8.0	8.1	7.6	7.9	6.8	7.8	7.3	---	---	7.6	7.3
12	8.4	7.9	---	---	7.6	7.2	7.7	7.5	---	---	7.5	7.2
13	8.4	8.0	---	---	8.2	7.2	7.8	7.3	---	---	7.4	7.1
14	8.5	7.9	---	---	8.3	7.7	7.4	7.2	7.7	7.3	7.4	6.9
15	8.2	8.0	---	---	8.1	7.1	7.9	7.3	7.6	7.5	7.4	6.9
16	8.2	8.1	---	---	8.2	7.1	8.1	7.4	7.7	7.6	7.7	7.0
17	8.2	8.1	---	---	8.2	7.3	8.1	7.4	7.7	7.4	7.4	7.1
18	8.3	8.0	---	---	7.9	7.5	8.6	7.1	7.8	7.5	7.2	6.8
19	8.3	7.9	---	---	8.1	7.4	8.2	7.8	7.7	7.4	7.4	7.1
20	8.3	7.9	---	---	7.8	7.5	8.7	7.7	7.9	7.5	7.6	7.4
21	8.2	7.9	7.9	7.5	7.7	7.4	8.3	7.7	8.1	7.2	7.6	7.4
22	8.1	7.7	7.4	7.3	7.7	7.2	8.4	7.7	7.9	7.2	7.6	7.4
23	7.8	7.5	7.3	7.2	7.7	7.1	8.1	7.8	7.6	7.2	7.7	7.4
24	7.6	7.4	7.5	7.1	7.8	7.0	8.2	7.7	7.8	7.2	7.9	7.4
25	7.5	7.3	7.4	7.3	7.6	7.0	8.3	7.7	8.1	7.2	7.9	7.5
26	---	7.3	7.3	7.2	7.4	7.2	8.1	7.5	7.9	7.3	7.8	7.6
27	---	7.3	7.4	7.1	7.3	7.2	7.8	7.3	7.7	7.2	7.6	7.4
28	---	7.6	7.4	7.1	7.6	7.1	7.9	6.9	7.6	7.4	7.9	7.4
29	---	7.5	7.4	7.0	7.6	6.9	8.1	7.3	8.0	7.5	7.6	7.3
30	8.0	7.5	7.4	6.9	7.6	6.8	8.1	7.6	8.0	7.7	7.3	7.1
31	---	---	7.2	6.9	---	---	8.0	7.6	7.9	7.4	---	---
MONTH	8.5	7.3	---	---	8.3	6.8	8.7	6.8	---	---	8.3	6.8

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

TEMPERATURE, WATER, (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
OCTOBER				NOVEMBER				DECEMBER				JANUARY			
1	23.3	21.6	22.5	17.7	17.5	17.6	12.4	12.2	12.3	9.4	9.2	9.3			
2	24.0	21.8	22.8	17.4	17.2	17.3	12.3	12.0	12.1	9.3	9.1	9.2			
3	24.0	22.3	23.2	17.3	17.2	17.2	12.0	11.7	11.9	9.1	8.9	9.0			
4	23.5	22.4	22.9	17.2	16.9	17.0	11.8	11.6	11.7	8.9	8.7	8.9			
5	22.6	22.2	22.4	17.0	16.8	16.9	11.7	11.5	11.6	8.8	8.7	8.7			
6	22.8	22.2	22.4	16.8	16.6	16.7	11.6	11.4	11.5	8.9	8.6	8.8			
7	22.7	21.8	22.4	16.7	16.5	16.6	11.4	11.3	11.4	8.9	8.7	8.8			
8	22.4	22.0	22.2	16.6	16.5	16.5	11.4	11.3	11.4	8.9	8.7	8.8			
9	22.2	21.5	21.8	16.5	15.7	16.1	11.9	11.5	11.7	8.9	8.7	8.8			
10	21.9	21.4	21.6	15.6	15.4	15.5	11.9	11.5	11.7	8.8	8.7	8.8			
11	21.9	21.6	21.8	15.6	15.2	15.4	11.6	11.1	11.4	8.6	8.2	8.4			
12	21.8	21.4	21.6	15.5	14.8	15.1	11.1	10.7	10.9	8.2	7.9	8.0			
13	21.4	20.7	21.2	15.0	13.6	13.8	10.7	10.3	10.5	8.1	7.9	8.0			
14	20.9	20.4	20.7	13.4	12.7	13.0	10.2	10.0	10.1	8.2	7.9	8.0			
15	20.4	19.8	20.2	12.6	12.4	12.5	10.3	10.0	10.1	8.4	8.1	8.3			
16	20.0	19.6	19.8	12.4	12.2	12.3	10.6	10.3	10.4	8.5	8.4	8.4			
17	19.9	19.4	19.6	12.5	12.3	12.4	10.7	10.6	10.7	8.4	8.3	8.3			
18	19.6	19.3	19.4	12.6	12.4	12.5	10.7	10.4	10.6	8.5	8.4	8.4			
19	19.5	19.1	19.3	12.5	12.2	12.4	10.5	10.4	10.4	8.5	8.1	8.3			
20	19.5	18.9	19.2	12.4	12.2	12.3	10.5	10.4	10.5	8.0	7.8	7.9			
21	19.4	19.1	19.2	12.2	12.0	12.1	10.4	10.2	10.3	7.9	7.6	7.8			
22	19.5	19.0	19.3	12.0	11.7	11.8	10.2	10.0	10.1	7.5	7.3	7.5			
23	19.4	19.1	19.2	11.9	11.8	11.9	10.1	10.0	10.0	7.1	6.6	6.9			
24	19.2	18.7	18.9	11.9	11.7	11.8	10.3	10.1	10.2	6.6	6.3	6.5			
25	18.6	18.4	18.5	11.9	11.6	11.7	10.3	10.1	10.2	6.3	5.9	6.1			
26	18.4	18.2	18.3	11.9	11.8	11.8	10.1	9.9	10.0	5.9	5.2	5.5			
27	18.2	17.8	17.9	12.0	11.7	11.9	10.0	9.8	9.9	5.2	5.0	5.1			
28	17.9	17.6	17.7	12.1	11.9	12.0	9.8	9.6	9.7	5.7	5.2	5.4			
29	17.8	17.5	17.7	12.6	12.1	12.4	9.6	9.5	9.5	5.7	5.5	5.6			
30	17.7	17.4	17.5	12.6	12.4	12.4	9.5	9.4	9.5	6.2	5.7	5.9			
31	17.8	17.3	17.5	---	---	---	9.4	9.3	9.4	6.3	5.8	6.1			
MONTH	24.0	17.3	20.3	17.7	11.6	14.0	12.4	9.3	10.7	9.4	5.0	7.8			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
FEBRUARY				MARCH				APRIL				MAY			
1	6.5	6.3	6.4	8.7	8.6	8.6	12.5	12.1	12.3	17.0	15.2	16.2			
2	6.7	6.4	6.5	8.9	8.6	8.7	---	---	---	17.3	16.1	16.7			
3	6.8	6.5	6.7	9.2	8.7	8.9	11.3	11.0	11.2	17.6	16.2	16.7			
4	7.0	6.7	6.8	9.6	9.0	9.3	11.0	10.6	10.8	16.5	16.1	16.2			
5	7.3	6.9	7.1	9.9	9.5	9.7	10.6	10.3	10.5	18.0	16.2	17.3			
6	7.2	7.1	7.1	10.2	9.7	9.9	10.5	10.3	10.4	18.2	17.2	17.6			
7	7.2	7.0	7.1	10.3	9.9	10.1	10.6	10.3	10.5	17.8	17.2	17.5			
8	7.3	7.1	7.2	10.2	10.0	10.1	10.9	10.5	10.7	18.1	16.9	17.6			
9	7.0	6.6	6.8	10.4	10.1	10.2	11.2	10.6	10.9	18.3	17.5	18.0			
10	7.0	6.4	6.8	10.2	9.9	10.1	12.6	10.8	11.7	18.8	17.2	17.9			
11	7.0	6.6	6.8	9.9	9.6	9.8	13.0	11.8	12.3	18.5	17.3	18.0			
12	7.8	7.0	7.4	9.7	9.4	9.6	12.9	12.0	12.3	18.4	17.5	18.0			
13	8.1	7.7	7.9	9.5	9.2	9.3	13.5	11.8	12.6	18.4	17.5	17.9			
14	8.0	7.9	8.0	9.5	9.0	9.3	13.5	12.7	13.3	19.1	17.8	18.6			
15	8.1	7.9	8.0	9.7	9.2	9.4	12.9	12.4	12.7	18.8	18.4	18.6			
16	8.0	7.9	8.0	10.0	9.6	9.8	13.2	12.9	13.1	20.3	18.3	19.2			
17	7.8	7.6	7.8	10.7	9.6	10.3	13.0	12.6	12.8	19.8	19.0	19.4			
18	7.6	7.4	7.5	10.8	10.6	10.7	13.3	12.5	12.9	20.5	18.7	19.7			
19	7.5	6.9	7.4	10.8	10.5	10.6	14.1	13.1	13.5	19.7	18.4	19.2			
20	7.4	7.2	7.3	11.4	10.5	11.0	14.7	13.6	14.1	19.9	19.3	19.6			
21	7.4	7.3	7.3	11.8	11.1	11.5	15.4	14.3	14.9	21.8	19.4	20.5			
22	7.4	7.3	7.4	12.2	11.3	11.8	15.3	14.7	15.0	22.7	20.9	21.6			
23	7.6	7.2	7.4	13.2	11.5	12.4	15.6	15.2	15.4	21.7	20.8	21.2			
24	7.6	7.4	7.5	13.2	12.6	13.0	15.5	15.0	15.3	22.5	21.3	21.8			
25	8.0	7.6	7.8	12.8	12.4	12.5	15.1	14.6	14.8	23.0	21.5	22.1			
26	8.2	8.0	8.1	12.9	11.9	12.4	15.3	14.7	14.9	22.0	21.2	21.6			
27	8.3	8.1	8.2	13.6	12.9	13.2	15.3	14.4	14.9	23.4	21.7	22.5			
28	8.7	8.4	8.6	14.1	12.9	13.5	14.9	14.4	14.7	23.3	21.8	22.4			
29	---	---	---	15.1	13.6	14.3	16.1	14.8	15.4	23.9	21.8	22.8			
30	---	---	---	14.5	13.1	13.5	16.1	15.2	15.6	24.1	22.4	23.0			
31	---	---	---	13.3	12.5	12.8	---	---	---	23.1	22.6	22.8			
MONTH	8.7	6.3	7.4	15.1	8.6	10.8	16.1	10.3	13.1	24.1	15.2	19.4			

CUMBERLAND RIVER BASIN

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

TEMPERATURE, WATER, (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.8	22.0	22.4	25.1	23.8	24.5	24.6	23.4	24.0	23.2	22.4	22.9
2	23.5	21.8	22.6	24.7	24.2	24.6	24.0	23.0	23.5	23.4	22.6	23.1
3	22.6	21.8	22.3	25.2	24.4	24.8	23.5	22.4	23.1	23.6	22.6	23.2
4	24.0	22.2	23.0	24.7	24.1	24.4	23.0	21.4	22.3	24.0	22.7	23.4
5	24.4	22.9	23.6	24.3	23.6	24.0	23.2	22.0	22.6	23.8	23.3	23.7
6	24.2	23.3	23.8	24.7	23.8	24.2	23.4	22.1	22.7	23.5	23.0	23.3
7	23.7	23.0	23.4	25.2	23.5	24.4	22.9	22.2	22.5	23.4	23.1	23.2
8	23.9	22.5	23.4	25.7	24.3	25.1	22.5	21.7	22.0	23.2	22.5	23.0
9	23.9	22.8	23.3	25.2	24.4	24.8	22.1	21.2	21.8	23.4	22.4	23.1
10	24.7	22.9	23.7	25.1	24.1	24.5	22.2	21.3	21.8	23.5	23.2	23.3
11	25.1	23.2	24.1	24.9	23.7	24.3	22.7	21.5	22.3	23.4	23.0	23.2
12	24.1	23.8	24.0	24.7	23.9	24.3	24.2	22.4	23.1	23.5	22.6	23.0
13	24.9	23.4	24.0	24.3	23.3	23.9	23.7	21.7	23.0	23.4	22.9	23.2
14	25.0	23.7	24.5	23.6	22.9	23.3	23.2	21.5	22.3	23.4	22.6	23.0
15	24.2	23.2	23.9	24.6	23.4	24.0	22.6	22.1	22.3	23.8	22.7	23.3
16	24.2	23.2	23.5	25.2	24.1	24.0	22.8	22.3	22.6	24.4	23.0	23.8
17	23.9	23.0	23.4	25.5	24.5	25.0	22.9	21.8	22.4	23.9	23.1	23.6
18	24.4	22.9	23.5	25.5	24.1	24.8	23.6	22.3	22.9	23.7	22.8	23.3
19	24.5	22.7	23.7	24.5	23.9	24.3	23.5	22.3	22.9	23.2	22.8	23.1
20	23.9	23.0	23.4	25.2	23.5	24.2	23.8	22.7	23.3	23.4	22.8	23.1
21	23.5	22.7	23.1	24.4	23.3	23.8	24.5	22.5	23.5	23.2	22.6	22.9
22	23.6	23.0	23.4	25.3	23.0	24.1	24.1	22.7	23.3	22.9	22.4	22.7
23	24.1	23.2	23.7	24.8	23.9	24.4	23.2	22.5	22.8	22.8	22.3	22.5
24	24.9	23.5	24.2	24.9	23.7	24.4	23.9	22.6	23.3	22.8	22.2	22.5
25	25.3	24.6	24.6	24.8	23.3	23.9	24.2	23.2	23.6	22.7	22.1	22.4
26	24.7	24.0	24.4	23.9	22.8	23.3	24.1	22.8	23.5	22.6	22.2	22.4
27	24.7	23.8	24.2	23.2	22.1	22.6	24.2	22.6	23.4	22.4	22.0	22.3
28	24.7	24.2	24.5	23.5	21.8	22.7	23.6	22.7	23.3	22.9	22.0	22.5
29	24.7	23.9	24.4	24.3	22.1	23.2	24.0	22.5	23.4	22.7	21.8	22.2
30	24.6	23.4	24.0	24.8	23.0	24.1	23.8	23.0	23.5	21.8	21.4	21.6
31	---	---	---	24.5	23.3	23.9	23.7	22.9	23.3	---	---	---
MONTH	25.3	21.8	23.7	25.7	21.8	24.1	24.6	21.2	22.9	24.4	21.4	23.0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.3	8.4	8.9	9.5	8.2	9.0	10.2	10.1	10.1
2	---	---	---	8.5	7.6	8.1	9.7	8.9	9.4	10.3	10.2	10.3
3	---	---	---	8.7	7.5	8.3	9.9	9.6	9.7	10.5	10.3	10.4
4	---	---	---	8.5	7.5	8.0	9.7	9.5	9.6	10.7	10.5	10.6
5	---	---	---	8.3	7.1	7.8	9.4	9.1	9.3	10.9	10.7	10.8
6	---	---	---	8.1	7.2	7.6	9.2	8.9	9.0	11.0	10.7	10.8
7	---	---	---	8.1	7.0	7.5	9.2	8.9	9.1	11.1	10.8	10.5
8	---	---	---	11.5	7.3	8.8	9.2	9.0	9.1	11.2	10.9	11.0
9	10.0	6.3	7.7	11.4	10.7	11.1	13.3	8.9	11.0	10.9	10.9	10.9
10	10.2	5.5	8.1	11.6	9.9	10.8	12.4	12.0	12.2	10.9	10.8	10.9
11	10.3	7.7	9.0	13.6	9.2	10.5	12.0	10.6	11.5	11.2	10.9	11.1
12	9.7	6.0	7.9	10.3	9.6	9.9	11.5	8.5	9.6	11.3	11.1	11.2
13	6.0	4.6	5.4	11.2	9.3	10.4	8.7	8.6	8.7	11.4	11.2	11.3
14	6.3	4.7	5.8	10.2	8.4	9.4	8.8	8.4	8.6	11.3	11.2	11.3
15	6.3	5.4	5.9	9.8	7.8	9.1	10.4	8.5	9.0	11.4	11.2	11.3
16	7.0	5.7	6.6	8.9	7.5	8.5	8.8	8.4	8.6	11.4	11.2	11.3
17	7.5	6.4	7.0	8.5	5.6	7.5	8.4	8.2	8.3	11.4	11.3	11.4
18	7.3	5.9	6.5	8.7	5.8	7.7	8.6	8.2	8.3	11.4	11.3	11.4
19	7.7	6.2	6.9	8.8	6.0	7.9	8.7	8.4	8.6	11.6	11.4	11.5
20	7.7	6.6	7.1	8.7	7.5	8.4	8.9	8.6	8.8	11.6	11.5	11.6
21	8.5	7.1	7.7	9.0	8.3	8.6	9.1	8.6	8.9	11.7	11.5	11.6
22	9.1	7.5	8.2	9.1	8.0	8.8	9.3	8.9	9.1	11.7	11.6	11.6
23	9.3	7.4	8.4	9.3	7.9	8.8	9.4	9.1	9.3	12.0	11.6	11.8
24	8.8	8.0	8.5	9.6	7.8	8.9	13.0	9.2	9.9	12.1	11.9	12.0
25	8.4	7.6	8.0	9.6	7.6	9.0	12.8	11.0	12.1	12.0	11.9	12.0
26	8.3	7.5	7.9	13.8	9.4	10.0	11.7	11.0	11.4	12.3	11.9	12.0
27	8.4	7.2	7.8	13.8	11.6	12.7	11.8	11.3	11.5	12.1	12.0	12.0
28	7.9	7.0	7.5	13.7	9.8	12.3	11.7	9.9	10.4	12.1	12.0	12.0
29	8.5	7.4	7.9	11.6	7.7	9.5	10.0	9.9	9.9	12.2	12.0	12.1
30	8.8	7.7	8.0	9.1	7.0	8.3	10.1	9.9	10.0	12.3	12.0	12.1
31	9.9	8.1	8.8	---	---	---	10.1	10.1	10.1	12.3	12.1	12.2
MONTH	---	---	---	13.8	5.6	9.1	13.3	8.2	9.7	12.3	10.1	11.3

03426310 CUMBERLAND RIVER AT OLD HICKORY DAM (TAILWATER), TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.1	12.0	12.0	14.4	11.9	12.6	12.5	11.7	12.0	12.3	9.2	10.9
2	12.1	12.0	12.0	11.9	11.6	11.7	---	---	---	11.7	10.1	10.9
3	12.2	12.0	12.1	11.7	11.5	11.6	11.6	11.4	11.5	11.5	10.1	10.7
4	12.4	11.7	12.2	11.6	11.4	11.5	11.8	11.3	11.6	10.2	8.9	9.8
5	12.6	12.2	12.4	11.5	11.3	11.4	11.8	11.4	11.7	11.2	9.3	10.6
6	12.7	12.2	12.5	11.8	11.4	11.6	12.1	11.6	11.8	10.6	9.5	10.1
7	12.8	12.5	12.7	12.3	11.5	11.9	12.0	11.6	11.8	9.9	9.3	9.7
8	12.8	12.6	12.7	12.2	11.8	12.0	12.2	11.4	11.9	9.9	9.1	9.5
9	13.0	12.7	12.8	12.0	11.7	11.9	13.0	11.3	11.8	9.5	8.9	9.2
10	13.2	12.9	13.1	11.9	11.5	11.7	13.5	11.4	12.6	9.4	8.3	8.9
11	13.3	12.9	13.1	11.8	11.5	11.7	13.1	12.2	12.6	9.3	8.6	9.0
12	13.2	13.0	13.1	11.8	11.2	11.6	12.6	11.5	11.9	9.4	8.5	8.9
13	13.2	12.8	13.0	12.3	11.7	11.9	12.8	10.9	12.0	8.6	8.3	8.5
14	12.9	12.7	12.8	12.4	11.9	12.1	12.3	10.8	11.7	8.5	8.0	8.3
15	12.7	12.5	12.6	12.5	12.0	12.2	13.2	10.6	11.9	8.2	7.6	8.0
16	12.5	12.3	12.4	12.5	11.5	12.2	12.9	10.9	11.5	8.3	7.3	7.9
17	12.4	12.3	12.3	12.8	12.1	12.5	11.4	10.9	11.1	7.9	7.2	7.6
18	12.4	11.9	12.3	12.5	12.0	12.3	11.1	10.7	10.9	8.0	6.7	7.4
19	12.6	12.2	12.4	12.5	11.8	12.2	11.0	10.4	10.7	9.8	6.6	7.4
20	12.5	12.3	12.4	13.5	11.9	12.6	11.3	10.4	10.8	6.9	6.1	6.5
21	12.5	12.2	12.4	13.6	12.4	13.1	11.6	10.6	11.0	6.7	5.9	6.3
22	12.4	12.3	12.3	14.0	12.9	13.3	11.1	10.0	10.6	7.0	6.1	6.6
23	12.7	12.3	12.5	15.1	12.8	14.1	9.9	9.3	9.7	6.6	6.0	6.3
24	12.6	12.3	12.5	14.9	12.9	13.9	9.5	9.2	9.3	6.5	6.0	6.3
25	12.6	12.2	12.4	13.1	12.6	12.8	9.5	9.3	9.4	6.8	5.9	6.2
26	12.8	12.3	12.5	13.4	12.3	12.8	10.2	9.5	9.8	6.4	6.0	6.2
27	12.5	12.2	12.4	14.3	12.5	13.2	10.9	9.6	10.3	6.8	5.5	6.1
28	14.6	12.0	13.3	14.5	12.3	13.5	10.6	10.1	10.4	6.6	5.7	6.1
29	---	---	---	14.5	12.8	13.7	11.8	10.2	11.1	6.6	5.2	6.1
30	---	---	---	13.4	11.7	12.0	11.1	9.7	10.5	6.8	5.6	6.1
31	---	---	---	11.9	11.7	11.8	---	---	---	6.1	5.6	5.9
MONTH	14.6	11.7	12.5	15.1	11.2	12.4	13.5	9.2	11.2	12.3	5.2	8.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	5.7	5.4	5.6	7.7	5.7	6.6	9.5	8.7	9.1	6.0	4.8	5.6
2	6.5	5.1	5.8	7.4	5.5	6.0	9.7	8.7	9.1	6.3	5.0	5.7
3	5.9	5.3	5.5	6.9	5.5	6.2	9.5	8.7	9.1	6.8	5.0	5.8
4	6.1	5.2	5.5	6.3	5.7	6.0	9.1	8.2	8.7	7.0	5.5	5.9
5	7.0	5.1	6.0	6.9	5.7	6.3	9.0	8.3	8.7	6.4	5.0	5.6
6	6.9	5.9	6.3	6.7	5.7	6.2	9.5	8.5	8.9	5.6	4.7	5.0
7	6.1	5.4	5.7	7.5	5.9	6.7	9.0	8.4	8.7	5.1	4.2	4.6
8	6.1	4.7	5.6	7.9	5.8	6.9	8.5	8.0	8.2	4.8	3.8	4.4
9	6.0	5.3	5.6	7.6	6.1	6.8	8.4	7.7	8.2	5.0	3.3	4.6
10	6.5	4.9	5.7	7.8	6.8	7.2	7.9	7.6	7.7	5.5	4.3	5.0
11	8.4	5.5	6.6	7.8	7.0	7.3	7.8	7.4	7.6	5.3	3.9	4.9
12	6.6	6.1	6.4	7.8	6.9	7.3	8.6	7.0	7.9	5.6	4.5	4.9
13	8.2	5.9	6.9	7.3	6.1	6.6	7.9	6.8	7.4	5.6	3.6	4.9
14	8.3	7.3	7.9	6.2	5.4	5.9	7.1	6.4	6.8	---	---	---
15	8.1	6.9	7.7	7.8	5.9	6.8	7.2	6.5	6.9	6.1	5.0	5.6
16	7.5	6.4	7.0	8.3	6.6	7.3	7.1	6.5	6.9	6.3	4.3	5.2
17	6.6	5.6	6.1	9.3	7.6	8.2	7.0	6.4	6.7	5.6	4.7	5.2
18	6.6	5.3	5.9	9.2	7.5	8.3	6.9	6.1	6.5	5.2	4.6	4.8
19	7.1	5.0	6.2	8.3	7.9	8.1	6.5	5.6	6.2	5.2	4.5	4.8
20	6.5	5.4	5.9	9.1	7.7	8.4	7.1	6.0	6.5	5.4	4.1	5.0
21	6.1	4.9	5.6	8.0	7.5	7.7	7.5	6.0	6.8	6.1	4.1	5.1
22	6.1	5.6	5.8	9.2	6.9	7.9	7.1	5.8	6.7	6.0	4.3	5.1
23	6.2	5.0	5.7	8.3	7.8	8.0	6.5	5.9	6.3	6.7	4.2	5.7
24	6.3	4.9	5.5	8.6	7.8	8.1	6.7	5.4	6.3	7.9	5.2	6.6
25	6.1	4.7	5.4	9.2	8.0	8.6	7.3	5.5	6.4	7.6	5.9	6.8
26	5.1	4.1	4.7	9.0	8.1	8.4	6.9	5.8	6.5	7.8	6.2	6.8
27	4.7	3.9	4.2	8.5	7.8	8.1	7.1	5.7	6.3	6.3	5.4	5.9
28	6.2	4.8	5.4	8.4	6.9	7.9	6.6	5.6	6.0	8.0	5.1	6.3
29	6.9	5.5	6.2	8.8	7.5	8.1	6.8	5.5	6.3	7.1	4.9	5.7
30	8.9	6.4	6.9	8.7	8.0	8.4	6.9	6.0	6.3	5.1	4.3	4.8
31	---	---	---	9.2	8.2	8.6	6.7	5.1	6.0	---	---	---
MONTH	8.9	3.9	6.0	9.3	5.4	7.4	9.7	5.1	7.3	8.0	3.3	5.4

CUMBERLAND RIVER BASIN

03426800 EAST FORK STONES RIVER AT WOODBURY, TN

LOCATION.--Lat 35°49'41", long 86°04'36", Cannon County, Hydrologic Unit 05130203, on center pier on downstream side of bridge on U.S. Highway 70S, at Woodbury, 0.4 mi downstream from Doolittle Branch, and at mile 45.6.

DRAINAGE AREA.--39.1 mi².

PERIOD OF RECORD.--Water years 1932-33, 1950, 1954, 1962, occasional low-flow measurements. October 1962 to current year.

REVISED RECORDS.--WSP 1910; Drainage area. WSP 2110: 1963, 1964(M), 1965.

GAGE.--Water-stage recorder. Datum of gage is 676.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--25 years, 66.3 ft³/s, 23.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft³/s, Mar. 15, 1973, gage height, 16.75 ft, from rating curve extended above 3,000 ft³/s on basis of velocity-area study and contracted-opening measurement at gage height 16.52 ft at bridge 4.6 mi downstream; minimum, 2.1 ft³/s, Nov. 13, 1980 (result of unnatural regulation upstream).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1902, that of Mar. 15, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	0215	*5,260	*13.33	Nov. 26	0230	2,930	10.79

Minimum discharge, 3.3 ft³/s, Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	11	58	44	55	320	48	24	14	10	7.0	4.9
2	7.0	11	57	40	59	171	46	24	15	10	8.2	4.6
3	6.2	10	54	35	58	111	43	23	13	18	7.9	4.4
4	5.8	10	49	33	51	81	40	21	12	30	15	4.2
5	5.8	11	43	31	48	69	38	19	11	15	9.5	4.3
6	5.6	11	39	30	46	61	36	19	10	12	7.4	5.4
7	5.6	68	37	29	45	55	35	18	10	9.9	6.3	6.0
8	5.5	697	169	28	43	64	33	17	9.7	9.0	5.8	6.0
9	5.5	1730	1030	28	38	88	31	17	9.5	10	5.4	7.0
10	5.2	229	446	28	35	69	31	16	9.4	11	5.7	5.5
11	5.2	225	203	27	35	61	31	16	9.9	9.7	5.4	6.2
12	14	157	122	26	34	56	30	16	10	28	5.1	11
13	33	90	82	25	32	51	29	15	11	18	6.2	19
14	35	66	66	25	34	49	61	15	9.9	14	5.1	16
15	17	55	58	29	40	48	113	15	9.3	11	4.6	8.6
16	12	47	51	29	176	45	81	15	9.4	9.3	4.4	6.5
17	9.3	40	49	28	138	41	72	14	9.8	8.7	4.7	5.8
18	8.1	35	51	137	116	53	61	14	12	8.2	6.1	5.6
19	7.4	30	47	575	91	53	53	14	10	8.1	5.1	6.5
20	7.0	33	43	203	78	48	48	14	9.7	7.8	4.7	6.8
21	6.8	32	38	121	75	45	44	14	9.6	7.6	4.4	5.6
22	6.8	30	35	91	265	43	41	13	10	7.3	4.3	5.1
23	6.6	116	86	69	364	41	37	18	10	7.4	4.4	5.1
24	9.7	264	229	58	190	40	34	18	9.6	7.4	4.2	5.0
25	65	169	157	250	125	38	31	16	22	7.1	4.1	4.9
26	34	943	110	232	124	35	29	14	35	6.9	4.0	4.7
27	24	237	86	140	778	33	28	13	14	6.7	4.8	4.7
28	17	128	70	99	503	32	27	13	11	6.6	8.5	4.6
29	14	86	61	81	---	31	26	18	9.3	6.5	6.1	24
30	13	68	54	71	---	45	25	26	8.7	6.4	5.4	25
31	12	---	47	59	---	55	---	21	---	6.2	5.1	---
TOTAL	414.8	5639	3727	2701	3676	2032	1282	530	353.8	333.8	184.9	233.0
MEAN	13.4	188	120	87.1	131	65.5	42.7	17.1	11.8	10.8	5.96	7.77
MAX	65	1730	1030	575	778	320	113	26	35	30	15	25
MIN	5.2	10	35	25	32	31	25	13	8.7	6.2	4.0	4.2
CFSM	.34	4.81	3.07	2.23	3.36	1.68	1.09	.44	.30	.28	.15	.20
IN.	.39	5.36	3.55	2.57	3.50	1.93	1.22	.50	.34	.32	.18	.22

CAL YR 1986 TOTAL 20142.9 MEAN 55.2 MAX 1730 MIN 4.5 CFMS 1.41 IN. 19.16
WTR YR 1987 TOTAL 21107.2 MEAN 57.8 MAX 1730 MIN 4.0 CFMS 1.48 IN. 20.08

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN

LOCATION.--Lat 35°55'06", long 86°20'02", Rutherford County, Hydrologic Unit 05130203, on left bank 100 ft upstream from highway bridge, 2.5 mi southwest of Lascassas, 3.7 mi downstream from Bradley Creek, 6.0 mi north-east of the courthouse in Murfreesboro, and at mile 15.4.

DRAINAGE AREA.--262 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to November 1958, May 1963 to current year. Prior to February 1951 monthly discharge only, published in WSP 1726.

REVISED RECORDS.--WSP 1910: Drainage Area. WDR-TN-75-1: 1955(M), 1963(M), 1970(M), 1973 (M)(P).

GAGE.--Water-stage recorder. Datum of gage is 507.88 ft, Sandy Hook datum (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1973, water-stage recorder 100 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Frequent diurnal fluctuation at low flow caused by small mills above station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--32 years (water years 1951-58, 1964-87), 458 ft³/s, 23.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,200 ft³/s, Mar. 13, 1975, gage height, 39.48 ft; minimum, 0.2 ft³/s, Oct. 23, 1953, gage height, 2.22 ft; minimum daily, 0.4 ft³/s, Aug. 31, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1902, that of Mar. 13, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	1400	*18,500	*29.61	Jan. 19	0545	8,490	19.01
Nov. 26	1115	10,900	21.76	Feb. 27	0830	10,400	21.25
Dec. 9	1300	11,700	22.72				

Minimum discharge, 2.4 ft³/s, Aug. 26, 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	54	378	212	294	2440	511	70	84	26	11	8.3
2	24	47	401	187	283	1110	373	75	62	26	11	6.5
3	24	42	419	162	323	708	318	71	51	30	14	5.5
4	23	39	341	144	288	563	268	64	43	67	16	4.8
5	23	39	278	130	253	459	228	59	37	72	17	4.4
6	20	39	232	118	222	375	201	54	34	42	18	4.5
7	20	43	201	108	208	309	179	51	31	33	19	4.7
8	19	4440	975	99	189	278	163	49	30	29	19	7.9
9	19	14200	8400	91	167	576	144	46	29	27	14	19
10	19	2510	4150	91	145	499	130	44	28	25	16	16
11	18	3050	1490	93	135	383	125	43	28	24	17	14
12	18	1650	819	88	131	328	118	42	27	29	15	192
13	140	784	591	81	120	274	109	47	27	30	15	78
14	588	560	461	80	115	234	188	47	26	37	14	71
15	295	444	371	83	140	212	729	45	26	27	13	56
16	145	353	300	102	1370	192	509	44	26	24	12	38
17	84	288	260	103	1110	172	430	41	31	21	17	32
18	55	237	301	549	894	281	337	40	35	19	103	30
19	42	193	292	5440	667	396	265	38	28	16	30	30
20	35	173	255	1530	541	283	220	37	28	15	23	35
21	31	169	218	766	504	236	188	38	63	14	18	35
22	28	149	189	578	1850	205	164	40	90	14	13	31
23	26	201	407	452	3480	181	146	241	37	13	9.2	27
24	27	1840	2430	338	1250	161	128	226	31	14	4.6	25
25	756	1640	1150	2160	741	153	116	81	28	13	3.0	23
26	594	6850	724	1880	589	135	105	169	93	12	2.4	21
27	316	2000	570	787	6410	121	95	79	86	11	2.4	20
28	188	881	452	589	3980	113	87	50	40	16	2.5	18
29	125	605	354	494	---	107	78	115	31	17	2.6	27
30	88	468	295	444	---	627	75	92	27	14	3.2	282
31	67	---	247	353	---	828	---	80	---	12	8.7	---
TOTAL	3879	43988	27951	18332	26399	12939	6727	2218	1237	769	483.6	1166.6
MEAN	125	1466	902	591	943	417	224	71.5	41.2	24.8	15.6	38.9
MAX	756	14200	8400	5440	6410	2440	729	241	93	72	103	282
MIN	18	39	189	80	115	107	75	37	26	11	2.4	4.4
CFSM	.48	5.60	3.44	2.26	3.60	1.59	.86	.27	.16	.09	.06	.15
IN.	.55	6.25	3.97	2.60	3.75	1.84	.96	.31	.18	.11	.07	.17

CAL YR 1986 TOTAL 172457.6 MEAN 472 MAX 23300 MIN 8.4 CFSM 1.80 IN. 24.48
WTR YR 1987 TOTAL 146089.0 MEAN 400 MAX 14200 MIN 2.4 CFSM 1.53 IN. 20.74

CUMBERLAND RIVER BASIN

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.

WATER TEMPERATURE: October 1975 to current year.

DISSOLVED OXYGEN: January 1980 to September 1981.

INSTRUMENTATION.--Water-quality monitor since October 1975.

REMARKS.--Interruptions in the record were due to monitor malfunction.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 697 microsiemens, Dec. 6, 1979; minimum, 40 microsiemens, Sept. 4, 1986.

WATER TEMPERATURE: Maximum, 34.2°C, Aug. 26, 1987; minimum, 0.0°C, Jan. 21, 1977, Jan. 21, 22, 1985.

DISSOLVED OXYGEN: Maximum recorded, 13.6 mg/L, Feb. 14, 25, 26, 1981; minimum, 4.4 mg/L, July 18, 19, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 595 microsiemens, June 2; minimum, 137 microsiemens, Nov. 9.

WATER TEMPERATURE: Maximum, 34.2°C, Aug. 26; minimum, 5.1°C, Feb. 10.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	439	432	436	386	383	385	382	373	377
2	---	---	---	433	426	430	394	389	392	381	372	376
3	---	---	---	429	427	429	407	399	398	377	368	373
4	---	---	---	427	417	423	410	407	408	374	367	370
5	---	---	---	420	418	419	410	408	409	370	362	367
6	---	---	---	419	417	418	412	407	410	375	369	373
7	372	370	371	418	409	414	411	407	409	378	375	376
8	371	367	368	415	184	304	407	331	378	383	378	381
9	372	368	370	301	137	200	323	183	235	387	381	383
10	372	368	370	367	308	345	326	247	292	397	389	393
11	374	368	371	367	284	323	353	327	343	405	398	401
12	374	360	368	386	330	365	366	354	361	413	407	410
13	366	354	361	396	387	393	371	366	370	420	414	417
14	399	359	389	404	395	400	377	371	374	427	421	424
15	410	399	403	405	403	404	379	376	378	432	428	430
16	418	410	414	408	404	405	382	377	379	438	434	436
17	428	418	423	408	406	407	382	376	378	445	440	442
18	431	429	430	408	402	405	380	373	377	452	447	450
19	432	429	430	406	402	404	382	377	379	453	222	277
20	432	426	429	405	402	403	385	378	382	366	321	347
21	433	424	429	404	400	402	386	379	382	384	369	377
22	430	421	426	401	398	400	386	378	382	390	384	388
23	426	417	423	397	381	393	383	313	369	393	391	392
24	422	409	416	389	301	334	330	243	282	395	391	393
25	423	367	401	377	330	356	364	332	351	395	276	337
26	416	368	392	339	148	228	376	365	371	353	277	319
27	438	417	429	332	282	312	382	377	380	375	356	367
28	445	440	443	354	337	347	383	381	382	386	376	380
29	444	440	442	367	359	364	382	379	381	393	338	364
30	441	437	438	379	372	375	383	379	381	349	344	347
31	438	433	434	---	---	---	384	374	379	353	347	349
MONTH	---	---	---	439	137	375	412	183	370	453	222	381

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	353	348	350	223	194	209	378	354	371	336	326	331
2	355	348	352	301	253	279	387	378	384	340	328	333
3	357	350	354	339	329	334	384	376	379	349	330	336
4	384	350	372	370	364	367	382	370	375	371	331	347
5	402	368	386	392	375	383	379	355	366	468	356	391
6	410	385	397	403	395	398	374	347	360	507	348	380
7	411	393	401	422	410	417	373	341	355	413	365	384
8	410	395	402	435	378	403	358	331	345	427	348	393
9	404	393	398	403	355	381	349	316	333	416	350	409
10	390	383	386	377	338	353	336	311	324	410	392	400
11	382	370	375	364	317	338	328	306	314	404	396	400
12	381	365	372	344	337	342	317	307	312	402	378	389
13	381	364	371	376	347	360	318	308	313	402	368	378
14	368	361	365	368	345	355	327	296	316	421	373	381
15	364	350	357	347	332	340	329	294	316	387	376	380
16	372	349	360	363	322	342	373	328	356	388	373	378
17	375	354	365	360	314	342	389	375	384	383	376	379
18	385	358	371	369	323	345	394	386	389	387	380	383
19	449	369	398	359	330	344	395	382	387	386	378	381
20	442	343	393	344	327	333	393	369	382	383	379	381
21	427	334	381	350	327	340	401	362	375	386	378	382
22	384	314	346	360	319	342	385	366	373	384	375	377
23	262	180	216	359	327	345	394	363	375	382	187	345
24	333	259	298	360	327	348	378	347	358	357	177	281
25	396	331	361	359	332	348	347	338	342	391	331	360
26	453	394	423	356	310	330	343	327	333	402	356	368
27	454	148	247	325	315	321	334	325	329	379	358	368
28	272	168	226	318	313	316	335	319	327	398	342	369
29	---	---	---	320	299	315	327	315	322	345	209	297
30	---	---	---	322	261	291	332	315	323	366	235	295
31	---	---	---	352	305	331	---	---	---	477	373	423
MONTH	454	148	358	435	194	342	401	294	351	507	177	368
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	551	473	511	248	245	246	293	287	290	318	302	312
2	595	545	568	260	246	253	298	287	293	322	297	304
3	590	344	405	263	257	260	304	291	297	305	299	302
4	412	350	369	267	261	264	327	298	311	306	300	303
5	373	313	337	300	264	277	333	325	328	310	304	306
6	370	320	338	305	300	303	336	329	331	309	304	307
7	335	302	319	306	299	303	337	329	332	310	306	308
8	321	311	315	305	295	302	340	331	336	310	307	309
9	313	306	308	299	270	285	333	327	330	308	306	307
10	306	300	302	281	275	280	339	326	331	306	302	304
11	307	297	301	---	---	---	340	334	338	304	288	301
12	311	298	304	---	---	---	343	327	333	320	289	302
13	306	296	302	---	---	---	342	335	338	305	292	296
14	302	297	300	---	---	---	337	331	334	317	301	307
15	312	300	304	---	---	---	333	313	324	351	317	334
16	311	304	307	---	---	---	325	316	320	362	351	358
17	306	298	301	---	---	---	328	314	321	363	359	362
18	338	296	311	---	---	---	330	309	323	359	354	356
19	357	330	344	---	---	---	306	289	294	356	344	350
20	388	349	362	---	---	---	307	291	299	351	345	348
21	396	335	377	---	---	---	319	308	313	357	349	353
22	321	237	257	---	---	---	344	320	333	362	356	358
23	278	246	259	---	---	---	346	332	341	365	358	362
24	291	260	274	---	---	---	333	327	331	366	360	363
25	280	264	273	---	---	---	333	327	330	368	363	365
26	277	246	265	---	---	---	335	325	331	373	366	369
27	275	256	265	---	---	---	336	328	333	374	369	371
28	270	254	260	---	---	---	329	322	325	375	372	374
29	269	249	259	288	284	285	324	315	322	378	335	361
30	252	248	250	292	284	288	316	311	313	393	327	372
31	---	---	---	292	286	289	325	302	315	---	---	---
MONTH	595	237	322	---	---	---	346	287	322	393	288	334

CUMBERLAND RIVER BASIN

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	16.9	15.5	16.2	13.8	13.3	13.6	8.6	7.6	8.1
2	---	---	---	16.5	15.6	16.1	13.4	12.8	13.2	8.1	7.3	7.7
3	---	---	---	16.0	15.5	15.8	12.8	11.3	12.3	7.2	6.1	6.8
4	---	---	---	16.1	14.8	15.6	11.2	9.7	10.6	7.4	6.6	7.0
5	---	---	---	16.3	15.5	16.0	9.8	8.6	9.2	7.4	6.0	6.7
6	---	---	---	16.5	15.9	16.2	8.9	7.3	8.2	7.3	6.1	6.8
7	19.0	17.7	18.4	16.5	15.9	16.2	9.4	7.4	8.4	7.8	7.1	7.4
8	18.6	16.7	17.7	17.2	16.5	17.0	12.5	9.3	10.5	8.1	7.2	7.5
9	19.5	17.8	18.6	18.0	16.6	17.4	14.5	12.5	13.8	7.8	6.3	7.1
10	19.3	17.8	18.7	16.4	14.9	15.3	14.3	12.0	13.1	8.0	6.9	7.7
11	20.1	19.0	19.5	15.0	14.2	14.5	11.9	11.4	11.6	6.8	6.1	6.5
12	19.4	18.9	19.1	14.4	13.8	14.2	11.5	10.7	11.2	6.6	5.3	5.9
13	19.2	18.6	18.9	13.6	11.0	12.3	10.6	9.1	9.8	6.8	5.3	6.0
14	18.4	16.9	17.5	10.9	9.9	10.4	9.0	8.2	8.6	7.4	6.2	6.7
15	16.8	15.3	16.2	11.3	10.8	11.1	10.1	8.7	9.6	8.4	7.3	7.9
16	15.7	13.9	14.8	12.9	11.3	12.2	11.3	10.0	10.7	8.6	8.1	8.3
17	15.4	13.8	14.6	14.4	12.9	13.7	12.1	10.9	11.5	8.9	8.2	8.6
18	15.7	13.9	14.8	14.9	13.4	14.1	11.9	10.6	11.5	11.0	8.9	9.5
19	15.6	13.9	14.9	13.9	12.7	13.3	10.5	9.8	10.2	11.0	10.2	10.7
20	15.4	13.8	14.7	13.4	12.5	13.1	10.8	9.6	10.1	10.1	9.6	9.8
21	15.4	13.6	14.7	12.6	11.5	12.1	9.6	8.5	9.0	9.6	9.1	9.3
22	15.2	13.8	14.7	11.5	10.0	10.9	8.7	7.4	8.1	9.2	8.3	8.9
23	15.8	14.6	15.3	13.1	11.6	11.8	8.9	7.6	8.1	8.1	7.1	7.4
24	15.9	15.6	15.7	13.5	12.4	13.1	11.2	9.1	10.2	7.2	6.6	6.9
25	16.4	15.5	16.0	14.9	13.5	14.0	11.2	10.8	11.0	7.2	6.2	6.8
26	16.3	15.9	16.1	16.0	15.0	15.5	11.1	10.6	10.9	7.2	6.6	6.8
27	16.3	15.8	16.1	15.0	13.5	14.1	10.9	10.2	10.5	6.6	5.8	6.2
28	16.3	15.0	15.7	13.7	13.2	13.5	10.2	9.1	9.8	7.2	5.6	6.5
29	16.1	14.7	15.5	13.5	12.9	13.2	9.1	8.3	8.7	9.3	7.3	8.2
30	16.5	15.2	15.8	13.2	12.7	13.0	8.7	8.1	8.5	10.3	9.2	9.7
31	16.5	15.0	15.8	---	---	---	8.8	7.9	8.3	10.3	9.3	9.8
MONTH	---	---	---	18.0	9.9	14.1	14.5	7.3	10.3	11.0	5.3	7.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	10.3	9.1	9.7	12.1	10.7	11.4	11.3	8.7	10.1	22.0	20.0	21.1
2	10.7	9.6	10.2	11.8	10.3	11.1	11.9	10.3	11.1	22.2	20.3	21.3
3	11.1	9.8	10.4	12.4	10.3	11.4	11.2	9.8	10.5	22.9	21.0	21.9
4	10.4	9.6	10.1	11.7	9.9	11.0	10.9	9.3	9.9	22.6	21.7	22.2
5	10.7	9.0	9.8	11.3	10.7	11.1	10.9	8.8	9.9	21.9	20.3	21.2
6	10.8	9.0	9.9	13.1	11.2	12.0	11.3	8.7	10.1	21.7	19.9	21.0
7	10.8	8.6	9.7	14.1	11.8	12.8	11.8	10.1	11.0	22.1	20.1	21.1
8	10.0	8.0	9.0	13.8	12.2	13.0	14.4	10.8	12.5	21.8	20.1	21.1
9	7.9	6.3	7.1	13.1	12.5	12.7	16.0	11.9	14.0	21.7	19.6	20.8
10	7.3	5.1	6.3	12.4	10.9	11.6	16.5	13.2	15.0	22.5	20.5	21.5
11	7.9	5.7	6.7	10.8	8.6	9.6	17.5	14.8	16.3	23.1	21.5	22.3
12	9.6	7.5	8.5	10.3	8.4	9.2	17.6	16.2	17.0	23.7	21.8	22.8
13	10.2	7.9	9.1	11.2	8.6	9.9	19.1	16.6	17.9	23.8	22.7	23.4
14	9.7	9.2	9.5	12.4	9.4	10.9	18.9	17.8	18.4	23.9	22.8	23.5
15	10.9	9.7	10.2	13.0	10.6	11.8	17.6	15.7	16.5	24.9	22.8	23.9
16	11.2	10.3	10.7	14.3	12.2	13.1	15.7	14.6	14.9	25.8	23.6	24.7
17	10.7	9.9	10.4	15.5	13.1	14.3	14.6	14.4	14.5	26.6	24.5	25.6
18	9.8	9.0	9.4	15.1	14.1	14.6	16.3	14.0	15.0	26.2	24.7	25.3
19	9.3	8.7	9.0	14.8	13.9	14.4	18.5	15.2	16.7	26.0	24.3	25.1
20	9.5	9.0	9.3	15.1	14.0	14.4	20.4	16.2	18.2	26.4	25.0	25.8
21	10.0	9.6	9.7	15.6	13.2	14.3	21.7	17.6	19.6	26.1	25.5	25.8
22	9.6	8.3	9.2	16.0	13.2	14.6	21.6	18.8	20.2	26.3	24.7	25.5
23	10.7	8.2	9.5	16.5	13.6	15.1	21.3	19.7	20.6	26.5	22.7	25.3
24	10.5	10.0	10.3	16.1	14.6	15.2	20.6	18.9	19.7	24.6	22.4	23.5
25	11.7	9.4	10.6	16.2	14.5	15.4	19.7	17.8	18.8	25.3	24.0	24.6
26	11.6	10.7	11.2	16.9	14.2	15.7	19.9	17.5	18.7	25.7	23.8	24.7
27	11.4	9.0	10.2	16.4	15.0	15.8	20.4	18.2	19.3	26.9	24.6	25.6
28	11.9	10.8	11.2	17.8	14.6	16.3	20.3	18.8	19.6	27.3	25.1	26.2
29	---	---	---	18.0	15.6	16.9	20.6	17.7	19.1	28.5	23.8	26.2
30	---	---	---	16.9	12.1	14.5	22.1	19.2	20.5	25.9	23.4	24.6
31	---	---	---	11.7	9.6	10.4	---	---	---	27.1	24.5	25.8
MONTH	11.9	5.1	9.5	18.0	8.4	13.0	22.1	8.7	15.9	28.5	19.6	23.7

CUMBERLAND RIVER BASIN

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03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.6	25.5	26.1	26.8	25.7	26.3	29.2	27.0	28.1	25.4	22.2	23.9
2	27.4	24.7	25.8	26.6	25.9	26.3	28.6	26.9	27.9	24.8	21.1	23.2
3	27.7	25.3	26.6	26.0	25.2	25.7	29.9	26.7	28.3	25.5	21.4	23.6
4	27.4	25.5	26.7	26.9	24.8	25.8	29.7	27.8	28.7	25.4	21.7	23.6
5	26.5	24.1	25.6	27.2	25.0	26.1	30.2	27.4	28.8	26.7	22.2	24.3
6	26.8	23.7	25.5	28.2	25.3	26.7	30.4	28.1	29.2	25.3	23.9	24.6
7	27.5	24.8	26.3	29.2	26.5	27.9	30.7	28.6	29.6	26.3	24.0	25.1
8	27.9	25.5	26.8	28.6	27.1	28.1	31.1	29.0	30.1	27.1	24.2	25.6
9	28.1	25.7	27.1	28.3	27.1	27.6	31.6	28.8	30.3	25.6	24.0	24.9
10	27.5	26.0	26.8	26.9	26.1	26.4	30.5	29.3	29.9	25.8	24.2	25.1
11	28.0	25.8	27.0	---	---	---	30.3	27.9	29.2	26.1	24.5	25.3
12	27.9	26.5	27.2	---	---	---	30.5	28.0	29.0	25.2	22.6	24.5
13	28.7	25.9	27.3	---	---	---	29.4	27.8	28.6	22.9	22.0	22.5
14	29.7	26.9	28.4	---	---	---	29.4	27.0	28.3	24.2	21.5	22.8
15	29.3	27.5	28.5	---	---	---	29.5	26.5	28.2	24.1	22.4	23.3
16	28.3	27.3	27.8	---	---	---	29.8	26.8	28.3	23.8	22.8	23.4
17	28.2	26.6	27.5	---	---	---	29.4	27.1	28.0	24.6	23.0	23.8
18	28.6	26.4	27.6	---	---	---	27.0	23.4	25.4	25.3	23.6	24.5
19	28.3	27.1	27.7	---	---	---	28.0	25.7	26.9	24.5	22.6	23.7
20	27.6	26.6	27.2	---	---	---	28.9	25.9	27.6	22.7	21.1	22.1
21	28.0	26.1	27.2	---	---	---	30.1	26.0	28.1	22.1	20.5	21.4
22	26.2	23.4	24.5	---	---	---	31.0	26.5	28.9	21.0	19.7	20.5
23	28.3	25.0	26.5	---	---	---	29.7	26.9	28.5	20.5	18.9	19.8
24	28.2	26.6	27.4	---	---	---	27.8	23.2	25.6	20.4	18.4	19.5
25	29.0	26.0	27.5	---	---	---	30.5	21.9	26.3	21.1	18.4	19.8
26	28.4	26.8	27.6	---	---	---	34.2	24.8	28.8	21.9	19.1	20.5
27	27.3	25.1	26.3	---	---	---	32.9	25.4	27.4	22.4	19.7	21.1
28	27.4	24.1	25.8	---	---	---	29.5	24.0	26.7	22.6	19.9	21.4
29	28.0	25.3	26.8	29.5	28.4	29.1	26.7	22.0	24.4	21.4	20.4	20.9
30	27.5	25.9	26.7	29.7	26.9	28.3	26.5	23.3	25.1	20.2	18.7	19.5
31	---	---	---	29.9	26.5	28.2	24.4	22.4	23.5	---	---	---
MONTH	27.4	23.4	26.9	---	---	---	34.2	21.9	27.9	27.1	18.4	22.8

CUMBERLAND RIVER BASIN

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN

LOCATION.--Lat 35°54'10", long 86°25'48", Rutherford County, Hydrologic Unit 05130203, on left bank at Murfreesboro waste treatment plant outfall, 3,000 ft downstream from Sinking Creek, 4.5 mi northwest of the courthouse in Murfreesboro, and at mile 10.7.

DRAINAGE AREA.--177 mi², includes 17 mi² without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1972 to January 1982, January 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 514.95 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow is affected by Murfreesboro sewage treatment plant outflow. An annual average of 7.7 ft³/s is discharged to the West Fork Stones River 25 ft above the control. Murfreesboro produces an average of 10 ft³/s of potable water of which 7.0 ft³/s is transbasin diversion from East Fork Stones River basin with the remainder being produced from a well and a spring located in the West Fork Stones River basin. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--10 years (water years 1973-81, 1987) 324 ft³/s, 24.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,000 ft³/s, Mar. 13, 1975, gage height 23.80 ft; minimum, 3.0 ft³/s, Oct. 13, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	1500	*18,300	*20.80	Jan. 19	0815	4,550	11.41
Nov. 26	1230	6,340	14.01	Feb. 27	1115	7,840	15.61
Dec. 9	1845	6,520	14.24				

Minimum discharge, 5.5 ft³/s, June 10, Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	70	503	187	225	1440	385	45	33	20	12	13
2	58	65	544	166	228	817	280	46	30	45	11	12
3	45	58	496	150	286	588	239	45	21	64	14	12
4	44	52	423	138	226	466	194	41	15	76	17	11
5	39	55	365	128	196	386	165	35	16	68	18	9.6
6	34	50	320	117	174	324	145	32	13	63	15	9.1
7	31	58	274	106	159	274	131	30	12	46	17	11
8	28	1870	379	96	146	244	120	30	12	38	14	11
9	27	10300	4240	91	129	543	108	25	12	32	13	12
10	24	1760	2400	90	118	403	98	24	9.4	31	12	9.5
11	22	1860	1050	89	112	290	96	24	10	30	12	11
12	29	1290	734	82	106	247	88	22	8.6	29	12	19
13	71	796	540	76	98	210	81	20	11	25	11	15
14	256	605	445	72	99	185	136	21	9.1	29	11	14
15	187	527	381	71	117	165	417	37	11	21	10	14
16	133	470	320	68	873	150	333	21	12	19	8.1	12
17	105	419	283	67	748	137	281	19	23	19	12	12
18	84	367	293	177	551	226	228	18	17	16	30	11
19	71	307	263	2620	446	283	182	21	15	13	18	15
20	59	281	231	870	365	194	151	32	13	14	15	17
21	48	269	201	553	367	161	130	40	18	16	13	15
22	41	238	180	435	883	141	112	34	23	16	13	13
23	43	257	311	333	1980	129	100	92	15	15	13	12
24	71	1220	1690	263	784	118	89	41	15	15	14	13
25	299	1190	796	855	549	109	82	28	30	16	13	11
26	318	3530	548	1010	457	97	76	23	34	12	12	12
27	192	1220	434	500	4020	88	68	21	27	14	11	9.3
28	140	774	351	399	2260	85	60	20	25	13	12	11
29	111	593	285	357	---	80	54	20	22	13	11	48
30	94	496	245	329	---	739	49	18	20	14	10	59
31	82	---	211	263	---	630	---	18	---	12	11	---
TOTAL	2822	31047	19736	10758	16702	9949	4678	943	532.1	854	415.1	453.5
MEAN	91.0	1035	637	347	596	321	156	30.4	17.7	27.5	13.4	15.1
MAX	318	10300	4240	2620	4020	1440	417	92	34	76	30	59
MIN	22	50	180	67	98	80	49	18	8.6	12	8.1	9.1
CFSM	.51	5.85	3.60	1.96	3.37	1.81	.88	.17	.10	.16	.08	.09
IN.	.59	6.53	4.15	2.26	3.51	2.09	.98	.20	.11	.18	.09	.10

CAL YR 1986 TOTAL 112959.1 MEAN 309 MAX 10800 MIN 9.1 CFSM 1.75 IN. 23.74
WTR YR 1987 TOTAL 98889.7 MEAN 271 MAX 10300 MIN 8.1 CFSM 1.53 IN. 20.78

CUMBERLAND RIVER BASIN

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03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1986 to current year.

pH: February 1986 to current year.

WATER TEMPERATURE: February 1986 to current year.

DISSOLVED OXYGEN: February 1986 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the record were due to monitor malfunctions.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 477 microsiemens, Feb. 11, 1986; minimum 182 microsiemens, Nov. 26, 1986.

pH: Maximum, 9.0 units, Mar. 24, 1986; minimum, 6.7 units, Aug. 16, 1987.

WATER TEMPERATURES: Maximum, 32.5°C, July 26, 1986; minimum, 3.0°C, Feb. 12, 13, 15, 1986.

DISSOLVED OXYGEN: Maximum, 16.4 mg/L, Jan. 5, 8, 1987; minimum, 2.5 mg/L, Aug. 5, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 448 microsiemens, Nov. 6; minimum 182 microsiemens, Nov. 26.

pH: Maximum, 8.6 units, Jan. 3, 4, Mar. 12, 13; minimum, 6.7 units, Aug. 16.

WATER TEMPERATURES: Maximum, 31.4°C, July 27; minimum, 4.7°C, Feb. 10.

DISSOLVED OXYGEN: Maximum, 16.4 mg/L, Jan. 5, 8; minimum, 2.5 mg/L, Aug. 5.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	385	380	382	438	431	434	395	391	393	424	417	421
2	381	378	380	440	430	436	399	395	397	423	416	420
3	379	378	378	441	436	438	404	400	402	420	409	415
4	379	378	378	443	428	436	412	407	409	417	406	412
5	379	378	378	443	433	436	436	415	422	414	401	408
6	378	377	378	448	441	440	434	421	427	411	398	404
7	378	377	378	442	431	437	425	421	423	408	397	402
8	379	377	378	440	253	365	424	405	415	405	395	399
9	379	378	378	254	202	228	403	221	300	398	392	395
10	379	378	378	344	267	311	313	227	272	---	---	---
11	380	379	379	360	329	346	354	313	333	---	---	---
12	380	379	379	354	336	343	337	322	330	---	---	---
13	389	379	385	359	348	352	346	339	342	---	---	---
14	397	374	385	387	368	377	356	349	352	---	---	---
15	379	374	376	387	384	386	364	358	361	---	---	---
16	401	380	390	390	385	388	370	365	367	---	---	---
17	411	402	407	391	387	388	375	371	373	---	---	---
18	421	409	417	389	386	388	377	371	375	---	---	---
19	422	418	420	388	383	386	381	373	377	---	---	---
20	423	416	420	388	385	387	384	373	380	---	---	---
21	424	419	421	388	381	385	382	376	380	---	---	---
22	428	413	422	385	378	382	421	372	388	---	---	---
23	425	411	419	385	369	379	426	403	417	---	---	---
24	424	390	413	374	291	340	409	337	365	---	---	---
25	408	384	397	337	184	301	386	342	366	---	---	---
26	420	409	414	293	182	240	404	386	396	---	---	---
27	421	419	420	342	258	310	415	404	410	---	---	---
28	420	410	414	369	346	360	420	414	417	---	---	---
29	422	416	418	382	372	377	423	418	420	---	---	---
30	431	423	428	391	386	388	426	422	423	382	371	374
31	436	427	433	---	---	---	425	385	421	387	382	384
MONTH	436	374	398	448	182	372	436	221	382	---	---	---

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	390	386	388	377	358	367	341	322	331	363	351	358
2	407	391	398	384	361	374	346	341	343	359	353	357
3	405	395	399	387	377	382	356	347	353	355	350	353
4	403	393	399	378	370	373	371	356	364	358	351	356
5	400	393	398	372	368	370	375	366	371	359	352	356
6	403	392	398	372	363	367	363	352	359	359	354	357
7	404	385	395	364	360	362	364	347	356	363	358	361
8	404	385	396	362	358	360	359	339	350	366	362	364
9	401	329	387	369	361	363	348	327	339	367	362	365
10	344	326	335	369	343	355	336	323	329	370	365	367
11	343	329	336	351	345	347	341	322	331	373	368	370
12	347	330	338	361	350	354	341	333	337	373	370	371
13	348	329	338	363	347	357	341	337	339	372	369	371
14	343	329	338	365	335	353	343	337	340	376	347	368
15	354	341	348	358	335	348	360	343	350	365	352	357
16	350	292	336	360	334	349	389	354	370	370	366	367
17	298	276	284	359	329	343	409	379	391	373	367	369
18	338	301	322	353	342	348	415	404	408	385	373	378
19	355	336	345	359	353	356	422	412	417	403	388	398
20	380	356	366	358	350	355	423	410	418	404	358	389
21	390	381	387	352	345	349	424	401	414	360	334	351
22	392	348	383	351	347	349	421	397	410	357	332	347
23	338	322	330	357	350	354	413	393	404	363	260	325
24	355	332	343	362	354	359	402	389	397	383	258	325
25	368	356	363	374	361	367	395	387	390	400	385	395
26	371	362	369	380	358	370	390	385	387	411	398	406
27	358	300	335	362	345	354	385	355	378	412	407	409
28	356	305	345	350	344	347	372	368	370	406	391	398
29	---	---	---	349	345	348	367	359	364	395	386	390
30	---	---	---	351	337	344	365	351	360	399	392	396
31	---	---	---	337	323	327	---	---	---	402	394	399
MONTH	407	276	361	387	323	356	424	322	369	412	258	370

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	401	355	387	317	312	315	372	325	340	364	359	362
2	369	349	360	317	299	310	390	328	352	404	360	370
3	362	355	359	321	280	299	391	341	367	406	362	377
4	374	353	361	320	291	308	377	328	348	422	357	379
5	378	366	371	322	303	311	367	319	346	395	354	369
6	378	371	375	330	309	319	382	331	345	390	349	366
7	370	368	369	349	325	336	401	340	357	376	346	360
8	369	359	364	346	325	334	387	341	356	375	352	360
9	361	352	357	331	321	328	377	325	346	357	352	354
10	356	351	353	332	319	325	391	326	338	372	355	359
11	346	336	342	340	335	339	326	322	324	362	323	358
12	345	335	342	343	338	340	325	321	322	352	305	342
13	345	339	343	349	341	346	395	320	328	360	348	356
14	351	341	346	346	340	343	396	324	348	356	351	353
15	350	334	343	351	345	349	347	301	341	353	349	351
16	343	330	340	352	348	350	343	335	338	370	349	359
17	336	320	329	355	344	349	337	330	334	376	369	373
18	340	327	334	352	343	348	349	331	341	379	371	374
19	333	326	330	349	329	345	379	347	358	376	342	361
20	339	331	335	335	327	331	373	352	361	371	362	364
21	341	286	323	355	330	342	368	345	352	387	371	379
22	330	275	306	370	341	347	359	340	346	391	385	387
23	338	329	335	373	333	348	343	307	326	391	380	387
24	336	314	327	360	331	335	341	323	330	391	385	388
25	346	310	326	361	330	339	346	325	332	393	388	390
26	344	334	341	369	335	348	341	332	335	395	390	392
27	332	311	322	381	331	349	346	341	342	398	391	393
28	313	309	311	387	327	340	350	343	345	400	392	394
29	320	311	314	390	332	347	346	343	344	401	235	357
30	319	315	317	378	327	341	353	345	348	388	347	375
31	---	---	---	388	322	337	378	354	360	---	---	---
MONTH	401	275	342	390	280	335	401	301	344	422	235	370

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.9	7.8	8.1	7.8	8.0	7.9	8.5	8.1	8.3	7.9	7.8	7.6
2	7.9	7.2	8.1	7.8	8.0	7.9	8.5	8.1	8.1	7.9	8.0	7.8
3	7.9	7.7	8.0	7.8	8.1	8.0	8.6	8.1	8.3	7.9	8.1	7.9
4	8.0	7.7	8.1	7.8	8.2	8.0	8.6	8.1	8.4	8.0	8.2	7.9
5	7.9	7.7	7.9	7.8	8.2	8.0	8.5	8.1	8.4	7.9	8.2	8.0
6	7.8	7.7	7.9	7.7	8.2	8.0	8.5	8.0	8.4	7.9	8.4	8.0
7	7.9	7.7	7.8	7.7	8.2	8.0	8.4	8.0	8.4	7.9	8.5	7.9
8	8.0	7.9	7.7	7.4	8.1	7.9	8.4	8.0	8.4	7.9	8.4	7.9
9	8.1	7.9	7.6	7.3	8.0	7.5	8.2	8.0	8.4	8.0	8.2	7.9
10	8.1	8.0	7.3	7.2	7.5	7.4	---	---	8.4	8.0	8.4	7.9
11	8.2	8.1	7.4	7.2	7.7	7.4	---	---	8.3	7.9	8.1	7.9
12	8.1	7.9	7.4	7.1	7.7	7.6	---	---	8.4	7.9	8.6	8.0
13	8.0	7.9	7.6	7.3	7.8	7.6	---	---	8.3	7.9	8.6	8.0
14	8.1	7.8	7.8	7.5	7.7	7.6	---	---	8.1	7.9	8.4	8.0
15	8.3	8.0	7.8	7.8	7.7	7.6	---	---	8.3	7.9	8.3	8.0
16	8.3	8.0	7.8	7.8	7.8	7.5	---	---	8.0	7.8	8.2	7.9
17	8.3	7.5	7.9	7.8	7.6	7.4	---	---	7.8	7.8	8.4	7.8
18	8.4	8.1	8.0	7.9	7.6	7.4	---	---	8.0	7.8	8.0	7.7
19	8.4	8.2	8.1	8.0	7.6	7.4	---	---	8.1	7.9	8.1	7.8
20	8.4	8.2	8.1	8.0	7.6	7.4	---	---	8.2	8.0	8.1	7.8
21	8.3	8.2	8.3	8.0	7.7	7.5	---	---	8.2	8.0	8.2	7.8
22	---	---	8.4	8.1	7.6	7.4	---	---	8.1	7.8	8.3	7.9
23	---	---	8.2	8.0	7.8	7.5	---	---	7.8	7.7	8.3	7.9
24	---	---	8.1	7.9	7.8	7.3	---	---	7.9	7.8	8.2	8.0
25	---	---	7.9	7.8	7.8	7.7	---	---	8.1	7.8	8.2	7.9
26	---	---	7.8	7.4	7.7	7.3	---	---	8.0	7.8	8.1	7.7
27	---	---	7.8	7.5	7.6	7.2	---	---	7.9	7.4	7.9	7.3
28	---	---	7.9	7.8	8.3	7.3	---	---	7.8	7.6	7.4	7.2
29	---	---	8.0	7.9	8.4	8.1	---	---	---	---	8.0	7.1
30	8.2	7.9	8.0	7.9	8.3	8.1	8.2	7.9	---	---	7.7	6.9
31	8.2	7.9	---	---	8.5	8.1	8.3	7.9	---	---	7.8	7.0
MONTH	---	---	8.4	7.1	8.5	7.2	---	---	8.4	7.4	8.6	6.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.8	8.3	7.7	7.5	7.4	7.9	7.8	7.5	7.2	7.7	7.4
2	8.1	7.9	---	---	7.5	7.3	7.9	7.8	7.5	7.2	7.6	7.4
3	8.2	7.8	---	---	7.5	7.3	7.9	7.7	7.6	7.2	7.6	7.4
4	8.2	7.9	---	---	7.5	7.3	8.0	7.7	7.8	7.2	7.6	7.4
5	8.2	7.8	7.8	7.8	7.6	7.3	8.1	7.7	7.7	7.5	7.7	7.4
6	8.1	7.8	7.9	7.7	7.6	7.3	8.2	7.9	7.9	7.7	7.6	7.5
7	8.0	7.7	7.8	7.7	7.6	7.3	8.3	7.9	7.9	7.7	7.7	7.5
8	8.0	7.6	7.8	7.7	7.6	7.3	8.3	7.9	7.9	7.7	7.7	7.5
9	7.8	7.4	7.8	7.7	7.7	7.3	8.1	8.0	7.7	7.5	7.7	7.5
10	7.7	7.3	7.9	7.7	7.7	7.3	8.1	8.0	7.8	7.5	7.7	7.5
11	7.7	7.4	7.8	7.7	7.8	7.2	8.2	8.0	7.8	7.5	7.7	7.5
12	7.5	7.3	7.9	7.7	7.6	7.2	8.1	8.0	7.7	7.6	7.7	7.5
13	7.5	7.2	7.9	7.7	7.7	7.2	8.0	7.8	7.8	7.4	7.6	7.5
14	7.2	7.1	8.0	7.6	7.9	7.3	7.9	7.7	7.6	7.3	7.6	7.5
15	7.8	7.1	7.8	7.5	7.9	7.4	7.8	7.4	7.4	7.0	7.6	7.5
16	8.0	7.6	7.9	7.5	7.8	7.4	7.8	7.5	7.4	6.7	7.8	7.4
17	8.0	7.8	7.8	7.5	7.9	7.4	7.9	7.6	7.6	7.5	7.8	7.5
18	8.3	7.9	7.8	7.5	7.9	7.5	8.1	7.6	7.5	7.2	7.7	7.5
19	8.3	7.8	7.7	7.5	7.9	7.5	8.3	7.7	7.5	7.2	7.6	7.5
20	8.2	7.8	7.6	7.4	7.8	7.5	8.3	7.8	7.5	7.4	7.7	7.6
21	8.2	7.8	7.4	7.3	7.7	7.5	8.2	7.8	7.5	7.3	7.7	7.6
22	8.1	7.8	7.4	7.2	7.6	7.4	8.2	7.8	7.5	7.3	7.8	7.6
23	8.1	7.8	7.4	7.1	7.9	7.5	8.0	7.8	7.5	7.3	8.0	7.7
24	8.1	7.9	7.2	7.0	7.9	7.6	8.1	7.8	7.5	7.4	8.0	7.7
25	8.2	7.9	7.3	7.2	7.9	7.5	8.0	7.7	7.4	7.1	8.0	7.8
26	8.2	7.9	7.4	7.2	8.1	7.6	7.9	7.6	7.2	7.0	8.1	7.8
27	8.2	7.5	7.5	7.3	8.0	7.7	7.9	7.6	7.1	6.9	8.2	8.0
28	8.2	7.9	7.6	7.4	8.0	7.7	7.6	7.4	7.3	6.9	8.1	8.0
29	8.2	7.9	7.6	7.4	7.9	7.8	7.5	7.2	7.4	7.3	8.0	7.8
30	8.2	7.9	7.5	7.4	8.0	7.7	7.4	7.2	7.5	7.3	8.0	7.9
31	---	---	7.5	7.3	---	---	7.6	7.3	7.7	7.4	---	---
MONTH	8.3	7.1	8.3	7.0	8.1	7.2	8.3	7.2	7.9	6.7	8.2	7.4

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	26.0	25.5	26.0	17.5	16.0	17.0	13.5	13.5	13.5	8.0	7.0	7.5
2	26.5	24.5	25.5	17.5	16.0	17.0	13.5	12.5	13.0	7.5	6.5	7.0
3	26.0	24.5	25.5	16.5	16.0	16.5	12.5	11.5	12.0	7.0	5.5	6.5
4	26.5	24.5	25.5	17.0	15.0	16.0	11.5	10.0	10.5	7.5	6.0	6.5
5	26.0	22.5	24.5	17.0	16.0	16.5	10.0	8.5	9.5	7.5	5.5	6.5
6	22.5	20.0	21.0	16.5	16.0	16.5	9.0	7.5	8.5	7.5	5.5	6.5
7	19.5	17.0	18.0	17.0	16.0	16.5	9.0	7.5	8.5	7.5	6.5	7.0
8	19.0	16.0	17.5	17.5	17.0	17.5	11.0	9.0	9.5	8.0	6.5	7.0
9	20.5	18.0	19.0	18.5	17.0	18.0	14.0	11.0	12.5	7.0	5.5	6.0
10	20.0	18.0	19.0	17.0	15.0	15.5	14.0	11.0	12.5	---	---	---
11	21.0	19.0	20.0	15.0	13.5	14.5	11.0	10.0	10.5	---	---	---
12	20.0	19.0	19.5	13.5	13.0	13.5	10.5	10.0	10.5	---	---	---
13	19.5	19.0	19.5	13.0	10.0	11.5	10.0	8.5	9.0	---	---	---
14	19.0	18.0	18.5	10.0	9.5	9.5	8.5	8.0	8.5	---	---	---
15	18.0	17.0	17.5	11.0	10.0	10.5	10.0	8.5	9.5	---	---	---
16	17.0	15.0	16.0	12.5	11.0	12.0	11.5	10.0	10.5	---	---	---
17	16.0	13.5	15.0	14.0	12.5	13.5	12.0	11.0	11.5	---	---	---
18	16.5	14.5	15.5	15.5	13.5	14.5	12.0	10.5	11.5	---	---	---
19	16.5	14.5	15.5	14.0	13.0	13.5	10.5	9.5	10.0	---	---	---
20	16.5	14.5	15.5	13.0	12.5	13.0	11.0	9.5	10.0	---	---	---
21	17.0	14.5	16.0	13.0	11.0	12.0	10.0	9.0	9.5	---	---	---
22	16.5	14.5	15.5	12.0	10.0	11.0	9.0	8.0	8.5	---	---	---
23	16.5	14.5	15.5	12.5	11.5	12.0	8.5	7.5	8.0	---	---	---
24	16.5	15.5	16.0	12.5	12.5	12.5	9.5	8.0	8.5	---	---	---
25	16.5	15.5	16.0	14.5	12.5	13.0	10.0	9.5	9.5	---	---	---
26	16.5	16.0	16.0	16.0	14.5	15.5	10.0	10.0	10.0	---	---	---
27	16.5	15.5	16.0	15.0	13.5	14.0	10.0	9.5	9.5	---	---	---
28	17.0	15.0	16.0	13.5	13.0	13.0	9.5	8.5	9.0	---	---	---
29	17.5	14.5	16.0	13.5	12.5	13.0	8.5	7.5	8.0	---	---	---
30	17.0	15.5	16.5	13.5	12.5	13.0	8.0	7.5	8.0	9.2	8.0	8.9
31	17.5	15.0	16.5	---	---	---	8.5	7.6	7.5	9.5	7.8	8.4
MONTH	26.5	13.5	18.4	18.5	9.5	14.1	14.0	7.5	9.9	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	9.4	7.8	8.6	10.9	10.0	10.6	11.0	8.0	9.5	23.0	21.0	22.0
2	9.6	8.8	9.2	11.2	9.6	10.5	10.5	9.5	10.0	23.0	21.0	22.0
3	10.3	9.1	9.5	12.0	10.1	11.0	10.5	9.0	9.5	23.5	21.5	22.5
4	9.7	8.6	9.1	12.1	10.0	11.0	11.0	8.0	9.5	23.5	22.0	23.0
5	10.2	8.4	9.1	11.5	10.2	11.0	10.5	8.0	9.5	22.5	20.5	21.5
6	10.2	8.5	9.3	13.5	11.0	12.1	11.0	8.0	9.5	21.5	19.5	21.0
7	10.8	8.3	9.4	14.2	11.5	12.7	11.0	9.5	10.5	22.5	20.0	21.5
8	10.1	7.3	8.8	13.3	12.6	12.9	15.0	10.0	12.5	22.5	20.0	21.5
9	8.2	5.6	6.9	13.4	12.5	12.9	16.5	11.5	14.0	22.5	19.5	21.0
10	7.8	4.7	6.3	13.8	12.4	13.0	17.0	13.0	15.0	23.5	20.5	22.0
11	8.1	5.1	6.6	12.3	10.6	11.5	18.5	15.0	16.5	24.0	21.5	23.0
12	10.0	7.2	8.6	12.4	9.9	11.0	18.0	16.5	17.0	24.5	22.0	23.0
13	10.2	7.5	9.0	13.0	10.1	11.2	20.0	16.5	18.0	24.5	22.5	23.5
14	9.6	8.8	9.2	13.8	10.4	11.9	19.5	18.0	18.5	25.5	22.5	24.0
15	10.7	9.3	10.0	13.9	11.4	12.6	17.5	16.7	17.0	25.5	23.0	24.0
16	10.5	9.7	10.2	15.3	12.7	13.8	17.0	14.0	15.5	26.5	23.5	24.5
17	9.7	8.8	9.3	16.0	13.1	14.6	14.5	13.5	14.0	27.0	24.0	25.5
18	8.7	6.5	8.4	14.7	13.3	14.1	17.0	12.5	14.5	25.5	24.0	25.0
19	8.3	7.8	8.1	15.7	13.2	14.3	19.0	14.0	16.5	26.0	23.5	24.5
20	8.7	7.9	8.3	15.9	13.8	14.6	21.0	15.5	18.0	26.0	24.5	25.5
21	9.1	8.5	8.8	16.8	12.9	14.7	22.0	17.0	19.5	25.4	24.2	25.0
22	8.7	7.7	8.6	17.3	13.3	15.2	22.0	18.5	20.5	26.0	23.8	24.9
23	8.7	7.0	7.9	18.0	13.6	15.8	22.0	19.5	20.5	27.4	23.2	25.1
24	9.4	8.6	9.0	16.4	14.5	15.3	20.5	18.5	19.0	24.6	22.5	23.7
25	10.7	9.8	9.9	17.3	14.1	15.7	20.5	17.0	18.5	25.1	23.8	24.5
26	11.0	10.3	10.7	17.6	13.7	15.8	21.0	17.5	19.0	27.7	24.1	25.8
27	10.6	8.5	9.3	17.0	15.8	16.5	22.3	18.0	20.3	28.9	25.7	27.3
28	10.5	9.7	10.1	19.0	15.0	17.0	22.0	19.0	20.5	30.0	26.8	28.3
29	---	---	---	19.0	16.0	18.0	21.5	17.5	20.0	30.2	26.8	28.4
30	---	---	---	18.0	11.5	14.5	23.5	19.5	21.5	27.9	25.7	26.6
31	---	---	---	11.5	9.0	10.0	---	---	---	27.4	24.6	26.1
MONTH	11.0	4.7	8.9	19.0	9.0	13.4	23.5	8.0	15.8	30.2	19.5	24.1

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.9	25.4	26.2	28.6	26.9	27.6	29.8	27.9	28.8	26.3	22.3	24.0
2	27.3	24.7	26.1	27.5	26.7	27.2	29.5	27.5	28.6	25.9	21.5	23.5
3	28.5	25.6	26.9	27.2	26.3	26.7	31.0	27.4	29.0	25.8	21.4	23.8
4	27.9	25.4	26.6	27.7	25.4	26.5	29.6	27.7	28.5	25.3	22.1	23.9
5	27.0	23.6	25.3	28.4	25.8	27.1	29.9	26.7	28.3	26.6	22.9	24.7
6	27.3	22.7	25.0	29.5	26.6	28.0	29.6	27.2	28.5	25.5	24.3	24.9
7	28.1	23.6	25.9	30.2	27.8	29.0	30.2	27.5	28.8	26.1	24.1	25.1
8	28.6	24.1	26.3	29.7	28.1	29.0	31.0	27.6	29.4	26.6	24.1	25.2
9	28.4	24.4	26.5	29.3	28.0	28.6	30.6	27.7	29.3	26.8	23.3	24.9
10	28.0	24.7	26.5	28.9	27.2	28.1	30.3	28.2	29.2	26.4	23.7	25.2
11	28.4	25.2	26.8	29.8	27.3	28.5	30.2	26.6	28.5	26.8	24.2	25.4
12	27.3	25.2	26.2	30.2	27.6	29.0	29.1	26.7	28.1	26.4	24.1	25.2
13	28.4	24.6	26.4	29.6	28.0	28.8	29.4	26.6	28.0	24.8	23.8	24.4
14	29.4	25.2	27.4	28.9	26.6	27.7	30.5	26.4	28.4	25.7	22.6	24.1
15	29.0	25.9	27.4	27.5	25.2	26.5	30.2	26.3	28.3	25.7	22.8	24.4
16	27.7	25.6	26.7	28.5	24.8	26.6	30.4	26.8	28.4	25.0	23.7	24.4
17	27.6	25.3	26.3	29.5	25.6	27.6	28.8	27.2	28.0	26.3	23.5	24.7
18	28.2	25.6	26.8	29.5	26.1	28.0	28.6	26.0	27.3	26.4	23.6	24.9
19	27.5	26.0	26.6	29.6	26.4	28.2	29.6	27.0	28.2	24.9	22.8	23.9
20	27.3	25.3	26.2	30.2	26.4	28.4	29.5	25.8	27.7	24.0	21.0	22.4
21	27.9	25.2	26.0	29.6	26.9	28.4	29.7	25.6	27.8	22.5	20.1	21.2
22	27.7	24.7	26.1	29.9	26.9	28.4	30.2	26.2	28.3	20.6	19.0	19.7
23	29.6	25.9	27.6	29.2	26.9	27.8	29.3	27.3	28.3	20.4	17.2	18.8
24	29.1	26.8	27.8	29.5	26.0	27.7	28.2	25.0	26.8	20.8	16.8	18.6
25	28.7	25.9	27.3	30.7	26.3	28.7	28.9	24.6	26.8	21.4	17.3	19.2
26	28.3	26.6	27.6	30.8	27.1	29.1	29.2	26.2	27.8	22.0	18.2	20.1
27	27.6	25.4	26.7	31.4	27.7	29.5	28.4	26.7	27.6	22.5	18.9	20.6
28	27.3	24.5	26.1	30.9	27.5	29.2	27.7	25.9	26.7	22.9	19.6	21.1
29	29.5	25.7	27.4	30.6	27.5	29.1	26.2	24.4	25.3	21.1	20.3	20.6
30	29.0	26.6	27.9	30.0	27.1	28.6	25.7	22.7	24.3	20.4	19.0	19.8
31	---	---	---	30.5	26.8	28.8	24.9	22.3	23.6	---	---	---
MONTH	29.6	22.7	26.6	31.4	24.8	28.1	31.0	22.3	27.8	26.8	16.8	23.0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.7	7.9	9.4	10.5	10.1	10.2	15.2	11.0	12.5
2	---	---	---	11.7	7.7	9.3	10.5	10.1	10.3	15.0	10.8	12.4
3	---	---	---	10.1	7.5	8.6	11.6	10.3	10.8	16.2	11.0	13.0
4	---	---	---	11.6	7.4	9.2	12.4	10.8	11.4	16.1	10.9	12.9
5	---	---	---	8.3	7.0	7.6	13.0	11.2	11.8	16.4	10.9	13.1
6	---	---	---	9.1	6.6	7.7	13.5	11.5	12.2	16.3	10.8	13.1
7	---	---	---	8.2	6.1	7.4	13.8	11.5	12.3	15.7	10.6	12.7
8	---	---	---	8.4	6.8	7.6	11.9	10.7	11.3	16.4	10.5	13.0
9	---	---	---	---	---	---	11.0	9.3	10.1	16.0	10.8	11.9
10	---	---	---	---	---	---	11.1	9.1	10.2	---	---	---
11	---	---	---	---	---	---	11.7	11.2	11.4	---	---	---
12	---	---	---	---	---	---	12.0	11.3	11.5	---	---	---
13	---	---	---	---	---	---	13.0	11.5	12.1	---	---	---
14	---	---	---	11.5	10.7	11.0	13.4	12.0	12.5	---	---	---
15	---	---	---	10.9	10.1	10.6	13.5	11.6	12.3	---	---	---
16	---	---	---	10.4	9.7	10.1	13.7	11.3	12.1	---	---	---
17	---	---	---	10.4	9.4	9.9	12.3	10.9	11.4	---	---	---
18	---	---	---	10.8	9.4	9.8	13.8	10.8	11.9	---	---	---
19	---	---	---	11.2	9.5	10.1	15.4	11.4	13.0	---	---	---
20	---	---	---	10.4	9.6	9.9	14.7	11.3	13.0	---	---	---
21	---	---	---	12.2	9.8	10.7	15.3	11.0	12.6	---	---	---
22	12.5	10.2	11.1	12.8	10.1	11.1	15.3	11.4	12.6	---	---	---
23	---	---	---	10.7	9.7	10.2	12.7	10.8	11.5	---	---	---
24	---	---	---	10.4	9.7	10.2	11.2	10.9	11.1	---	---	---
25	---	---	---	10.3	9.8	10.1	11.1	10.8	10.9	---	---	---
26	---	---	---	9.7	8.3	9.1	11.8	10.9	11.2	---	---	---
27	---	---	---	10.1	9.0	9.8	12.6	10.9	11.4	---	---	---
28	---	---	---	10.8	10.2	10.4	13.2	10.9	11.7	---	---	---
29	---	---	---	11.0	10.2	10.5	14.3	11.1	12.2	---	---	---
30	10.4	7.4	9.1	10.9	10.1	10.4	12.9	11.0	11.6	13.6	11.6	13.1
31	11.8	8.6	10.1	---	---	---	15.2	11.1	12.5	---	---	---
MONTH	---	---	---	---	---	---	15.4	9.1	11.6	---	---	---

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	11.0	6.4	8.6
2	---	---	---	---	---	---	---	---	---	10.4	6.3	8.3
3	---	---	---	---	---	---	---	---	---	10.7	6.0	8.2
4	---	---	---	---	---	---	---	---	---	9.0	5.8	7.3
5	---	---	---	---	---	---	---	---	---	8.4	6.0	7.0
6	---	---	---	---	---	---	---	---	---	7.8	5.9	6.9
7	---	---	---	---	---	---	---	---	---	7.7	5.7	6.7
8	---	---	---	---	---	---	---	---	---	7.6	5.8	6.8
9	---	---	---	---	---	---	---	---	---	7.8	6.1	7.0
10	---	---	---	---	---	---	---	---	---	8.0	6.1	7.1
11	---	---	---	---	---	---	---	---	---	7.7	6.1	6.9
12	---	---	---	---	---	---	---	---	---	8.2	6.0	7.0
13	---	---	---	---	---	---	---	---	---	8.3	6.1	7.1
14	---	---	---	---	---	---	---	---	---	9.4	6.1	7.6
15	---	---	---	---	---	---	---	---	---	8.8	5.4	7.1
16	---	---	---	---	---	---	---	---	---	9.8	6.0	7.7
17	---	---	---	---	---	---	---	---	---	9.5	6.3	7.8
18	---	---	---	---	---	---	---	---	---	9.2	6.1	7.4
19	---	---	---	---	---	---	---	---	---	8.5	6.1	7.1
20	13.0	11.5	12.1	---	---	---	---	---	---	7.7	6.0	6.7
21	13.5	11.1	11.9	---	---	---	---	---	---	6.7	4.9	5.7
22	11.8	10.9	11.3	---	---	---	---	---	---	7.1	4.7	5.8
23	11.6	10.8	11.3	---	---	---	---	---	---	8.1	5.2	6.2
24	11.4	10.6	10.9	---	---	---	---	---	---	6.6	4.9	5.8
25	12.6	10.3	11.2	---	---	---	---	---	---	6.7	5.5	6.1
26	11.6	10.0	10.6	---	---	---	---	---	---	7.6	5.7	6.6
27	16.1	10.3	13.2	12.2	9.7	11.1	9.8	7.2	8.9	8.7	6.0	7.2
28	---	---	---	13.8	9.0	10.9	9.9	6.3	8.0	8.5	6.0	7.1
29	---	---	---	12.7	8.7	10.3	10.8	6.9	8.6	7.4	5.6	6.4
30	---	---	---	10.6	8.5	8.0	11.4	6.7	8.8	6.7	5.1	5.8
31	---	---	---	---	---	---	---	---	---	6.9	5.0	5.9
MONTH	---	---	---	---	---	---	---	---	---	11.0	4.7	6.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.1	5.2	6.2	6.4	4.9	5.5	6.1	3.5	4.5	6.4	5.1	5.7
2	8.1	5.2	6.6	6.3	4.5	5.3	5.4	3.4	4.2	6.9	5.0	6.0
3	7.8	5.7	6.7	6.5	4.9	5.7	6.1	3.3	4.5	6.5	4.7	5.9
4	8.1	5.6	6.8	7.8	4.7	5.9	4.6	2.8	3.7	6.7	4.4	5.4
5	8.5	6.0	7.1	8.2	5.8	6.4	4.7	2.5	3.5	7.1	4.4	5.5
6	8.6	5.9	7.2	8.8	5.2	6.8	5.2	2.9	4.0	6.1	4.2	4.9
7	8.8	5.7	7.2	9.0	5.2	6.9	5.7	3.3	4.4	6.4	4.1	5.0
8	9.5	5.8	7.6	7.9	4.9	6.4	6.6	3.4	5.0	6.5	4.3	5.1
9	9.8	5.9	7.7	6.2	4.8	5.6	6.5	3.7	5.0	6.4	4.0	5.0
10	9.8	5.9	7.8	6.5	4.7	5.6	6.3	3.6	4.7	6.0	4.0	4.8
11	10.7	5.7	7.9	6.7	4.9	5.8	6.5	3.5	4.9	6.0	3.5	4.5
12	9.2	5.8	7.1	6.8	4.8	5.8	6.2	3.3	4.7	5.9	4.2	5.1
13	9.5	5.1	7.2	5.9	4.7	5.3	6.5	3.1	4.7	6.2	4.1	5.1
14	11.2	5.6	8.2	6.4	4.6	5.5	6.4	3.2	5.0	6.6	4.4	5.4
15	11.4	6.2	8.3	6.6	5.3	5.9	6.6	3.1	5.0	7.1	4.8	5.9
16	9.4	5.3	7.3	7.3	5.6	6.4	---	---	---	6.1	4.4	5.5
17	9.5	5.7	7.3	8.7	5.5	6.7	---	---	---	5.5	3.6	4.4
18	9.2	5.6	7.2	9.3	5.1	7.1	---	---	---	5.8	3.5	4.4
19	9.1	5.9	7.1	10.0	5.6	7.7	---	---	---	5.6	3.9	4.9
20	8.3	5.0	6.3	9.9	5.8	7.7	---	---	---	6.0	4.8	5.4
21	7.4	4.8	6.0	8.5	5.8	7.1	---	---	---	6.7	5.1	5.9
22	7.3	4.8	5.9	8.2	4.8	6.4	---	---	---	7.4	5.7	6.5
23	8.7	5.4	6.9	6.7	4.4	5.4	---	---	---	7.8	6.3	6.9
24	8.2	5.5	6.6	7.0	3.9	5.4	6.6	5.1	6.4	8.0	6.4	7.0
25	8.5	4.5	6.2	8.0	4.4	6.0	7.4	4.6	5.8	8.1	6.4	7.0
26	9.2	4.8	6.9	8.1	4.5	6.0	7.2	4.5	5.6	8.2	6.3	7.1
27	8.2	5.3	6.8	8.5	4.5	6.1	5.3	3.4	4.4	8.3	6.1	7.0
28	7.7	5.6	6.7	7.6	4.0	5.6	5.6	3.2	4.2	8.1	6.0	6.8
29	7.4	5.6	6.4	7.3	3.9	5.4	6.3	3.8	4.9	7.4	5.7	6.5
30	7.2	5.2	6.1	6.8	3.8	5.1	6.9	4.3	5.3	7.6	6.4	6.9
31	---	---	---	6.9	3.5	5.0	6.8	4.3	5.4	---	---	---
MONTH	11.4	4.5	7.0	10.0	3.5	6.05	---	---	---	8.3	3.5	5.7

CUMBERLAND RIVER BASIN

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03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN

LOCATION.--Lat 35°56'25", long 86°27'54", Rutherford County, Hydrologic Unit 05130203, near left bank at county bridge on Sulphur Springs Road, 400 ft upstream from Nice's Mill dam, 1.6 mi downstream from Overall Creek, 4.2 mi southeast of Smyrna, and at mile 6.4.

DRAINAGE AREA.--237 mi², includes 43 mi² without surface drainage.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 21, 1986, at site on right bank, 40 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--22 years, 428 ft³/s, 24.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,800 ft³/s, Mar. 13, 1975, gage height, 19.18 ft from rating curve extended above 14,000 ft³/s on basis of area-velocity study at gage height 17.11 ft and flood routing from Murfreesboro gage and Overall Creek at gage heights 16.65 ft and 17.39 ft; no flow Aug. 9, 10, Sept. 12, 13, 1983, result of upstream regulation and diversion; minimum natural discharge, 2.2 ft³/s, Nov. 6-8, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	1700	*16,400	*14.62	No other peak greater than base discharge.			

Minimum discharge, 11 ft³/s, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	108	660	326	379	2050	490	77	78	42	36	20
2	86	98	749	292	366	1230	397	77	85	54	24	21
3	66	92	705	263	421	971	353	79	47	165	24	20
4	71	83	594	241	369	792	313	72	36	144	27	20
5	62	92	516	224	322	679	279	69	33	203	29	19
6	53	87	453	201	290	599	252	63	31	172	25	19
7	48	96	402	182	265	536	229	60	28	133	26	19
8	44	2180	467	159	242	490	200	57	28	96	24	21
9	42	11100	5580	143	215	695	167	52	30	88	22	20
10	39	2280	3430	138	191	591	140	47	28	75	21	21
11	38	2430	1370	135	176	487	132	46	27	74	21	22
12	46	1750	1000	116	162	441	117	45	25	67	20	23
13	105	1070	792	99	145	400	103	43	26	59	20	29
14	345	837	656	88	140	363	211	40	26	70	21	26
15	235	718	570	84	153	333	629	54	24	52	21	26
16	190	636	501	79	810	306	491	41	25	50	20	28
17	152	567	450	75	882	282	452	38	37	40	21	29
18	124	506	442	200	707	340	390	36	31	31	30	24
19	103	441	408	3390	604	454	332	37	29	24	28	29
20	83	405	366	1130	522	362	286	39	26	23	24	31
21	69	386	327	775	513	313	253	53	27	24	21	24
22	60	344	295	619	1050	279	213	59	43	27	20	22
23	52	345	399	511	2640	254	176	137	32	26	20	20
24	58	1200	2090	431	1070	233	146	188	32	28	22	20
25	248	1330	1070	1010	802	215	127	121	62	31	22	19
26	346	5040	791	1310	665	175	117	136	93	29	22	18
27	255	1680	640	742	5410	150	107	73	61	26	21	18
28	203	1060	547	587	3040	137	97	50	58	31	22	16
29	162	838	473	528	---	123	89	47	51	101	22	32
30	139	682	415	505	---	707	84	70	40	51	20	102
31	125	---	366	433	---	786	---	89	---	42	20	---
TOTAL	3702	58481	27524	15016	22551	15773	7372	2095	1199	2078	716	758
MEAN	119	1283	888	484	805	509	246	67.6	40.0	67.0	23.1	25.3
MAX	346	11100	5580	3390	5410	2050	629	188	93	203	36	102
MIN	38	83	295	75	140	123	84	36	24	23	20	16
CFSM	.50	5.41	3.75	2.04	3.40	2.15	1.04	.29	.17	.28	.10	.11
IN.	.58	6.04	4.32	2.36	3.54	2.48	1.16	.33	.19	.33	.11	.12

CAL YR 1986 TOTAL 147444 MEAN 404 MAX 12200 MIN 17 CFSM 1.70 IN. 23.14
WTR YR 1987 TOTAL 137265 MEAN 376 MAX 11100 MIN 16 CFSM 1.59 IN. 21.54

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.

WATER TEMPERATURE: March 1974 to current year.

INSTRUMENTATION.--Water-temperature recorder March 1974 to September 1975, water-quality monitor October 1975 to current year.

REMARKS.--Records good. Interruptions in the record were due to monitor malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 631 microsiemens, Nov. 18, 1980; minimum, 83 microsiemens, May 19, 1983.

WATER TEMPERATURES: Maximum, 30.0°C, July 12, 1976, Aug. 14, 1985, July 20, 1986; minimum, 0.5°C, Jan. 21, 1985.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 593 microsiemens, Sept. 14, 15; minimum, 133 microsiemens, Nov. 9.

WATER TEMPERATURES: Maximum, 28.4°C, July 20; minimum, 6.0°C, Jan. 26, 27.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	418	361	395	469	465	467	406	403	405	420	415	418
2	390	353	372	467	462	465	415	409	412	419	415	417
3	385	349	370	469	460	465	419	418	419	419	416	418
4	382	354	368	467	460	464	429	420	425	422	416	419
5	390	363	381	469	464	467	432	429	431	422	416	419
6	410	387	400	470	464	467	438	433	436	426	416	421
7	420	395	407	470	458	467	438	435	436	425	418	420
8	416	395	405	460	217	390	434	405	428	426	417	421
9	402	381	397	214	133	171	412	181	285	424	413	419
10	412	388	401	349	223	299	320	203	270	422	412	419
11	403	394	399	353	318	335	362	323	345	426	412	421
12	408	393	400	357	314	334	378	361	371	424	418	420
13	416	399	408	387	359	375	385	377	382	420	414	417
14	422	390	412	398	387	393	390	385	388	421	416	419
15	---	---	---	404	399	402	394	388	392	424	420	422
16	---	---	---	407	403	405	396	393	395	426	424	425
17	---	---	---	410	399	407	400	396	398	426	419	423
18	---	---	---	413	409	411	403	397	401	425	327	410
19	---	---	---	416	412	414	401	397	399	346	202	260
20	462	460	461	418	414	416	403	398	401	353	268	316
21	466	459	463	421	416	419	402	397	400	384	355	371
22	469	465	467	421	417	419	403	396	400	397	386	392
23	474	465	468	423	408	400	401	354	388	405	397	401
24	474	468	472	409	329	377	351	268	304	411	405	409
25	467	419	452	348	329	333	354	287	322	412	350	382
26	437	406	426	321	228	263	384	357	373	345	289	303
27	448	438	443	345	280	317	397	386	393	362	312	338
28	452	439	449	374	349	362	405	399	403	390	363	378
29	460	438	452	390	377	384	410	407	409	402	390	397
30	459	447	453	400	394	397	415	409	413	409	402	405
31	466	448	463	---	---	---	418	415	417	414	409	412
MONTH	---	---	---	470	133	389	438	181	388	426	202	397

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	416	414	415	319	258	289	367	334	347	427	421	424
2	416	414	415	349	320	337	394	368	384	432	421	427
3	426	418	424	362	350	357	413	395	407	427	415	421
4	425	423	424	367	363	365	418	412	414	438	417	425
5	425	422	423	373	368	371	419	410	415	469	440	455
6	424	420	422	375	370	374	415	410	413	492	470	480
7	424	422	423	378	371	375	418	403	410	509	493	499
8	422	421	421	380	371	377	418	407	411	520	509	514
9	422	420	421	382	371	376	411	393	400	530	519	524
10	419	418	418	376	358	366	406	386	395	537	530	533
11	419	418	418	367	358	362	398	382	390	542	536	538
12	420	418	419	376	369	373	394	385	389	544	539	541
13	421	419	420	387	375	383	396	387	392	544	536	542
14	421	419	420	386	376	382	391	372	379	548	540	544
15	422	420	421	387	373	381	414	372	392	550	543	547
16	422	399	417	402	377	390	393	383	389	550	541	546
17	396	352	366	399	390	396	391	382	385	547	543	546
18	390	352	371	393	370	384	403	392	399	549	544	546
19	407	391	401	388	372	384	410	401	407	549	546	548
20	419	409	415	394	383	388	415	410	413	549	543	546
21	423	419	421	389	380	384	422	413	418	554	549	551
22	424	387	419	388	376	382	422	414	417	554	542	545
23	371	270	298	392	375	385	429	416	421	546	531	539
24	369	317	344	401	384	391	446	429	438	524	492	504
25	405	370	388	403	397	399	456	447	451	513	507	511
26	430	405	418	407	398	403	468	456	461	512	504	508
27	433	175	278	405	399	403	478	468	473	509	502	505
28	294	252	273	405	396	401	486	479	482	521	509	513
29	---	---	---	403	396	401	---	---	---	527	519	522
30	---	---	---	396	234	336	---	---	---	---	---	---
31	---	---	---	332	225	276	---	---	---	---	---	---
MONTH	433	175	397	407	225	373	486	334	410	554	415	495

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	430	423	428	392	380	383	522	514	517	539	535	537
2	456	403	428	393	387	391	522	501	511	542	532	537
3	437	408	424	399	326	365	509	497	504	544	538	541
4	457	433	446	340	324	335	512	498	504	543	525	533
5	465	452	457	341	318	327	513	494	504	536	527	532
6	464	441	454	336	328	331	490	479	484	542	535	538
7	473	457	463	352	334	341	481	474	478	549	540	544
8	468	459	465	374	350	358	486	479	482	555	545	550
9	470	456	462	379	374	377	487	480	483	568	558	563
10	465	456	461	386	378	382	486	477	481	574	566	569
11	460	453	458	392	381	385	481	473	478	574	566	566
12	458	450	455	393	386	390	487	477	482	549	536	542
13	459	443	454	392	384	388	486	478	482	559	534	546
14	471	445	461	389	372	380	495	484	488	593	559	582
15	475	457	468	389	372	378	508	495	500	593	550	571
16	471	464	469	407	389	399	512	504	506	550	510	524
17	468	451	459	416	401	406	511	487	505	517	512	513
18	460	423	445	427	415	419	536	484	494	528	516	523
19	424	414	419	426	416	422	543	506	525	536	528	532
20	420	410	414	427	416	422	503	457	475	552	537	542
21	430	421	424	443	423	432	456	445	451	561	552	556
22	452	425	436	443	427	436	473	453	459	560	543	557
23	424	387	405	483	428	478	485	474	480	542	518	527
24	389	386	388	485	468	475	495	485	489	516	503	507
25	419	389	401	498	476	484	503	495	499	517	506	510
26	422	376	406	518	494	505	502	491	496	543	521	532
27	380	376	378	518	505	513	493	487	490	575	549	564
28	381	375	377	510	501	506	497	491	493	582	575	578
29	382	376	378	512	441	470	506	497	500	579	539	570
30	384	379	381	501	465	484	525	510	517	540	372	456
31	---	---	---	514	499	505	535	526	529	---	---	---
MONTH	475	375	432	518	318	415	543	445	493	593	372	541

CUMBERLAND RIVER BASIN

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.0	18.0	20.0	17.0	15.5	16.5	14.5	14.0	14.5	9.5	8.5	9.0
2	19.5	17.5	18.5	17.0	16.0	16.5	14.5	14.0	14.0	9.0	8.5	9.0
3	19.5	17.5	18.5	16.5	16.0	16.0	14.0	12.5	13.5	8.5	8.0	8.0
4	19.5	18.0	18.5	16.0	15.0	15.5	13.0	11.6	11.1	9.0	8.5	8.5
5	19.5	18.0	19.0	16.5	15.5	16.0	12.0	10.5	11.0	9.0	8.0	8.5
6	20.5	19.5	20.0	16.5	16.0	16.0	10.5	9.5	10.0	10.0	8.5	9.0
7	21.0	19.5	20.5	16.5	16.0	16.0	11.5	10.0	10.5	10.0	9.0	9.5
8	20.5	20.0	20.0	17.0	16.5	16.5	12.5	11.5	12.0	10.0	9.0	9.5
9	20.0	19.6	19.9	17.5	16.5	17.0	14.0	13.0	13.5	10.0	8.5	9.0
10	20.5	19.5	20.0	17.0	15.0	16.0	14.0	12.0	13.0	9.5	9.5	9.5
11	20.0	19.5	20.0	16.0	15.0	15.5	12.0	11.5	11.5	9.0	8.0	8.5
12	20.5	19.5	20.0	15.5	15.0	15.0	12.0	11.0	11.5	8.5	7.0	7.5
13	21.0	20.0	20.5	15.0	12.0	13.5	11.0	9.5	10.5	9.0	7.5	8.0
14	21.0	17.0	20.5	12.5	11.5	12.0	10.0	9.0	10.0	10.0	8.5	9.0
15	---	---	---	13.5	12.0	13.0	11.5	10.0	10.5	10.5	9.5	10.0
16	---	---	---	14.5	13.5	14.0	12.0	11.0	11.5	10.5	10.0	10.5
17	---	---	---	15.5	14.5	15.0	13.0	11.5	12.5	10.0	9.5	10.0
18	---	---	---	15.5	14.0	14.5	13.0	11.5	12.5	11.0	10.0	10.5
19	---	---	---	14.5	13.5	14.0	11.0	10.5	11.0	11.0	10.0	10.5
20	17.5	16.5	17.0	14.0	13.5	14.0	11.0	10.5	11.0	10.0	9.5	10.0
21	17.5	16.0	17.0	13.5	12.5	13.0	10.5	9.5	10.0	10.0	9.5	9.5
22	17.0	16.5	16.5	12.5	11.0	12.0	12.5	9.0	10.0	10.0	9.0	9.5
23	17.5	16.5	17.0	13.5	12.5	13.0	9.5	8.5	9.0	9.0	8.0	8.5
24	17.5	17.0	17.5	13.5	12.5	13.0	10.0	9.5	9.5	9.0	8.0	8.5
25	17.5	17.0	17.5	14.5	12.5	13.5	10.5	10.0	10.0	9.0	7.0	8.0
26	17.5	16.5	17.0	16.0	15.0	15.5	10.5	10.0	10.0	7.0	6.0	6.5
27	17.0	16.0	16.5	15.5	14.5	15.0	10.0	10.0	10.0	7.0	6.0	6.5
28	17.0	16.0	16.5	14.5	14.0	14.5	10.0	9.0	9.5	8.0	6.5	7.5
29	16.5	15.5	16.0	14.5	14.0	14.5	9.0	8.0	8.5	10.0	8.0	9.0
30	16.5	15.0	16.0	14.5	14.0	14.0	9.0	9.0	9.0	12.0	10.0	10.5
31	16.5	15.0	15.5	---	---	---	9.5	9.0	9.0	11.5	10.5	11.0
MONTH	---	---	---	17.5	11.0	14.7	14.5	8.0	11.0	12.0	6.0	9.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.0	10.0	11.0	12.0	11.5	11.5	16.0	11.5	13.5	21.0	19.2	19.8
2	12.0	11.5	12.0	13.0	11.0	12.0	15.0	13.5	14.0	---	---	---
3	12.5	11.5	11.5	13.0	11.0	12.0	14.0	12.5	13.5	---	---	---
4	11.5	10.5	11.0	13.5	11.0	12.5	14.5	11.5	12.5	22.0	20.5	21.2
5	12.0	10.5	11.0	13.5	12.0	13.0	13.5	12.0	12.5	21.5	19.0	20.0
6	12.0	10.5	11.5	15.5	13.0	14.0	13.5	12.0	13.0	21.0	18.5	20.0
7	12.0	10.5	11.5	16.0	13.0	14.5	14.5	13.5	14.0	21.5	18.5	20.0
8	11.0	9.5	10.5	15.5	14.0	14.5	17.0	13.0	15.0	21.5	19.0	20.5
9	9.5	8.0	8.5	15.5	14.0	14.5	19.0	15.0	16.5	21.5	18.5	20.0
10	9.5	7.5	8.5	14.0	12.5	13.0	20.0	15.5	17.5	22.0	19.0	20.5
11	10.0	8.5	9.0	12.0	11.0	11.0	21.5	17.0	19.5	22.0	19.5	21.0
12	12.0	10.0	11.0	12.0	9.5	11.0	21.5	19.0	20.0	23.5	20.0	21.5
13	12.0	10.5	11.0	13.0	10.0	11.5	22.5	19.0	21.0	23.0	20.5	22.0
14	11.5	11.0	11.0	14.5	11.0	12.5	22.0	20.0	21.5	23.5	20.5	22.0
15	12.0	11.0	11.5	15.5	12.5	13.5	20.0	18.0	18.5	24.0	21.0	22.5
16	12.0	11.0	11.5	16.0	13.5	15.0	18.0	16.5	17.0	25.5	21.5	23.0
17	11.0	10.5	10.5	16.5	14.5	15.5	17.0	16.0	16.5	25.0	21.5	23.5
18	10.5	10.0	10.0	16.0	15.5	15.5	18.5	15.0	16.5	23.5	22.0	22.5
19	10.5	9.5	10.0	17.0	14.5	15.5	20.0	16.5	18.0	25.0	21.5	23.0
20	10.5	9.5	10.0	16.5	15.0	15.5	21.0	18.0	19.5	24.5	22.5	23.5
21	11.0	10.0	10.5	16.5	14.5	15.5	22.0	19.0	20.5	24.0	22.5	23.5
22	10.5	9.5	10.0	17.0	15.0	16.0	22.0	19.5	20.5	25.0	22.5	23.5
23	10.0	8.5	9.5	19.0	15.5	17.0	21.0	19.5	20.5	24.0	22.5	23.0
24	11.0	9.5	10.5	18.0	16.5	17.0	19.5	17.5	18.5	22.5	20.5	21.5
25	12.5	10.5	11.5	20.0	16.0	17.5	19.0	16.5	17.5	21.5	20.5	21.0
26	12.5	12.0	12.0	20.0	17.0	18.5	19.5	16.5	18.0	22.5	19.0	20.5
27	12.0	10.0	11.0	20.0	18.5	19.5	20.5	17.5	19.0	24.0	20.5	22.0
28	11.5	11.0	11.0	22.0	18.0	20.0	20.0	18.0	19.0	25.5	21.5	23.0
29	---	---	---	25.5	21.0	23.0	20.0	17.0	18.5	---	---	---
30	---	---	---	23.5	15.5	19.5	22.0	18.5	20.0	---	---	---
31	---	---	---	15.5	13.5	14.0	---	---	---	---	---	---
MONTH	12.5	7.5	10.7	25.5	9.5	15.0	22.5	11.5	17.4	25.5	18.5	21.7

03428500 WEST FORK STONES RIVER NEAR SMYRNA, TN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.1	21.7	22.4	25.1	23.5	24.3	26.0	24.6	25.1	24.0	21.5	22.7
2	24.4	21.6	22.9	25.4	23.5	24.4	25.8	24.1	24.9	24.2	21.3	22.4
3	25.5	22.2	23.8	25.1	23.6	24.5	27.9	23.8	25.5	24.7	21.5	23.0
4	25.1	22.4	23.8	25.8	23.6	24.4	26.7	23.9	25.1	25.6	21.9	23.4
5	25.9	21.4	23.1	25.9	24.0	24.9	25.5	23.6	24.4	24.7	22.2	23.6
6	25.5	20.8	22.8	27.0	24.1	25.2	25.8	24.4	25.1	24.8	23.5	24.1
7	26.0	21.4	23.3	27.3	25.1	26.0	26.2	24.1	25.2	25.1	23.0	24.0
8	25.8	21.9	23.6	26.7	25.1	25.8	26.8	24.7	25.7	25.5	23.3	24.1
9	26.1	22.1	23.8	26.2	24.8	25.4	26.1	24.6	25.5	25.8	23.5	24.3
10	25.8	22.6	24.0	26.3	24.2	24.9	26.7	25.1	25.7	25.3	23.9	24.6
11	26.0	22.7	24.1	27.3	24.6	25.6	27.2	24.4	25.6	24.6	23.5	24.0
12	24.6	23.1	23.8	27.6	24.9	25.8	26.4	24.8	25.6	24.2	23.5	23.8
13	26.2	22.5	24.1	27.1	25.2	25.9	26.0	24.1	25.1	24.1	23.0	23.5
14	27.6	23.3	24.2	25.8	24.3	25.1	26.3	24.0	25.1	23.6	22.4	22.9
15	26.6	23.9	25.1	25.3	23.9	24.3	26.3	23.6	24.9	23.6	22.7	23.2
16	25.6	23.5	24.4	26.1	23.0	24.1	26.0	23.5	24.7	23.4	22.6	23.1
17	26.3	23.1	24.5	25.4	23.8	24.5	24.9	23.5	24.2	23.3	22.3	22.8
18	26.9	23.8	25.0	25.9	23.7	24.6	26.2	22.9	24.1	23.4	22.8	23.1
19	25.2	24.1	24.6	26.1	24.1	25.0	25.6	23.5	24.6	23.2	22.4	23.0
20	25.9	23.6	24.3	28.4	24.2	25.8	27.5	24.3	25.6	22.3	21.1	21.7
21	25.1	23.6	24.3	26.7	24.7	25.6	26.2	24.1	25.1	21.0	20.3	20.8
22	26.4	22.9	24.4	25.9	25.9	25.2	26.2	24.2	25.2	20.2	19.6	19.9
23	27.2	24.1	25.3	26.0	23.6	24.7	26.7	25.0	25.8	19.6	19.0	19.3
24	26.3	24.4	25.5	25.8	23.1	24.5	26.2	24.2	25.1	19.5	18.6	19.1
25	26.3	24.0	24.9	25.9	23.6	24.7	25.9	23.7	24.7	19.5	18.7	19.1
26	26.4	24.6	25.4	26.6	24.4	25.5	26.6	24.7	25.5	20.3	19.1	19.6
27	25.7	23.7	24.6	27.3	25.3	26.1	26.4	24.8	25.5	21.5	19.5	20.3
28	25.1	22.4	23.5	26.9	25.0	26.0	25.8	24.1	24.7	21.7	19.6	20.6
29	26.2	22.9	24.1	26.3	24.4	25.1	25.0	23.6	24.2	20.6	19.7	20.1
30	26.2	23.3	24.3	25.1	23.7	24.3	24.8	22.5	23.5	19.7	19.2	19.5
31	---	---	---	25.5	23.6	24.4	23.4	22.0	22.7	---	---	---
MONTH	27.6	20.8	24.1	28.4	23.0	25.1	27.9	22.0	25.0	25.8	18.6	22.2

CUMBERLAND RIVER BASIN

03431500 CUMBERLAND RIVER AT NASHVILLE, TN

LOCATION.--Lat 36°09'45", long 85°46'17", Davidson County, Hydrologic Unit 05130202, at left bank pier of Shelby Avenue (formerly Sparkman Street) Bridge, at Nashville, 1.3 mi downstream from Mill Creek, and at mile 191.1.

DRAINAGE AREA.--12,860 mi², approximately.

PERIOD OF RECORDS.--October 1986 to September 1987 (gage height only). October 1892 to September 1954 (discharge), published in WSP 1726. Gage heights for some periods since 1873 are in reports of the Tennessee Division of Geology or the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage of 368.10 ft above National Geodetic Vertical Datum of 1929. Prior to fall of 1922 inclined and vertical staff gage at site 350 ft downstream and from fall of 1922 to April 9, 1940, staff gage at site 400 ft downstream, both gages at same datum. November 1, 1930 to September 30, 1954 upper staff gage at former lock 1, 2.7 miles downstream was used as auxiliary gage.

REMARKS.--Records good. Flow regulated by seven lakes or reservoirs above station (see p.141). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREME FOR PERIOD OF RECORD.--Maximum gage height, 56.2 ft, Jan. 1, 1927; minimum gage height observed after first filling of pool at dam 1, 6.1 ft Oct. 19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 34.44 ft, Nov. 10; minimum, 16.15 ft, Nov. 3, Aug. 4.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.90	16.94	17.50	17.02	22.36	22.12	23.44	22.42	20.19	18.42	32.11	25.62
2	18.10	17.37	17.52	16.50	22.45	22.32	23.29	22.23	18.34	17.17	25.47	21.98
3	17.90	16.86	18.14	16.15	22.49	22.40	23.18	22.65	18.43	17.77	21.88	20.31
4	18.09	17.15	19.26	16.39	23.63	22.44	22.67	21.99	18.10	17.01	21.43	20.19
5	17.44	16.73	19.15	16.38	23.84	23.48	22.58	21.60	17.26	16.52	23.23	21.33
6	17.44	16.48	18.74	16.19	24.05	22.61	22.39	21.47	17.86	16.76	23.50	22.59
7	17.39	16.78	19.30	16.24	22.46	21.66	22.67	22.33	17.71	17.27	24.26	23.53
8	17.49	16.79	27.91	18.20	22.15	21.79	22.67	22.37	17.69	17.20	24.19	23.03
9	17.78	16.97	34.43	28.18	29.65	22.17	22.41	22.01	19.21	17.05	23.01	21.11
10	17.93	17.22	34.44	30.10	31.78	29.67	22.39	21.83	19.91	17.72	22.53	21.63
11	17.80	16.86	29.99	21.92	31.84	27.31	21.82	20.41	19.84	17.24	22.13	21.81
12	17.31	16.50	22.26	20.89	27.29	24.88	20.42	19.43	21.81	19.85	23.26	22.01
13	17.77	17.01	21.91	20.32	24.83	23.37	19.43	17.87	21.99	21.36	23.79	21.89
14	17.57	16.72	21.82	20.59	23.39	22.54	18.22	16.27	21.51	20.13	21.77	20.07
15	17.56	16.86	23.34	21.54	23.28	22.28	19.07	17.26	20.51	18.39	20.13	18.95
16	17.76	17.09	23.27	22.29	23.84	22.94	19.01	18.41	18.39	16.77	18.92	16.99
17	17.66	16.55	22.86	21.40	22.95	22.19	18.60	18.14	18.06	17.19	17.64	16.39
18	17.73	17.02	21.34	19.85	23.03	22.24	18.15	17.79	19.37	16.89	18.12	17.39
19	17.44	16.78	20.28	18.73	23.05	22.39	21.97	17.71	20.15	18.17	18.68	17.23
20	17.30	16.76	21.73	19.49	23.25	22.31	23.40	22.06	20.04	18.39	17.80	16.93
21	17.84	16.84	21.83	21.05	22.88	21.47	22.20	19.07	19.70	18.29	17.71	17.23
22	17.90	17.31	21.79	20.33	23.21	22.16	19.33	17.81	18.90	17.61	17.77	17.18
23	17.86	17.18	20.31	18.36	24.52	22.10	18.61	17.62	22.13	19.00	17.52	17.17
24	18.07	17.33	18.59	16.63	24.77	24.34	18.83	17.32	23.41	22.06	18.32	17.33
25	18.38	17.44	19.31	16.53	27.57	24.57	19.01	18.10	21.98	20.55	18.91	17.68
26	17.96	17.67	25.29	19.85	26.58	25.59	20.74	18.55	21.28	17.57	19.01	18.48
27	17.85	17.19	26.68	25.33	25.58	24.75	22.54	19.79	23.77	21.36	18.83	17.69
28	17.36	16.73	27.33	25.31	25.06	24.44	22.62	22.15	32.87	23.81	17.86	17.55
29	17.58	16.66	25.27	22.09	24.33	22.06	22.17	20.88	---	---	17.73	16.83
30	17.74	15.99	22.17	21.96	24.42	23.43	21.08	19.60	---	---	17.62	16.87
31	17.76	17.33	---	---	24.15	23.53	21.48	20.05	---	---	18.07	17.30
MONTH	18.38	16.48	34.44	16.15	31.84	21.47	23.44	16.27	32.87	16.52	32.11	16.39

CUMBERLAND RIVER BASIN

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03431500 CUMBERLAND RIVER AT NASHVILLE, TN--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.21	17.57	18.26	16.57	18.06	17.10	18.08	17.31	19.90	18.15	17.44	16.86
2	20.19	18.38	18.78	17.80	18.06	17.26	17.80	17.29	19.16	17.52	18.56	16.99
3	20.19	18.57	18.45	17.58	18.16	17.31	18.74	17.19	18.91	17.18	18.00	16.95
4	18.75	17.10	18.03	16.32	18.22	17.36	18.39	17.36	17.90	16.15	17.98	17.28
5	17.22	16.49	16.95	16.18	17.71	17.10	17.87	17.15	19.15	17.50	18.03	17.09
6	17.58	16.41	17.32	16.36	17.59	16.44	17.88	16.77	18.65	17.46	17.61	17.00
7	18.25	17.28	17.39	16.59	17.38	16.44	18.11	16.72	17.98	17.02	17.87	16.45
8	18.16	16.97	18.08	16.98	17.99	16.56	19.95	17.74	17.97	16.86	17.78	16.54
9	17.24	16.79	18.06	17.01	17.92	16.98	19.77	18.50	17.90	16.84	17.72	16.42
10	17.94	16.82	17.67	16.78	18.12	17.18	19.58	18.26	17.94	16.92	18.23	17.19
11	17.89	17.48	17.90	17.06	18.91	17.39	18.60	17.72	17.84	16.89	17.82	16.79
12	17.58	17.20	17.91	17.20	18.48	17.64	18.10	16.74	17.86	17.30	18.06	16.84
13	17.45	16.64	17.88	17.24	18.54	17.02	17.42	16.60	17.85	16.96	18.01	17.36
14	18.93	16.52	18.10	17.20	19.41	17.05	18.30	16.97	17.84	17.08	18.07	17.39
15	23.89	17.87	17.82	17.24	18.87	17.15	19.48	17.98	17.59	16.94	17.88	17.22
16	24.91	22.17	17.90	17.28	17.72	16.80	20.21	18.46	17.88	17.12	17.58	17.05
17	22.11	20.52	17.82	16.99	17.96	16.82	20.28	18.92	17.71	17.26	18.09	17.17
18	20.83	19.44	17.85	16.78	17.92	17.31	19.46	17.70	17.93	17.23	17.44	16.71
19	20.85	19.56	17.63	16.91	17.97	17.17	19.44	18.00	18.01	17.09	17.62	16.70
20	19.63	18.33	17.59	17.06	17.95	17.18	19.35	17.60	17.96	17.00	17.64	16.80
21	21.00	19.69	17.93	17.08	17.46	16.70	18.29	17.66	18.41	16.80	17.83	17.03
22	22.59	21.01	18.44	17.04	17.89	16.96	19.78	17.32	17.96	17.12	17.74	17.07
23	22.59	22.41	18.14	17.12	17.70	17.18	20.08	18.71	18.18	17.49	17.75	17.15
24	22.38	21.04	18.24	17.22	17.90	17.26	20.19	19.08	17.80	16.93	17.79	17.01
25	21.02	17.73	18.01	17.14	18.14	17.23	19.79	18.17	17.41	16.89	17.64	16.90
26	18.01	17.35	17.84	16.81	17.76	16.64	18.62	17.68	17.45	16.88	17.70	16.78
27	18.90	17.47	17.61	16.66	17.91	17.12	18.34	17.62	18.08	17.23	17.76	16.77
28	19.18	17.75	17.98	17.16	17.98	17.02	18.98	16.80	18.02	17.25	17.57	16.77
29	17.72	17.04	17.95	17.40	17.71	16.73	18.86	17.47	17.99	17.19	17.68	16.92
30	17.24	16.67	18.00	17.31	17.99	16.97	20.48	17.92	17.59	16.88	17.45	16.93
31	---	---	17.89	17.05	---	---	20.37	18.62	17.67	16.80	---	---
MONTH	24.91	16.41	18.78	16.18	19.41	16.44	20.48	16.60	19.90	16.15	18.56	16.42

CUMBERLAND RIVER BASIN

03431517 CUMMINGS BRANCH AT LICKTON, TN

LOCATION.--Lat 36°18'25", long 86°48'00", Davidson County, Hydrologic Unit 05130202, on right downstream wing-wall of bridge, on Shaw Road, 900 ft above confluence with Shaw Branch, 0.8 mi northeast of Lickton, and at mile 0.2.

DRAINAGE AREA.--2.40 mi².

PERIOD OF RECORD.--December 1975 to April 1985, August 1985 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and V-notch wier. Datum of gage is 532.25 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-15, June 5-11. Records good, except those below 1.0 ft³/s, which are fair, and for periods of estimated daily discharges, which are poor. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--10 years (water years 1977-84, 1986-87), 3.02 ft³/s, 17.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 881 ft³/s, Sept. 13, 1979, gage height, 5.21 ft; no flow many days, 1980, 1983, 1984, and for part of day Sept. 6, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 25	2300	251	3.78	Feb. 28	0945	*411	*4.27
Dec. 9	0745	282	3.88				

No flow for part of Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.13	2.5	2.2	1.8	24	1.6	.86	.32	.21	.14	.01
2	.11	.13	2.9	1.9	2.0	14	1.6	.78	.26	.19	.14	.01
3	.10	.13	3.0	1.7	2.0	10	1.5	.83	.21	.34	.11	.01
4	.11	.12	2.6	1.6	1.9	7.2	1.4	.75	.19	.55	.09	.01
5	.09	.34	2.4	1.3	1.8	5.7	1.3	.67	.19	4.0	.09	.01
6	.09	.42	2.1	1.3	1.8	4.6	1.3	.61	.14	2.2	.07	.01
7	.08	.37	1.8	1.2	1.7	4.0	1.3	.56	.12	1.3	.05	.01
8	.08	19	2.1	1.1	1.7	3.7	1.2	.51	.11	.69	.03	.01
9	.08	11	33	1.1	1.4	3.2	1.1	.46	.09	.50	.03	.01
10	.08	6.4	13	1.1	1.3	2.7	1.0	.42	.09	.47	.11	.01
11	.08	12	8.3	1.0	1.3	2.4	1.1	.39	.08	.35	.08	.02
12	.22	7.0	5.5	.90	1.3	2.1	1.1	.37	.11	.27	.05	.33
13	.12	2.9	3.9	.84	1.2	1.9	1.1	.36	.15	.56	.03	.20
14	.11	2.2	3.1	.80	1.3	1.8	2.3	.35	.12	.78	.03	.10
15	.10	1.7	2.6	.78	1.3	1.7	3.1	.35	.10	.46	.02	.06
16	.10	1.4	2.4	.72	1.3	1.6	3.7	.35	.09	.31	.02	.04
17	.09	1.2	2.2	.68	1.5	1.5	3.7	.30	.14	.23	.02	.04
18	.09	.99	1.9	.91	1.7	1.5	3.4	.27	1.3	.17	.03	.06
19	.09	.79	1.7	1.8	1.8	1.4	3.0	.26	1.4	.14	.02	.09
20	.09	.75	1.5	1.7	1.8	1.3	2.7	.23	.61	.12	.02	.08
21	.09	.66	1.3	1.5	1.8	1.2	2.4	.23	.90	.09	.02	.06
22	.09	.60	1.2	1.5	3.4	1.1	2.1	.21	1.1	.07	.01	.04
23	.09	.76	5.4	1.3	7.4	1.1	1.9	.21	.52	.08	.01	.04
24	.13	1.3	12	1.2	6.2	1.1	1.8	.20	.38	.08	.01	.03
25	.58	13	8.0	1.3	5.0	1.1	1.6	.27	.29	.06	.01	.03
26	.34	25	5.9	1.3	4.8	.92	1.5	.36	.22	.05	.01	.03
27	.20	8.2	4.6	1.2	14	.87	1.3	.25	.17	1.2	.01	.02
28	.17	5.1	3.7	1.1	86	.83	1.2	.21	.14	1.2	.02	.02
29	.15	3.7	3.1	1.2	---	.79	1.1	.19	.12	.45	.02	.24
30	.14	2.8	2.6	1.7	---	1.2	.98	.38	.11	.26	.01	.24
31	.13	---	2.4	1.8	---	1.6	---	.55	---	.19	.01	---
TOTAL	4.21	130.09	148.7	39.73	160.5	108.11	54.38	12.74	9.77	17.57	1.32	1.87
MEAN	.14	4.34	4.80	1.28	5.73	3.49	1.81	.41	.33	.57	.04	.06
MAX	.58	.25	.33	2.2	.86	.24	3.7	.86	1.4	4.0	.14	.33
MIN	.08	.12	1.2	.68	1.2	.79	.98	.19	.08	.05	.01	.01
CFSM	.06	1.81	2.00	.53	2.39	1.45	.76	.17	.14	.24	.02	.02
IN.	.07	2.02	2.30	.62	2.49	1.68	.84	.20	.15	.27	.02	.03

CAL YR 1986 TOTAL 755.87 MEAN 2.07 MAX 33 MIN .01 CFSM .86 IN. 11.71
WTR YR 1987 TOTAL 688.98 MEAN 1.89 MAX 86 MIN .01 CFSM .79 IN. 10.68

CUMBERLAND RIVER BASIN

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03431700 RICHLAND CREEK AT CHARLOTTE AVENUE, AT NASHVILLE, TN

LOCATION.--Lat 36°09'04", long 86°51'16", Davidson County, Hydrologic Unit 05130202, near left bank on downstream end of pier of Charlotte Avenue bridge on U.S. Highway 70, 4.0 mi southwest of the State Capitol in Nashville, and at mile 3.6.

DRAINAGE AREA.--24.3 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 409.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 4 to Mar. 3, July 17 to Aug. 4. Records good, except those below 5.0 ft³/s which are fair, and periods of no gage-height record Feb. 4 to Mar. 3 and July 17 to Aug. 4, which are poor. Diversions above station used for irrigation of golf courses and water supply. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--23 years, 33.3 ft³/s, 18.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,470 fts³/s, Sept. 13, 1979, gage height, 15.13 ft; minimum, 0.05 ft³/s, Oct. 7-9, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	2115	2,260	7.56	Aug. 17	2145	1,890	6.94
Nov. 26	0020	*3,360	*9.15				

Minimum daily discharge, 1.6 fts³/s, June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.3	39	20	17	200	38	6.6	10	20	3.2	2.4
2	4.6	3.7	38	17	21	130	31	6.1	10	6.4	2.6	2.4
3	2.4	3.2	30	15	18	92	24	7.4	14	9.5	2.1	2.3
4	2.2	4.1	25	14	16	69	21	6.2	10	6.8	1.9	2.3
5	2.0	12	22	12	15	56	19	5.7	5.8	4.8	3.2	2.2
6	2.0	7.4	20	11	20	48	17	5.6	3.2	6.1	3.3	2.2
7	1.9	16	17	10	17	42	15	5.4	2.5	3.9	2.6	2.4
8	1.8	815	29	10	16	36	14	5.2	2.4	3.3	2.3	2.2
9	1.7	223	246	10	15	31	13	5.0	1.8	25	2.2	2.2
10	1.7	91	101	10	14	27	13	4.9	1.7	11	18	2.2
11	1.7	200	65	10	13	25	15	5.4	1.6	6.1	3.2	2.8
12	15	94	48	9.8	13	22	12	5.2	3.7	4.8	2.7	25
13	6.8	61	39	8.0	13	20	18	5.2	6.5	8.8	2.4	7.3
14	4.5	45	32	7.6	14	19	40	9.5	2.8	4.2	2.3	8.0
15	3.0	38	27	7.4	17	18	35	9.5	3.9	2.9	2.2	4.9
16	2.6	31	23	7.1	21	17	37	14	3.4	2.5	2.1	5.9
17	2.3	26	22	6.9	18	15	31	11	14	2.3	130	4.8
18	2.2	22	19	21	16	20	24	6.1	4.1	2.1	38	4.5
19	2.2	19	17	41	15	16	20	5.1	4.4	2.0	12	18
20	2.1	19	15	23	14	14	18	4.6	9.1	2.0	6.8	5.8
21	2.0	16	13	20	20	14	16	4.2	23	1.9	5.2	4.2
22	2.0	14	12	18	45	14	14	3.4	8.7	7.7	3.9	4.0
23	2.0	25	147	16	100	13	12	2.9	7.6	5.0	3.4	3.7
24	26	27	127	14	72	19	12	4.8	7.1	3.5	2.9	3.6
25	27	198	72	28	54	15	10	4.0	7.3	2.5	2.6	3.5
26	12	426	52	22	48	14	9.1	2.9	7.2	3.3	2.6	3.5
27	8.2	102	41	19	125	13	8.6	2.2	4.4	9.0	5.5	3.5
28	6.2	66	35	17	300	13	7.9	2.0	3.9	12	2.6	3.5
29	5.0	48	29	17	---	38	7.6	2.0	3.8	6.4	2.5	16
30	4.7	38	24	19	---	60	7.1	11	3.2	5.0	2.4	5.1
31	3.7	---	21	18	---	48	---	8.6	---	4.0	2.4	---
TOTAL	166.0	2694.7	1447	478.8	1087	1178	559.3	181.7	191.1	194.8	279.1	160.4
MEAN	5.35	89.8	46.7	15.4	38.8	38.0	18.6	5.86	6.37	6.28	9.00	5.35
MAX	27	815	246	41	300	200	40	14	23	25	130	25
MIN	1.7	3.2	12	6.9	13	13	7.1	2.0	1.6	1.9	1.9	2.2
CFSM	.22	3.70	1.92	.64	1.60	1.56	.77	.24	.26	.26	.37	.22
IN.	.25	4.13	2.22	.73	1.66	1.80	.86	.28	.29	.30	.43	.25

CAL YR 1986 TOTAL 9198.2 MEAN 25.2 MAX 815 MIN 1.3 CFMS 1.04 IN. 14.08
WTR YR 1987 TOTAL 8617.8 MEAN 23.6 MAX 815 MIN 1.6 CFMS .97 IN. 13.19

CUMBERLAND RIVER BASIN

03431800 SYCAMORE CREEK NEAR ASHLAND CITY, TN

LOCATION.--Lat 36°19'12", long 87°03'04", Cheatham County, Hydrologic Unit 05130202, near right bank on downstream end of pier of bridge on State Highway 49, at Sycamore, 3.2 mi north of Ashland City, 4.4 mi upstream from Spring Creek, and at mile 8.6.

DRAINAGE AREA.--97.2 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--26 years, 140 ft³/s, 19.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s, May 19, 1983, gage height, 13.24 ft; minimum, 7.5 ft³/s, Sept. 15, 16, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 26	0715	5,740	10.17	Feb. 28	1415	*7,360	*10.90
Dec. 9	1545	5,460	10.03				

Minimum discharge, 7.6 ft³/s, Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	97	75	79	867	128	42	28	51	15	12
2	19	21	139	69	93	411	130	40	25	69	14	12
3	19	22	125	61	89	282	106	47	23	64	13	11
4	21	23	101	58	76	205	85	46	21	133	14	11
5	36	33	86	55	66	165	75	41	20	136	13	11
6	24	58	76	53	62	139	69	38	19	127	13	11
7	20	41	71	51	59	120	64	36	19	60	12	11
8	19	1250	81	48	57	112	60	34	19	44	11	25
9	18	448	2340	48	50	105	55	32	18	33	11	13
10	18	160	576	51	47	90	53	31	18	31	22	12
11	17	349	304	48	48	77	62	30	19	28	21	14
12	19	214	210	45	48	72	58	30	22	24	13	43
13	24	131	152	44	45	66	59	29	37	64	11	37
14	23	102	122	43	51	64	345	29	26	100	11	18
15	20	95	108	43	56	62	335	38	22	42	9.4	15
16	18	86	96	42	60	60	262	41	54	29	8.9	13
17	18	76	88	42	69	57	227	30	30	24	19	16
18	18	68	82	52	79	60	177	27	29	21	24	25
19	17	62	74	93	79	57	136	27	43	19	17	21
20	16	59	68	80	79	54	111	26	33	18	12	17
21	16	54	61	66	79	52	94	26	53	17	10	14
22	16	48	58	62	129	50	82	26	80	16	9.5	12
23	16	55	190	58	372	48	75	26	34	19	8.9	12
24	21	91	632	51	236	52	69	26	28	19	8.3	12
25	59	200	301	56	175	56	60	26	36	18	8.0	12
26	49	2430	203	56	152	49	55	50	48	15	8.1	12
27	31	312	153	57	654	47	52	33	25	15	9.5	11
28	26	179	124	55	4030	47	49	26	21	63	27	11
29	22	131	106	54	---	45	45	24	19	28	19	19
30	21	106	97	101	---	55	44	28	18	19	14	36
31	19	---	83	90	---	113	---	32	---	17	13	---
TOTAL	699	6925	7004	1807	7119	3739	3222	1017	887	1363	419.6	499
MEAN	22.5	231	226	58.3	254	121	107	32.8	29.6	44.0	13.5	16.6
MAX	59	2430	2340	101	4030	867	345	50	80	136	27	43
MIN	16	21	58	42	45	45	44	24	18	15	8.0	11
CFSM	.23	2.37	2.32	.60	2.62	1.24	1.10	.34	.30	.45	.14	.17
IN.	.27	2.65	2.68	.69	2.72	1.43	1.23	.39	.34	.52	.16	.19

CAL YR 1986	TOTAL 38536.0	MEAN 106	MAX 2430	MIN 15	CFSM 1.09	IN. 14.74
WTR YR 1987	TOTAL 34700.6	MEAN 95.1	MAX 4030	MIN 8.0	CFSM .98	IN. 13.28

CUMBERLAND RIVER BASIN

129

03432350 HARPETH RIVER AT FRANKLIN, TN

LOCATION.--Lat 35°55'14", long 86°51'56", Williamson County, Hydrologic Unit 05130204, on left bank 15 ft downstream from left downstream end of State Highway 96 bridge, 0.4 mi southeast of the courthouse in Franklin, and at mile 88.1.

DRAINAGE AREA.--191 mi², includes 15 mi² without surface drainage.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 604.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, Oct. 21-24, Sept. 2-10, and those below 5.0 ft³/s, which are poor. The Franklin Utility District diverts part of its municipal water supply from the river above the gage. This water along with other water is returned to the river through the sewage treatment plant below the gage. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--13 years, 292 ft³/s, 20.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft³/s, Mar. 13, 1975, gage height, 33.65 ft; minimum daily, 0.30 ft³/s, Oct. 14, 20, 22, 23, 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	0500	5,260	19.63	Feb. 23	0100	3,120	14.72
Nov. 26	1115	*7,080	*22.56	Feb. 27	0945	3,870	16.65
Dec. 9	1845	3,910	16.74	Feb. 28	1715	4,290	17.64

Minimum daily discharge, 0.67 ft³/s, July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	30	447	197	238	1900	185	47	26	38	7.7	2.9
2	35	29	547	177	232	970	149	46	22	37	3.4	1.8
3	31	23	483	158	226	697	133	46	16	73	3.4	1.5
4	32	23	393	143	197	543	118	41	11	78	59	1.3
5	38	32	340	125	180	448	109	38	8.6	78	116	1.2
6	29	38	293	115	168	376	101	36	6.3	41	24	1.1
7	22	44	256	106	160	324	90	37	5.1	25	12	1.1
8	21	2050	321	97	147	296	84	30	4.2	20	5.5	1.2
9	22	3690	2440	92	125	277	81	26	2.9	19	1.8	1.2
10	17	1100	2230	98	115	220	76	26	1.9	31	6.9	1.0
11	16	1940	937	95	109	199	74	22	3.1	19	2.9	6.1
12	28	1050	649	82	107	135	70	19	5.6	19	1.6	6.2
13	41	583	483	77	104	168	70	19	4.3	15	1.5	6.6
14	60	429	395	73	100	155	237	21	2.7	9.7	21	4.2
15	61	357	338	71	105	138	484	26	3.2	6.6	7.1	3.5
16	47	304	298	69	166	128	341	20	12	4.4	2.4	2.9
17	35	262	272	69	270	121	278	19	11	2.4	7.3	3.2
18	28	228	264	113	261	154	230	21	16	4.1	66	2.7
19	27	199	235	2000	245	170	190	20	26	5.6	24	7.6
20	20	190	216	777	213	136	158	15	17	1.1	13	3.9
21	18	178	190	503	220	120	136	17	23	.90	4.6	3.1
22	17	158	157	401	784	110	122	19	51	.76	4.5	2.9
23	16	180	437	323	1930	104	103	18	24	.67	2.6	2.4
24	15	623	1680	273	835	105	89	28	42	.79	1.8	2.2
25	91	929	954	639	594	97	81	30	53	.79	2.4	2.1
26	152	5610	638	817	507	86	75	48	195	.75	1.7	2.1
27	94	1330	483	459	2900	84	72	29	69	.71	2.1	1.9
28	67	701	386	358	3060	84	67	20	32	.82	2.1	2.2
29	46	511	308	314	---	81	59	15	20	27	1.8	11
30	40	418	261	334	---	199	52	32	13	9.3	1.9	46
31	32	---	222	272	---	255	---	24	---	3.7	2.3	---
TOTAL	1220	23239	17553	9427	14298	8930	4114	855	726.9	573.09	414.3	137.1
MEAN	39.4	775	566	304	511	288	137	27.6	24.2	18.5	13.4	4.57
MAX	152	5610	2440	2000	3060	1900	484	48	195	78	116	46
MIN	15	23	157	69	100	81	52	15	1.9	.67	1.5	1.0
CFSM	.21	4.06	2.96	1.59	2.67	1.51	.72	.14	.13	.10	.07	.02
IN.	.24	4.53	3.42	1.84	2.78	1.74	.80	.17	.14	.11	.08	.03

CAL YR 1986 TOTAL 74975.77 MEAN 205 MAX 5610 MIN .62 CFSM 1.08 IN. 14.60
WTR YR 1987 TOTAL 81486.80 MEAN 223 MAX 5610 MIN .67 CFSM 1.17 IN. 15.87

CUMBERLAND RIVER BASIN

03433500 HARPETH RIVER AT BELLEVUE, TN

LOCATION.--Lat 36°03'16", long 86°55'42", Davidson County, Hydrologic Unit 05130204, on right bank 45 ft upstream from bridge on State Highway 100, 0.1 mi downstream from Little Harpeth River, 0.9 mi southeast of Bellevue, and at mile 62.1.

DRAINAGE AREA.--408 mi², includes 15 mi² without surface drainage.

PERIOD OF RECORD.--April 1920 to current year. Monthly discharge only November 1929 to December 1931, published in WSP 1306.

REVISED RECORDS.--WSP 953: 1920-30, 1932-35. WSP 1386: 1948. WSP 1556: Drainage area. WSP 1910: 1960.

GAGE.--Water-stage recorder. Datum of gage is 541.04 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Apr. 11, 1920, to Oct. 31, 1929, Jan. 1, 1932, to Sept. 30, 1933, non-recording gage at site 2.8 mi downstream at datum 7.85 ft lower.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--67 years, 579 ft³/s, 19.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft³/s, Feb. 13, 1948, gage height, 24.34 ft from floodmark; no flow Oct. 5-10, 1922.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Feb. 13, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	0800	8,380	13.07	Feb. 28	1300	*11,300	*15.45
Nov. 26	2200	11,000	15.21				

Minimum discharge, 4.0 ft³/s, Sept. 5, 6, 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	64	1040	508	583	7140	576	136	49	54	22	5.2
2	57	59	1200	449	553	2850	465	126	53	86	24	4.9
3	55	58	1150	399	540	1920	396	123	56	166	42	4.8
4	51	54	948	361	478	1480	343	117	49	573	25	4.4
5	54	58	795	327	427	1220	304	103	35	263	112	4.3
6	63	71	673	299	395	1040	283	97	30	195	95	4.0
7	49	86	584	274	375	879	256	90	27	122	43	4.0
8	37	3290	611	254	352	785	236	86	24	90	30	4.5
9	33	7660	3380	238	316	719	217	77	22	260	20	5.3
10	33	3270	5030	241	286	597	204	69	19	217	21	5.3
11	30	3210	2350	241	272	490	202	67	17	142	20	6.0
12	34	3170	1570	220	263	432	195	64	16	96	19	10
13	53	1610	1190	203	252	382	188	58	23	79	14	16
14	80	1160	969	194	251	354	327	55	27	77	11	16
15	92	942	829	185	259	325	961	58	25	76	12	16
16	86	794	714	179	306	300	849	67	26	57	22	12
17	69	668	634	175	566	279	782	71	73	46	25	9.7
18	53	552	595	193	624	280	645	63	72	39	56	12
19	44	466	524	2540	621	336	510	56	58	34	91	31
20	41	421	471	1850	573	294	423	54	58	32	45	26
21	36	395	420	1140	560	260	362	47	53	30	32	30
22	31	350	370	914	1190	239	321	45	69	24	20	18
23	28	333	736	755	4420	222	286	55	92	37	12	12
24	36	754	3570	617	2270	225	249	50	73	32	9.3	9.7
25	129	1370	2400	789	1560	241	225	67	166	31	8.2	8.8
26	209	9720	1570	1670	1290	211	206	70	207	25	7.2	8.5
27	184	5250	1220	1060	5370	195	194	77	250	22	6.4	7.8
28	135	1970	999	846	8940	188	183	59	104	19	5.9	7.4
29	105	1410	824	741	---	187	168	45	66	16	5.5	19
30	84	1120	696	789	---	412	151	38	49	24	5.0	46
31	75	---	581	681	---	685	---	48	---	32	4.9	---
TOTAL	2100	50335	38643	19332	33892	25167	10707	2238	1888	2996	865.4	368.6
MEAN	67.7	1678	1247	624	1210	812	357	72.2	62.9	96.6	27.9	12.3
MAX	209	9720	5030	2540	8940	7140	961	136	250	573	112	46
MIN	28	54	370	175	251	187	151	38	16	16	4.9	4.0
CFSM	.17	4.11	3.06	1.53	2.97	1.99	.87	.18	.15	.24	.07	.03
IN.	.19	4.59	3.52	1.76	3.09	2.29	.98	.20	.17	.27	.08	.03

CAL YR 1986 TOTAL 176809.2 MEAN 484 MAX 9720 MIN 6.9 CFSM 1.19 IN. 16.12
WTR YR 1987 TOTAL 188531.7 MEAN 517 MAX 9720 MIN 4.0 CFSM 1.27 IN. 17.19

CUMBERLAND RIVER BASIN

131

03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN

LOCATION.--Lat 36°07'19", long 87°05'56", Cheatham County, Hydrologic Unit 05130204, on right bank 400 ft upstream from bridge on U.S. Highway 70, 1.7 mi northeast of Kingston Springs, 3.0 mi downstream from Turnbull Creek, and at mile 32.4.

DRAINAGE AREA.--681 mi², includes 15 mi² without surface drainage.

PERIOD OF RECORD.--October 1924 to current year. Prior to July 1925 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 953: 1927, 1933, 1935-36. WSP 1033: 1927(M), 1932-33(M), 1935(M), 1937(M). WSP 1706: 1945(P). WSP 2110: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 448.04 ft above National Geodetic Vertical Datum of 1929. July 8, 1925, to Jan. 22, 1939, nonrecording gage at site 150 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, Aug. 21-31, which are fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--63 years, 976 ft³/s, 19.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,000 ft³/s, Jan. 7, 1946, gage height, 32.20 ft from high-water mark in gage house; minimum, 12 ft³/s, Sept. 18, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Jan. 7, 1946. Flood of March 1902 reached a stage about 3 ft lower than that of Jan. 7, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 10,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 26	0930	11,800	14.23	Feb. 28	1900	*23,500	*22.29

Minimum discharge, 35 ft³/s, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	133	1390	794	879	12300	1170	299	169	126	82	46
2	92	124	1470	707	873	4750	937	281	159	144	85	43
3	110	119	1510	633	847	3100	752	280	145	171	82	42
4	105	118	1300	580	772	2370	636	271	144	555	95	40
5	99	134	1090	535	686	1920	556	256	130	435	93	37
6	100	152	935	489	634	1640	501	238	108	318	143	36
7	109	154	819	451	601	1400	466	226	99	241	148	36
8	96	4140	801	422	569	1220	426	216	91	182	103	41
9	86	8900	4100	399	522	1110	388	207	87	157	87	42
10	80	5260	7090	395	471	990	355	194	82	832	109	46
11	76	3550	3700	395	446	823	361	182	81	361	95	60
12	80	4420	2370	376	430	721	346	221	81	246	76	99
13	95	2360	1750	346	409	641	332	194	107	191	72	101
14	110	1580	1410	321	405	589	941	178	100	264	70	85
15	132	1260	1180	314	439	554	1620	168	90	178	61	74
16	141	1050	1030	304	601	518	1710	179	99	156	58	64
17	136	889	912	291	886	476	1600	205	167	133	74	62
18	120	751	849	320	1100	471	1310	215	207	117	406	66
19	103	646	773	1580	1070	489	1040	189	170	107	159	68
20	97	584	687	2920	1040	485	842	164	213	99	137	87
21	93	543	624	1620	1010	437	713	157	179	95	115	87
22	90	499	565	1280	1400	399	630	147	215	91	90	74
23	82	480	778	1080	5830	371	571	138	201	141	78	71
24	87	634	4560	902	3810	369	505	174	214	163	69	64
25	181	1520	3740	850	2500	399	453	164	181	140	62	59
26	236	10100	2430	1810	1960	377	414	266	296	102	55	55
27	278	8490	1820	1500	6330	338	381	204	312	96	46	52
28	233	3000	1480	1160	15400	319	374	171	264	90	64	51
29	188	2050	1230	1030	---	307	343	146	168	84	56	69
30	161	1610	1060	1080	---	713	321	146	129	78	51	122
31	144	---	914	1020	---	1300	---	223	---	73	49	---
TOTAL	3822	65250	54367	25904	51920	41896	20994	6299	4688	6166	2970	1879
MEAN	123	2175	1754	836	1854	1351	700	203	156	199	95.8	62.6
MAX	278	10100	7090	2920	15400	12300	1710	299	312	832	406	122
MIN	76	118	565	291	405	307	321	138	81	73	46	36
CFSM	.18	3.19	2.58	1.23	2.72	1.98	1.03	.30	.23	.29	.14	.09
IN.	.21	3.56	2.97	1.42	2.84	2.29	1.15	.34	.26	.34	.16	.10

CAL YR 1986 TOTAL 264334 MEAN 724 MAX 10100 MIN 40 CFMS 1.06 IN. 14.44
WTR YR 1987 TOTAL 286155 MEAN 784 MAX 15400 MIN 36 CFMS 1.15 IN. 15.63

CUMBERLAND RIVER BASIN

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN

LOCATION.--Lat 36°19'26", long 87°13'32", Cheatham County, Hydrologic Unit 05130205, on downstream end of lower lock wall at Cheatham Dam, 2.0 mi southwest of Neptune, 3.0 mi upstream from Half Pone Creek, 9.7 mi west of Ashland City, and at mile 148.4.

DRAINAGE AREA.--14,163 mi².

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

REVISED RECORDS.--WSP 1726: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 350.00 ft above National Geodetic Vertical Datum of 1929. Prior to May 5, 1966, at National Geodetic Vertical Datum. Auxiliary water-stage recorder 15.3 mi downstream from base gage at same datum. Prior to June 3, 1966, auxiliary water-stage recorder and non-recording gage on upper lock wall at former dam B, at site 8.1 mi downstream from base gage at datum 1.76 ft lower.

REMARKS.--Records good except for estimated daily discharges, May 19 to June 26, July 8 to Aug. 25, Aug. 29 to Sept. 30, which are fair. Flow regulated by eight lakes or reservoirs above station (see p.141).

AVERAGE DISCHARGE.--33 years, 23,270 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 204,000 ft³/s, Mar. 15, 1975; maximum gage height, 48.39 ft, Mar. 1, 1962; minimum daily discharge, 700 ft³/s, Oct. 29, 1969; minimum gage height, 1.55 ft, Nov. 26, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 53.5 ft, Jan. 25, 1937, from profile by U.S. Army Corps of Engineers, discharge, about 200,000 ft³/s on Jan. 24, 1937. Flood of Jan. 1, 1927, reached a stage of 51.7 ft, from profile, discharge about 205,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 129,000 ft³/s, Feb. 28; maximum gage height, 33.06 ft, Mar. 1; minimum daily discharge, 3,090 ft³/s, Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6420	11300	40700	44400	26200	100000	19200	11800	5150	11200	21000	6490
2	9080	9020	40900	39900	18800	52800	23600	15500	6340	12200	20200	7390
3	10500	3310	40800	42100	13200	35500	22900	14500	11100	11300	21100	9330
4	10400	11500	42800	40500	16000	31100	18600	11000	12100	12100	10200	9210
5	6820	11500	45500	38100	12200	39600	9090	6600	11000	7940	12700	7260
6	4100	9530	45900	37800	11800	40400	7080	5900	7830	10700	19500	5790
7	4300	11500	41300	39500	12700	44300	11700	6520	4540	12000	9870	5870
8	3730	48100	38500	41100	10600	45200	11500	9420	4630	19300	7000	4170
9	4770	89800	61300	41200	13500	38100	6020	10200	6390	22500	6290	3230
10	5930	95700	83700	40800	22400	34900	9960	6910	8720	19600	8280	7570
11	7890	65500	81900	36400	26800	37800	13100	6370	13400	17000	6830	9940
12	3530	42400	55100	30200	29500	38200	12300	6290	15900	13300	12300	7590
13	4400	37700	49600	28000	33900	40200	9990	6360	15100	8200	11300	7230
14	5280	35100	42900	18200	31600	33100	15000	7220	16200	8100	10400	5380
15	3770	39700	39100	19500	26300	25500	26100	9170	9720	17000	6910	6190
16	6680	45000	42400	19900	17700	16400	48400	8980	8080	21500	6510	6030
17	8900	41700	41600	19100	14300	11500	36800	7470	6150	24400	7420	8900
18	5620	32500	41000	17300	14100	15100	30300	4850	8690	19700	8950	6860
19	4020	27500	41600	25600	22400	17600	28700	3840	12000	19000	11900	4950
20	3090	28700	41800	45500	26400	12000	25800	4530	13100	15100	13000	4340
21	4790	34500	41000	33200	22400	9490	27400	7370	7500	15600	9670	4690
22	9740	34000	39700	25300	14000	8890	34000	9090	5860	14600	8400	5570
23	11500	25500	44400	22700	34800	8330	38200	9290	6160	22000	7650	6680
24	12500	11800	57900	17200	45500	11000	35700	9310	6320	24200	8100	7020
25	12300	13800	60200	19200	38500	15900	28100	10700	9460	26000	6520	7340
26	11500	59300	60000	24000	28300	18700	19800	7650	13200	13700	6680	5560
27	11200	68600	54600	31500	45800	18800	17800	7220	7850	11600	8330	4950
28	7480	60600	51900	40600	91200	16500	17300	7050	7050	11100	9610	4630
29	8550	49800	45000	38400	---	9350	12400	9170	4230	19100	11400	6260
30	10300	40400	46100	30300	---	8490	10700	8190	4730	21800	8010	4610
31	12200	---	47400	31000	---	10200	---	4800	---	24600	5550	---
TOTAL	231290	1095360	1506600	978500	720900	844950	627540	253270	268500	506440	321580	191030
MEAN	7461	36510	48600	31560	25750	27260	20920	8170	8950	16340	10370	6368
MAX	12500	95700	83700	45500	91200	100000	48400	15500	16200	26000	21100	9940
MIN	3090	3310	38500	17200	10600	8330	6020	3840	4230	7940	5550	3230

CAL YR 1986 TOTAL 6210540 MEAN 17020 MAX 95700 MIN 1320
WTR YR 1987 TOTAL 7545960 MEAN 20670 MAX 100000 MIN 3090

03435770 SULPHUR FORK RED RIVER ABOVE SPRINGFIELD, TN

LOCATION.--Lat 36°30'47", long 86°51'44", Robertson County, Hydrologic Unit 05130206, on left bank 150 ft downstream from new bridge on State Highway 49, 1.2 mi downstream from Beaver Dam Creek, 1.3 mi northeast of Springfield, and at mile 30.8.

DRAINAGE AREA.--65.6 mi², includes 9.0 mi² without surface drainage.

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder, and crest-stage gage. Datum of gage is 538.17 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharges: July 1 to Aug. 17. Records fair, except for period of no gage-height record July 1 to Aug. 17, which are poor. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--12 years, 98.2 ft³/s, 20.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft³/s, Dec. 8, 1978, gage height, 14.14 ft; minimum, 2.4 ft³/s, Oct. 1-4, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 26	0430	2,180	9.15	Feb. 28	1315	*3,600	*10.97
Dec. 9	1200	2,220	9.23				

Minimum daily discharge, 2.5 ft³/s, Aug. 24-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	8.8	79	60	45	674	113	32	18	20	6.8	8.0
2	7.1	11	115	55	49	373	120	29	54	29	6.0	7.1
3	7.1	12	101	48	50	269	95	37	33	27	5.4	6.2
4	8.0	13	83	45	45	215	78	38	26	45	6.0	5.5
5	10	19	70	41	41	184	68	31	23	56	5.8	5.0
6	9.9	25	63	40	40	155	62	27	18	43	5.6	4.3
7	7.7	15	57	38	39	123	55	25	18	25	5.6	7.3
8	5.5	448	62	36	38	110	54	24	17	17	5.0	27
9	5.5	241	838	33	36	100	49	21	17	14	4.5	17
10	5.5	87	380	35	34	84	44	21	17	13	9.3	13
11	5.5	170	234	34	33	71	48	20	16	12	8.0	10
12	6.7	130	177	31	33	66	45	19	20	10	6.0	29
13	12	71	127	30	32	60	44	19	28	22	5.2	27
14	14	53	102	30	33	57	166	18	19	41	4.7	20
15	12	50	85	29	36	56	208	17	17	23	4.2	15
16	10	46	70	28	35	52	217	17	16	15	3.8	13
17	8.2	40	63	27	36	50	186	16	22	10	4.2	32
18	8.0	37	57	31	39	48	151	16	16	9.0	38	21
19	8.0	34	50	55	40	47	121	16	20	8.0	12	18
20	8.0	33	46	48	41	42	98	14	18	7.8	7.0	13
21	8.0	32	41	43	42	41	84	13	18	7.2	4.7	11
22	8.0	28	38	41	89	38	76	13	30	6.8	3.9	9.1
23	8.0	29	155	40	247	37	68	26	21	8.0	3.3	8.0
24	12	44	383	36	184	38	60	15	27	8.7	2.5	6.3
25	21	48	226	35	145	40	53	15	20	7.9	2.5	5.5
26	17	865	170	36	116	36	48	24	15	7.0	2.8	5.5
27	9.1	232	134	50	441	34	47	17	12	6.2	11	5.5
28	6.4	161	107	32	1820	32	43	13	9.2	27	23	4.7
29	4.5	121	86	34	---	31	38	12	8.3	18	17	11
30	5.3	97	77	62	---	70	35	23	7.2	12	13	19
31	6.3	---	65	52	---	102	---	34	---	7.4	9.0	---
TOTAL	269.6	3200.8	4341	1235	3859	3335	2574	662	600.7	563.0	245.8	384.0
MEAN	8.70	107	140	39.8	138	108	85.8	21.4	20.0	18.2	7.93	12.8
MAX	21	865	838	62	1820	674	217	38	54	56	38	32
MIN	4.5	8.8	38	27	32	31	35	12	7.2	6.2	2.5	4.3
CFSM	.13	1.63	2.13	.61	2.10	1.64	1.31	.33	.31	.28	.12	.20
IN.	.15	1.82	2.46	.70	2.19	1.89	1.46	.38	.34	.32	.14	.22

CAL YR 1986 TOTAL 26306.9 MEAN 72.1 MAX 952 MIN 4.0 CFSM 1.10 IN. 14.91
WTR YR 1987 TOTAL 21269.8 MEAN 58.3 MAX 1820 MIN 2.5 CFSM .89 IN. 12.06

CUMBERLAND RIVER BASIN

03436000 SULPHUR FORK RED RIVER NEAR ADAMS, TN

LOCATION.--Lat 36°30'55", long 85°03'32", Robertson County, Hydrologic Unit 05130206, on left bank 600 ft downstream from county highway bridge, 2.8 mi downstream from Millers Creek, 4.1 mi southwest of Cedar Hill, 4.6 mi south of Adams, and at mile 10.2.

DRAINAGE AREA.--186 mi², includes 21 mi² without surface drainage.

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939, monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 1910: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 424.36 ft, Sandy Hook datum. Jan. 20, 1939, to Nov. 25, 1940, non-recording gage at site 600 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--49 years, 249 ft³/s, 18.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,400 ft³/s, Mar. 12, 1975, gage height, 30.86 ft, from floodmarks; minimum, 1.8 ft³/s, Sept. 27, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1934 reached a stage of 25.1 ft, from floodmarks, discharge not determined. Flood in January 1937 reached a stage of about 22.6 ft, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 26	0800	3,530	10.75	Feb. 28	1830	*7,040	*15.77
Dec. 9	1715	3,800	11.18				

Minimum discharge, 13 ft³/s, Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	205	165	116	2230	208	83	56	100	43	18
2	21	21	254	151	126	1020	220	85	59	151	37	17
3	21	21	249	134	128	731	198	93	58	105	34	17
4	24	22	208	122	112	572	168	113	43	172	30	17
5	35	29	176	114	103	461	143	94	38	535	30	14
6	27	45	154	107	98	394	133	81	34	435	31	15
7	23	49	140	102	97	333	125	75	32	200	29	28
8	21	893	142	95	96	301	117	70	30	129	25	44
9	19	574	1740	90	90	282	108	65	29	109	23	24
10	19	269	989	94	83	241	102	62	30	117	67	20
11	18	391	580	90	80	208	109	59	40	84	55	18
12	19	366	434	83	80	186	105	57	39	67	35	20
13	24	217	327	79	78	170	103	55	64	202	27	32
14	25	152	265	74	84	160	516	53	47	374	24	29
15	23	131	229	74	92	152	650	55	35	159	22	24
16	21	116	195	72	90	141	540	54	38	102	21	21
17	20	101	175	69	94	132	502	50	40	78	20	20
18	19	89	160	78	99	127	416	47	44	64	29	33
19	18	79	141	130	101	123	330	45	59	54	41	26
20	18	74	127	132	104	114	267	59	49	47	25	22
21	17	68	116	111	107	107	225	179	40	43	21	18
22	17	62	105	106	180	101	197	108	53	39	18	17
23	17	60	138	104	636	97	176	94	50	79	17	16
24	20	72	881	92	488	100	157	69	219	102	16	16
25	41	148	550	92	398	105	134	65	98	50	15	16
26	46	2120	408	97	337	93	119	92	58	40	16	16
27	37	590	330	146	907	87	110	67	43	73	20	15
28	29	388	276	95	4340	84	102	51	35	275	47	15
29	25	295	235	83	---	80	93	46	31	98	28	149
30	23	239	210	136	---	107	88	44	28	61	22	80
31	21	---	183	133	---	202	---	65	---	50	19	---
TOTAL	726	7701	10322	3250	9344	9241	6461	2235	1519	4194	887	817
MEAN	23.4	257	333	105	334	298	215	72.1	50.6	135	28.6	27.2
MAX	46	2120	1740	165	4340	2230	650	179	219	535	67	149
MIN	17	20	105	69	78	80	88	44	28	39	15	14
CFSM	.13	1.38	1.79	.56	1.79	1.60	1.16	.39	.27	.73	.15	.15
IN.	.15	1.54	2.06	.65	1.87	1.85	1.29	.45	.30	.84	.18	.16

CAL YR 1986 TOTAL 67814 MEAN 186 MAX 2600 MIN 17 CFSM .99 IN. 13.56
WTR YR 1987 TOTAL 56697 MEAN 155 MAX 4340 MIN 14 CFSM .84 IN. 11.34

CUMBERLAND RIVER BASIN

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03436100 RED RIVER AT PORT ROYAL, TN

LOCATION.--Lat 36°33'17", long 87°08'31", Montgomery County, Hydrologic Unit 05130206, on left bank at county road bridge at Port Royal, 250 ft downstream from Sulphur Fork, and at mile 25.5.

DRAINAGE AREA.--935 mi² includes 437 mi² without surface drainage.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 376.25 ft above National Geodetic Vertical Datum of 1929. July 13, 1961, to Oct. 9, 1963, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: July 10-13. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--26 years, 1,324 ft³/s, 19.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,300 ft³/s, Mar. 13, 1975, gage height, 48.26 ft; minimum, 54 ft³/s, Sept. 17, 18, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 23, 1937, reached a stage of 44.4 ft; from flood profile of U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 1	0930	*17,000	*29.51	No other peak greater than base discharge.			

Minimum discharge, 82 ft³/s, Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	95	1240	1050	656	15700	963	550	558	284	284	143
2	104	94	1400	977	649	7020	985	527	615	994	276	129
3	126	89	1990	891	777	4300	980	510	620	992	257	123
4	126	92	1540	812	737	3420	878	513	425	1570	244	120
5	149	121	1270	755	654	2860	744	508	365	1530	234	114
6	170	164	1100	714	619	2520	677	480	332	4800	225	104
7	153	230	989	684	602	2200	633	456	309	2380	221	120
8	123	2170	940	651	597	1970	601	438	293	1710	215	330
9	110	3320	3590	620	578	1830	566	424	282	1240	200	256
10	102	1800	7850	608	546	1630	539	407	269	1100	226	229
11	99	1550	4200	596	528	1430	531	400	264	1000	228	165
12	98	2010	3040	564	529	1270	525	391	269	900	203	157
13	102	1480	2420	541	521	1140	514	377	281	916	188	151
14	110	1050	1990	524	513	1050	1590	366	276	1620	174	228
15	108	880	1740	513	525	996	3850	371	262	1010	166	172
16	103	784	1540	499	528	939	2680	544	254	723	158	142
17	97	703	1380	480	529	871	2420	455	274	598	150	128
18	95	629	1240	485	550	825	2050	401	293	521	160	132
19	93	569	1100	549	557	783	1680	368	283	467	185	175
20	90	525	992	711	557	747	1420	356	354	426	198	137
21	86	488	904	664	557	701	1210	460	329	394	163	118
22	86	458	820	599	643	666	1070	493	281	375	147	107
23	84	438	800	577	2340	639	970	651	294	364	137	103
24	91	429	2850	547	2590	627	892	493	565	415	127	97
25	124	453	3160	527	1980	614	800	422	665	348	122	97
26	146	4860	2300	512	1690	581	728	437	530	317	118	91
27	138	4190	1880	478	2890	553	678	434	384	320	117	90
28	154	2290	1630	472	8150	533	639	379	305	493	258	90
29	133	1770	1440	468	---	514	601	343	267	375	282	240
30	115	1460	1300	547	---	532	575	329	267	314	188	359
31	105	---	1160	688	---	847	---	401	---	289	157	---
TOTAL	3525	35191	59795	19303	32592	60308	32989	13684	10765	28785	6008	4647
MEAN	114	1173	1929	623	1164	1945	1100	441	359	929	194	155
MAX	170	4860	7850	1050	8150	15700	3850	651	665	4800	284	359
MIN	84	89	800	468	513	514	514	329	254	284	117	90
CFSM	.12	1.25	2.06	.67	1.24	2.08	1.18	.47	.38	.99	.21	.17
IN.	.14	1.40	2.38	.77	1.30	2.40	1.31	.54	.43	1.15	.24	.18

CAL YR 1986	TOTAL 343379	MEAN 941	MAX 11200	MIN 84	CFSM 1.01	IN. 13.66
WTR YR 1987	TOTAL 307592	MEAN 843	MAX 15700	MIN 84	CFSM .90	IN. 12.23

CUMBERLAND RIVER BASIN

03436500 CUMBERLAND RIVER AT CLARKSVILLE, TN

LOCATION (REVISED).--Lat 36°32'28", long 87°22'04", Montgomery County, Hydrologic Unit 05130205, on left bank 30 ft below U.S. Highways 41A, 79 bridge, at Clarksville, 0.3 mile upstream from mouth of Red River, and at mile 125.5.

DRAINAGE AREA.--16,000 sq mi, approximately.

PERIOD OF RECORDS.--October 1986 to September 1987 (gage height only). October 1924 to September 1944 (discharge), published in WSP 1306. Gage height for some periods since 1900 are in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage 300.00 ft above National Geodetic Vertical Datum of 1929. Oct. 1924 to Sept. 1944 at site 1.0 mi upstream at datum 30.86 ft higher.

REMARKS.--Records good. Flow regulated by eight lakes or reservoirs above station, (see p. 141). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 65.7 ft, Jan. 25, 1937, from floodmarks; minimum observed, 12.3 ft, Oct. 7, 24, 1935, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 73.26 ft, Mar. 1; minimum, 53.58 ft, Mar. 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	56.54	55.13	56.18	55.78	58.69	58.33	59.85	58.75	57.18	56.14	73.26	71.72
2	56.30	54.97	56.50	56.18	58.62	58.29	58.73	58.31	56.14	55.08	71.45	64.61
3	56.80	55.03	56.50	56.50	58.89	58.62	58.71	58.60	55.17	53.94	64.54	59.69
4	56.74	55.13	56.50	55.03	59.15	58.72	58.72	58.32	55.56	54.16	59.64	58.18
5	55.93	55.30	56.65	55.37	59.48	59.12	58.30	57.91	55.60	54.33	59.72	58.36
6	56.12	54.94	56.08	55.02	59.60	59.45	58.06	57.75	55.41	53.89	60.08	59.76
7	55.88	54.80	56.60	55.06	59.60	58.89	58.10	57.98	55.49	54.38	60.75	60.09
8	55.59	54.70	62.16	55.35	59.04	58.64	58.14	57.98	55.71	54.22	60.98	60.64
9	55.73	54.68	68.20	62.31	66.38	58.61	58.12	58.02	55.39	54.40	60.60	59.08
10	55.87	54.77	69.14	68.24	69.00	66.48	58.30	58.12	56.04	54.50	59.05	58.65
11	55.97	54.78	68.12	62.61	69.24	67.76	58.36	57.38	56.38	56.00	58.98	58.60
12	55.96	54.85	62.48	60.05	67.70	63.75	57.35	56.96	56.95	56.32	58.68	58.40
13	55.99	55.19	60.60	58.68	63.73	62.59	57.00	56.49	57.45	56.95	58.79	58.67
14	55.81	55.14	58.67	58.34	62.56	61.97	56.47	54.21	57.07	56.52	58.77	57.33
15	55.99	55.14	59.53	58.36	61.78	61.40	55.93	54.18	56.51	56.03	57.33	56.36
16	56.22	54.95	59.66	59.54	61.66	61.30	55.67	54.48	56.06	54.97	56.36	54.55
17	56.20	55.01	59.56	58.51	61.53	60.60	55.61	54.64	55.35	53.88	54.92	53.58
18	55.89	55.47	58.49	57.00	60.58	60.07	55.52	54.92	55.18	54.12	55.46	53.94
19	55.68	54.97	57.01	56.34	60.05	59.64	57.06	54.40	56.51	54.86	55.94	54.58
20	55.54	54.79	56.79	56.33	59.62	59.34	58.63	57.20	56.58	56.52	55.56	54.53
21	55.80	54.85	57.24	56.84	59.34	58.48	58.66	56.27	56.58	56.58	55.00	54.28
22	55.89	54.76	57.47	57.22	58.42	57.78	56.26	55.92	56.58	56.58	54.91	54.22
23	55.95	54.82	57.42	56.45	58.94	58.14	55.98	55.27	58.85	56.58	55.08	54.18
24	56.08	55.32	56.36	54.47	61.61	59.14	55.62	54.62	60.13	58.86	55.10	53.90
25	56.72	55.59	54.98	54.18	62.74	61.63	55.74	54.23	59.68	58.42	55.72	54.10
26	56.37	55.63	62.84	55.01	62.80	62.03	56.00	55.68	58.57	56.36	55.71	54.48
27	56.25	55.19	64.70	62.87	62.01	61.15	57.11	56.00	60.80	57.09	55.97	54.81
28	55.69	55.09	64.83	62.18	61.12	60.87	58.25	57.17	71.74	60.93	56.03	54.53
29	56.25	54.79	62.16	59.75	60.86	59.20	58.27	57.65	---	---	55.66	54.46
30	56.08	55.12	59.69	58.69	59.92	59.38	57.87	56.40	---	---	55.80	54.19
31	55.96	55.24	---	---	59.98	59.86	57.18	56.42	---	---	55.74	54.21
MONTH	56.80	54.68	69.14	54.18	69.24	57.78	59.85	54.18	71.74	53.88	73.26	53.58

CUMBERLAND RIVER BASIN

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03436500 CUMBERLAND RIVER AT CLARKSVILLE, TN--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	56.47	54.82	60.23	58.49	59.72	58.74	59.97	58.67	58.97	58.34	56.73	55.67
2	56.96	55.66	60.30	58.41	---	---	60.04	58.56	58.77	57.98	57.10	55.65
3	56.97	56.01	60.33	59.06	---	---	60.16	58.51	58.82	57.83	57.05	55.57
4	56.68	55.91	59.99	58.64	---	---	59.83	59.28	58.90	57.11	56.76	55.51
5	56.42	55.06	59.80	58.74	---	---	60.16	58.79	58.77	57.00	56.42	55.40
6	56.35	54.90	59.63	58.65	59.92	58.60	60.56	58.88	58.70	57.32	56.35	55.37
7	56.37	55.05	59.65	58.53	59.55	58.55	60.36	58.96	58.45	56.95	56.50	55.33
8	56.47	55.71	59.58	58.46	59.67	58.40	60.50	58.66	58.31	56.79	56.39	55.31
9	56.65	55.45	59.50	58.48	59.90	58.43	60.19	59.49	58.08	56.73	56.25	55.10
10	56.92	55.58	59.57	58.46	59.76	58.42	60.15	59.26	58.34	56.68	56.47	55.09
11	57.04	56.10	59.30	58.50	60.08	58.43	60.15	59.00	57.74	56.51	56.39	55.25
12	56.95	56.71	59.52	58.48	59.96	58.52	59.96	58.35	58.17	56.40	56.53	55.23
13	57.15	55.83	59.62	58.57	60.16	58.98	59.89	58.18	58.14	56.43	56.57	55.57
14	59.04	56.32	59.68	58.66	60.24	58.71	59.46	58.05	58.09	56.51	56.47	55.40
15	60.70	58.36	59.90	58.74	60.14	58.66	59.66	57.96	57.83	56.49	56.56	55.40
16	62.52	60.89	59.80	58.56	60.06	58.65	59.61	58.80	57.75	56.63	56.45	55.41
17	61.90	60.23	59.74	58.72	59.74	58.70	59.57	59.17	57.95	56.55	57.26	55.42
18	60.20	59.58	59.70	58.70	60.18	58.64	59.41	58.58	57.75	56.27	56.79	55.28
19	60.08	59.70	59.66	58.59	60.20	58.69	59.57	58.24	58.03	56.49	56.31	55.10
20	60.12	59.82	59.73	58.56	60.36	58.83	59.28	57.73	57.79	56.08	56.22	55.05
21	60.90	60.11	59.87	58.67	60.30	58.90	59.27	57.97	57.63	56.09	56.29	54.91
22	61.84	60.90	59.99	58.93	60.17	58.87	59.26	57.50	57.56	56.01	55.91	54.82
23	62.32	61.80	60.29	59.01	59.89	58.70	59.16	58.13	57.12	56.03	55.79	54.75
24	62.20	61.58	60.14	58.84	59.73	58.71	59.13	58.83	57.30	55.74	56.01	54.79
25	61.58	60.44	59.81	59.04	60.10	58.56	59.08	58.32	56.98	55.52	55.99	54.79
26	60.42	59.56	59.72	58.69	60.28	58.58	59.22	57.53	56.99	55.47	55.98	54.85
27	60.22	58.58	60.02	58.84	60.09	58.50	59.18	57.44	57.00	55.81	55.82	54.90
28	60.16	58.93	59.96	58.69	59.73	58.48	58.50	57.64	57.03	55.81	55.59	54.73
29	60.01	58.68	60.09	58.64	59.75	58.40	59.01	58.09	57.49	55.70	55.78	54.61
30	60.00	58.81	60.38	58.64	59.53	58.45	59.09	58.16	56.95	55.75	55.57	54.65
31	---	---	60.33	58.60	---	---	59.15	58.87	57.04	55.70	---	---
MONTH	62.52	54.82	60.38	58.41	---	---	60.56	57.44	58.97	55.47	57.26	54.61

CUMBERLAND RIVER BASIN

03436690 YELLOW CREEK AT ELLIS MILLS, TN

LOCATION.--Lat 36°18'39", long 87°33'15", Houston County, Hydrologic Unit 05130205, on right bank at downstream end of bridge on county road, 0.3 mi northeast of Ellis Mills, 1.0 mi upstream from Leatherwood Creek, 1.0 mi downstream from Williamson Branch.

DRAINAGE AREA.--103 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 417 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--7 years, 145 ft³/s, 19.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s May 6, 1984, gage height, 18.47 ft recorded, 18.95 ft, from floodmarks, from rating curve extended above 9,500 ft³/s on basis of regression formula and peak discharge at Station No. 03436700 Yellow Creek near Shiloh, TN; minimum, 7.2 ft³/s Oct. 14, 1986, result of upstream regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 9	1400	*3,180	*10.35	Feb. 28	1130	3,120	10.27

Minimum discharge, 7.2 ft³/s, Oct. 14, result of upstream regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	23	130	121	62	1200	90	92	37	30	26	17
2	30	23	115	111	69	604	118	87	37	41	25	17
3	38	23	102	101	76	417	129	85	35	42	23	16
4	42	23	90	94	79	334	130	79	33	39	24	15
5	45	28	82	89	79	289	126	74	31	34	23	15
6	37	32	76	84	79	254	124	70	30	35	23	15
7	32	34	72	79	79	220	118	67	30	31	22	15
8	29	456	71	75	79	202	111	63	29	29	21	15
9	27	451	1050	72	75	187	103	59	28	28	20	16
10	26	255	633	71	72	166	97	57	27	28	19	16
11	25	359	386	69	69	149	96	55	27	28	19	15
12	24	361	301	65	68	135	90	54	30	26	19	17
13	24	231	234	62	66	125	93	53	38	26	18	18
14	22	167	188	60	66	118	798	52	32	24	17	18
15	22	143	162	58	67	112	710	65	29	24	17	17
16	22	117	145	55	69	107	498	58	40	23	17	17
17	21	100	131	53	81	99	415	52	40	22	17	18
18	21	89	117	56	94	104	346	49	36	21	18	19
19	20	78	103	61	104	98	295	48	35	21	18	18
20	20	71	94	60	111	91	253	47	34	21	17	18
21	20	64	86	61	118	87	220	45	37	19	17	17
22	19	59	79	61	150	84	195	44	38	19	16	16
23	19	56	86	62	372	81	173	45	36	21	15	15
24	22	54	242	62	383	81	157	51	34	25	14	15
25	31	53	282	62	320	80	142	45	32	24	14	15
26	32	459	241	61	281	75	130	46	30	22	14	15
27	30	332	205	57	694	73	121	43	28	38	22	15
28	28	234	177	56	1970	72	111	40	26	40	22	14
29	25	178	161	56	---	70	101	39	26	36	20	17
30	24	149	149	61	---	78	97	38	25	32	19	20
31	24	---	134	62	---	86	---	38	---	29	18	---
TOTAL	825	4702	6124	2157	5832	5878	6187	1740	970	878	594	491
MEAN	26.6	157	198	69.6	208	190	206	56.1	32.3	28.3	19.2	16.4
MAX	45	459	1050	121	1970	1200	798	92	40	42	26	20
MIN	19	23	71	53	62	70	90	38	25	19	14	14
CFSM	.26	1.52	1.92	.68	2.02	1.84	2.00	.54	.31	.27	.19	.16
IN.	.30	1.70	2.21	.78	2.11	2.12	2.23	.63	.35	.32	.21	.18

CAL YR 1986 TOTAL 39626 MEAN 109 MAX 1430 MIN 15 CFSM 1.05 IN. 14.31
WTR YR 1987 TOTAL 36378 MEAN 99.7 MAX 1970 MIN 14 CFSM .97 IN. 13.13

CUMBERLAND RIVER BASIN

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03437000 CUMBERLAND RIVER AT DOVER, TN

LOCATION.--Lat 36°29'26", long 87°50'20", Stewart County, Hydrologic Unit 05130205, on left bank, 50 ft downstream from bridge on U.S. Highway 79, at Dover, 0.1 mile upstream from Dyer Creek, 0.6 mile upstream from Indian Creek, 0.8 mile upstream from former lock and dam D, and at mile 88.8.

DRAINAGE AREA.--16,530 mi², approximately.

PERIOD OF RECORD.--October 1986 to September 1987, (gage height only). Prior to September 1965 (discharge), published in WSP 1910. Gage-height records collected in this vicinity 1917-22 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1276: 1942. WSP 1706: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft, Sandy Hook datum. Oct. 1937 to Sept. 1965 at datum 24.25 ft higher. Staff gage above spillway at lock and dam D, at datum 24.25 ft higher, used during periods of crest-wicket manipulation.

REMARKS.--Records good. Flow regulated by eight lakes or reservoirs above station (see p. 141). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 56.8 ft Jan. 25, 1937, at lock D; minimum observed, 6.8 ft in Sept. 1925, at lock D. Both extremes from unpublished records of U.S. Army Corps of Engineers and prior to closure of Barkley Dam.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 61.60 ft Mar. 1; minimum gage height 53.58 ft, Mar. 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	55.88	55.24	55.68	55.23	55.74	55.38	56.23	56.03	55.14	54.73	61.60	59.98
2	55.73	55.28	55.81	55.29	55.71	55.45	55.91	55.55	54.80	54.28	61.51	58.68
3	55.98	55.22	55.74	55.17	55.89	55.61	55.70	55.59	54.39	53.89	58.64	56.34
4	55.91	55.34	55.76	55.17	55.94	55.80	55.75	55.62	54.54	53.99	56.35	55.55
5	55.91	55.39	55.85	55.29	56.07	55.90	55.62	55.42	54.62	54.20	56.16	55.61
6	55.58	55.26	55.68	55.18	56.30	56.07	55.43	55.20	54.54	53.96	56.63	56.18
7	55.53	55.12	55.83	55.11	56.38	56.27	55.46	55.19	54.74	54.30	56.91	56.63
8	55.31	54.94	57.76	55.26	56.32	56.20	55.21	55.11	55.22	54.36	57.04	56.90
9	55.34	54.87	59.56	57.79	58.60	56.18	55.22	55.09	54.59	54.20	56.93	56.39
10	55.43	54.99	60.09	59.55	60.31	58.68	55.55	55.23	54.86	54.30	56.37	55.90
11	55.62	55.04	60.03	58.62	60.83	60.33	55.61	55.43	55.00	54.77	55.90	55.50
12	55.77	55.10	58.56	57.29	60.69	59.65	55.44	55.29	55.01	54.88	55.58	55.37
13	55.60	55.20	57.57	56.58	59.68	59.47	55.27	55.02	55.10	54.95	55.48	55.38
14	55.53	55.20	56.57	56.25	59.46	59.34	55.04	54.22	55.12	54.96	55.58	55.30
15	55.57	55.23	56.52	56.32	59.23	58.88	54.66	54.36	55.04	54.78	55.29	54.74
16	55.70	55.18	56.56	56.42	58.87	58.47	54.46	54.16	54.78	54.30	54.73	53.98
17	55.63	55.22	56.42	55.90	58.50	57.80	54.44	54.12	---	---	54.07	53.58
18	55.66	55.24	55.90	55.50	57.79	57.06	54.58	54.35	---	---	54.52	53.78
19	55.48	55.16	55.46	54.92	57.18	56.69	54.77	54.22	---	---	54.68	54.29
20	55.30	54.94	55.12	54.90	56.68	56.28	55.21	54.53	---	---	54.58	54.18
21	55.44	54.96	55.23	55.06	56.28	55.69	55.24	54.70	54.76	54.46	54.25	53.96
22	55.40	55.00	55.54	55.23	55.66	55.06	54.73	54.62	54.76	54.43	54.30	54.00
23	55.51	55.03	55.62	55.36	55.10	54.99	54.67	54.32	55.58	54.60	54.38	54.07
24	55.72	55.37	55.47	54.38	56.33	55.11	54.53	54.21	56.03	55.59	54.35	54.01
25	55.91	55.61	54.38	54.12	56.84	56.34	54.54	54.11	56.05	55.76	54.46	54.20
26	55.86	55.62	57.12	54.40	57.12	56.82	54.57	54.38	55.79	55.30	54.46	54.18
27	55.70	55.31	57.68	57.11	57.01	56.81	54.96	54.54	56.22	55.28	54.74	54.39
28	55.37	54.97	57.86	57.32	56.80	56.68	55.40	54.96	59.90	56.24	54.89	54.34
29	55.63	55.03	57.30	56.53	56.70	56.30	55.48	55.32	---	---	54.98	54.52
30	55.50	55.06	56.50	55.76	56.36	56.26	55.52	55.24	---	---	54.81	54.36
31	55.44	55.17	---	---	56.29	56.23	55.22	54.95	---	---	54.85	54.38
MONTH	55.98	54.87	60.09	54.12	60.83	54.99	56.23	52.22	56.22	53.89	61.60	53.58

CUMBERLAND RIVER BASIN

03437000 CUMBERLAND RIVER AT DOVER, TN--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	55.28	54.65	59.35	58.73	59.22	58.77	59.21	58.72	58.05	57.73	56.30	55.75
2	55.40	55.03	59.27	58.77	59.16	58.70	59.11	58.70	57.79	57.60	56.29	55.74
3	55.55	55.17	59.42	59.00	59.36	58.80	59.24	58.68	---	---	56.21	55.71
4	55.58	55.11	59.36	58.85	59.26	58.66	59.24	59.06	---	---	56.11	55.62
5	55.58	55.02	59.40	58.80	59.32	58.74	59.58	58.95	---	---	56.02	55.54
6	55.61	55.03	59.18	58.76	59.22	58.66	59.46	58.93	57.78	57.28	55.92	55.48
7	55.60	55.05	59.14	58.70	59.02	58.62	59.38	58.98	57.75	57.06	55.90	55.41
8	55.77	55.47	59.14	58.66	58.95	58.58	59.45	58.74	57.46	56.97	55.67	55.42
9	56.03	55.53	59.04	58.67	59.01	58.53	59.31	59.00	57.43	56.94	55.70	55.31
10	56.34	55.58	58.98	58.61	59.12	58.47	59.21	58.78	57.47	56.88	55.88	55.22
11	56.33	55.81	58.89	58.66	59.20	58.57	59.18	58.76	57.26	56.76	55.86	55.33
12	56.33	56.04	59.02	58.58	59.14	58.62	59.02	58.66	57.34	56.66	55.97	55.35
13	56.47	55.89	59.18	58.68	59.26	58.82	58.95	58.34	57.30	56.78	55.99	55.62
14	57.35	56.19	59.22	58.74	59.39	58.88	58.78	58.21	57.27	56.73	56.05	55.54
15	57.88	57.25	59.33	58.86	59.46	58.73	58.70	58.10	57.31	56.70	56.06	55.51
16	58.78	57.94	59.29	58.80	59.38	58.79	58.66	58.34	57.21	56.68	55.98	55.52
17	58.58	57.98	59.23	58.82	59.32	58.85	58.63	58.30	57.30	56.63	56.16	55.50
18	58.19	57.96	59.14	58.83	59.38	58.80	58.55	58.27	57.10	---	56.05	55.46
19	58.56	58.08	59.18	58.74	59.40	58.84	58.65	58.14	57.08	56.59	55.85	55.24
20	58.95	58.54	59.27	58.63	59.50	58.90	58.47	57.93	56.86	56.43	55.78	55.22
21	59.50	58.97	59.28	58.67	59.62	59.06	58.34	57.99	56.81	56.38	55.64	55.04
22	59.90	59.51	59.48	58.96	59.65	59.10	58.32	57.75	56.86	56.34	55.57	55.02
23	60.38	59.89	59.58	59.07	59.34	58.89	58.21	57.80	56.59	56.20	55.51	55.08
24	60.14	59.82	59.42	58.90	59.29	58.72	58.18	57.85	56.44	55.94	55.50	55.04
25	59.90	59.42	59.29	58.91	59.27	58.72	58.15	57.87	56.38	55.72	55.51	55.02
26	59.42	59.06	59.29	58.94	59.34	58.83	58.24	57.69	56.33	55.82	55.42	55.00
27	59.18	58.64	59.38	58.94	59.40	58.73	58.24	57.64	56.48	55.89	55.34	55.00
28	59.30	58.79	59.33	58.94	59.22	58.63	58.00	57.70	56.43	55.85	55.17	54.88
29	59.33	58.85	59.29	58.79	59.14	58.61	58.15	57.78	56.52	55.91	55.38	54.68
30	59.37	58.77	59.47	58.61	58.99	58.58	58.24	57.81	56.40	55.90	55.22	54.66
31	---	---	59.24	58.81	---	---	58.22	57.90	56.42	55.81	---	---
MONTH	60.38	54.65	59.58	58.58	59.65	58.47	59.58	57.64	58.05	55.72	56.30	54.66

RESERVOIRS IN CUMBERLAND RIVER BASIN

03413500 LAKE CUMBERLAND.--Lat 36°52'09", long 85°08'45", Russell County, KY, Hydrologic Unit 05130103, in pylon of Wolf Creek Dam on Cumberland River and 10 mi southwest of Jamestown, Ky. DRAINAGE AREA, 5,789 mi². PERIOD OF RECORD, April 1950 to current year. Prior to October 1954, published as Wolf Creek Reservoir. April to June 1950, published in WSP 1726. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum. Prior to Dec. 6, 1950, nonrecording gage at same site at datum 545.0 ft higher.

REVISIONS.--WSP 1556: Drainage area.

REMARKS.--Reservoir is formed by earth embankment and concrete gravity dam surmounted by 10 tainter gates, each 37 ft high by 50 ft wide. Final closure of dam made Aug. 7, 1950. Total capacity at elevation 760.00 ft top of gates, is 3,070,000 cfs-days, of which 1,056,000 cfs-days above elevation 723.00 ft, crest of spillway, are reserved for flood control and 1,080,000 cfs-days between elevation 673.00 ft, minimum power pool, and 723.00 ft are used for power production. Figures given herein represent total contents, of which 934,000 cfs-days below elevation 673.00 ft is dead storage. Reservoir is used for flood control, power, navigation, and recreation.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,811,000 cfs-days, May 13, 1984, elevation, 751.70 ft; minimum, after first filling, 934,400 cfs-days, Jan. 1, 1956, elevation, 673.01 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,063,800 cfs-days, Apr. 20, elevation, 724.96 ft; minimum, 1,320,200 cfs-days, Jan. 18, elevation, 692.89 ft.

03416500 DALE HOLLOW LAKE.--Lat 36°32'19", long 85°27'05", Clay County, Hydrologic Unit 05130105, at Dale Hollow Dam on Obey River, 3.0 mi east of Celina, and 7.3 mi upstream from mouth. DRAINAGE AREA, 936 mi². PERIOD OF RECORD, August 1943 to current year. Prior to October 1965, published as Dale Hollow Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum. Prior to June 25, 1946, nonrecording gage at same site and datum.

REVISIONS.--WSP 1306: 1944. WSP 2110: Drainage area.

REMARKS.--Reservoir is formed by concrete gravity dam. Spillway is equipped with six tainter gates, each 12 ft high by 60 ft wide. Closure of dam was made Aug. 30, 1943; water in reservoir first reached minimum pool elevation May 7, 1944. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 663.0 ft, top of gates, is 859,800 cfs-days of which 177,500 cfs-days between elevations 663.00 ft and 651.00 ft, crest of spillway, are reserved for flood control, and 250,200 cfs-days between elevations 651.00 ft and 631.00 ft, ordinary minimum pool, are used for power production. Contents of 432,100 cfs-days below elevation 631.00 ft is dead storage. Reservoir is used for flood control, navigation, and power.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 828,600 cfs-days, .. 15, 1975, elevation, 660.98 ft; minimum, after first filling, 428,000 cfs-days, Sept. 11, 1944, elevation, 630.63 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 669,200 cfs-days, June 1, elevation, 650.06 ft; minimum, 504,500 cfs-days, Nov. 7, elevation, 637.29 ft.

03418400 CORDELL HULL RESERVOIR.--Lat 36°17'23", long 85°56'39", Smith County, Hydrologic Unit 05130108, at Cordell Hull Dam on Cumberland River, 2.7 mi north of Carthage, and at mile 313.5. DRAINAGE AREA, 8,095 mi². PERIOD OF RECORD, October 1972 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with five tainter gates, each 41 ft high and 45 ft wide. Closure of dam was made Oct. 4, 1967; water in reservoir first reached ordinary minimum pool Mar. 13, 1973. Total capacity at elevation 508.0 ft, maximum surge pool, is 156,700 cfs-days, of which 53,400 cfs-days is controlled storage between elevations 508.0 ft and 499.0 ft, ordinary minimum pool. Contents of 5,000 cfs-days between elevation of 499.0 ft and 500.0 ft full winter pool, is available for power production. Contents of 48,400 cfs-days above 500.0 ft is available for flood control during the winter, and 26,100 cfs-days above 504.0 ft, full pool during spring to fall season, is available for flood control the rest of the year. Contents of 103,300 cfs-days below elevation 499.0 ft is dead storage. Reservoir is used for navigation, power, and flood control.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 156,700 cfs-days, Mar. 13, 1975, May 8, 1984, elevation, 508.00 ft; minimum, after first filling to ordinary minimum pool, 96,700 cfs-days, Apr. 18, 1974, elevation, 497.65 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 135,800 cfs-days, Aug. 12, elevation, 504.83 ft; minimum, 103,300 cfs-days, Dec. 27, Mar. 11, elevation, 499.00 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	03413500 LAKE CUMBERLAND			03416500 DALE HOLLOW LAKE			03418400 CORDELL HULL RESERVOIR		
	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
Sept. 30.....	698.25	1,433,800	-	637.75	510,000	-	504.20	131,900	-
Oct. 31.....	694.96	1,363,600	-70,200	637.35	505,200	-4,800	502.05	119,300	-12,600
Nov. 30.....	709.56	1,687,500	+323,900	643.35	579,700	+74,500	500.06	108,600	-10,700
Dec. 31.....	704.64	1,574,800	-112,700	642.59	570,000	-9,700	499.60	106,300	-2,300
CAL YR 1986	-	-	+222,200	-	-	+55,400	-	-	-4,200
Jan. 31.....	700.03	1,472,500	-102,300	641.57	557,100	-12,900	500.31	109,900	+3,600
Feb. 28.....	712.54	1,757,400	+284,900	645.28	604,800	+47,700	500.13	109,000	-900
Mar. 31.....	715.57	1,830,000	+72,600	646.52	621,200	+16,400	501.10	114,100	+5,100
Apr. 30.....	722.30	1,996,200	+166,200	649.38	659,900	+38,700	504.13	131,400	+17,300
May 31.....	722.13	1,991,900	-4,300	650.01	660,600	+700	504.40	133,100	+1,700
June 30.....	718.71	1,906,600	-85,300	648.36	645,900	-14,700	504.41	133,100	0
July 31.....	709.39	1,683,500	-223,100	643.17	577,400	-68,500	503.96	130,400	-2,700
Aug. 31.....	701.61	1,507,000	-176,500	639.74	534,300	-43,100	504.06	131,000	+600
Sept. 30.....	696.96	1,406,100	-100,900	637.97	512,700	-21,600	504.17	131,700	+700
WTR YR 1987	-	-	-27,700	-	-	+2,700	-	-	-200

RESERVOIRS IN CUMBERLAND RIVER BASIN--Continued

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, Hydrologic Unit 05130108, at penstock inlet on Collins River, 700 ft southwest of powerhouse of Tennessee Valley Authority, 1.5 mi northwest of Rock Island, 1.8 mi upstream from mouth of Collins River, and 2.0 mi upstream from Great Falls Dam on Caney Fork. DRAINAGE AREA, 1,677 mi². PERIOD OF RECORD, January 1917 to current year. GAGE, remote indicator gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REVISIONS.--WSP 2110: Drainage area.

REMARKS.--Reservoir is formed by concrete gravity dam. Spillway is equipped with 18 taintor gates, each 14 ft high by 25 ft wide. Closure of dam was made in 1916; dam redesigned and crest raised 35 ft in 1925. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 805.3 ft top of gates, is 25,900 cfs-days, of which 18,700 cfs-days are controlled storage above elevation 780.0 ft, normal minimum pool. Contents of 1,500 cfs-days below elevation 762.0 ft is dead storage. Reservoir is used primarily for power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum midnight elevation, 817.48 ft, Mar. 23, 1929, contents not determined; minimum midnight contents, 1,700 cfs-days, Aug. 19, 1918, elevation, 756.3 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 26,100 cfs-days, Dec. 8, elevation, 806.04 ft; minimum, 5,800 cfs-days, Sept. 22, elevation, 776.52 ft.

03424000 CENTER HILL LAKE.--Lat 36°05'48", long 85°49'38", DeKalb County, Hydrologic Unit 05130108, at Center Hill Dam on Caney Fork, 10 mi north of Smithville, 14 mi southeast of Carthage, and at mile 26.6. DRAINAGE AREA, 2,174 mi². PERIOD OF RECORD, October 1948 to current year. Prior to October 1965, published as Center Hill Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum. Prior to Mar. 14, 1949, nonrecording gage at site 1,320 ft upstream at same datum.

REVISIONS.--WSP 1910: Drainage area.

REMARKS.--Reservoir is formed by earth embankment and concrete gravity dam. Spillway is equipped with eight taintor gates, each 37 ft high by 50 ft wide. Closure of dam was made Nov. 27, 1948; water in reservoir first reached minimum pool elevation Jan. 11, 1949. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 685.0 ft, top of gates, is 1,054,800 cfs-days, of which 384,500 cfs-days between 685.0 ft and 648.0 ft, crest of spillway, are reserved for flood control, and 248,000 cfs-days between elevations 648.0 ft and 618.0 ft, ordinary minimum pool, are used for power production. Contents of 422,300 cfs-days below 618.0 ft is dead storage. Reservoir is used for flood control, navigation, and power.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,014,600 cfs-days, May 10, 1984, elevation, 681.52 ft; minimum, after first filling, 171,000 cfs-days, Dec. 1, 2, 1949, elevation, 576.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 671,900 cfs-days, Mar. 2, elevation, 648.18 ft; minimum, 494,700 cfs-days, Jan. 17, elevation, 627.47 ft.

03426300 OLD HICKORY LAKE.--Lat 36°17'50", long 86°39'20", Sumner County, Hydrologic Unit 05130201, at Old Hickory Dam on Cumberland River, 2.0 mi west of Hendersonville, 10 mi northeast of the State Capitol in Nashville, and at mile 216.2. DRAINAGE AREA, 11,673 mi². PERIOD OF RECORD, June 1954 to current year. GAGE, water-stage recorder. Datum of gage is 408.5 ft National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Apr. 4, 1957, nonrecording gage at same site and datum.

REVISIONS.--WSP 2110: Drainage area.

REMARKS.--Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with six taintor gates, each 41 ft high and 45 ft wide. Closure of dam was made in June 1954 and water in reservoir was raised sufficiently to maintain navigation through the lock. Water in reservoir first reached ordinary minimum pool elevation Dec. 30, 1956. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 450.0 ft, maximum surcharge pool, 274,600 cfs-days of which 63,000 cfs-days between elevations 450.0 ft and 445.0 ft, normal pool, are induced surcharge storage provided to compensate for loss of natural valley storage incurred by construction of the project, and 31,800 cfs-days between elevations 445.0 ft and 442.0 ft, ordinary minimum pool, are used for power production. Contents of 179,800 cfs-days below elevation 442.0 ft, is dead storage. Reservoir is used for navigation and power.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 277,200 cfs-days, May 9, 1984, elevation, 450.18 ft; minimum, after first filling to ordinary minimum pool, 179,400 cfs-days, Oct. 22, 1957, Oct. 28, 1969, elevation, 441.96 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 220,700 cfs-days, Nov. 27, elevation, 445.79 ft; minimum, 195,400 cfs-days, Mar. 2, elevation, 443.52 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03422000	GREAT FALLS LAKE		03424000	CENTER HILL LAKE		03426300	OLD HICKORY LAKE	
Sept. 30.....	799.16	19,800	-	631.81	529,700	-	444.46	205,600	-
Oct. 31.....	799.90	20,400	+600	630.65	520,200	-9,500	444.60	207,100	+1,500
Nov. 30.....	804.36	24,400	+4,000	642.14	617,500	+97,300	444.21	202,800	-4,300
Dec. 31.....	803.94	24,000	-400	632.94	539,000	-78,500	444.72	208,400	+5,600
CAL YR 1986	-	-	+12,600	-	-	+54,600	-	-	+3,000
Jan. 31.....	805.54	25,600	+1,600	634.01	547,800	+8,800	444.42	205,100	-3,300
Feb. 28.....	804.28	24,300	-1,300	645.04	634,400	+95,600	444.69	208,100	+3,000
Mar. 31.....	793.16	15,100	-9,200	640.83	606,000	-37,400	444.78	209,100	+1,000
Apr. 30.....	795.77	17,000	+1,900	645.82	650,400	+44,400	444.52	206,200	-2,900
May 31.....	781.95	8,300	-8,700	647.45	665,200	+14,800	444.63	207,400	+1,200
June 30.....	779.65	7,200	-1,100	644.19	635,700	-29,500	444.60	207,100	-300
July 31.....	779.29	7,000	-200	638.12	582,600	-53,100	444.28	203,600	-3,500
Aug. 31.....	778.65	6,700	-300	634.05	548,200	-34,400	444.56	206,700	+3,100
Sept. 30.....	779.30	7,000	+300	631.22	524,800	-23,400	444.74	208,700	+2,000
WTR YR 1987	-	-	-12,800	-	-	-4,900	-	-	+3,100

RESERVOIRS IN CUMBERLAND RIVER BASIN--Continued

03430050 J. PERCY PRIEST RESERVOIR.--Lat 36°09'23", long 86°37'07", Davidson County, Hydrologic Unit 05130203, on upstream face of J. Percy Priest Dam on Stones River, 2.6 mi east of Donelson, and 6.8 mi above mouth. DRAINAGE AREA, 892 mi². PERIOD OF RECORD, September 1967 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Dec. 15, 1967, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with four taintor gates, each 41 ft high by 45 ft wide. Closure of dam was made Sept. 18, 1967; water in reservoir first reached ordinary minimum pool May 15, 1968. Revised capacity table used after Sept. 30, 1970. Total capacity at elevation 504.5 ft, maximum controlled pool, is 328,700 cfs-days of which 193,600 cfs-days is controlled storage between elevations 504.5 ft and 480.0 ft, ordinary minimum pool. Contents of 17,200 cfs-days between elevations 480.0 ft and 483.0 ft, full winter pool, is available for power production. Contents of 176,400 cfs-days above 483.0 ft is available for flood control during the winter, and 131,100 cfs-days above 490.0 ft, full pool during spring-to-fall season, is available for flood control the rest of the year. Contents of 135,100 cfs-days below elevation 480.0 ft is dead storage. Reservoir is used for flood control, power, recreation, and wildlife.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 336,600 cfs-days, May 9, 1984, elevation, 505.18 ft; minimum, after first filling to ordinary minimum pool, 109,500 cfs-days, Dec. 5, 1968, elevation, 474.75 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 231,700 cfs-days, Nov. 12, elevation, 494.49 ft; minimum, 145,300 cfs-days, Jan. 3, elevation, 481.82 ft.

03434900 CHEATHAM LAKE.--Lat 36°18'56", long 87°13'10", Cheatham County, Hydrologic Unit 05130202, at Cheatham Dam on Cumberland River, 9.4 mi west of Ashland City, 16 mi southeast of the courthouse in Clarksville, and at mile 148.7. DRAINAGE AREA, 14,159 mi².

REMARKS.--Reservoir is formed by concrete gravity dam. Spillway is equipped with seven semi-submersible taintor gates, each 27 ft high by 60 ft wide. Total capacity at elevation 385.0 ft, normal pool, is 52,200 cfs-days, of which 9,800 cfs-days are controlled storage. Records of contents not published herein.

03438210 LAKE BARKLEY.--Lat 37°01'17", long 88°13'16", Lyon County, KY, Hydrologic Unit 05130205, in powerhouse of Barkley Dam on Cumberland River, 1.4 mi northeast of Grand Rivers, KY, and at mile 30.6. DRAINAGE AREA, 17,598 mi². PERIOD OF RECORD, July 1964 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers). Prior to Jan. 1, 1966, nonrecording gage, 1,200 ft upstream from Barkley Dam at same datum.

REMARKS.--Reservoir is formed by concrete gravity dam with earth embankments. Spillway is equipped with 12 taintor gates, each 50 ft high by 55 ft wide. Construction cofferdam was closed and limited storage began July 1, 1964; reservoir reached ordinary minimum pool elevation of 354.0 ft Feb. 16, 1966. Total level pool capacity at elevation 375.0 ft, top of gates, is 1,049,600 cfs-days, of which 742,000 cfs-days is controlled storage above 354.0 ft, ordinary minimum pool. Contents of 130,500 cfs-days between ordinary minimum pool elevation, 354.0 ft, and full pool elevation, 359.0 ft, is available for power during the spring-to-fall season. Minimum pool elevation in advance of floods is 346.0 ft, contents 171,000 cfs-days. Reservoir is used for navigation, flood control, power, and recreation. Barkley-Kentucky Canal opened June 13, 1966, for navigation and power use. Canal is 1.75 mi long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 mi upstream from Barkley Dam. For daily discharges through the canal, see station 03438190, Kentucky reports.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 370.04 ft, May 13, 1984; minimum after reaching permanent pool elevation, 353.20 ft, Dec. 20, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 460,800 cfs-days, Apr. 23, elevation, 359.77 ft; minimum contents, 300,900 cfs-days, Feb. 3, minimum elevation, 353.70 ft. Contents based on backwater profile.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03430050	J. PERCY PRIEST LAKE		03438210	LAKE BARKLEY†	
Sept. 30.....	490.12	198,500	-	355.54	344,200	-
Oct. 31.....	487.81	182,400	-16,100	355.34	339,300	-4,900
Nov. 30.....	488.82	189,300	+6,900	354.52	319,600	-19,700
Dec. 31.....	482.63	150,100	-39,200	354.83	326,900	+7,300
CAL YR 1986	-	-	+3,800	-	-	+11,500
Jan. 31.....	482.27	148,000	-2,100	354.47	318,400	-8,500
Feb. 28.....	487.86	182,700	+34,700	354.74	324,800	+6,400
Mar. 31.....	484.73	162,700	-20,000	354.86	327,600	+2,800
Apr. 30.....	488.13	184,600	+21,900	359.15	442,400	+114,800
May 31.....	489.04	190,800	+6,200	359.20	443,900	+1,500
June 30.....	489.58	194,600	+3,800	359.14	442,100	-1,800
July 31.....	490.11	198,400	+3,800	357.90	406,700	-35,400
Aug. 31.....	489.40	193,300	-5,100	356.12	358,900	-47,800
Sept. 30.....	487.72	181,800	-11,500	355.02	331,500	-27,400
WTR YR 1987	-	-	-16,700	-	-	-12,700

† Contents based on backwater profile.

TENNESSEE RIVER BASIN

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN

LOCATION.--Lat 35°58'54", long 83°09'40", Cocke County, Hydrologic Unit 06010105, on left bank, 200 ft upstream from bridge on U.S. Highway 411, 1.0 mi northeast of Newport city limits, 3.7 mi upstream from Pigeon River, and at mile 77.5.

DRAINAGE AREA.--1,858 mi².

PERIOD OF RECORD.--September to December 1900, February to August 1901, October to November 1901, November 1902 to December 1905, September to December 1907, October 1920 to current year. Monthly discharge only October to November 1920, published in WSP 1306.

REVISED RECORDS.--WSP 783: 1933-34. WSP 823: Drainage area. WSP 893: 1928(M). WSP 1306: 1900-1908. WSP 1336: 1903(M), 1921-22(M), 1923, 1925(M), 1927(M), 1928, 1932. WSP 1706: 1901(M).

GAGE.--Water-stage recorder. Datum of gage is 1,011.61 ft above National Geodetic Vertical Datum of 1929. See WSP 1910 for history of changes prior to Mar. 31, 1934.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation during low flow caused by powerplants above station. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--69 years (water years 1904-05, 1921-87), 2,956 ft³/s, 21.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,300 ft³/s, Aug. 30, 1940, gage height, 19.25 ft; minimum, 208 ft³/s, Oct. 23, 1952, gage height, 0.97 ft; minimum daily, 240 ft³/s, Sept. 9, 1925; minimum gage height, 0.86 ft, Aug. 4, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--From reports of Tennessee Valley Authority, the flood of Mar. 7, 1867, gage height, 24 ft, present datum, discharge, estimated, 110,000 ft³/s, has not been exceeded since that date. From the same reports, other outstanding floods occurred Feb. 28, 1902, gage height, 23.0 ft present datum, discharge, estimated, 101,000 ft³/s; and July 17, 1916, gage height, 22.5 ft, present datum, discharge, estimated, 97,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 1	0630	*29,100	*11.77	Apr. 17	1700	16,900	8.34

Minimum discharge, 445 ft³/s, Oct. 8, 9; minimum daily, 459 ft³/s, Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	578	1210	3190	2580	3820	23600	4710	3070	2260	1830	1040	621
2	578	1190	3880	2570	3420	16800	4010	2960	3250	2530	1100	626
3	536	1230	6350	2560	4150	13100	3700	3030	2780	2620	1020	628
4	573	1180	6060	2380	4140	9670	3930	2900	2430	3220	1160	606
5	630	1150	5310	2250	3620	6450	4000	2680	3060	3500	1030	616
6	530	1180	3620	2190	3200	4720	4080	2620	2420	4500	1230	743
7	493	1220	2970	2090	2950	4150	5680	2430	1960	3390	1460	2760
8	465	1520	2730	1960	2800	3810	7050	2360	1800	2590	2100	4230
9	459	1940	2600	1980	2580	3690	9130	2240	1730	2300	1580	2470
10	544	1810	3330	1970	2400	4110	7460	2120	1660	2100	1490	1770
11	770	1640	4240	1940	2370	3890	5790	2020	1640	2130	1290	1690
12	825	1690	5100	1930	2160	3550	4920	1950	2010	2750	1150	2300
13	846	2010	4380	1860	2170	3330	4280	2080	1820	2100	980	3060
14	1160	1720	3520	1820	2110	3160	3810	2230	1770	1970	955	2970
15	2490	1500	3070	1800	2170	3030	5080	2340	1680	1840	943	2160
16	1830	1500	2670	1810	2250	3030	8660	2640	1790	1670	879	1720
17	1240	1530	2570	1830	3840	2990	12900	2430	2310	1520	945	1500
18	1010	1420	2470	2000	3470	2800	10500	2290	2150	1380	999	1580
19	904	1310	2490	5050	3100	3040	6690	2220	4260	1300	1010	1710
20	827	1230	2320	6780	2880	3770	5200	2610	3290	1290	1230	1480
21	732	1420	2180	4850	2820	3430	4410	2830	2950	1210	1070	1380
22	712	1690	2090	3840	2840	3140	3960	3630	3170	1150	1020	1260
23	692	1560	1980	3450	3720	2960	3700	2700	2970	1120	884	1140
24	732	1710	2840	3070	4220	2740	6580	2850	2630	1040	814	1070
25	732	1890	7670	2840	3790	2740	6210	2640	2080	1070	695	1030
26	1520	1880	6800	4040	3170	2960	5460	2470	3140	1020	635	1020
27	4600	8680	5550	3820	4770	3170	4490	2310	3510	1020	661	978
28	3910	7840	3840	3250	10400	2850	3930	2600	2620	1040	759	957
29	2150	7470	3250	2850	---	2960	3520	2730	2190	957	760	941
30	1650	5590	2980	3070	---	2800	3280	2790	1780	928	696	975
31	1330	---	2680	4130	---	3680	---	2430	---	895	724	---
TOTAL	36048	68910	114730	88560	95330	156120	167120	79200	73110	57980	32309	45991
MEAN	1163	2297	3701	2857	3405	5036	5571	2555	2437	1870	1042	1533
MAX	4600	8630	7670	6780	10400	23600	12900	3630	4260	4500	2100	4230
MIN	459	1150	1980	1800	2110	2740	3280	1950	1640	895	635	606
CFSM	.63	1.24	1.99	1.54	1.83	2.71	3.00	1.38	1.31	1.01	.56	.83
IN.	.72	1.38	2.30	1.77	1.91	3.13	3.35	1.59	1.46	1.16	.65	.92

CAL YR 1986	TOTAL 602308	MEAN 1650	MAX 8680	MIN 339	CFSM .89	IN. 12.06
WTR YR 1987	TOTAL 1015410	MEAN 2782	MAX 23600	MIN 459	CFSM 1.50	IN. 20.32

03461200 COSBY CREEK ABOVE COSBY, TN

LOCATION.--Lat 35°46'58", long 83°13'03", Cocke County, Hydrologic Unit 06010106, in Great Smoky Mountains National Park on left retaining wall of creek, 400 ft downstream from Crying Creek, 600 ft upstream from bridge on State Highway 32, 3,600 ft upstream from Stillhouse Branch, 2.4 mi southeast of Cosby, and at mile 10.7.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--Annual maximum, water years 1959-66 (1959-65 published as "near Cosby"); October 1966 to current year.

REVISED RECORD.--WDR TN-82-1: 1977-78(M)(P), 1979, 1980-81(M)(P).

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 1,644.07 ft above National Geodetic Vertical Datum of 1929. Oct. 15, 1958, to Sept. 30, 1966, crest-stage gage at site 600 ft downstream, at datum 1.08 ft lower (gage heights adjusted to present datum in WSP 2110). Oct. 1, 1966 to June 13, 1977, water-stage recorder at site 600 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Feb. 4-12. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--21 years, 27.0 ft³/s, 36.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/s, Mar. 16, 1973, gage height, 4.11 ft former site; about 17.1 ft present site; minimum, 1.4 ft³/s, Sept. 30, Oct. 1, 2, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Apr. 17	1115	*233	*14.21				

Minimum discharge, 1.7 ft³/s, Aug. 26, 27, 28, Sept. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	5.8	14	11	35	119	23	24	50	12	4.3	2.6
2	5.6	5.8	13	11	54	75	24	22	50	12	4.0	2.3
3	5.2	5.7	13	9.9	74	57	29	19	33	11	3.8	2.1
4	5.0	5.4	11	9.6	62	45	26	21	28	18	3.6	1.9
5	4.6	5.3	9.9	9.3	52	38	24	18	22	16	3.5	2.0
6	4.6	5.9	9.0	9.1	45	32	24	17	18	26	5.4	4.0
7	4.6	8.4	8.7	8.8	38	28	24	16	16	18	7.1	11
8	4.4	9.2	9.2	8.6	32	25	32	14	14	18	4.8	6.6
9	5.3	7.9	25	8.4	27	26	55	14	13	17	4.1	4.4
10	5.7	7.8	79	8.5	22	30	80	13	12	15	4.5	4.5
11	4.7	10	59	8.3	20	26	104	13	12	14	4.6	8.4
12	4.4	15	47	8.0	19	25	122	12	11	14	3.8	15
13	5.8	13	35	7.8	18	22	123	14	12	14	3.5	13
14	11	11	27	7.7	20	21	87	13	11	16	3.2	8.0
15	7.3	11	22	8.0	27	19	100	12	9.8	14	3.0	6.3
16	6.0	11	19	8.2	42	23	78	11	22	12	3.1	5.4
17	5.5	9.7	17	8.6	42	21	170	11	53	11	3.9	4.8
18	5.2	8.7	17	20	34	22	139	11	27	10	6.1	4.3
19	5.0	8.0	15	96	29	55	91	9.9	20	9.3	3.9	4.2
20	4.8	8.7	14	62	25	43	68	10	25	8.8	3.1	5.8
21	4.7	8.5	13	40	24	36	54	11	34	8.2	2.6	4.5
22	4.6	7.8	13	34	34	31	44	11	40	7.5	2.4	3.9
23	4.4	8.8	12	26	65	26	37	11	25	7.0	2.4	3.5
24	4.2	20	15	22	52	23	34	14	20	6.6	2.3	3.4
25	7.8	19	15	23	43	21	62	12	20	6.2	2.1	3.2
26	13	66	14	21	38	19	52	19	17	5.7	2.0	3.0
27	8.8	45	14	18	62	18	43	20	15	5.5	1.9	2.9
28	7.5	27	14	17	86	17	36	15	14	6.1	2.9	2.8
29	6.9	19	13	18	---	16	31	14	13	5.2	4.3	2.6
30	6.5	16	12	32	---	17	27	14	12	4.9	3.2	6.7
31	6.0	---	12	39	---	33	---	23	---	4.4	2.8	---
TOTAL	184.9	410.4	610.8	618.8	1121	1009	1843	458.9	668.8	353.4	112.2	153.1
MEAN	5.96	13.7	19.7	20.0	40.0	32.5	61.4	14.8	22.3	11.4	3.62	5.10
MAX	13	66	79	96	86	119	170	24	53	26	7.1	15
MIN	4.2	5.3	8.7	7.7	18	16	23	9.9	9.8	4.4	1.9	1.9
CFSM	.59	1.35	1.95	1.98	3.96	3.22	6.08	1.47	2.21	1.13	.36	.51
IN.	.68	1.51	2.25	2.28	4.13	3.72	6.79	1.69	2.46	1.30	.41	.56

CAL YR 1986 TOTAL 5948.3 MEAN 16.3 MAX 142 MIN 2.7 CFSM 1.61 IN. 21.90
WTR YR 1987 TOTAL 7544.3 MEAN 20.7 MAX 170 MIN 1.9 CFSM 2.05 IN. 27.78

TENNESSEE RIVER BASIN

03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN

LOCATION.--Lat 36°10'35", long 82°27'27", Washington County, Hydrologic Unit 06010108, on left bank, at Embreeville, 1,000 ft upstream from bridge on State Highway 81, 3 mi northwest of Erwin, 5.2 mi downstream from North Indian Creek, and at mile 89.0.

DRAINAGE AREA.--805 mi².

PERIOD OF RECORD.--September 1900 to May 1901 (published as "near Chucky Valley"), October 1919 to current year. Monthly discharge only October 1919 to June 1920, published in WSP 1306.

REVISED RECORDS.--WSP 803: 1935(M). WSP 823: Drainage area. WSP 1336: 1921-24, 1931(M).

GAGE.--Water-stage recorder. Datum of gage is 1,519.30 ft above National Geodetic Vertical Datum of 1929. Sept. 1, 1900 to May 21, 1901, nonrecording gage at site 3 mi downstream at different datum, destroyed by flood of May 21, 1901. July 1, 1920 to Sept. 30, 1931, nonrecording gage at bridge 2,000 ft downstream at datum 6.33 ft lower.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--68 years (water years 1920-87), 1,358 ft³/s, 22.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 110,000 ft³/s, Nov. 6, 1977, gage height, 21.52 ft, from rating curve extended above 48,000 ft³/s on basis of contracted-opening and slope-area measurements of peak flow; minimum, 85 ft³/s, Sept. 8, 9, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 21, 1901, reached a stage of 24 ft, discharge, 120,000 ft³/s, present site and datum, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 1	0730	*21,900	*7.83	Apr. 17	0830	11,500	5.53

Minimum discharge, 164 ft³/s, Sept. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	363	899	998	1980	16000	1970	1850	1090	629	323	207
2	278	433	2030	1010	1780	7570	1610	1680	1030	965	300	193
3	255	573	2970	888	2580	4690	1590	1550	869	1020	351	177
4	248	472	1750	814	2350	3540	1700	1510	814	1380	398	167
5	235	423	1310	766	1960	2850	1560	1430	855	1490	334	187
6	231	437	1080	728	1680	2430	1530	1310	726	1090	334	904
7	225	521	943	718	1510	2150	1990	1240	658	908	447	5030
8	214	961	862	732	1380	2010	3020	1170	623	762	437	4190
9	216	917	928	706	1230	2100	4930	1090	587	711	448	1360
10	238	670	2010	680	1070	2940	4610	1040	566	650	428	918
11	265	588	2920	682	1050	2370	3760	1000	552	764	359	875
12	272	701	3260	649	1010	2020	3200	963	554	855	316	871
13	366	683	2250	634	972	1810	2860	991	568	758	303	970
14	791	575	1660	624	924	1650	2460	1060	594	732	301	817
15	922	540	1380	656	982	1520	4180	965	571	635	295	629
16	522	567	1190	702	1150	1490	8520	904	614	574	289	542
17	402	561	1060	708	1530	1430	10200	879	1830	528	314	504
18	356	511	1070	1100	1450	1330	7640	876	1250	487	303	533
19	329	480	1080	3460	1340	1610	4890	850	1490	467	278	496
20	311	483	937	3790	1250	1770	3630	1710	1260	450	264	552
21	305	711	855	2450	1340	1520	2930	1250	981	428	254	562
22	294	671	787	1990	1450	1390	2490	1210	959	406	227	462
23	283	578	738	1680	2570	1290	2630	958	900	387	219	410
24	271	772	2140	1350	2400	1220	5090	1030	734	383	203	387
25	323	950	4210	1350	1950	1170	5600	1200	677	398	196	373
26	1210	1240	2480	1640	1690	1160	4540	1150	1280	415	194	361
27	1060	3490	1890	1340	2830	1090	3310	1000	1230	405	205	345
28	598	1720	1560	1240	6290	1100	2720	1170	874	357	207	338
29	477	1240	1340	1100	---	1040	2320	1100	701	324	243	327
30	422	1000	1190	1450	---	1030	2050	1080	630	303	238	340
31	388	---	1070	2490	---	2170	---	1050	---	324	231	---
TOTAL	12587	23831	49849	39125	49698	77460	109530	36266	26067	19985	9239	24027
MEAN	406	794	1608	1262	1775	2499	3651	1170	869	645	298	801
MAX	1210	3490	4210	3790	6290	16000	10200	1850	1830	1490	448	5030
MIN	214	363	738	624	924	1030	1530	850	552	303	194	167
CFSM	.50	.99	2.00	1.57	2.20	3.10	4.54	1.45	1.08	.80	.37	.99
IN.	.58	1.10	2.30	1.81	2.30	3.58	5.06	1.68	1.20	.92	.43	1.11

CAL YR 1986 TOTAL 290937 MEAN 797 MAX 4350 MIN 194 CFSM .99 IN. 13.44
WTR YR 1987 TOTAL 477664 MEAN 1309 MAX 16000 MIN 167 CFSM 1.63 IN. 22.07

TENNESSEE RIVER BASIN

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03466228 SINKING CREEK AT AFTON, TN

LOCATION.--Lat 36°11'55", long 82°44'31", Greene County, Hydrologic Unit 06010108, on left bank 300 ft upstream from bridge on county road, 0.4 mi northwest of Afton, and at mile 3.1.

DRAINAGE AREA.--13.7 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,459.36 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--10 years, 12.1 ft³/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s, July 21, 1979, gage height, 7.79 ft, from rating curve extended above 100 ft³/s on basis of area-velocity study; minimum, 1.6 ft³/s, October 3, 4, 5, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 1	0330	*185	*3.25	Apr. 17	0800	182	3.23

Minimum discharge, 1.6 ft³/s, Oct. 3, 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.8	2.2	2.8	13	87	16	16	8.7	5.2	3.2	2.6
2	1.8	1.8	2.0	2.7	12	35	14	16	9.8	5.5	3.2	2.6
3	1.6	1.8	2.0	2.6	12	28	14	15	8.3	5.1	3.2	2.3
4	1.7	1.8	2.1	2.5	10	25	15	16	8.1	7.4	3.1	2.3
5	1.9	1.8	2.1	2.5	9.7	23	18	15	8.0	8.4	3.5	2.3
6	1.8	1.8	2.1	2.4	9.0	22	30	15	7.5	5.8	3.8	2.6
7	1.8	2.3	2.0	2.5	8.7	20	53	14	7.4	5.5	3.7	4.4
8	1.8	2.5	1.9	2.5	8.3	19	49	13	7.1	5.1	3.4	3.5
9	1.9	2.1	3.5	2.3	7.8	19	35	12	7.1	5.1	3.8	2.9
10	1.9	1.9	8.1	2.3	7.4	18	28	12	7.1	5.0	4.2	2.6
11	1.9	2.0	8.0	2.3	7.1	17	25	12	6.8	4.3	3.4	2.7
12	1.9	2.2	8.0	2.2	7.1	17	23	12	6.8	4.5	3.2	3.9
13	2.4	1.9	5.3	2.1	6.6	16	22	11	6.7	4.6	3.2	3.5
14	2.6	1.8	4.3	2.1	6.6	15	21	11	6.8	5.4	3.2	2.9
15	2.3	1.8	3.9	2.1	7.1	15	26	11	6.5	4.7	3.2	2.6
16	2.1	1.9	3.5	2.1	34	15	42	11	6.5	4.6	3.2	2.5
17	2.1	1.9	3.2	2.1	48	14	119	10	6.8	4.3	3.0	2.5
18	2.1	2.1	4.6	3.9	22	14	48	10	6.6	4.3	3.0	2.5
19	2.0	1.9	5.1	49	18	41	36	10	6.5	4.3	3.0	2.9
20	1.9	2.2	4.3	17	16	23	30	10	6.6	4.1	2.6	3.0
21	1.9	2.4	3.6	11	15	19	28	9.7	6.6	4.1	2.6	2.4
22	1.6	2.3	3.2	9.4	18	17	25	9.4	6.6	4.1	2.6	2.1
23	1.6	2.1	3.0	8.6	39	16	23	9.8	6.2	3.9	2.8	2.3
24	1.6	2.6	4.2	7.9	23	15	22	11	6.4	3.9	2.8	2.3
25	2.4	2.8	6.3	21	19	15	28	9.5	5.9	3.7	2.8	2.3
26	2.4	3.0	5.0	59	17	14	22	9.0	5.9	3.7	2.8	2.1
27	1.9	2.8	4.2	19	72	14	20	8.8	5.8	3.7	2.4	2.1
28	1.8	2.6	3.8	15	67	14	19	8.6	5.4	3.7	2.5	2.1
29	1.8	2.5	3.3	13	---	13	18	8.4	5.4	3.4	3.5	2.1
30	1.7	2.3	3.1	18	---	13	18	9.1	5.4	3.2	2.9	2.4
31	1.8	---	3.0	17	---	20	---	11	---	3.2	2.6	---
TOTAL	60.0	64.7	120.9	308.9	540.4	653	887	356.3	205.3	143.8	96.4	79.3
MEAN	1.94	2.16	3.90	9.96	19.3	21.1	29.6	11.5	6.84	4.64	3.11	2.64
MAX	2.6	3.0	8.1	59	72	87	119	16	9.8	8.4	4.2	4.4
MIN	1.6	1.8	1.9	2.1	6.6	13	14	8.4	5.4	3.2	2.4	2.1
CFSM	.14	.16	.28	.73	1.41	1.54	2.16	.84	.50	.34	.23	.19
IN.	.16	.18	.33	.84	1.47	1.77	2.41	.97	.56	.39	.26	.22

CAL YR 1986 TOTAL 2170.8 MEAN 5.95 MAX 45 MIN 1.6 CFSM .43 IN. 5.89

WTR YR 1987 TOTAL 3516.0 MEAN 9.63 MAX 119 MIN 1.6 CFSM .70 IN. 9.55

TENNESSEE RIVER BASIN

03470500 FRENCH BROAD RIVER NEAR KNOXVILLE, TN

LOCATION.--Lat 35°57'30", long 83°46'26", Knox County, Hydrologic Unit 06010107, on left bank, 0.7 mi downstream from Johnson Hollow, 7.5 mi upstream from confluence with Holston River, and 8 mi east of Knoxville.

DRAINAGE AREA.--5,101 mi².

PERIOD OF RECORD.--October 1945 to September 1987 (discontinued). Prior to December 1945 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Dec. 10, 1945, to Sept. 30, 1957, at site 200 ft upstream on right bank at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Douglas Lake (station 03468500), 24.6 mi upstream.

AVERAGE DISCHARGE.--42 years, 7,719 ft³/s, 20.55 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,600 ft³/s, May 8, 1984, elevation, 834.60 ft; minimum, 67 ft³/s, Oct. 25, 1953, elevation, 813.38 ft; minimum daily, 68 ft³/s, Oct. 23-26, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1867 reached a stage of 855.0 ft, from floodmarks, estimated discharge, 160,000 ft³/s, from investigations by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,700 ft³/s, Mar. 2, elevation, 822.39 ft; minimum, 408 ft³/s, Oct. 5; elevation, 814.90 ft; minimum daily, 1,040 ft³/s, Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4030	1590	2260	13600	8590	15700	7350	8250	5850	7140	8400	4860
2	4520	1320	11200	13500	11800	18100	3330	5410	8080	6990	8440	4320
3	4350	2480	14400	8860	14900	19300	5920	3660	7860	4540	9750	2870
4	3330	4070	14300	3770	14300	18700	5260	4030	6460	2780	9100	3410
5	1300	3980	13900	2880	14100	18500	2400	5970	5880	1810	8610	3020
6	2390	5110	14800	4390	13700	17300	4410	5900	2990	5180	8010	1770
7	2190	6890	14700	4690	11600	17900	7710	5440	1800	6830	7000	4310
8	2030	3510	15000	4860	7550	17000	8090	5140	7690	5010	8300	6390
9	1760	1440	14400	5340	9650	17800	6950	2830	10200	6770	6530	6520
10	2140	2030	8010	3120	10800	19000	4640	1830	9180	11200	8450	6080
11	1560	1740	7510	3500	10700	18600	3240	4310	7620	6700	7630	7470
12	1630	2340	6590	4060	9630	18200	2410	6490	6410	3410	6340	3440
13	1980	6980	5960	2950	11300	15000	6840	6090	3680	6540	6400	1510
14	1830	9610	5200	2490	5510	9810	8500	5850	1780	8890	6350	4530
15	1810	4830	5260	2030	1830	4260	8290	6320	5000	6400	6300	7650
16	1720	2240	4500	2250	5090	6390	7540	3590	6150	7870	6190	7460
17	1710	2800	4420	3100	7700	9930	9550	1750	8610	7520	7010	8630
18	1530	3320	7560	2930	6370	7000	8290	3960	6070	6060	7880	6880
19	1670	4590	14100	7700	5450	7930	5240	8310	6280	4660	7060	7920
20	3380	3340	16100	5410	5720	8140	6340	8940	4040	7110	8000	4470
21	4320	4540	15200	4080	3460	4520	7670	10400	1890	7360	7420	6560
22	4320	3390	15600	3290	2200	2350	5650	4660	5280	7620	6750	9900
23	4670	1660	15900	3520	7300	3940	6430	2750	6270	8460	4940	9620
24	3150	3320	11100	3890	7630	3570	6980	2600	5700	8340	6930	6140
25	3660	1350	7850	2680	4530	5790	4800	3230	5640	7270	8410	5880
26	1070	1040	10300	9790	2520	5250	3250	6050	6140	5620	7580	2630
27	1080	1910	12000	11800	4180	5190	3680	6760	4990	7540	8120	1980
28	2340	1090	7340	10300	12800	2550	6610	6510	1730	9370	4010	6680
29	1580	1350	6680	8410	---	2500	6790	6560	4910	9500	4400	9590
30	1970	1260	9300	8010	---	4540	9230	3430	8680	9640	3870	10500
31	1810	---	11700	9330	---	6440	---	2080	---	8290	5220	---
TOTAL	76830	95120	323140	176530	230910	331200	183390	159100	172860	212420	219400	172990
MEAN	2478	3171	10420	5695	8247	10680	6113	5132	5762	6852	7077	5766
MAX	4670	9610	16100	13600	14900	19300	9550	10400	10200	11200	9750	10500
MIN	1070	1040	2260	2030	1830	2350	2400	1750	1730	1810	3870	1510
(+)	-9800	+44200	-80800	+57800	+33100	+52300	+287900	+38400	-12700	-88400	-150400	-78900
MEAN +	2162	4644	7817	7559	9429	12370	15710	6371	5339	4001	2226	3136
CFSM +	.42	.91	1.53	1.48	1.85	2.43	3.08	1.25	1.05	.78	.44	.61
IN. +	.49	1.02	1.77	1.71	1.92	2.80	3.44	1.44	1.17	.90	.50	.69

CAL YR 1986 TOTAL 1387540 MEAN 3801 MAX 16100 MIN 353 MEAN+ 3820 CFSM+ 0.75 IN.+ 10.17
WTR YR 1987 TOTAL 2353890 MEAN 6449 MAX 19300 MIN 1040 MEAN+ 6703 CFSM+ 1.31 IN.+ 17.84

(+) Change in contents, in cfs-days, in Douglas Lake, furnished by TVA.

(+) Adjusted for change in contents in Douglas Lake.

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

149

03487550 REEDY CREEK AT OREBANK, TN

LOCATION.--Lat 36°33'42", long 82°27'36", Sullivan County, Hydrologic Unit 06010102, on left bank, 50 ft upstream from Anderson Bridge, 0.1 mi south of U.S. Highway 11W, 0.3 mi north of Orebank, 1.0 mi upstream from Gaines Branch, and at mile 9.8.

DRAINAGE AREA.--36.3 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WRD TN 1973: 1971(P), 1972(M); WRD TN 1980: 1979(M), 1982(P)(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,232.61 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 4, 1975, at site 50 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. The Bloomingdale Utility District diverts an average of about 0.6 ft³/s for water supply, 0.8 mi upstream from the gage. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--24 years, 44.2 ft³/s, 16.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,940 ft³/s, Oct. 2, 1977, gage height, 11.61 ft, from rating curve extended above 1,300 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 2.2 ft³/s, July 27, 1982 and Oct. 28, 1984, result of upstream pumpage.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1927, reached a stage of 11.4 ft, discharge, about 11,000 ft³/s, datum then in use and before flood plain development, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jan. 19	1145	*902	*7.00	No other peak greater than base discharge.			
Minimum discharge, 3.6 ft ³ /s, Aug. 26, 27.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	11	16	31	106	338	84	53	16	9.7	6.6	4.8
2	13	11	16	30	90	187	65	47	17	12	6.3	4.7
3	9.1	11	15	27	76	134	64	44	15	12	6.0	4.5
4	8.4	11	14	25	62	103	65	56	16	25	6.4	4.5
5	14	12	12	25	53	85	72	43	16	18	6.3	5.8
6	11	13	12	23	47	72	97	39	14	16	6.3	8.3
7	9.3	24	11	22	43	63	150	36	13	11	10	21
8	8.5	37	13	21	40	57	236	34	13	10	7.3	15
9	8.0	23	89	20	36	55	200	32	13	9.6	6.6	7.9
10	8.0	21	165	20	34	47	126	31	12	9.2	6.6	6.7
11	8.1	20	179	19	32	40	101	29	12	8.9	6.2	6.3
12	8.5	23	136	18	30	37	86	28	12	9.8	6.0	13
13	13	17	69	18	28	34	77	27	12	10	6.2	13
14	25	15	47	17	27	32	68	26	12	11	6.0	8.0
15	16	14	37	18	28	31	122	25	12	9.4	5.6	6.9
16	11	14	32	19	94	34	331	25	11	8.5	6.7	6.5
17	9.5	13	28	19	143	29	469	23	12	8.6	7.0	6.6
18	8.8	12	69	33	128	28	207	22	12	8.3	6.1	6.3
19	8.4	11	59	531	113	135	145	21	11	8.0	6.2	7.5
20	8.3	11	44	186	113	83	114	22	12	7.8	6.0	10
21	8.1	15	34	109	103	60	95	20	11	7.8	5.4	7.6
22	7.8	13	29	90	117	50	82	19	11	7.9	5.0	7.0
23	8.0	13	27	73	247	44	100	19	11	7.1	6.3	6.7
24	8.2	19	140	60	140	38	142	34	10	6.6	5.5	6.6
25	14	25	129	115	101	36	168	21	12	6.5	5.1	6.3
26	16	32	80	221	77	34	113	19	27	6.2	4.4	6.1
27	11	34	58	125	298	31	87	18	18	6.2	4.2	6.4
28	10	25	46	96	311	37	73	17	11	6.9	6.3	6.5
29	9.3	20	40	81	---	30	64	17	10	6.7	11	6.7
30	9.3	17	37	121	---	37	58	17	10	6.4	5.5	11
31	10	---	32	150	---	126	---	16	---	6.2	5.0	---
TOTAL	325.7	537	1715	2363	2717	2147	3861	880	394	297.3	194.1	238.2
MEAN	10.5	17.9	55.3	76.2	97.0	69.3	129	28.4	13.1	9.59	6.26	7.94
MAX	25	37	179	531	311	338	469	56	27	25	11	21
MIN	7.8	11	11	17	27	28	58	16	10	6.2	4.2	4.5
CFSM	.29	.49	1.52	2.10	2.67	1.91	3.55	.78	.36	.26	.17	.22
IN.	.33	.55	1.76	2.42	2.78	2.20	3.96	.90	.40	.30	.20	.24

CAL YR 1986 TOTAL 12228.9 MEAN 33.5 MAX 600 MIN 5.9 CFSM .92 IN. 12.53
WTR YR 1987 TOTAL 15669.2 MEAN 42.9 MAX 531 MIN 4.2 CFSM 1.18 IN. 16.05

TENNESSEE RIVER BASIN

03490500 HOLSTON RIVER AT SURGOINSVILLE, TN

LOCATION.--Lat 36°28'19", long 82°50'50", Hawkins County, Hydrologic Unit 06010104, on right bank 1,500 ft upstream from Surgoinsville Creek and county bridge at Surgoinsville, 9.8 mi upstream from Big Creek, and at mile 118.7. Records include flow of Surgoinsville Creek.

DRAINAGE AREA.--2,874 mi², includes that of Surgoinsville Creek.

PERIOD OF RECORD.--October 1940 to current year. Prior to April 1941 monthly discharge only, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,088.46 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those for growing season, which are fair. Flow partly regulated by four reservoirs (see p.218). Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--47 years, 3,747 ft³/s, 17.70 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,600 ft³/s, Feb. 18, 1944, gage height, 17.48 ft; minimum, 470 ft³/s, Oct. 21, 1941; minimum daily, 528 ft³/s, Oct. 21, 1941. Maximum discharge since closure of Watauga Dam on Dec. 1, 1948, 59,300 ft³/s, Mar. 13, 1963, gage height, 17.13 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,300 ft³/s, Apr. 17, gage height, 11.25 ft; minimum, 1,150 ft³/s, Dec. 8; minimum daily, 1,290 ft³/s, Jan. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1990	2040	2910	3810	5980	10800	5620	10600	3430	2940	3240	1930		
2	2000	2030	4240	4100	4810	13100	4100	9390	2830	3050	2140	1910		
3	2010	2040	4380	4280	3920	10300	4330	8440	3290	2660	2490	1840		
4	1990	2080	4380	2980	3740	7280	3270	10600	2980	2750	3310	1850		
5	1980	2120	4280	2790	3380	6760	2890	8750	2830	2460	3460	1880		
6	2200	2130	4160	2620	2900	6780	3660	7140	2800	2740	2440	1910		
7	2130	2230	2500	2750	2830	5840	4470	5980	2170	4300	2450	1950		
8	2050	2500	2130	3440	2300	4560	4860	7250	3410	4340	2520	2090		
9	2050	2880	2920	3400	2330	4450	8260	6890	3630	3700	2290	2180		
10	2050	2930	5710	2390	2010	4800	10400	5190	3120	3550	2260	1920		
11	2050	3050	6990	2430	1890	6040	8200	4330	2450	2920	2200	2090		
12	2030	2920	7930	2250	1790	6010	6950	4720	3470	2400	2200	2000		
13	2090	3020	7130	2080	1740	5660	8430	4200	2930	2510	2190	1990		
14	2140	5530	5380	1640	1720	5050	9580	3860	2220	4010	2170	1920		
15	2180	3060	4230	1300	1760	4080	8920	4170	2250	2970	2170	3160		
16	2220	2580	3740	1290	2340	3700	12400	3470	2590	3330	1870	1840		
17	2150	3050	3790	1300	3840	2630	25300	2470	2500	3270	1890	1850		
18	2100	3430	3870	1420	3190	3210	23400	2510	2600	3310	2560	1870		
19	2040	4150	4470	6710	3210	4670	17200	4240	2590	2330	2800	1870		
20	2030	3950	3700	11500	2580	7280	15600	3940	2730	2110	2010	1890		
21	2000	3960	2270	7320	2680	6020	13600	3490	1660	2970	1990	1850		
22	2000	3750	3520	4930	3070	3070	11400	3670	1580	3430	2540	1860		
23	1980	2240	3190	4210	5980	2640	10700	3600	1910	2810	1810	1860		
24	1970	3570	3910	3840	7530	2300	11700	3780	2910	2520	2000	1850		
25	2110	4290	6130	2960	5100	2800	17100	2540	2900	2920	1940	1820		
26	2150	4040	5460	5140	3380	3170	20000	3280	2900	3090	1880	1790		
27	2090	4110	4180	5360	7300	2120	15300	4610	2860	2670	1900	1810		
28	2050	4140	3620	5640	12400	1890	12400	3960	2740	3220	1930	1830		
29	2020	3120	3760	4680	---	1800	11600	3600	2380	3170	1990	1780		
30	2040	2380	3980	3750	---	1790	10900	3370	2330	2990	1940	1840		
31	2020	---	4210	4810	---	3190	---	2520	---	2970	1930	---		
TOTAL	63910	93320	133070	117120	105700	153790	322540	156560	80990	94410	70510	58230		
MEAN	2062	3111	4293	3778	3775	4961	10750	5050	2700	3045	2275	1941		
MAX	2220	5530	7930	11500	12400	13100	25300	10600	3630	4340	3460	3160		
MIN	1970	2030	2130	1290	1720	1790	2890	2470	1580	2110	1810	1780		
CFSM	.72	1.08	1.49	1.31	1.31	1.73	3.74	1.76	.94	1.06	.79	.68		
IN.	.83	1.21	1.72	1.52	1.37	1.99	4.17	2.03	1.05	1.22	.91	.75		
CAL YR 1986	TOTAL 923470		MEAN 2530		MAX 11400		MIN 1010		MEAN† 2510		CFSM† 0.87		IN† 11.85	
WTR YR 1987	TOTAL 1450150		MEAN 3973		MAX 25300		MIN 1290		MEAN† 3849		CFSM† 1.34		IN† 18.18	

† Adjusted for change in contents in South Holston, Watauga, Boone, and Fort Patrick Henry Lakes.

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

151

03491000 BIG CREEK NEAR ROGERSVILLE, TN

LOCATION.--Lat 36°25'34", long 82°57'07", Hawkins County, Hydrologic Unit 06010104, on left bank 300 ft upstream from county road bridge, 3 mi northeast of Rogersville, and at mile 2.0.

DRAINAGE AREA.--47.3 mi².

PERIOD OF RECORD.--April 1941 to June 1949; occasional low-flow measurements, water years 1950-55, 1957; annual maximum, water years 1955-57; October 1957 to current year.

REVISED RECORDS.--WSP 1436: 1945.

GAGE.--Water-stage recorder. Datum of gage is 1,128.9 ft above National Geodetic Vertical Datum of 1929 (levels based on City of Rogersville construction plans for pumping station). Dec. 7, 1954, to Sept. 30, 1957, crest-stage gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--37 years (water years 1942-48, 1958-87), 57.8 ft³/s, 16.59 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,760 ft³/s, Mar. 12, 1963, gage height, 9.40 ft, from rating curve extended above 3,000 ft³/s on basis of contracted-opening measurement of peak flow; maximum gage height, 10.68 ft, Dec. 30, 1969, backwater from log jam; minimum discharge observed, 1.3 ft³/s, Sept. 23, 1955; minimum gage height, 1.32 ft, Sept. 12, Oct. 2, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jan. 19	1345	*1,620	*5.17	No other peak greater than base discharge.			
Minimum discharge, 3.0 ft ³ /s, Sept. 4.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	5.5	22	32	117	447	109	36	17	6.9	5.7	4.3
2	5.0	6.3	20	34	100	246	79	33	16	21	5.4	3.8
3	4.6	7.4	18	30	86	171	73	31	13	21	5.2	3.4
4	4.1	6.9	16	28	72	134	75	52	12	168	5.6	3.2
5	4.2	6.6	14	26	62	111	80	58	12	112	6.0	3.3
6	4.1	6.8	13	25	55	96	108	42	11	63	9.6	3.9
7	4.2	11	12	24	51	83	305	36	9.8	42	7.4	5.8
8	3.8	47	12	23	47	74	429	32	8.9	28	6.2	8.0
9	3.8	30	285	21	42	68	288	29	8.5	22	5.7	7.0
10	3.8	29	439	22	37	63	170	27	8.2	20	5.7	5.6
11	4.2	23	282	22	35	54	124	25	7.9	27	5.6	5.4
12	4.1	47	240	20	34	50	102	23	7.8	25	5.3	15
13	5.4	31	120	19	32	47	102	22	8.2	22	5.0	19
14	13	21	84	18	31	42	91	21	8.6	39	4.7	11
15	21	16	66	20	32	40	118	20	8.6	32	4.4	6.9
16	11	15	54	21	93	41	191	23	8.7	21	4.2	5.6
17	7.2	13	46	19	386	42	208	20	8.0	16	4.2	5.1
18	5.8	11	54	25	173	38	196	18	7.9	13	4.5	4.8
19	4.9	10	56	755	129	113	147	19	9.8	12	4.3	6.0
20	4.5	9.9	48	278	103	124	116	18	16	11	4.0	9.8
21	4.2	12	41	151	90	87	96	17	11	9.8	3.7	9.0
22	4.0	14	36	117	83	70	81	21	9.0	9.1	3.4	6.1
23	3.8	12	33	93	282	60	70	18	8.1	8.8	3.3	5.1
24	3.7	15	57	74	185	52	62	18	11	7.9	3.3	4.6
25	6.1	31	114	86	133	48	65	16	7.4	7.5	3.3	4.3
26	21	73	74	319	106	43	60	15	15	7.0	3.5	4.1
27	18	92	57	168	301	39	53	14	30	6.4	3.5	4.0
28	11	45	48	124	457	38	48	16	14	6.6	4.0	3.8
29	8.3	31	41	98	---	35	42	13	9.4	6.5	5.2	3.8
30	6.9	24	37	98	---	34	38	13	7.6	5.7	6.4	5.9
31	6.0	---	34	156	---	116	---	23	---	5.7	5.1	---
TOTAL	217.3	702.4	2473	2946	3354	2706	3726	769	330.4	802.9	153.4	187.6
MEAN	7.01	23.4	79.8	95.0	120	87.3	124	24.8	11.0	25.9	4.95	6.25
MAX	21	92	439	755	457	447	429	58	30	168	9.6	19
MIN	3.7	5.5	12	18	31	34	38	13	7.4	5.7	3.3	3.2
CFSM	.15	.49	1.69	2.01	2.53	1.85	2.63	.52	.23	.55	.10	.13
IN.	.17	.55	1.94	2.32	2.64	2.13	2.93	.60	.26	.63	.12	.15

CAL YR 1986 TOTAL 10915.6 MEAN 29.9 MAX 675 MIN 2.7 CFSM .63 IN. 8.58
WTR YR 1987 TOTAL 18367.9 MEAN 50.3 MAX 755 MIN 3.2 CFSM 1.06 IN. 14.44

03491300 BEECH CREEK AT KEPLER, TN

LOCATION.--Lat 36°24'06", long 82°53'09", Hawkins County, Hydrologic Unit 06010104, on upstream right wingwall of county road bridge, at Kepler, 5.9 mi east of intersection of U.S. Highway 11W and Burem Road, and at mile 6.6.

DRAINAGE AREA.--47.0 mi².

PERIOD OF RECORD.--October 1965 to current year. Occasional low-flow measurements, water years 1961-62, 1964-65.

GAGE.--Water-stage recorder. Datum of gage is 1,107.83 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges, but discharges for period Oct. 1 to July 20 computed from temporary gage site 0.4 mi upstream at different datum. Records fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--22 years, 48.7 ft³/s, 14.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,480 ft³/s, Mar. 30, 1975, gage height, 13.38 ft, from rating curve extended above 1,300 ft³/s; minimum, 0.77 ft³/s, Aug. 6, 7, 8, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 12, 1963, reached a stage of 14.6 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,860 ft³/s, on Jan. 19, gage height unknown due to use of temporary gage at site 0.4 mi upstream at different datum; minimum discharge, 0.87 ft³/s, Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	5.7	11	18	98	395	71	39	12	4.6	1.6	1.2
2	3.8	7.8	12	21	81	174	58	33	16	14	1.5	1.2
3	3.8	7.2	11	19	73	115	65	30	11	14	1.5	1.1
4	3.8	6.5	9.6	17	58	85	76	63	10	108	5.7	1.0
5	3.7	6.4	8.3	16	48	69	90	41	11	67	4.8	1.0
6	3.8	7.0	7.5	14	40	59	166	31	8.2	68	4.3	1.8
7	3.4	11	7.1	14	35	51	316	29	7.3	24	3.1	6.3
8	3.3	28	7.7	13	30	47	350	25	6.6	14	2.4	9.6
9	3.1	17	195	12	25	46	239	23	6.3	10	2.1	6.2
10	3.0	13	202	12	21	38	149	21	5.8	8.3	2.4	2.7
11	3.1	11	250	12	20	30	113	20	5.6	7.7	2.0	2.4
12	3.4	14	132	12	20	29	112	19	5.6	7.9	1.8	18
13	4.4	12	60	11	19	26	120	18	6.1	9.7	1.7	16
14	8.2	9.4	35	10	20	24	92	17	6.4	10	1.5	6.4
15	8.3	8.6	26	11	25	23	156	17	5.6	8.2	1.3	3.5
16	5.4	8.6	20	12	517	29	235	17	5.6	6.4	1.3	2.6
17	4.4	8.6	19	12	470	25	353	14	5.4	5.4	1.3	2.2
18	4.0	7.8	55	38	172	25	206	13	9.5	4.7	1.2	1.9
19	3.6	7.3	44	1030	120	200	136	14	49	4.5	1.2	2.5
20	3.5	7.7	28	178	88	101	104	14	11	4.2	1.1	5.5
21	3.5	11	21	90	74	72	85	13	15	3.9	1.0	4.2
22	3.5	10	18	68	95	58	71	12	8.3	3.5	.94	2.9
23	3.5	9.2	16	55	280	49	62	11	6.8	3.3	.93	2.3
24	3.5	22	107	46	128	43	57	60	8.4	3.0	.99	2.0
25	12	32	95	172	90	38	123	38	7.8	2.6	.98	1.9
26	19	47	55	354	70	32	81	18	14	2.4	.99	1.8
27	10	37	37	125	553	29	66	14	11	2.1	.95	1.7
28	7.6	19	29	81	374	30	59	12	6.7	2.0	1.1	1.7
29	6.2	15	23	63	---	25	51	11	5.3	1.8	1.7	1.6
30	5.6	12	21	148	---	29	46	9.9	4.7	1.7	1.6	3.2
31	5.2	---	19	168	---	127	---	12	---	1.6	1.3	---
TOTAL	163.6	418.8	1581.2	2852	3644	2123	3908	708.9	292.0	428.5	56.28	116.4
MEAN	5.28	14.0	51.0	92.0	130	68.5	130	22.9	9.73	13.8	1.82	3.88
MAX	19	47	250	1030	553	395	353	63	49	108	5.7	18
MIN	3.0	5.7	7.1	10	19	23	46	9.9	4.7	1.6	.93	1.0
CFSM	.11	.30	1.09	1.96	2.77	1.46	2.77	.49	.21	.29	.04	.08
IN.	.13	.33	1.25	2.26	2.88	1.68	3.09	.56	.23	.34	.04	.09

CAL YR 1986 TOTAL 9600.69 MEAN 26.3 MAX 651 MIN .77 CFSM .56 IN. 7.60
WTR YR 1987 TOTAL 16292.60 MEAN 44.6 MAX 1030 MIN .93 CFSM .95 IN. 12.89

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN
(National stream-quality accounting network station)

LOCATION.--Lat 36°00'56", 83°49'54", Knox County, Hydrologic Unit 06010104, on right bank at bridge on U.S. Highway 70, at Knoxville city limits, and 5.5 mi upstream from confluence with French Broad River.

DRAINAGE AREA.--3,747 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to June 1976, January 1978 to current year. Published as "at Strawberry Plains" 1930-48. Records published for both sites June 1945 to September 1948. Gage-height records collected at Strawberry Plains from December to March 1885-97 are contained in reports of the U.S. Weather Bureau.

REVISED RECORDS.--WSP 893: 1935(M). WSP 1336: 1939.

GAGE.--Water-stage recorder. Datum of gage is 815.84 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1930, to June 8, 1931, nonrecording gage, and June 9, 1931, to Sept. 30, 1948, water-stage recorder, at site 12 mi upstream at datum 22.55 ft higher. June 19, 1945, to Oct. 4, 1960, 300 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by five reservoirs (see p. 218).

AVERAGE DISCHARGE.--54 years (water years 1931-75, 1979-87), 4,699 ft³/s, 17.03 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,900 ft³/s, Mar. 28, 1935, gage height, 20.20 ft, site and datum then in use; minimum, 44 ft³/s, Dec. 12, 21, 22, 1941, gage height, -0.58 ft, site and datum then in use; minimum daily, 44 ft³/s, Dec. 21, 22, 1941. Maximum discharge since closure of Cherokee Dam on Dec. 5, 1941, 31,400 ft³/s, Mar. 22, 1963, gage height, 11.20 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1791, about 41 ft in March 1867, from profile by Tennessee Valley Authority. Flood in 1901 reached a stage of about 32 ft, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,400 ft³/s, Sept. 9, gage height, 7.30 ft; minimum, 149 ft³/s, Dec. 1, 2; minimum daily, 159 ft³/s, Dec. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5480	2030	159	7700	483	2810	10400	7900	2850	7290	7590	5660
2	6260	1150	1520	9910	1190	3750	3270	6900	7520	5190	7740	3940
3	6260	1180	2870	7890	6190	7910	5300	2960	7560	5760	7250	4100
4	6450	3100	2960	4810	5010	7810	8420	2620	6580	3990	7450	3000
5	1380	3210	3370	6290	5150	7830	3110	8780	4190	1690	7000	4560
6	3480	3380	3500	8360	4380	7860	2570	9120	3910	1820	6880	2150
7	4550	5620	3800	7500	4180	6860	4590	8170	2230	6310	6240	2060
8	3010	4550	4530	8400	1440	4220	7910	7820	2710	5170	7820	6030
9	1600	1170	7530	9410	4640	4160	4880	6360	7880	7200	7000	7010
10	1620	1220	2670	5730	8930	5690	834	1450	7300	9460	6790	6150
11	1590	2300	1230	5730	5900	6560	565	3520	6050	8140	8250	6620
12	1500	2620	1050	5420	3470	6120	499	8740	4810	3090	7840	6350
13	1460	4010	1870	7520	4410	6940	2670	8860	5040	3640	7140	2290
14	1500	8540	711	7020	3020	6350	7350	8490	1850	7750	8430	2060
15	1320	3670	542	6260	1990	3860	7550	5830	1870	6950	7870	5280
16	1490	2790	1630	4630	1540	4440	6720	4830	4380	4380	7080	5890
17	1680	2790	591	4210	3380	5190	7370	3340	6850	6670	5930	1800
18	1350	2820	383	3360	3820	5270	4240	2280	6110	6240	7370	6150
19	1360	4060	2390	6170	3590	5250	4850	6450	6290	5200	7010	6390
20	3190	3150	1580	2780	3230	904	4450	5170	5280	5450	6740	1790
21	6210	4050	460	2480	2210	572	5010	7560	1850	7770	6300	1180
22	6150	3060	1660	1660	2340	485	5300	5500	2230	8290	6390	6240
23	6370	2050	5570	749	4410	1680	6050	3600	6560	7230	5760	7340
24	5790	2290	6750	509	7820	2870	4320	1850	4970	6970	4910	6870
25	6100	1660	6730	588	5670	2930	5390	1380	5680	6200	7720	4810
26	1350	604	6110	2350	1720	3920	3480	6230	6860	6100	6930	3670
27	303	530	9020	7400	2870	3880	2920	8110	6530	6020	6630	1640
28	1840	393	8070	5800	6070	2430	6900	8380	1700	8050	5150	1400
29	2100	247	7740	2160	---	1490	6800	8280	2120	7810	4430	6530
30	2250	190	7840	1540	---	2240	7630	6660	7860	7890	4720	7380
31	2050	---	10000	610	---	7330	---	1650	---	7690	4890	---
TOTAL	97043	78434	114836	154946	109053	139611	151348	178790	147620	191410	209250	136340
MEAN	3130	2614	3704	4998	3895	4504	5045	5767	4921	6175	6750	4545
MAX	6450	8540	10000	9910	8930	7910	10400	9120	7880	9460	8430	7380
MIN	303	190	159	509	483	485	499	1380	1700	1690	4430	1180
CFSM	.84	.70	.99	1.33	1.04	1.20	1.35	1.54	1.31	1.65	1.80	1.21
IN.	.96	.78	1.14	1.54	1.08	1.39	1.50	1.78	1.47	1.90	2.08	1.35

CAL YR 1986 TOTAL 1044580 MEAN 2862 MAX 11000 MIN 159 MEAN± 3026 CFSM± 0.81 IN± 10.96
WTR YR 1987 TOTAL 1708680 MEAN 4681 MAX 10400 MIN 159 MEAN± 4608 CFSM± 1.23 IN± 16.69

† Adjusted for change in contents in South Holston, Watauga, Boone, Fort Patrick Henry, and Cherokee Lakes.
NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1980 to September 1986.

WATER TEMPERATURE: February 1980 to September 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 365 microsiemens, Mar. 1, 1981; minimum, 121 microsiemens, July 31, 1982.

WATER TEMPERATURE: Maximum, 27.0°C, Aug. 21, 1982, Sept. 2, 1985; minimum, 1.0°C, Jan. 27, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 28...	1030	4180	315	7.50	17.5	747	2.7	8.1	86	76
DEC 15...	1215	420	315	7.90	7.5	751	6.0	11.7	99	24
FEB 23...	1245	3070	252	7.90	8.0	745	36	10.1	87	K1700
APR 27...	1040	2570	273	8.50	13.5	744	1.2	8.3	82	K20
JUN 22...	1130	2900	253	8.30	21.5	739	1.8	7.9	92	39
AUG 11...	1330	5030	265	7.80	22.0	739	1.8	5.4	64	51

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 28...	72	130	24	36	10	18	23	0.7	2.2	106
DEC 15...	26	140	18	41	9.4	13	16	0.5	2.3	123
FEB 23...	K1700	120	19	38	6.7	7.0	11	0.3	2.1	104
APR 27...	K16	130	22	38	8.9	10	14	0.4	1.8	110
JUN 22...	54	120	17	36	8.3	7.9	12	0.3	1.8	107
AUG 11...	190	110	6	32	8.2	9.9	16	0.4	1.9	108

DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT 28...	6.6	31	16	0.20	2.1	205	180	0.28	2310	<0.010
DEC 15...	3.0	27	13	0.10	4.3	200	180	0.27	227	<0.010
FEB 23...	2.5	20	8.9	0.10	3.7	149	150	0.20	1240	<0.010
APR 27...	0.7	23	11	0.10	1.3	161	160	0.22	1120	<0.010
JUN 22...	1.0	18	9.9	0.10	3.5	159	150	0.22	1240	<0.010
AUG 11...	3.3	18	12	0.10	3.3	147	150	0.20	2000	0.020

K--Results based on non-ideal colony count.

03495500 HOLSTON RIVER NEAR KNOXVILLE, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDEED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 28...	0.360	0.040	0.030	0.60	0.030	0.020	0.010	15	169	64
DEC 15...	0.910	0.050	0.070	0.70	0.030	0.030	0.030	6	6.8	99
FEB 23...	0.670	0.060	0.050	1.4	0.090	0.060	0.040	73	605	98
APR 27...	0.640	<0.010	0.020	1.0	0.020	0.030	<0.010	6	42	88
JUN 22...	0.670	0.030	0.060	3.0	0.040	0.010	0.020	9	70	80
AUG 11...	<0.100	0.120	0.120	<0.20	0.030	0.030	0.010	15	204	73
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 28...	<10	<1	33	<0.5	<1	<1	<3	1	5	<5
FEB 23...	60	<1	24	<0.5	<1	<1	<3	2	96	<5
APR 27...	<10	<1	30	<0.5	<1	<1	<3	<1	4	<5
JUN 22...	10	<1	30	<0.5	1	<1	<3	2	5	<5
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 28...	7	12	<0.1	<10	<1	<1	<1	150	<6	<3
FEB 23...	4	8	<0.1	<10	2	<1	<1	100	<6	7
APR 27...	<4	10	<0.1	<10	<1	<1	<1	120	<6	14
JUN 22...	6	15	<0.1	10	<1	<1	<1	110	<6	7

TENNESSEE RIVER BASIN

03497300 LITTLE RIVER ABOVE TOWNSEND, TN
(Hydrologic bench-mark station)

LOCATION.--Lat 35°39'52", long 83°42'41", Blount County, Hydrologic Unit 06010201, in Great Smoky Mountains National Park, on left bank along State Highway 73, 0.3 mi upstream from Rush Branch, 0.4 mi southeast of Park entrance, 2.2 mi southeast of Townsend, and at mile 35.3.

DRAINAGE AREA.--106 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 1,106.92 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 19. Records good.

AVERAGE DISCHARGE.--24 years, 278 ft³/s, 35.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s, Mar. 16, 1973, gage height, 12.30 ft; minimum, 21 ft³/s, Jan. 18, 1981, gage height, 1.13 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jan. 19	unknown	*2,770	*5.35				

Minimum discharge, 24 ft³/s, Sept. 4, 5, 6, gage height, 1.14 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	80	206	142	345	1430	233	239	247	119	36	31
2	37	83	196	141	452	845	241	227	220	183	35	29
3	35	77	204	126	537	600	279	204	185	130	36	25
4	33	73	168	122	461	457	262	210	283	141	34	24
5	33	76	151	118	391	377	241	183	201	138	33	24
6	31	118	140	114	342	325	244	170	170	150	37	41
7	30	134	131	112	307	289	294	159	153	131	60	92
8	30	205	140	106	274	268	445	151	139	125	64	85
9	41	180	563	98	241	281	705	143	128	115	41	47
10	71	175	1210	106	214	303	758	137	118	116	39	38
11	47	208	835	102	200	250	818	130	124	103	36	39
12	39	279	655	94	192	241	904	125	139	95	36	69
13	129	210	467	91	181	222	847	132	162	87	72	100
14	314	170	367	91	187	212	775	158	124	125	39	56
15	150	167	307	108	263	204	1170	133	120	90	32	46
16	103	147	267	106	320	220	914	118	136	78	32	41
17	84	132	233	115	357	207	1280	119	194	73	44	37
18	73	120	251	263	317	199	1330	135	157	68	98	36
19	65	112	219	1600	288	410	903	119	159	64	47	39
20	60	127	198	758	265	345	669	146	153	61	39	45
21	56	155	180	485	260	315	518	230	180	59	33	41
22	52	129	165	397	321	284	423	378	241	56	30	34
23	50	136	158	314	741	259	366	284	176	53	32	31
24	49	455	198	267	516	236	327	381	156	49	33	31
25	291	388	229	314	416	230	421	407	203	47	29	31
26	337	768	197	361	366	206	346	421	226	45	27	30
27	172	563	186	281	745	191	318	288	188	43	26	29
28	131	383	175	254	1060	202	295	240	153	42	34	28
29	109	297	164	227	---	177	269	217	133	41	53	27
30	96	243	155	369	---	190	252	303	121	39	37	70
31	86	---	144	397	---	311	---	231	---	37	31	---
TOTAL	2870	6390	8859	8179	10559	10286	16847	6518	5089	2703	1255	1296
MEAN	92.6	213	286	264	377	332	562	210	170	87.2	40.5	43.2
MAX	337	768	1210	1600	1060	1430	1330	421	283	183	98	100
MIN	30	73	131	91	181	177	233	118	118	37	26	24
CFSM	.87	2.01	2.70	2.49	3.56	3.13	5.30	1.98	1.60	.82	.38	.41
IN.	1.01	2.24	3.11	2.87	3.71	3.61	5.91	2.29	1.79	.95	.44	.45

CAL YR 1986 TOTAL 59769 MEAN 164 MAX 1320 MIN 29 CFSM 1.54 IN. 20.97
WTR YR 1987 TOTAL 80851 MEAN 222 MAX 1600 MIN 24 CFSM 2.09 IN. 28.37

03497300 LITTLE RIVER ABOVE TOWNSEND, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to 1982, 1986.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1963 to September 1981.

INSTRUMENTATION.--Temperature recorder from October 1963 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.0°C June 23, 1964, July 3, 1970; minimum, 0.0°C on several days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 29...	1015	103	15	7.00	10.0	740	0.20	11.2	102	73
DEC 17...	1000	233	11	6.80	7.5	737	0.20	11.6	100	K1
FEB 25...	1015	420	12	7.10	8.5	740	0.20	11.8	104	K4
APR 28...	1100	301	12	6.90	12.0	734	0.80	9.8	94	K1
JUN 23...	1000	175	15	6.90	19.0	731	1.4	8.7	98	K15
AUG 13...	1010	87	31	7.40	22.0	734	1.3	8.8	105	140

DATE	STREP- TOCOCCL FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT FOI FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 29...	64	6	0	1.6	0.40	0.90	23	0.2	0.80	6
DEC 17...	K7	4	1	1.3	0.30	0.90	28	0.2	0.50	3
FEB 25...	K1	5	0	1.3	0.40	0.90	26	0.2	0.50	5
APR 28...	K3	5	1	1.3	0.40	1.0	28	0.2	0.50	4
JUN 23...	99	6	1	1.6	0.44	1.1	27	0.2	0.50	5
AUG 13...	170	13	1	3.9	0.82	1.2	16	0.1	0.70	12

DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT 29...	1.2	4.0	0.60	<0.10	5.4	22	17	0.03	6.1	<0.010
DEC 17...	0.9	2.8	0.60	<0.10	5.4	14	14	0.02	8.8	<0.010
FEB 25...	0.8	2.9	0.50	<0.10	5.4	8	15	0.01	9.1	<0.010
APR 28...	1	2.8	0.60	<0.10	5.4	8	14	0.01	6.5	<0.010
JUN 23...	1.2	3.8	1.0	<0.10	6.3	13	18	0.02	6.1	<0.010
AUG 13...	0.9	3.9	0.60	0.10	5.8	25	24	0.03	5.9	<0.010

K--Results based on non-ideal colony count.

TENNESSEE RIVER BASIN

30497300 LITTLE RIVER ABOVE TOWNSEND, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 29...	0.160	0.030	0.040	<0.20	0.010	<0.010	<0.010	4	1.1	79
DEC 17...	0.210	0.040	0.030	0.30	<0.010	0.030	<0.010	<1	--	72
FEB 25...	0.220	<0.010	<0.010	4.8	<0.010	<0.010	<0.010	2	2.3	64
APR 28...	0.120	<0.010	<0.010	0.40	0.010	0.010	<0.010	<1	--	67
JUN 23...	0.160	<0.010	0.030	0.40	0.020	0.030	<0.010	3	1.4	57
AUG 13...	0.250	0.020	0.020	<0.20	0.020	0.010	<0.010	7	1.6	65

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 29...	20	<1	8	1	<1	<1	<3	1	11	<5
FEB 25...	10	<1	8	<0.5	1	<1	<3	12	6	<5
APR 28...	20	<1	8	<0.5	<1	<1	<3	<1	7	<5
JUN 23...	<10	<1	9	<0.5	<1	<1	<3	2	12	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 29...	<4	3	<0.1	<10	2	<1	<1	9	<6	<3
FEB 25...	<4	<1	<0.1	<10	<1	<1	<1	8	<6	17
APR 28...	<4	1	<0.1	<10	<1	<1	<1	10	<6	14
JUN 23...	<4	2	<0.1	10	4	<1	<1	11	<6	10

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
FEB 25...	<0.4	<0.4	0.7	<0.4	0.07	<0.4	0.04	0.01

03498500 LITTLE RIVER NEAR MARYVILLE, TN

LOCATION.--Lat 35°47'10", long 83°53'04", Blount County, Hydrologic Unit 06010201, on right bank on downstream side of bridge on U.S. Highway 411, 0.8 mi downstream from Crooked Creek, 5.0 mi east of Maryville, and at mile 17.3.

DRAINAGE AREA.--269 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: June 16-19. Records good. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverted an average of about 4.0 ft³/s (2.6 MGD) for municipal supply 300 ft upstream from gage. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--36 years, 518 ft³/s, 26.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s, Mar. 12, 1963, gage height, 24.20 ft, from rating curve extended above 20,000 ft³/s, on basis of area-velocity study and road overflow computations; minimum, 32 ft³/s, Aug. 27, 1956; minimum gage height, 6.08 ft, Aug. 6, 1986; minimum daily, 44 ft³/s, Sept. 19, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1875, reached a stage of 31 ft, discharge, 50,000 ft³/s, and flood of April 1, 1896, reached a stage of 26 ft, discharge, 36,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 19	1400	*4,720	*11.83				

Minimum discharge, 44 ft³/s, Oct. 8, 9; minimum daily, 46 ft³/s, Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	108	284	230	625	2930	438	383	350	190	76	61
2	57	107	263	234	691	1480	425	371	336	270	72	58
3	56	103	281	208	821	1030	489	339	291	230	70	55
4	53	98	243	194	730	823	529	345	653	231	69	51
5	51	96	213	188	636	698	524	317	395	239	66	49
6	49	122	194	180	567	614	673	291	311	293	71	53
7	48	138	180	175	519	552	926	276	269	310	102	91
8	47	258	194	171	476	517	1090	261	239	225	101	116
9	50	225	709	164	431	550	1230	244	221	201	99	86
10	77	264	2290	171	391	606	1090	229	208	209	87	69
11	92	222	1410	176	372	511	1050	220	200	179	77	66
12	68	371	1070	160	357	519	1080	211	233	163	76	112
13	88	289	743	153	340	484	1030	227	244	152	122	143
14	352	236	574	150	342	463	940	266	224	189	91	98
15	240	219	481	166	460	445	1290	262	203	170	74	79
16	146	209	419	176	493	461	1150	208	230	145	68	72
17	116	178	367	188	640	448	1390	198	550	135	72	66
18	101	163	418	320	564	433	1730	226	300	128	129	61
19	92	147	388	3130	528	746	1210	205	340	123	99	64
20	84	144	336	1530	489	626	921	483	289	120	81	70
21	78	206	306	874	490	567	758	525	303	115	70	72
22	74	172	281	720	624	517	646	860	411	111	65	64
23	72	169	266	600	1950	475	574	537	324	106	62	59
24	69	643	292	509	1100	447	523	691	295	101	63	57
25	203	641	343	703	808	431	604	647	302	95	61	56
26	514	796	304	1190	679	398	533	652	386	92	57	56
27	256	731	292	722	1650	377	490	465	317	87	56	54
28	183	511	277	600	1980	383	459	399	255	85	58	49
29	147	401	261	521	---	355	422	350	222	83	83	46
30	127	331	248	620	---	354	400	400	201	79	79	48
31	116	---	232	715	---	528	---	372	---	77	65	---
TOTAL	3764	8298	14159	15838	19753	19768	24614	11460	9102	4933	2421	2081
MEAN	121	277	457	511	705	638	820	370	303	159	78.1	69.4
MAX	514	796	2290	3130	1980	2930	1730	860	653	310	129	143
MIN	47	96	180	150	340	354	400	198	200	77	56	46
CFSM	.45	1.03	1.70	1.90	2.62	2.37	3.05	1.37	1.13	.59	.29	.26
IN.	.52	1.15	1.96	2.19	2.73	2.73	3.40	1.58	1.26	.68	.33	.29

CAL YR 1986 TOTAL 93924 MEAN 257 MAX 3180 MIN 47 CFSM .96 IN. 12.99
WTR YR 1987 TOTAL 136191 MEAN 373 MAX 3130 MIN 46 CFSM 1.39 IN. 18.83

TENNESSEE RIVER BASIN

03498850 LITTLE RIVER NEAR ALCOA, TN

LOCATION.--Lat 35°48'32", long 83°55'36", Blount County, Hydrologic Unit 06010201, at Singleton Bend on left bank, 3.0 mi northeast of Alcoa, and at mile 9.7.

DRAINAGE AREA.--300 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 814.22 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 3. Records good. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverts an average of about 4.0 ft³/s (2.6 MGD) for municipal supply 7.6 mi upstream from gage and the town of Alcoa at the gage diverts about 19.7 ft³/s (12.7 MGD). Periodic observations of water temperature are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,340 ft³/s, Jan. 19, 1987, gage height, 9.62 ft, from rating curve extended above 1,800 ft³/s; minimum, 31 ft³/s Oct. 8, 9; minimum daily, 36 ft³/s Oct. 7-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	101	270	250	680	3600	453	375	335	174	63	54
2	47	98	241	240	708	1810	418	367	316	227	62	47
3	43	98	257	230	897	1200	478	329	271	221	57	47
4	41	92	228	220	796	937	542	332	680	204	58	40
5	42	92	200	186	686	782	539	306	401	218	55	40
6	37	97	183	176	603	679	669	278	293	278	61	41
7	36	139	171	173	543	602	1060	262	253	295	85	67
8	36	216	210	169	487	550	1180	249	227	217	85	110
9	38	214	800	165	429	567	1350	239	214	194	92	85
10	53	243	2660	165	380	650	1190	225	203	194	74	64
11	83	207	1640	174	353	534	1140	218	192	174	66	61
12	65	328	1280	161	337	537	1160	210	210	157	63	110
13	69	275	903	153	320	495	1130	209	213	146	102	150
14	259	220	669	149	314	467	1020	251	215	163	90	105
15	230	197	550	159	442	445	1380	260	188	168	70	79
16	136	197	474	176	462	457	1300	212	202	136	65	70
17	103	172	401	181	676	455	1430	198	519	122	65	66
18	90	156	386	256	581	432	1980	222	279	115	114	58
19	80	142	449	3830	537	803	1370	212	317	107	107	58
20	74	138	354	1960	488	690	1020	426	268	101	78	67
21	72	179	316	1000	484	614	828	549	269	98	69	69
22	67	167	265	798	577	548	702	920	377	92	60	63
23	65	161	315	659	2260	490	615	573	302	89	56	55
24	61	604	279	527	1300	454	550	720	287	86	52	52
25	115	698	360	713	906	433	621	704	254	81	51	49
26	519	816	330	1430	745	393	563	688	360	79	45	48
27	253	791	310	839	1840	360	511	494	296	76	45	44
28	178	534	290	669	2380	373	473	400	234	72	46	43
29	145	405	270	565	---	349	430	343	207	72	67	41
30	121	324	260	637	---	335	394	385	188	68	75	39
31	110	---	250	781	---	532	---	369	---	66	61	---
TOTAL	3316	8101	15571	17791	21211	21573	26496	11525	8570	4490	2139	1922
MEAN	107	270	502	574	758	696	883	372	286	145	69.0	64.1
MAX	519	816	2660	3830	2380	3600	1980	920	680	295	114	150
MIN	36	92	171	149	314	335	394	198	188	66	45	39
CFSM	.36	.90	1.67	1.91	2.53	2.32	2.94	1.24	.95	.48	.23	.21
IN.	.41	1.00	1.93	2.21	2.63	2.68	3.29	1.43	1.06	.56	.27	.24

WTR YR 1987 TOTAL 142705 MEAN 391 MAX 3830 MIN 36 CFSM 1.30 IN. 17.69

03528000 CLINCH RIVER ABOVE TAZEWEILL, TN

LOCATION.--Lat 36°25'30", long 83°23'54", Claiborne County, Hydrologic Unit 06010205, on right bank 0.4 mi upstream from Grissom Island, 4.6 mi downstream from Big War Creek, 10 mi east of Tazewell, and at mile 159.8.

DRAINAGE AREA.--1,474 mi².

PERIOD OF RECORD.--October 1918 to current year. Published as "near Lone Mountain" October 1918 to September 1927; as "near Tazewell" August 1927 to December 1936; and as "above Tazewell" July 1935 to current year. Prior to April 1919 monthly discharge only, published in WSP 1306. Gage-height record "near Tazewell" January 1937 to July 1941.

REVISED RECORDS.--WSP 803: Drainage area at site "near Tazewell". WSP 1306: Drainage area at site "near Lone Mountain". WSP 1336: 1928.

GAGE.--Water-stage recorder. Datum of gage is 1,060.7 ft above National Geodetic Vertical Datum of 1929. Apr. 1, 1919 to Sept. 30, 1927, nonrecording gage on railroad bridge 23.3 mi downstream at datum 102.7 ft lower. Aug. 8, 1927, to July 16, 1941, water-stage recorder at site 8.0 mi downstream at datum 47.2 ft lower. Water-stage recorder at present site and datum since July 29, 1935.

REMARKS.--Estimated daily discharges: Feb. 26 to Mar. 5 and July 24 to Aug. 1. Records good, except those for periods of no gage-height record, which are fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--69 years, 2,080 ft³/s, 19.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 98,100 ft³/s, Apr. 5, 1977, gage height, 29.32 ft, from floodmarks; minimum, 108 ft³/s, Sept. 11, 1925; minimum gage height, at present site and datum, 0.33 ft, Sept. 20, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1862 reached a stage of about 24 ft, present site and datum, from information by local resident; discharge, about 66,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jan. 20	1200	15,900	10.29	Apr. 10	0930	16,000	10.30
Mar. 1	Unknown	*24,800	*a13.41	Apr. 18	1130	23,000	12.82

a From cross-line in gage house.

Minimum discharge, 168 ft³/s, Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	402	354	1410	1550	6710	23000	3710	2820	870	499	300	248
2	365	385	1220	1440	5400	17000	4040	2440	946	497	285	223
3	346	414	1100	1350	4170	12000	3480	2160	985	510	273	210
4	308	403	1010	1230	3730	8000	3260	2270	859	1060	262	193
5	287	411	915	1120	3560	5000	3260	2240	997	3880	250	181
6	371	466	854	1030	3160	3530	3540	2070	1500	2670	251	180
7	497	792	793	965	2750	2980	5300	1810	1320	2110	310	193
8	518	1870	756	924	2410	2600	7130	1640	945	1590	293	213
9	474	2370	2810	885	2150	2400	10500	1500	761	1270	294	393
10	394	4880	10300	871	1910	2310	15500	1380	661	1110	290	538
11	344	4040	8950	857	1700	2180	13000	1270	600	1090	276	415
12	321	3770	7760	831	1540	2140	9230	1190	601	2090	285	410
13	335	3430	6610	804	1470	1910	7230	1180	668	2490	276	513
14	460	2590	4350	773	1410	1710	6020	1200	579	2420	258	482
15	1110	1860	3010	765	1420	1580	5730	1220	588	2390	242	494
16	1120	1460	2310	776	1600	1550	7350	1150	534	1740	229	488
17	864	1210	1890	780	3760	1600	15800	1080	500	1320	217	414
18	751	1040	1730	872	3820	1670	21900	987	473	1020	207	325
19	593	911	1800	6470	3620	2670	13500	950	531	860	198	305
20	492	825	1720	15000	3390	4020	7570	985	685	760	197	339
21	429	833	1630	10800	3410	4290	5420	1020	660	692	192	352
22	384	902	1460	5860	3650	3590	4220	1890	605	635	183	389
23	351	886	1300	4060	6360	2930	3510	1470	610	594	179	354
24	328	929	1310	3140	9510	2490	3270	1260	606	520	174	322
25	350	1120	3800	2690	7470	2190	5120	1420	541	480	169	283
26	461	1530	5450	4360	5000	1950	7930	1200	496	440	170	259
27	542	2620	4160	4220	7000	1740	9200	1100	665	410	180	238
28	510	2440	3030	3440	12000	1600	5730	1170	864	380	194	222
29	455	2050	2410	2880	---	1490	4150	1040	752	350	216	214
30	408	1690	2010	2650	---	1430	3340	909	587	330	218	297
31	374	---	1740	3910	---	2020	---	911	---	310	228	---
TOTAL	14944	48481	89598	87303	114080	125570	218940	44932	21989	36517	7296	9687
MEAN	482	1616	2890	2816	4074	4051	7298	1449	733	1178	235	323
MAX	1120	4880	10300	15000	12000	23000	21900	2820	1500	3880	310	538
MIN	287	354	756	765	1410	1430	3260	909	473	310	169	180
CFSM	.33	1.10	1.96	1.91	2.76	2.75	4.95	.98	.50	.80	.16	.22
IN.	.38	1.22	2.26	2.20	2.88	3.17	5.53	1.13	.55	.92	.18	.24

CAL YR 1986 TOTAL 525439 MEAN 1440 MAX 17000 MIN 185 CFSM .98 IN. 13.26
WTR YR 1987 TOTAL 819337 MEAN 2245 MAX 23000 MIN 169 CFSM 1.52 IN. 20.67

TENNESSEE RIVER BASIN

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN

LOCATION.--Lat 36°06'52", long 83°59'16", Knox County, Hydrologic Unit 06010207, on left bank on downstream side of bridge on U.S. Highway 441, 2.1 mi downstream from Smith Branch, 4 mi northwest of Halls Crossroads, and at mile 16.3.

DRAINAGE AREA.--68.5 mi².

PERIOD OF RECORD.--October 1957 to December 1986 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 854.91 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--29 years (water years 1958-86), 97.8 ft³/s, 19.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,300 ft³/s, Apr. 4, 1977, gage height, 13.28 ft, from rating curve extended above 5,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 2.5 ft³/s, Aug. 12, 1974, caused by regulation upstream of unknown origin.

EXTREMES FOR CURRENT PERIOD--October to December 1986: Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 9	2330	*1,040	*7.78				

Minimum discharge, 4.9 ft³/s, Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1986 TO DECEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	10	35	---	---	---	---	---	---	---	---	---
2	7.5	10	33	---	---	---	---	---	---	---	---	---
3	6.3	10	31	---	---	---	---	---	---	---	---	---
4	6.4	10	27	---	---	---	---	---	---	---	---	---
5	6.2	11	24	---	---	---	---	---	---	---	---	---
6	5.4	12	23	---	---	---	---	---	---	---	---	---
7	5.0	14	22	---	---	---	---	---	---	---	---	---
8	5.1	37	33	---	---	---	---	---	---	---	---	---
9	5.2	66	603	---	---	---	---	---	---	---	---	---
10	6.1	57	608	---	---	---	---	---	---	---	---	---
11	11	51	269	---	---	---	---	---	---	---	---	---
12	8.8	71	206	---	---	---	---	---	---	---	---	---
13	18	36	121	---	---	---	---	---	---	---	---	---
14	32	27	85	---	---	---	---	---	---	---	---	---
15	24	25	68	---	---	---	---	---	---	---	---	---
16	13	24	57	---	---	---	---	---	---	---	---	---
17	10	22	49	---	---	---	---	---	---	---	---	---
18	8.5	20	55	---	---	---	---	---	---	---	---	---
19	7.6	18	48	---	---	---	---	---	---	---	---	---
20	7.2	17	43	---	---	---	---	---	---	---	---	---
21	6.8	20	39	---	---	---	---	---	---	---	---	---
22	6.7	18	36	---	---	---	---	---	---	---	---	---
23	6.7	17	34	---	---	---	---	---	---	---	---	---
24	6.8	52	42	---	---	---	---	---	---	---	---	---
25	31	56	41	---	---	---	---	---	---	---	---	---
26	48	263	36	---	---	---	---	---	---	---	---	---
27	24	137	35	---	---	---	---	---	---	---	---	---
28	17	71	33	---	---	---	---	---	---	---	---	---
29	14	50	31	---	---	---	---	---	---	---	---	---
30	12	41	30	---	---	---	---	---	---	---	---	---
31	11	---	29	---	---	---	---	---	---	---	---	---
TOTAL	385.7	1273	2826	---	---	---	---	---	---	---	---	---
MEAN	12.4	42.4	91.2	---	---	---	---	---	---	---	---	---
MAX	48	263	608	---	---	---	---	---	---	---	---	---
MIN	5.0	10	22	---	---	---	---	---	---	---	---	---
CFSM	.18	.62	1.33	---	---	---	---	---	---	---	---	---
IN.	.21	.69	1.53	---	---	---	---	---	---	---	---	---

CAL YR 1986 TOTAL 15482.0 MEAN 42.4 MAX 1020 MIN 4.8 CFSM .61 IN. 8.41

TENNESSEE RIVER BASIN

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03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°53'07", long 84°18'03", Loudon County, Hydrologic Unit 06010207, at downstream side of Melton Hill Dam, 1.9 mi downstream from Hope Creek, and at mile 23.1.

DRAINAGE AREA.--3,343 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1936 to January 1941 (published as "near Wheat"), February 1941 to September 1960 (published as "near Scarboro"), October 1960 to September 1964 (published as "at Melton Hill Dam"), October 1967 to September 1968 (published as "near Oak Ridge"), October 1978 to current year. Equivalent record for the period October 1964 to December 1978 published in annual reports of Tennessee Valley Authority entitled "Operation of TVA Reservoirs".

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to February 1941, at site 8.7 miles downstream at datum 717.36 ft higher. February 1941 to September 1962 at site 15.9 miles upstream at datum 753.35 ft higher. October 1962 to September 1964, headwater gage at upstream side of dam at present datum. October 1967 to September 1968, at site 8.6 miles downstream at datum 731.62 ft higher.

REMARKS.--Flow regulated by Melton Hill Lake (station 03535900) and Norris Lake (station 03532500) above site.

COOPERATION.--Records furnished by Tennessee Valley Authority.

AVERAGE DISCHARGE.--38 years, (1936-64, 1967-68, 1978-87), 4,599 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 39,600 ft³/s, Feb. 18, 1937; minimum daily, no flow, many days since closure of Melton Hill Dam in August 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 13,500 ft³/s, Jan. 7; minimum daily, no flow, Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5670	2490	1280	8650	417	10200	1470	11600	4070	3220	7980	3840
2	6070	1600	833	7880	4700	11200	938	8280	4850	2990	7720	4150
3	7450	7680	2080	8270	3480	8700	433	6570	4900	1490	8480	2100
4	3500	7800	2180	6970	6470	10600	450	7680	3550	1860	8470	2800
5	3450	8230	2360	10700	5670	13000	430	5370	1780	1770	5980	2470
6	4950	6100	2880	12100	6090	10200	1330	7770	1800	6380	5820	2500
7	7900	6180	3120	13500	4450	10900	471	5420	1300	5100	7320	2920
8	6940	3370	5030	7600	4020	6920	1070	4510	5250	7020	6370	3100
9	2050	417	3430	9100	11400	6250	1830	5630	6200	6370	5370	3330
10	817	400	8520	3030	10700	7740	459	3030	5350	6630	7000	3750
11	400	417	1840	2080	11300	7030	454	6230	3950	2530	7580	3900
12	417	2620	21	6720	9170	7000	0	6220	5820	2080	8150	983
13	517	7000	800	7450	4120	8020	833	5290	833	9020	7910	1220
14	417	5820	800	8120	1720	6580	867	6970	883	7470	7700	4600
15	417	4770	4320	5940	950	4430	2420	6320	3050	9380	6430	4730
16	417	3020	4320	6980	4820	7940	2870	4600	3390	9180	5260	2550
17	367	5780	5920	6420	5830	6620	2100	2490	4170	8080	6120	4310
18	500	4730	5120	5270	8100	7570	2180	2300	4330	4720	6590	4390
19	438	4870	7050	9080	3220	6290	1450	6580	3350	3980	6490	2400
20	9550	1970	3820	6220	5550	5360	9780	5170	3600	5420	6850	3280
21	8920	433	617	5520	4250	783	7490	7200	967	7290	5270	3570
22	11800	417	5120	1350	2570	488	10200	6120	2200	5870	4670	4950
23	7700	583	6330	1280	7770	2350	10400	4220	2260	8240	4370	5290
24	6630	400	6720	2130	11200	3040	8300	1970	2250	7620	5780	5070
25	400	2650	7280	1220	11400	3200	6520	2860	1570	7550	6740	5330
26	517	1880	7370	7500	6930	3290	5820	4690	3470	5230	6500	1200
27	1700	817	7020	9440	6290	6280	5330	5200	1770	7270	6400	1600
28	854	833	6500	8900	12500	6170	7450	5310	417	8350	4540	3990
29	3330	1220	6770	3230	---	5580	8520	3980	2520	8510	950	4330
30	3780	1350	8020	2140	---	4870	8790	3340	4180	8140	5310	5280
31	3450	---	7020	417	---	1090	---	2170	---	7820	5220	---
TOTAL	111318	95847	134491	195207	175087	199691	110655	165090	94030	186580	195340	103933
MEAN	3591	3195	4338	6297	6253	6442	3688	5325	3134	6019	6301	3464
MAX	11800	8230	8520	13500	12500	13000	10400	11600	6200	9380	8480	5330
MIN	367	400	21	417	417	488	0	1970	417	1490	950	983

CAL YR 1986 TOTAL 1081781 MEAN 2980 MAX 11800 MIN 21 MEAN+ 3244 CFSM+ 0.97 IN.+ 13.17
WTR YR 1987 TOTAL 1767269 MEAN 4842 MAX 13500 MIN 0 MEAN+ 4903 CFSM+ 1.47 IN.+ 19.90

+ Adjusted for change in contents in Norris and Melton Hill lakes.

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

03535912 CLINCH RIVER AT MELTON HILL DAM (TAILWATER), TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1981 to September 1986.

WATER TEMPERATURES: March 1981 to September 1986.

INSTRUMENTATION.--Water-quality monitor since March 21, 1981.

REMARKS.--Flow regulated by Melton Hill and Norris Lakes.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 449 microsiemens, Oct. 28, 1981; minimum, 186 microsiemens, May 29, 1982.

WATER TEMPERATURES: Maximum, 23.5°C, May 17, 1982; minimum, 4.0°C, Jan. 27, 1983, Jan. 21, 22, 1984.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 293 microsiemens, April 1; minimum, 235 microsiemens, Mar. 8.

WATER TEMPERATURES: Maximum, 22.5°C, Aug. 28, 29; minimum, 6.0°C, Jan. 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 30...	1100	10000	268	8.10	16.0	750	1.8	8.9	92	31
DEC 16...	1130	10400	265	8.00	10.0	750	3.7	10.6	95	K12
FEB 24...	1130	20000	255	8.20	7.0	750	0.80	11.3	95	K3
APR 29...	1130	15600	247	8.40	14.0	746	1.5	9.8	97	K2
JUN 24...	1030	8400	251	8.20	18.0	742	1.8	8.7	94	K10
AUG 12...	1100	10800	255	8.10	18.5	741	1.7	9.4	103	K22

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 30...	K21	150	28	40	11	5.5	8	0.2	1.5	121
DEC 16...	K6	130	23	36	10	5.8	9	0.2	1.9	108
FEB 24...	K7	130	21	36	10	5.3	8	0.2	1.7	110
APR 29...	K1	130	21	36	9.9	5.0	8	0.2	1.6	110
JUN 24...	K1	130	19	35	9.7	4.9	8	0.2	1.4	108
AUG 12...	52	120	9	34	9.2	4.7	8	0.2	1.4	114

DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
OCT 30...	1.8	24	5.1	<0.10	3.8	178	160	0.24	4810	0.010
DEC 16...	2.1	26	5.5	<0.10	3.2	160	150	0.22	4490	0.010
FEB 24...	1.3	25	5.1	0.10	3.1	141	150	0.19	7610	<0.010
APR 29...	0.8	23	4.6	<0.10	3.4	146	150	0.20	6150	<0.010
JUN 24...	1.3	23	4.9	<0.10	3.4	131	150	0.18	2970	<0.010
AUG 12...	1.7	24	4.8	0.10	4.2	150	150	0.20	4370	<0.010

K--Results based on non-ideal colony count.

03535912 CLINCH RIVER AT MILTON HILL DAM (TAILWATER), TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, SUS- PENDEED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 30...	0.360	0.040	0.040	0.40	<0.010	<0.010	<0.010	11	297	58
DEC 16...	0.390	0.050	0.050	0.50	0.020	0.030	0.010	5	140	94
FEB 24...	0.410	0.010	<0.010	0.60	0.010	0.010	<0.010	6	324	79
APR 29...	0.440	<0.010	<0.010	1.6	0.010	0.010	<0.010	9	379	90
JUN 24...	0.560	0.020	0.050	0.90	0.020	0.050	<0.010	4	91	98
AUG 12...	0.580	0.020	0.020	<0.20	0.020	<0.010	<0.010	10	292	83
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 30...	20	<1	35	1	<1	<1	<3	1	5	<5
FEB 24...	<10	<1	30	<0.5	1	<1	<3	<1	3	<5
APR 29...	<10	<1	31	<0.5	<1	<1	<3	<1	4	<5
JUN 24...	<10	<1	31	<0.5	<1	1	<3	6	3	5
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 30...	8	2	<0.1	<10	2	<1	<1	110	<6	6
FEB 24...	10	5	<0.1	<10	<1	<1	<1	99	<6	11
APR 29...	7	1	<0.1	<10	<1	<1	<1	91	<6	4
JUN 24...	8	2	<0.1	<10	1	<1	<1	92	<6	14

TENNESSEE RIVER BASIN

03536380 WHITEOAK CREEK NEAR WHEAT, TN

LOCATION.--Lat 35°55'30", long 84°18'52", Roane County, Hydrologic Unit 06010207, on left bank, 1.1 mi upstream of Melton Branch, 6.2 mi southwest of Oak Ridge, and at mile 2.7.

DRAINAGE AREA.--2.10 mi².

PERIOD OF RECORD.--December 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 775.44 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 1-2, 8-12, 17-19, Jan. 18-27, Feb. 6-10. Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT PERIOD.--February to September: Maximum discharge recorded, 92 ft³/s, Sept. 12, but may have been higher during periods of missing record; minimum, 2.1 ft³/s, Aug. 8, 9, 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, DECEMBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	4.5	3.5	4.6	20	4.3	3.4	3.0	3.3	2.2	2.4
2	---	---	5.2	3.3	5.8	12	4.7	3.4	3.0	3.1	2.2	2.4
3	---	---	4.2	3.2	4.9	9.4	7.0	3.7	2.9	3.8	2.3	2.4
4	---	---	3.7	3.2	4.5	7.6	6.3	6.8	2.9	3.8	2.4	2.4
5	---	---	3.5	3.3	4.3	6.7	6.4	3.6	2.8	4.3	2.5	2.4
6	---	---	3.3	3.2	4.1	5.9	6.8	3.5	2.7	3.7	2.6	2.5
7	---	---	3.1	3.2	4.0	5.4	6.7	3.5	2.6	5.9	2.4	2.6
8	---	---	12	3.1	3.9	5.2	6.3	3.2	2.8	3.3	2.2	2.8
9	---	---	33	3.1	3.7	6.2	5.8	3.1	2.8	3.0	2.2	2.7
10	---	---	17	3.1	3.6	4.9	5.3	3.0	3.0	2.9	2.5	2.6
11	---	---	14	3.1	3.5	4.6	5.4	3.0	3.0	2.9	2.2	2.7
12	---	---	10	3.1	3.5	4.7	4.9	3.0	3.8	2.7	4.3	11
13	---	---	7.4	3.1	3.3	4.2	4.4	3.1	3.1	2.7	2.8	3.2
14	---	---	6.1	3.3	3.6	4.1	5.5	3.0	2.9	2.6	2.4	2.9
15	---	---	5.5	3.5	3.4	4.0	14	2.9	3.0	2.5	2.2	2.8
16	---	---	5.0	3.0	9.4	4.7	11	2.8	3.6	2.6	2.3	2.8
17	---	---	5.0	2.9	6.6	4.1	9.6	5.3	4.2	2.6	2.9	2.8
18	---	---	6.5	9.0	7.0	7.6	7.9	3.2	3.1	2.4	2.5	2.8
19	---	---	5.0	45	5.9	7.9	6.8	3.0	3.1	2.4	2.4	3.6
20	---	---	4.6	13	5.5	6.8	6.1	3.8	3.6	2.6	2.3	2.8
21	---	---	4.3	9.0	5.2	6.3	5.5	4.8	4.4	2.7	2.4	2.7
22	---	---	4.1	8.0	7.3	5.6	5.1	3.4	4.3	2.6	2.3	2.5
23	---	---	4.6	6.5	9.8	5.2	4.6	2.9	3.3	2.6	2.3	2.5
24	---	---	4.5	5.5	8.4	5.3	4.9	2.8	3.1	2.5	2.3	2.4
25	---	---	3.8	11	7.1	5.0	3.9	4.3	3.0	2.2	2.4	2.4
26	---	---	3.8	10	7.2	4.4	3.6	3.2	3.0	2.2	2.5	2.4
27	---	---	3.7	9.0	30	4.3	3.6	3.0	2.8	2.4	2.6	2.5
28	---	---	3.5	7.7	26	3.9	3.6	2.9	2.7	2.4	2.6	2.5
29	---	---	3.5	6.7	---	3.8	3.4	3.0	2.8	2.3	2.4	4.9
30	---	---	3.5	5.7	---	6.1	3.5	3.8	2.9	2.3	2.3	3.1
31	---	---	3.4	5.0	---	4.8	---	3.1	---	2.3	2.4	---
TOTAL	---	---	201.3	205.3	196.1	190.7	176.9	107.5	94.2	89.6	76.3	90.5
MEAN	---	---	6.49	6.62	7.00	6.15	5.90	3.47	3.14	2.89	2.46	3.02
MAX	---	---	33	45	30	20	14	6.8	4.4	5.9	4.3	11
MIN	---	---	3.1	2.9	3.3	3.8	3.4	2.8	2.6	2.2	2.2	2.4
CFSM	---	---	3.09	3.15	3.34	2.93	2.81	1.65	1.50	1.38	1.17	1.44
IN.	---	---	3.57	3.64	3.47	3.38	3.13	1.90	1.67	1.59	1.35	1.60

TENNESSEE RIVER BASIN

167

03536440 NORTHWEST TRIBUTARY NEAR OAK RIDGE, TN

LOCATION.--Lat 35°55'18", long 84°19'13", Roane County, Hydrologic Unit 06010207, on left bank 750 ft upstream of Lagoon Road, 6 miles southwest of Oak Ridge, and at mile 0.2.

DRAINAGE AREA.--0.67 mi².

PERIOD OF RECORD.--May to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 774.36 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated at times by Oak Ridge National Laboratory. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT PERIOD.--May to September 1987: Maximum discharge, 47 ft³/s, June 27; minimum, 0.51 ft³/s, June 10, Aug. 30, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY 1987 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.64	.69	.74	.77	.56
2	---	---	---	---	---	---	---	.61	.75	.70	.78	.72
3	---	---	---	---	---	---	---	.65	.81	.72	.81	.76
4	---	---	---	---	---	---	---	.98	.67	.76	.79	.59
5	---	---	---	---	---	---	---	.65	.66	.76	.81	.58
6	---	---	---	---	---	---	---	.59	.54	.70	.83	.56
7	---	---	---	---	---	---	---	.57	.54	.89	.73	.57
8	---	---	---	---	---	---	---	.54	.54	.68	.61	.62
9	---	---	---	---	---	---	---	.54	.54	.71	.61	.58
10	---	---	---	---	---	---	---	.54	.55	.70	.65	.59
11	---	---	---	---	---	---	---	.55	.59	.72	.61	.64
12	---	---	---	---	---	---	---	.59	.63	.68	.79	1.2
13	---	---	---	---	---	---	---	.58	.62	.66	.63	.58
14	---	---	---	---	---	---	---	.58	.61	.62	.62	.59
15	---	---	---	---	---	---	---	.64	.57	.64	.57	.60
16	---	---	---	---	---	---	---	.65	.57	.63	.57	.63
17	---	---	---	---	---	---	---	.78	.62	.64	.66	.60
18	---	---	---	---	---	---	---	.71	.58	.55	.61	.64
19	---	---	---	---	---	---	---	.73	.58	.54	.59	.63
20	---	---	---	---	---	---	---	.82	.63	.56	.59	.54
21	---	---	---	---	---	---	---	.70	.66	.71	.61	.55
22	---	---	---	---	---	---	---	.66	2.4	.73	.55	.59
23	---	---	---	---	---	---	---	.65	.94	.71	.54	.62
24	---	---	---	---	---	---	---	.64	.68	.70	.57	.73
25	---	---	---	---	---	---	---	1.3	.69	.58	.57	.80
26	---	---	---	---	---	---	---	.87	.64	.57	.59	.73
27	---	---	---	---	---	---	---	.69	.61	.58	.59	.65
28	---	---	---	---	---	---	---	.71	.58	.64	.61	.69
29	---	---	---	---	---	---	---	.78	.61	.72	.55	.90
30	---	---	---	---	---	---	---	.81	.66	.75	.52	.74
31	---	---	---	---	---	---	---	.77	---	.80	.57	---
TOTAL	---	---	---	---	---	---	---	21.52	20.76	21.09	19.90	19.78
MEAN	---	---	---	---	---	---	---	.69	.69	.68	.64	.66
MAX	---	---	---	---	---	---	---	1.3	2.4	.89	.83	1.2
MIN	---	---	---	---	---	---	---	.54	.54	.54	.52	.54
CFSM	---	---	---	---	---	---	---	1.04	1.03	1.02	.96	.98
IN.	---	---	---	---	---	---	---	1.19	1.15	1.17	1.10	1.10

03536450 FIRST CREEK NEAR OAK RIDGE, TN

LOCATION.--Lat 35°55'21", long 84°19'10", Roane County, Hydrologic Unit 06010207, on left bank, 5.9 mi southwest of Oak Ridge, and at mile 0.1.

DRAINAGE AREA.--0.33 mi².

PERIOD OF RECORD.--February to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 772.78 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 1-5. Records fair. Flow regulated at times by Oak Ridge National Laboratory. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT PERIOD.--February to September: Maximum discharge, 29 ft³/s, June 22; minimum, 0.15 ft³/s, Sept. 25, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, FEBRUARY 1987 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	.80	3.7	.70	.51	.32	.34	.28	.41
2	---	---	---	---	.95	2.3	.77	.48	.28	.32	.27	.28
3	---	---	---	---	.80	1.7	1.1	.54	.21	.46	.28	.23
4	---	---	---	---	.75	1.4	1.0	1.1	.24	.46	.28	.23
5	---	---	---	---	.72	1.2	1.1	.49	.26	.46	.28	.22
6	---	---	---	---	.67	1.1	1.2	.47	.31	.35	.33	.23
7	---	---	---	---	.64	.97	1.1	.46	.31	.64	.38	.24
8	---	---	---	---	.63	.93	1.1	.47	.32	.30	.47	.26
9	---	---	---	---	.59	1.1	1.0	.43	.32	.25	.47	.23
10	---	---	---	---	.54	.82	.93	.43	.32	.24	.63	.22
11	---	---	---	---	.51	.77	.92	.43	.32	.28	.53	.23
12	---	---	---	---	.50	.75	.83	.40	.41	.24	.88	1.7
13	---	---	---	---	.48	.67	.71	.40	.32	.25	.50	.27
14	---	---	---	---	.53	.66	.88	.35	.31	.24	.45	.25
15	---	---	---	---	.50	.66	2.4	.31	.30	.25	.44	.26
16	---	---	---	---	1.8	.72	1.9	.28	.31	.25	.44	.25
17	---	---	---	---	1.2	.63	1.7	.62	.34	.26	.57	.25
18	---	---	---	---	1.2	1.2	1.5	.33	.29	.30	.46	.25
19	---	---	---	---	1.1	1.3	1.2	.27	.31	.30	.45	.34
20	---	---	---	---	1.1	1.1	1.1	.69	.34	.30	.43	.24
21	---	---	---	---	1.0	1.1	.97	.57	.52	.27	.43	.23
22	---	---	---	---	2.0	.99	.90	.43	1.1	.22	.43	.24
23	---	---	---	---	2.0	.93	.80	.38	.47	.21	.43	.30
24	---	---	---	---	1.6	.92	.81	.36	.35	.26	.42	.27
25	---	---	---	---	1.3	.86	.66	1.0	.32	.50	.43	.27
26	---	---	---	---	1.3	.75	.61	.49	.31	.51	.43	.17
27	---	---	---	---	5.2	.71	.57	.40	.27	.44	.43	.17
28	---	---	---	---	5.4	.67	.56	.33	.26	.32	.44	.33
29	---	---	---	---	---	.63	.52	.30	.26	.29	.42	.86
30	---	---	---	---	---	1.0	.53	.51	.26	.28	.41	.31
31	---	---	---	---	---	.77	---	.35	---	.29	.40	---
TOTAL	---	---	---	---	35.81	33.01	30.07	14.58	10.26	10.08	13.49	9.74
MEAN	---	---	---	---	1.28	1.06	1.00	.47	.34	.33	.44	.32
MAX	---	---	---	---	5.4	3.7	2.4	1.1	1.1	.64	.88	1.7
MIN	---	---	---	---	.48	.63	.52	.27	.21	.21	.27	.17
CFSM	---	---	---	---	3.88	3.23	3.04	1.43	1.04	.99	1.32	.98
IN.	---	---	---	---	4.04	3.72	3.39	1.64	1.16	1.14	1.52	1.10

LOCATION.--Lat 35°55'10", long 84°19'02", Roane County, Hydrologic Unit 06010207, on right bank 200 ft downstream of bridge on Melton Valley Drive at Oak Ridge National Laboratory, 6.7 mi southwest of Oak Ridge, and at mile 2.2.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder, and crest-stage gage. Datum of gage is 766.35 ft above National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 360 ft³/s, Aug. 16, 1985, gage height, 6.43 ft; minimum, 4.5 ft³/s, May 18, 1987, gage height, 2.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 236 ft³/s, Jan. 19, gage height, 5.48 ft; minimum, 4.5 ft³/s, May 18, gage height, 2.40 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.7	7.7	6.6	8.8	33	8.0	7.2	6.8	7.1	6.4	5.6
2	6.9	6.4	9.3	5.9	11	20	8.9	7.1	6.9	6.6	6.5	5.7
3	6.6	6.5	7.8	6.0	9.6	16	12	7.3	6.8	7.6	6.6	5.8
4	5.9	6.8	6.9	5.8	8.4	13	11	12	6.5	7.7	7.0	5.7
5	5.7	7.0	6.3	5.9	8.5	11	11	8.1	6.4	8.3	7.0	5.6
6	5.6	6.5	5.8	5.9	8.3	11	11	7.8	5.9	7.5	7.0	5.6
7	5.8	9.0	5.7	5.9	7.7	9.8	11	7.7	6.0	11	6.9	5.6
8	5.9	7.6	15	5.9	7.9	9.3	11	7.3	6.5	6.9	6.7	5.8
9	6.2	9.4	59	5.9	7.5	11	10	7.0	6.5	6.7	6.2	5.6
10	7.5	7.3	30	6.2	7.4	8.8	9.4	6.9	6.5	6.8	6.7	5.7
11	7.8	14	25	5.8	7.3	8.5	9.9	7.1	6.6	6.5	6.0	5.7
12	9.9	9.4	17	5.7	7.6	8.6	9.1	7.2	7.2	5.8	8.8	16
13	14	8.1	12	5.7	7.1	7.9	8.5	7.0	6.5	5.9	6.7	6.3
14	12	7.4	11	6.0	6.9	7.6	10	7.0	6.3	6.1	6.2	5.9
15	7.4	8.0	9.7	6.6	7.1	7.5	23	7.0	6.3	5.9	5.7	5.9
16	6.6	7.1	8.9	6.1	18	8.6	19	6.8	6.9	6.0	5.7	6.2
17	6.4	7.2	9.0	6.0	12	7.6	16	10	8.0	6.2	6.6	6.2
18	5.9	7.0	12	18	12	13	14	7.5	6.3	6.3	6.0	6.1
19	5.9	6.6	9.0	83	11	14	12	7.5	6.5	6.0	6.0	6.8
20	6.0	9.0	8.4	24	10	12	11	8.7	7.4	6.4	5.9	5.4
21	6.1	7.6	7.5	16	9.8	11	11	9.1	8.2	6.7	6.0	5.3
22	6.2	6.6	7.3	15	18	9.7	9.8	7.5	11	6.5	5.7	5.5
23	6.2	9.0	8.3	12	19	9.3	8.8	6.4	7.7	6.9	5.7	5.5
24	6.7	17	8.6	10	15	9.4	9.2	6.3	6.9	6.6	5.8	5.6
25	25	12	7.6	21	12	9.2	7.6	9.3	6.5	6.6	5.8	5.5
26	10	18	6.7	20	12	8.4	7.4	7.6	6.7	6.3	6.2	5.3
27	8.5	11	6.8	15	49	8.2	7.2	6.9	6.3	6.5	6.4	5.4
28	7.9	9.0	6.6	13	46	7.5	7.4	6.8	5.9	6.2	6.1	5.5
29	7.3	8.1	6.4	11	---	7.1	7.1	6.8	6.1	6.3	5.8	8.7
30	7.4	7.6	6.0	11	---	11	7.1	7.7	6.3	6.4	5.3	6.4
31	7.1	---	6.1	9.4	---	8.8	---	6.9	---	6.8	5.6	---
TOTAL	242.8	262.9	353.4	380.3	364.9	337.8	318.4	235.5	204.4	209.1	195.0	185.9
MEAN	7.83	8.76	11.4	12.3	13.0	10.9	10.6	7.60	6.81	6.75	6.29	6.20
MAX	25	18	59	83	49	33	23	12	11	11	8.8	16
MIN	5.6	6.4	5.7	5.7	6.9	7.1	7.1	6.3	5.9	5.8	5.3	5.3
CAL YR 1986	TOTAL 3098.7		MEAN 8.49	MAX 63	MIN 5.6							
WTR YR 1987	TOTAL 3290.4		MEAN 9.01	MAX 83	MIN 5.3							

TENNESSEE RIVER BASIN

03536550 WHITE OAK CREEK BELOW MELTON VALLEY DRIVE NEAR OAK RIDGE, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1986 to September 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)
				OCT			
				03...	1020	6.9	23.5
				NOV			
				10...	1405	7.3	20.0
				JAN			
				27...	1355	14	11.0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS AS (MG/L CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
AUG												
26...	0900	6.3	310	23.0	130	0	37	9.5	11	15	0.4	1.6

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
AUG											
26...	23	10	1.0	5.2	130	0.18	2.2	1.20	<10	25	89

TENNESSEE RIVER BASIN

171

03537100 MELTON BRANCH NEAR MELTON HILL, NEAR OAK RIDGE, TN

LOCATION.--Lat 35°54'59", long 84°17'53", Roane County, Hydrologic Unit 06010207, on left bank 1.0 mi southeast of the Oak Ridge National Laboratory, 6.0 mi south of Oak Ridge, and at mile 1.2.

DRAINAGE AREA.--0.52 mi².

PERIOD OF RECORD.--April 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 784.06 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 132 ft³/s, Aug. 16, 1985 and Mar. 19, 1986, gage height, 9.64 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 108 ft³/s, Jan. 19, gage height, 9.54 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.02	.17	.16	.38	3.5	.54	.12	.02	.00	.00	.00
2	.00	.01	.32	.13	.75	1.7	.51	.10	.02	.00	.00	.00
3	.00	.01	.27	.10	.66	1.2	.93	.12	.01	.01	.00	.00
4	.00	.01	.18	.10	.49	.84	1.3	.59	.01	.01	.00	.00
5	.00	.02	.14	.10	.41	.65	1.4	.14	.02	.01	.00	.00
6	.00	.01	.12	.10	.38	.53	1.3	.10	.01	.03	.00	.00
7	.00	.08	.10	.10	.33	.44	1.0	.09	.01	.23	.00	.00
8	.00	.17	1.4	.07	.30	.44	.80	.07	.01	.03	.00	.00
9	.00	.31	13	.08	.23	.81	.65	.06	.00	.01	.00	.00
10	.00	.16	3.8	.12	.22	.51	.52	.05	.00	.01	.00	.00
11	.00	.86	2.8	.10	.21	.41	.61	.04	.00	.01	.00	.00
12	.00	.46	1.6	.09	.21	.51	.52	.04	.00	.01	.00	.00
13	.05	.19	.91	.07	.17	.39	.40	.03	.00	.00	.00	.00
14	.06	.12	.57	.08	.23	.38	.79	.03	.00	.00	.00	.00
15	.01	.19	.41	.17	.25	.33	4.0	.03	.00	.00	.00	.00
16	.01	.15	.32	.13	2.1	.41	2.0	.02	.00	.00	.00	.00
17	.00	.12	.28	.11	1.5	.33	1.7	.31	.01	.00	.00	.00
18	.00	.09	.99	2.1	1.2	.86	1.2	.15	.01	.00	.00	.00
19	.00	.07	.55	23	.91	1.9	.92	.06	.01	.00	.00	.00
20	.00	.27	.39	2.1	.71	1.1	.68	.05	.01	.00	.00	.00
21	.00	.25	.29	1.2	.67	.78	.54	.07	.02	.00	.00	.00
22	.00	.16	.23	1.0	2.0	.59	.42	.08	.16	.00	.00	.00
23	.00	.23	.27	.72	2.6	.49	.37	.04	.08	.00	.00	.00
24	.00	1.7	.42	.54	1.3	.48	.34	.03	.03	.00	.00	.00
25	.95	.89	.29	3.0	.97	.57	.26	.02	.02	.00	.00	.00
26	.25	1.8	.23	2.6	.79	.39	.22	.03	.01	.00	.00	.00
27	.08	.80	.21	1.2	9.1	.38	.20	.03	.01	.00	.00	.00
28	.04	.40	.17	.98	6.5	.33	.16	.03	.00	.00	.00	.00
29	.03	.26	.17	.73	---	.31	.14	.01	.00	.00	.00	.00
30	.02	.19	.15	.62	---	.77	.12	.03	.00	.00	.00	.00
31	.02	---	.13	.46	---	.81	---	.04	---	.00	.00	---
TOTAL	1.52	10.0	30.88	42.06	35.57	23.14	24.54	2.61	.48	.36	.00	.00
MEAN	.05	.33	1.00	1.36	1.27	.75	.82	.08	.02	.01	.00	.00
MAX	.95	1.8	13	23	9.1	3.5	4.0	.59	.16	.23	.00	.00
MIN	.00	.01	.10	.07	.17	.31	.12	.01	.00	.00	.00	.00
CFSM	.09	.64	1.92	2.61	2.44	1.44	1.57	.16	.03	.02	.00	.00
IN.	.11	.72	2.21	3.01	2.54	1.66	1.76	.19	.03	.03	.00	.00
CAL YR 1986	TOTAL 132.66	MEAN .36	MAX 14	MIN .00	CFSM .70	IN. 9.49						
WTR YR 1987	TOTAL 171.16	MEAN .47	MAX 23	MIN .00	CFSM .90	IN. 12.24						

TENNESSEE RIVER BASIN

03538225 POPLAR CREEK NEAR OAK RIDGE, TN

LOCATION.--Lat 35°59'55", long 84°20'23", Roane County, Hydrologic Unit 06010207, on right bank, 1,000 ft upstream from county road bridge, 0.4 mi downstream from Indian Creek, 8.2 mi southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 13.8.

DRAINAGE AREA.--82.5 mi².

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 743.50 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-15, Nov. 19-21. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--27 years, 167 ft³/s, 27.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, Apr. 5, 1977, gage height, 27.93 ft, from floodmarks, from rating curve extended above 8,000 ft³/s; minimum, 3.7 ft³/s, July 31, Aug. 5, 6, 1986, Aug. 25, 26, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1928, at site about 5.0 mi upstream, drainage area, 55.9 mi², discharge, about 14,000 ft³/s, was the greatest known since at least 1900, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 10	0300	*3,400	*18.50	Jan. 19	1630	2,410	15.88

Minimum discharge, 3.7 ft³/s, Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	22	101	75	144	958	113	63	37	11	5.9	4.7
2	11	22	125	73	156	494	108	54	47	13	5.8	4.5
3	10	20	129	64	157	323	140	52	34	56	6.1	4.4
4	9.5	19	109	58	131	239	149	89	25	103	7.4	4.3
5	9.5	20	95	54	119	195	139	58	21	139	7.6	4.3
6	8.5	25	85	51	112	170	150	47	17	103	13	4.5
7	7.0	39	75	50	109	146	196	41	16	274	9.6	5.9
8	7.0	227	180	47	103	134	179	37	15	111	8.2	7.1
9	7.0	405	2210	44	94	149	153	33	14	67	6.7	16
10	15	264	2700	47	83	126	128	30	13	44	11	8.4
11	25	209	752	47	78	105	116	28	13	35	9.7	6.5
12	20	257	472	42	78	107	106	27	13	31	7.2	112
13	40	142	312	40	73	94	94	35	15	23	13	51
14	80	88	229	38	77	87	193	28	16	21	7.6	19
15	55	78	187	48	91	84	447	27	15	20	5.9	13
16	29	68	157	46	200	104	367	26	14	15	5.1	9.9
17	20	57	140	41	266	97	283	24	41	13	4.9	8.6
18	16	48	281	85	251	99	218	24	23	12	5.3	8.9
19	14	42	236	1690	216	272	178	22	17	11	5.9	11
20	12	40	196	927	193	233	149	23	32	11	4.9	14
21	11	75	160	365	182	189	127	30	38	9.5	4.4	13
22	9.9	57	133	285	228	157	111	30	44	8.9	4.2	9.1
23	11	68	119	235	578	133	101	26	29	8.1	4.4	7.6
24	10	290	172	184	374	117	162	26	30	7.6	4.5	7.0
25	141	330	144	260	276	121	156	27	41	7.3	4.0	6.6
26	188	867	122	537	221	99	122	30	24	7.1	3.8	6.4
27	72	486	109	346	999	87	103	28	18	7.0	4.1	6.2
28	46	238	100	272	1120	83	90	41	14	6.8	5.3	6.1
29	34	163	90	220	---	75	77	21	13	6.2	6.5	6.2
30	28	123	85	198	---	95	70	25	12	6.1	5.6	128
31	24	---	79	167	---	142	---	55	---	6.1	5.4	---
TOTAL	984.4	4789	10084	6636	6709	5514	4725	1107	701	1193.7	203.0	514.2
MEAN	31.8	160	325	214	240	178	157	35.7	23.4	38.5	6.55	17.1
MAX	188	867	2700	1690	1120	958	447	89	47	274	13	128
MIN	7.0	19	75	38	73	75	70	21	12	6.1	3.8	4.3
CFSM	.38	1.93	3.94	2.59	2.90	2.16	1.91	.43	.28	.47	.08	.21
IN.	.44	2.16	4.55	2.99	3.03	2.49	2.13	.50	.32	.54	.09	.23

CAL YR 1986	TOTAL 36186.6	MEAN 99.1	MAX 3030	MIN 4.2	CFSM 1.20	IN. 16.32
WTR YR 1987	TOTAL 43160.1	MEAN 118	MAX 2700	MIN 3.8	CFSM 1.43	IN. 19.47

LOCATION.--Lat 35°57'58", long 84°21'30", Roane County, Hydrologic Unit 06010207, near left bank, on upstream side of county road bridge, 0.3 mi north of State Highway 95, 1.7 mi upstream from Bear Creek, 5.8 mi southwest of intersection of State Highways 95 and 62 in Oak Ridge, and at mile 3.3.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 754.16 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow includes effect of operations of the Department of Energy's Y-12 Plant, which may add up to 20 ft³/s, and the west end sewage treatment plant of the City of Oak Ridge, which may add up to 10 ft³/s. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--27 years, 50.3 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft³/s, Nov. 28, 1973, gage height, 16.0 ft, from floodmarks, backwater from low steel on bridge, on basis of runoff comparison with nearby stations; minimum daily, 12 ft³/s, July 1, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 29, 1944, the greatest known since 1900, reached a discharge of about 4,600 ft³/s, at site 5.1 mi upstream, from report of the Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Jan. 19	1115	*919	*7.37	No other peak greater than base discharge.			
Minimum daily discharge, 16 ft ³ /s, Sept. 2-3.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	22	31	29	43	210	38	26	23	19	18	17
2	24	21	44	28	50	111	37	26	22	20	18	16
3	20	21	44	27	47	83	59	29	22	20	19	16
4	19	21	35	26	41	67	58	46	24	30	19	17
5	18	25	32	25	39	58	54	29	21	79	18	17
6	18	22	29	25	37	51	56	27	19	62	19	18
7	18	29	27	25	36	46	53	25	19	132	32	19
8	18	44	64	25	34	43	48	24	19	36	18	34
9	19	52	435	25	33	50	44	23	19	28	19	28
10	20	35	264	26	32	43	40	22	20	25	27	18
11	34	56	157	24	31	38	41	22	22	37	19	18
12	21	46	107	24	31	41	38	23	20	34	19	136
13	80	34	75	24	30	36	35	22	23	24	31	31
14	54	30	60	24	32	34	56	21	20	23	19	23
15	28	30	52	31	33	32	137	23	19	21	18	22
16	23	27	46	27	94	42	78	21	21	20	17	20
17	21	26	43	25	71	36	70	21	50	21	19	20
18	20	26	74	56	65	38	57	27	23	20	21	24
19	19	25	50	499	57	111	48	23	36	20	18	25
20	19	40	44	134	50	61	44	30	26	19	18	24
21	19	34	39	85	50	51	40	26	24	19	18	19
22	19	28	37	77	76	45	38	31	28	19	17	18
23	18	28	36	64	141	41	35	23	21	19	18	18
24	19	85	45	52	79	40	45	21	33	19	18	18
25	142	59	36	105	64	44	34	31	21	18	18	18
26	55	116	34	139	56	37	33	31	20	17	18	18
27	34	60	32	82	287	37	32	23	19	18	18	17
28	29	44	30	67	251	36	29	34	18	18	18	17
29	26	38	30	58	---	32	28	23	18	17	18	26
30	24	33	30	53	---	43	27	29	18	17	17	80
31	23	---	29	47	---	51	---	31	---	17	17	---
TOTAL	922	1157	2091	1958	1890	1688	1432	813	688	888	601	792
MEAN	29.7	38.6	67.5	63.2	67.5	54.5	47.7	26.2	22.9	28.6	19.4	26.4
MAX	142	116	435	499	287	210	137	46	50	132	32	136
MIN	18	21	27	24	30	32	27	21	18	17	17	16
CAL YR 1986	TOTAL 12930		MEAN 35.4	MAX 435		MIN 17						
WTR YR 1987	TOTAL 14920		MEAN 40.9	MAX 499		MIN 16						

TENNESSEE RIVER BASIN

035382672 BEAR CREEK TRIB ABOVE BEAR CREEK ROAD NEAR WHEAT, TN

LOCATION.--Lat 35°56'41", long 84°19'27", Roane County, Hydrologic Unit 06010207, on right bank 200 ft upstream from mouth, 1.2 mi northwest of the Oak Ridge National Laboratory, 1.2 mi northeast of intersection of Bear Creek Road and State Highway 95, 4.8 mi southwest of Oak Ridge.

DRAINAGE AREA.--0.30 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 830.47 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 3-6. Records fair. Periodic observation of water temperatures are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37 ft³/s, Jan. 19, 1987, gage height, 2.18 ft; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37 ft³/s, Jan. 19, gage height, 2.18 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.12	.11	.22	2.4	.22	.11	.06	.03	.01	.00
2	.01	.03	.16	.10	.27	1.0	.23	.09	.05	.03	.01	.00
3	.01	.02	.18	.09	.26	.59	.28	.10	.04	.04	.01	.00
4	.01	.02	.15	.08	.23	.41	.35	.53	.05	.05	.02	.00
5	.01	.04	.13	.08	.20	.33	.48	.23	.04	.07	.02	.00
6	.00	.03	.12	.07	.18	.27	.69	.16	.03	.08	.03	.00
7	.00	.06	.10	.07	.18	.23	.62	.14	.03	.12	.02	.00
8	.00	.07	.49	.07	.16	.22	.47	.12	.03	.07	.02	.00
9	.00	.10	7.8	.07	.13	.23	.35	.11	.02	.05	.01	.00
10	.02	.09	2.9	.07	.13	.18	.28	.09	.02	.04	.04	.00
11	.03	.18	1.6	.07	.12	.17	.25	.08	.02	.04	.01	.00
12	.03	.16	1.1	.07	.12	.18	.22	.07	.02	.03	.02	.09
13	.09	.10	.54	.07	.11	.17	.18	.06	.03	.03	.01	.01
14	.06	.07	.36	.07	.12	.17	.28	.06	.03	.03	.00	.00
15	.03	.08	.26	.09	.11	.17	1.6	.03	.03	.02	.00	.00
16	.02	.07	.20	.08	.52	.19	1.2	.03	.07	.02	.00	.00
17	.02	.06	.18	.07	.70	.17	1.0	.05	.08	.02	.01	.00
18	.02	.05	.35	.37	.62	.26	.67	.05	.05	.02	.01	.00
19	.02	.04	.29	11	.48	.66	.46	.04	.04	.02	.00	.02
20	.02	.09	.25	1.5	.38	.58	.35	.09	.06	.02	.00	.00
21	.01	.10	.20	.69	.34	.43	.28	.09	.06	.02	.00	.00
22	.01	.08	.16	.50	.65	.33	.22	.09	.09	.01	.00	.00
23	.01	.10	.18	.35	1.5	.27	.18	.06	.09	.02	.00	.00
24	.01	.44	.19	.27	.87	.24	.27	.06	.06	.02	.00	.00
25	.38	.37	.16	.84	.53	.23	.19	.20	.05	.02	.00	.00
26	.14	1.0	.14	1.6	.42	.18	.17	.15	.04	.02	.00	.00
27	.07	.50	.13	.83	4.1	.17	.15	.09	.03	.01	.00	.00
28	.05	.28	.13	.52	3.6	.15	.14	.07	.03	.01	.00	.00
29	.03	.19	.12	.38	---	.14	.13	.05	.02	.01	.00	.02
30	.03	.14	.12	.32	---	.20	.12	.07	.02	.01	.00	.02
31	.03	---	.11	.25	---	.24	---	.09	---	.01	.00	---
TOTAL	1.18	4.59	18.90	20.75	17.25	11.16	12.03	3.26	1.29	.99	.25	.16
MEAN	.04	.15	.61	.67	.62	.36	.40	.11	.04	.03	.01	.01
MAX	.38	1.0	7.8	11	4.1	2.4	1.6	.53	.09	.12	.04	.09
MIN	.00	.02	.10	.07	.11	.14	.12	.03	.02	.01	.00	.00
CFSM	.13	.51	2.03	2.23	2.05	1.20	1.34	.35	.14	.11	.03	.02
IN.	.15	.57	2.34	2.57	2.14	1.38	1.49	.40	.16	.12	.03	.02

WTR YR 1987 TOTAL 91.81 MEAN .25 MAX 11 MIN .00 CFSM .84 IN. 11.38

TENNESSEE RIVER BASIN

175

035382673 BEAR CREEK NEAR WHEAT, TN

LOCATION.--Lat 35°56'39", long 84°19'27", Roane County, Hydrologic Unit 06010207, on left bank 20 ft upstream of county road bridge, 1.2 mi northeast of intersection of Bear Creek Road and State Highway 95, 4.8 mi southwest of Oak Ridge, and at mile 3.9.

DRAINAGE AREA.--3.20 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 825.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 286 ft³/s, Jan. 19, 1987, gage height, 4.90 ft; no flow part of each day Sept. 3, 4, 5, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 286 ft³/s, Jan. 19, gage height, 4.90 ft; no flow part of each day Sept. 3, 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.53	1.5	1.3	3.1	26	2.8	1.3	.62	.20	.07	.03
2	.54	.48	2.4	1.2	3.9	12	2.8	1.2	.55	.21	.06	.02
3	.29	.47	2.6	1.0	3.4	8.3	4.1	1.3	.49	.24	.06	.01
4	.23	.44	1.8	.99	3.0	6.1	4.9	5.0	.46	.54	.06	.01
5	.21	.48	1.5	.96	2.6	5.0	5.3	2.0	.39	.83	.07	.01
6	.19	.48	1.3	.91	2.4	4.2	6.2	1.6	.33	1.9	.07	.03
7	.19	.97	1.2	.91	2.4	3.6	5.7	1.3	.30	11	.08	.06
8	.19	1.8	7.0	.86	2.2	3.4	4.9	1.1	.28	1.2	.07	.09
9	.21	2.7	74	.85	1.8	4.0	4.1	.96	.25	.71	.06	.13
10	.28	1.5	27	.95	1.6	3.1	3.5	.88	.24	.54	.08	.11
11	.56	4.2	17	.87	1.6	2.6	3.4	.81	.23	1.9	.05	.11
12	.59	2.8	10	.80	1.5	2.9	3.1	.77	.24	.89	.08	4.1
13	4.8	1.6	6.1	.76	1.4	2.5	2.6	.74	.32	.54	.09	.43
14	2.8	1.2	4.4	.79	1.5	2.4	3.5	.72	.26	.40	.10	.25
15	.83	1.3	3.5	1.2	1.5	2.4	16	.69	.23	.31	.07	.16
16	.58	1.2	2.9	.98	8.3	3.0	10	.65	1.5	.27	.05	.13
17	.48	.98	2.5	.90	7.1	2.4	8.9	.68	1.9	.23	.06	.12
18	.40	.89	6.3	5.7	6.3	4.5	6.7	.85	.62	.20	.07	.12
19	.35	.78	3.8	105	5.1	9.6	5.3	.68	.46	.18	.05	.16
20	.32	2.0	3.2	15	4.4	6.3	4.3	.87	.52	.16	.02	.19
21	.29	1.6	2.6	8.6	4.3	5.1	3.7	.85	.81	.16	.02	.15
22	.29	1.2	2.1	7.0	9.3	4.2	3.2	.99	1.3	.15	.02	.12
23	.29	1.8	2.1	5.1	15	3.6	2.8	.68	.68	.14	.02	.12
24	.28	8.0	2.9	4.0	8.4	3.3	3.4	.62	.48	.13	.01	.11
25	10	4.6	2.2	13	6.2	3.2	2.5	1.1	.39	.12	.01	.10
26	2.7	9.5	1.8	16	5.2	2.6	2.1	.91	.33	.11	.01	.10
27	1.3	4.7	1.7	8.6	42	2.4	1.9	.63	.27	.10	.02	.10
28	.89	3.0	1.5	6.5	38	2.2	1.7	.53	.21	.10	.02	.10
29	.72	2.2	1.5	5.0	---	2.0	1.5	.97	.19	.09	.02	.17
30	.64	1.7	1.4	4.4	---	3.1	1.5	1.4	.17	.08	.02	1.9
31	.55	---	1.2	3.5	---	3.5	---	1.2	---	.08	.03	---
TOTAL	32.21	65.10	201.0	223.63	193.5	149.5	132.4	33.98	15.02	23.71	1.52	9.24
MEAN	1.04	2.17	6.48	7.21	6.91	4.82	4.41	1.10	.50	.76	.05	.31
MAX	10	9.5	74	105	42	26	16	5.0	1.9	11	.10	4.1
MIN	.19	.44	1.2	.76	1.4	2.0	1.5	.53	.17	.08	.01	.01
CFSM	.32	.68	2.03	2.25	2.16	1.51	1.38	.34	.16	.24	.02	.10
IN.	.37	.76	2.34	2.60	2.25	1.74	1.54	.40	.17	.28	.02	.11

WTR YR 1987 TOTAL 1080.79 MEAN 2.96 MAX 105 MIN .01 CFSM .93 IN. 12.56

TENNESSEE RIVER BASIN

035382677 BEAR CREEK TRIB NEAR WHEAT, TN

LOCATION.--Lat 35°56'28", long 84°19'55", Roane County, Hydrologic Unit 06010207, on right bank, 0.7 mi northeast of intersection of State Highway 95 and Bear Creek Valley Road, 4.7 mi southwest of Oak Ridge, and at mile 0.1.

DRAINAGE AREA.--0.14 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 817.99 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: April 28 to June 4. Records fair. Periodic observation of water temperature are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17 ft³/s, Jan. 19, 1987, gage height, 2.19 ft; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17 ft³/s, Jan. 19, gage height, 2.19 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.06	.05	.13	1.1	.10	.03	.02	.01	.00	.00
2	.00	.01	.11	.04	.18	.46	.10	.03	.02	.01	.00	.00
3	.00	.01	.12	.03	.17	.26	.16	.03	.01	.03	.00	.00
4	.00	.01	.09	.03	.15	.16	.23	.32	.02	.02	.00	.00
5	.00	.02	.07	.03	.12	.13	.37	.10	.02	.10	.00	.00
6	.00	.02	.06	.03	.11	.10	.44	.06	.02	.10	.00	.00
7	.00	.04	.05	.03	.10	.08	.36	.05	.01	.09	.00	.00
8	.00	.03	.34	.03	.10	.09	.25	.04	.01	.03	.00	.00
9	.00	.06	3.6	.03	.09	.10	.17	.03	.01	.03	.00	.00
10	.00	.04	1.4	.03	.08	.08	.14	.03	.01	.02	.00	.00
11	.00	.16	.85	.03	.08	.08	.13	.02	.01	.02	.00	.00
12	.01	.11	.57	.03	.07	.09	.11	.02	.01	.01	.00	.02
13	.03	.05	.30	.03	.04	.08	.09	.03	.02	.01	.00	.00
14	.02	.03	.19	.03	.05	.08	.17	.02	.01	.02	.00	.00
15	.01	.04	.14	.04	.05	.08	.74	.03	.01	.02	.00	.00
16	.00	.03	.10	.03	.45	.08	.55	.02	.11	.02	.00	.00
17	.00	.03	.10	.03	.47	.07	.48	.04	.07	.01	.00	.00
18	.00	.03	.21	.32	.36	.15	.29	.02	.03	.00	.00	.00
19	.00	.02	.15	5.0	.26	.46	.17	.02	.03	.00	.00	.00
20	.00	.07	.12	.74	.19	.36	.12	.07	.03	.01	.00	.00
21	.00	.07	.09	.39	.16	.23	.10	.06	.03	.01	.00	.00
22	.00	.05	.08	.28	.38	.15	.08	.06	.07	.01	.00	.00
23	.01	.07	.08	.19	.79	.12	.06	.03	.06	.01	.00	.00
24	.01	.37	.10	.16	.42	.11	.14	.02	.03	.01	.00	.00
25	.18	.25	.08	.56	.24	.10	.08	.15	.03	.00	.00	.00
26	.05	.58	.07	.83	.18	.08	.06	.07	.02	.00	.00	.00
27	.02	.25	.07	.45	2.1	.07	.05	.04	.01	.00	.00	.00
28	.01	.13	.06	.29	1.7	.06	.04	.03	.01	.00	.00	.00
29	.01	.09	.06	.20	---	.05	.03	.02	.01	.00	.00	.02
30	.01	.07	.05	.16	---	.10	.03	.05	.01	.00	.00	.01
31	.01	---	.04	.15	---	.12	---	.04	---	.00	.00	---
TOTAL	.38	2.75	9.41	10.27	9.22	5.28	5.84	1.58	.76	.60	.00	.05
MEAN	.01	.09	.30	.33	.33	.17	.19	.05	.03	.02	.00	.00
MAX	.18	.58	3.6	5.0	2.1	1.1	.74	.32	.11	.10	.00	.02
MIN	.00	.01	.04	.03	.04	.05	.03	.02	.01	.00	.00	.00
CFSM	.09	.65	2.17	2.37	2.35	1.22	1.39	.36	.18	.14	.00	.00
IN.	.10	.73	2.50	2.73	2.45	1.40	1.55	.42	.20	.16	.00	.00

WTR YR 1987 TOTAL 46.14 MEAN .13 MAX 5.0 MIN .00 CFSM .90 IN. 12.26

03538270 BEAR CREEK AT STATE HIGHWAY 95 NEAR OAK RIDGE, TN

LOCATION.--Lat 35°56'17", long 84°20'29", Roane County, Hydrologic Unit 06010207, on right bank upstream from bridge on State Highway 95, in triangle formed by intersection of Highway 95 and Bear Creek Valley Road, 6.8 mi southwest of Oak Ridge, and at mile 2.8.

DRAINAGE AREA.--4.34 mi² (revised).

PERIOD OF RECORD.--April 1959 to June 1964 (discharge measurements only), March 1985 to current year.

GAGE.--Water-stage recorder and Cippolletti-weir. Datum of gage is 801.15 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233 ft³/s, Mar. 12, 1963; minimum, 0.18 ft³/s, Sept. 3, 4, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 214 ft³/s, Jan. 19, gage height, 2.78 ft; minimum, 0.18 ft³/s, Sept. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.83	2.8	2.4	6.1	42	5.5	3.0	1.6	.76	.32	.23
2	.63	.78	3.9	2.4	6.9	23	5.5	2.8	1.4	.73	.30	.21
3	.41	.71	4.3	2.1	6.7	16	6.6	2.8	1.3	.71	.30	.20
4	.34	.69	3.4	2.0	5.8	12	8.4	8.1	1.2	1.3	.30	.19
5	.38	.73	2.9	1.9	5.4	9.9	9.1	4.5	1.1	1.6	.30	.20
6	.40	.75	2.6	1.8	5.2	8.4	9.8	3.5	.98	3.6	.41	.22
7	.33	1.0	2.3	1.8	5.0	7.4	10	3.0	.89	13	.37	.26
8	.30	3.4	7.8	1.6	4.5	6.7	9.1	2.6	.83	2.4	.35	.28
9	.28	4.3	86	1.6	3.8	7.2	8.1	2.4	.78	1.5	.42	.38
10	.33	2.6	47	1.7	3.4	6.3	7.2	2.1	.74	1.2	.45	.35
11	.90	5.5	30	1.7	3.2	5.6	6.7	2.0	.74	2.5	.42	.24
12	.64	4.7	20	1.5	3.1	5.5	6.0	1.9	.74	1.9	.45	4.9
13	7.5	2.7	13	1.5	3.0	5.3	5.6	1.8	.88	1.1	.44	.94
14	4.2	2.0	9.2	1.5	2.9	5.1	6.3	1.7	.83	.95	.30	.51
15	1.5	2.1	7.2	1.9	3.1	5.1	22	1.7	.78	.75	.33	.40
16	.99	1.9	5.7	1.8	13	5.4	17	1.6	2.0	.62	.32	.34
17	.81	1.7	4.9	1.7	13	5.1	16	1.6	3.9	.60	.33	.34
18	.66	1.5	9.4	6.6	11	6.4	13	2.0	1.6	.64	.35	.34
19	.58	1.3	6.5	105	9.1	15	10	1.6	1.2	.67	.28	.41
20	.53	2.7	5.7	29	8.2	11	8.8	2.0	1.2	.77	.26	.35
21	.50	2.8	5.0	18	7.8	9.4	7.4	2.1	1.3	.64	.26	.34
22	.47	2.1	4.0	14	13	8.2	6.5	2.8	2.9	.77	.25	.34
23	.47	2.3	3.8	11	23	7.2	5.8	2.3	2.3	.58	.22	.33
24	.48	11	5.1	8.3	15	6.5	6.5	2.0	1.6	.53	.22	.30
25	13	6.9	4.0	19	12	6.2	5.5	3.2	1.3	.49	.21	.30
26	5.3	13	3.5	28	9.6	5.7	4.9	5.0	1.0	.47	.24	.31
27	2.2	7.8	3.2	17	54	5.4	4.1	2.5	.90	.53	.26	.30
28	1.6	5.5	3.0	13	54	5.1	3.8	1.7	.78	.52	.25	.26
29	1.3	4.1	2.8	10	---	4.3	3.5	1.4	.69	.47	.27	.28
30	1.1	3.3	2.7	8.9	---	5.4	3.3	3.1	.71	.36	.30	2.5
31	.92	---	2.5	7.4	---	6.4	---	2.6	---	.34	.30	---
TOTAL	49.35	100.69	314.2	326.1	310.8	278.2	242.0	81.4	38.17	43.00	9.78	16.55
MEAN	1.59	3.36	10.1	10.5	11.1	8.97	8.07	2.63	1.27	1.39	.32	.55
MAX	13	13	86	105	54	42	22	8.1	3.9	13	.45	4.9
MIN	.28	.69	2.3	1.5	2.9	4.3	3.3	1.4	.69	.34	.21	.19
CFSM	.37	.77	2.34	2.42	2.56	2.07	1.86	.61	.29	.32	.07	.13
IN.	.42	.86	2.69	2.80	2.66	2.38	2.07	.70	.33	.37	.08	.14

CAL YR 1986 TOTAL 1365.24 MEAN 3.74 MAX 86 MIN .23 CFSM .86 IN. 11.70
WTR YR 1987 TOTAL 1810.22 MEAN 4.96 MAX 105 MIN .19 CFSM 1.14 IN. 15.51

03538272 BEAR CREEK TRIB AT HWY 95 NEAR WHEAT, TN

LOCATION.--Lat 35°56'26", long 84°20'32", Roane County, Hydrologic Unit 06010207, on left bank 100 ft upstream from bridge on State Highway 95, 0.4 mi north of intersection of Bear Creek and State Highway 95, 5.6 mi southwest of Oak Ridge, and 200 ft upstream from mouth.

DRAINAGE AREA.--0.14 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 794.24 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Periodic observations of water temperatures are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10 ft³/s, Jan. 19, 1987, gage height, 1.79 ft; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10 ft³/s, Jan. 19, gage height, 1.79 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.04	.05	.11	.96	.10	.04	.02	.00	.00	.00
2	.00	.01	.10	.04	.14	.43	.10	.03	.02	.01	.00	.00
3	.00	.01	.11	.03	.13	.28	.15	.04	.01	.02	.00	.00
4	.00	.01	.09	.03	.12	.19	.18	.21	.02	.02	.00	.00
5	.00	.01	.07	.03	.10	.15	.23	.10	.01	.04	.00	.00
6	.00	.01	.06	.03	.09	.13	.31	.07	.01	.04	.00	.00
7	.00	.04	.06	.03	.08	.11	.24	.05	.01	.06	.00	.00
8	.00	.04	.23	.03	.07	.10	.18	.04	.00	.02	.00	.00
9	.00	.07	2.4	.03	.09	.12	.14	.03	.00	.02	.00	.00
10	.00	.03	1.0	.03	.08	.08	.12	.03	.00	.01	.00	.00
11	.00	.07	.61	.03	.06	.06	.11	.02	.00	.00	.00	.00
12	.01	.04	.41	.03	.06	.08	.10	.02	.00	.01	.00	.00
13	.04	.02	.23	.02	.05	.06	.09	.03	.01	.00	.00	.00
14	.02	.02	.17	.02	.05	.07	.14	.02	.01	.00	.00	.00
15	.00	.03	.12	.04	.05	.07	.45	.03	.00	.00	.00	.00
16	.00	.03	.10	.03	.31	.09	.41	.02	.11	.00	.00	.00
17	.00	.03	.10	.03	.33	.07	.37	.04	.06	.00	.00	.00
18	.00	.02	.18	.22	.29	.12	.26	.02	.03	.00	.00	.00
19	.00	.02	.14	3.6	.22	.30	.18	.02	.02	.00	.00	.00
20	.00	.05	.11	.62	.18	.31	.14	.07	.02	.00	.00	.00
21	.00	.04	.09	.34	.16	.21	.11	.06	.02	.00	.00	.00
22	.00	.03	.08	.25	.30	.16	.10	.06	.06	.00	.00	.00
23	.00	.04	.09	.18	.60	.13	.09	.03	.06	.00	.00	.00
24	.00	.15	.10	.15	.36	.12	.13	.02	.02	.00	.00	.00
25	.13	.12	.08	.41	.24	.12	.09	.08	.02	.00	.00	.00
26	.03	.32	.08	.63	.19	.09	.08	.06	.01	.00	.00	.00
27	.02	.15	.07	.37	1.7	.09	.07	.04	.01	.00	.00	.00
28	.01	.09	.06	.25	1.5	.08	.06	.03	.00	.00	.00	.00
29	.01	.07	.06	.19	---	.07	.05	.02	.00	.00	.00	.00
30	.00	.05	.05	.16	---	.11	.04	.05	.00	.00	.00	.01
31	.00	---	.04	.13	---	.11	---	.04	---	.00	.00	---
TOTAL	.27	1.63	7.13	8.03	7.66	5.07	4.82	1.42	.56	.25	.00	.01
MEAN	.01	.05	.23	.26	.27	.16	.16	.05	.02	.01	.00	.00
MAX	.13	.32	2.4	3.6	1.7	.96	.45	.21	.11	.06	.00	.01
MIN	.00	.01	.04	.02	.05	.06	.04	.02	.00	.00	.00	.00
CFSM	.06	.39	1.64	1.85	1.95	1.17	1.15	.33	.13	.06	.00	.00
IN.	.07	.43	1.89	2.13	2.04	1.35	1.28	.38	.15	.07	.00	.00

WTR YR 1987 TOTAL 36.85 MEAN .10 MAX 3.6 MIN .00 CFSM .72 IN. 9.79

03538273 BEAR CREEK AT PINE RIDGE NEAR WHEAT, TN

LOCATION.--Lat 35°56'32", long 84°20'37", Roane County, Hydrologic Unit 06010207, on right bank, 0.6 mi north of intersection of Highway 95 and Bear Creek Road, 5.7 miles southwest of Oak Ridge, and at mile 2.3.

DRAINAGE AREA.--5.0 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 784.98 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 532 ft³/s, Jan. 19, 1987; minimum, 0.23 ft³/s, Sept. 1, 2, 4, 5, 6, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 532 ft³/s, Jan. 19; minimum, 0.23 ft³/s, Sept. 1, 2, 4, 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.98	2.9	2.6	6.3	46	5.7	2.8	1.3	.49	.27	.24
2	.65	.91	4.3	2.4	7.5	23	5.6	2.6	1.2	.53	.27	.24
3	.39	.83	4.8	2.2	6.8	16	7.7	2.7	1.1	.55	.27	.24
4	.35	.78	3.7	2.1	5.9	13	9.3	8.2	1.0	1.0	.26	.24
5	.33	.88	3.1	2.0	5.3	10	10	4.4	.88	1.5	.27	.24
6	.32	.88	2.7	1.9	5.0	8.6	13	3.6	.76	3.5	.26	.25
7	.32	1.2	2.4	1.8	4.9	7.5	12	3.0	.67	12	.27	.25
8	.32	3.5	9.1	1.8	4.7	7.0	10	2.5	.61	2.2	.26	.25
9	.33	4.3	117	1.7	4.2	7.8	8.7	2.1	.56	1.2	.26	.26
10	.35	2.9	45	2.0	3.6	6.4	7.5	1.9	.54	.95	.27	.26
11	.93	5.8	27	1.8	3.5	5.5	7.1	1.8	.52	2.2	.26	.26
12	.64	4.8	18	1.6	3.4	5.7	6.4	1.6	.53	1.6	.27	4.6
13	6.3	2.9	12	1.6	3.1	5.1	5.6	1.5	.66	.86	.27	.89
14	3.8	2.2	8.3	1.6	3.2	5.0	7.0	1.4	.56	.67	.27	.50
15	1.4	2.3	6.6	2.2	3.4	4.9	22	1.3	.53	.53	.27	.42
16	1.0	2.1	5.4	2.0	13	5.5	18	1.3	2.2	.46	.27	.40
17	.82	1.8	4.8	1.9	14	4.9	16	1.4	3.9	.43	.28	.39
18	.60	1.6	9.4	7.5	12	6.4	14	1.7	1.4	.39	.28	.31
19	.50	1.5	6.4	197	10	16	11	1.3	1.0	.38	.27	.33
20	.46	2.9	5.6	27	8.7	12	8.8	2.0	1.1	.36	.26	.32
21	.42	3.0	4.8	16	8.5	9.7	7.6	2.1	1.2	.34	.26	.32
22	.39	2.3	4.1	14	14	8.3	6.7	2.4	3.8	.33	.25	.32
23	.38	2.5	4.0	11	24	7.3	5.9	1.6	2.8	.33	.25	.30
24	.37	12	5.2	8.1	16	6.6	6.7	1.3	1.5	.32	.24	.30
25	13	7.6	4.2	19	13	6.5	5.4	2.3	1.1	.30	.24	.29
26	4.4	16	3.6	26	11	5.5	4.7	2.7	.89	.29	.24	.29
27	2.3	8.4	3.3	16	71	5.0	4.3	1.7	.66	.28	.24	.28
28	1.7	5.6	3.1	13	66	4.8	3.9	1.4	.55	.28	.24	.28
29	1.3	4.3	2.9	10	---	4.4	3.4	1.1	.50	.28	.24	.32
30	1.2	3.4	2.8	8.7	---	5.7	3.1	2.8	.45	.27	.24	2.2
31	1.1	---	2.5	7.2	---	6.8	---	2.5	---	.27	.24	---
TOTAL	46.71	110.16	339.0	413.7	352.0	286.9	257.1	71.0	34.47	35.09	8.04	15.79
MEAN	1.51	3.67	10.9	13.3	12.6	9.25	8.57	2.29	1.15	1.13	.26	.53
MAX	13	16	117	197	71	46	22	8.2	3.9	12	.28	4.6
MIN	.32	.78	2.4	1.6	3.1	4.4	3.1	1.1	.45	.27	.24	.24
CFSM	.30	.73	2.19	2.67	2.51	1.85	1.71	.46	.23	.23	.05	.11
IN.	.35	.82	2.52	3.08	2.62	2.13	1.91	.53	.26	.26	.06	.12

WTR YR 1987 TOTAL 1969.93 MEAN 5.40 MAX 197 MIN .24 CFSM 1.08 IN. 14.65

TENNESSEE RIVER BASIN

03539800 OBED RIVER NEAR LANCING, TN

LOCATION.--Lat 36°04'53", long 84°40'15", Morgan County, Hydrologic Unit 06010208, on left bank at Alley Ford, 2.9 mi southwest of Lancing, 3.0 mi downstream from Clear Creek, and at mile 1.5.

DRAINAGE AREA.--518 mi².

PERIOD OF RECORD.--October 1956 to September 1968, March 1973 to current year. Prior to May 1957, monthly discharge only, published in WSP 1726.

GAGE.--Water-stage recorder. Datum of gage is 891.91 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 24 to Sept. 11, Sept. 21-24. Records good. Periodic observations of water temperatures are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--26 years (water years 1957-68, 1974-87), 1,034 ft³/s, 27.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105,000 ft³/s, May 27, 1973, gage height, 29.51 ft, dross line in gage well, 30.5 ft, from floodmarks, from rating curve extended above 33,000 ft³/s, on basis of slope conveyance study at gage height, 22.40 ft, and slope-area measurement of peak flow; minimum, 0.4 ft³/s, Oct. 31, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 23, 1929, reached a stage of 33.9 ft, 35 ft downstream from gage, from high water marks by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 9	1315	*19,000	*13.38	Feb. 27	1400	14,500	11.75
Nov. 26	1415	*19,000	*13.38	Apr. 15	0845	17,400	12.84
Dec. 10	0245	14,000	11.55				

Minimum daily discharge, 8.0 ft³/s, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	272	1320	588	1150	7180	863	304	934	47	15	30
2	15	229	1270	530	1100	3930	755	262	605	41	13	25
3	15	199	1340	468	1230	2580	722	238	436	40	12	20
4	14	176	1200	415	1080	1880	737	275	358	141	11	16
5	13	186	1070	383	941	1490	725	295	394	379	11	13
6	12	185	924	350	832	1230	805	242	271	733	9.9	12
7	11	233	779	324	756	1030	945	208	198	1810	9.1	11
8	9.5	1000	763	307	683	896	980	181	149	1290	9.0	10
9	8.9	10700	7120	285	592	890	855	157	110	652	11	9.0
10	8.6	6010	10400	278	499	974	690	136	86	684	18	8.0
11	9.4	3160	5190	289	455	809	635	116	73	589	23	12
12	11	2980	3500	273	433	741	612	101	78	409	20	17
13	109	1960	2410	252	396	681	582	97	113	327	18	18
14	1070	1380	1840	248	369	614	686	108	164	346	19	27
15	781	1130	1480	260	429	566	10400	90	129	360	19	30
16	441	1030	1190	292	661	578	6340	85	95	254	16	31
17	300	887	1030	290	1700	691	4660	88	89	187	16	28
18	227	780	1250	318	1650	611	3050	80	93	142	35	26
19	159	672	1290	6430	1480	741	2150	71	74	104	49	23
20	114	670	1110	5310	1260	892	1650	64	69	83	28	24
21	88	897	937	2820	1160	797	1300	167	84	68	19	22
22	76	833	795	2030	1220	711	1040	543	219	57	13	21
23	66	763	722	1650	4640	627	866	382	262	49	14	22
24	60	1990	1450	1310	3230	568	795	1140	174	42	14	30
25	142	3140	1730	1550	2190	499	765	1250	131	36	13	23
26	1760	11300	1430	3980	1690	437	621	719	148	32	16	19
27	1130	6820	1190	2650	8840	387	523	502	118	27	20	16
28	700	3330	1010	1930	8210	383	451	720	86	25	25	14
29	501	2180	861	1580	---	372	387	938	69	22	30	16
30	385	1650	760	1530	---	398	336	635	56	19	55	140
31	317	---	665	1350	---	752	---	1280	---	17	40	---
TOTAL	8570.4	66742	58026	40270	48876	34935	45926	11474	5865	9012	621.0	713.0
MEAN	276	2225	1872	1299	1746	1127	1531	370	195	291	20.0	23.8
MAX	1760	11300	10400	6430	8840	7180	10400	1280	934	1810	55	140
MIN	8.6	176	665	248	369	372	336	64	56	17	9.0	8.0
CFSM	.53	4.29	3.61	2.51	3.37	2.18	2.96	.71	.38	.56	.04	.05
IN.	.62	4.79	4.17	2.89	3.51	2.51	3.30	.82	.42	.65	.04	.05

CAL YR 1986 TOTAL 261928.5 MEAN 718 MAX 13600 MIN 4.5 CFSM 1.39 IN. 18.81
WTR YR 1987 TOTAL 331030.3 MEAN 907 MAX 11300 MIN 8.0 CFSM 1.75 IN. 23.77

03540500 EMORY RIVER AT OAKDALE, TN

LOCATION.--Lat 35°58'59", long 84°33'29", Morgan County, Hydrologic Unit 06010208, on left bank, at Oakdale, 1,000 ft downstream from highway bridge, 1,100 ft downstream from Mud Lick Creek, and at mile 18.3.

DRAINAGE AREA.--764 mi².

PERIOD OF RECORD.--June 1927 to current year. Prior to October 1929, published as Emery River at Harriman and October 1929 to September 1934 as Emery River at Oakdale.

REVISED RECORDS.--WSP 823: Drainage area. WSP 923: 1940. WSP 1386: 1928-30(M), 1932, 1943, 1945(P).

GAGE.--Water-stage recorder. Datum of gage is 761.38 ft above National Geodetic Vertical Datum of 1929. Prior to Oct 1, 1929, nonrecording gage at site 5.8 mi downstream at datum 43.60 ft lower, and Oct. 1, 1929, to Dec. 29, 1969, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Apr. 15-28 and May 7-28. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--60 years, 1,452 ft³/s, 25.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 195,000 ft³/s, Mar. 23, 1929, gage height, 41.2 ft, present site and datum, 61.1 ft, site and datum then in use, from floodmarks and flood profile, from rating curve extended above 85,000 ft³/s, confirmed by slope-area measurement of May 28, 1973, flood at gage height 38.68 ft; no flow at times in 1944, 1952-53.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1857, that of Mar. 23, 1929, from report of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 19,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 9	1400	24,600	18.30	Feb. 27	1630	21,100	17.16
Nov. 26	1400	*32,900	*20.57	Apr. 15	0930	22,000	17.45
Dec. 10	0230	22,800	17.73				

Minimum discharge, 12 ft³/s, Aug. 9, 10, Sept. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	326	1730	885	1550	10000	1670	512	1180	94	25	57
2	32	275	1650	810	1510	5530	1420	449	885	104	21	38
3	28	253	1800	730	1660	3590	1310	404	718	373	19	29
4	25	253	1650	656	1520	2590	1270	497	544	592	18	24
5	23	250	1480	607	1350	2020	1210	507	533	1010	19	20
6	22	253	1300	563	1230	1670	1330	420	403	1460	19	17
7	20	279	1140	527	1130	1420	1810	350	290	3820	16	15
8	17	1250	1220	494	1030	1260	1800	320	219	2270	14	13
9	18	12700	12900	461	909	1230	1540	290	170	1260	12	13
10	18	7700	16400	442	784	1300	1250	250	135	1080	15	12
11	23	4090	7400	445	720	1130	1120	210	110	976	26	13
12	28	4190	4940	437	695	1050	1040	180	99	752	31	21
13	90	2610	3360	403	648	984	964	170	156	590	33	27
14	1340	1770	2500	391	603	908	1040	190	203	585	27	26
15	1130	1440	1990	404	642	854	13200	170	231	589	23	23
16	629	1310	1610	450	1320	863	10000	140	174	428	22	30
17	417	1150	1400	459	3130	1020	7000	140	164	309	21	28
18	308	1020	1740	515	2740	969	4500	130	206	238	21	27
19	230	891	1840	10100	2310	1230	3000	120	162	191	26	27
20	176	871	1610	7730	1930	1440	2500	110	227	150	57	28
21	143	1100	1380	4040	1730	1330	2000	350	352	121	45	25
22	120	1120	1180	2850	1720	1190	1500	800	439	100	33	24
23	104	1040	1070	2240	6240	1060	1300	600	521	86	25	24
24	94	2380	2220	1750	4660	947	1200	1600	468	75	21	26
25	280	4330	2690	1920	3130	865	1100	1700	341	65	18	25
26	1810	18400	2140	5580	2350	762	1000	800	293	56	17	22
27	1390	10100	1750	3780	12300	676	900	650	248	47	26	19
28	876	4630	1480	2710	11500	645	750	750	181	39	26	17
29	633	2960	1270	2130	---	620	639	1010	139	32	37	15
30	484	2170	1130	1990	---	711	567	736	112	28	48	23
31	389	---	997	1790	---	1650	---	1190	---	26	78	---
TOTAL	10935	91111	86967	58289	71041	51514	69930	15745	9903	17546	839	708
MEAN	353	3037	2805	1880	2537	1662	2331	508	330	566	27.1	23.6
MAX	1810	18400	16400	10100	12300	10000	13200	1700	1180	3820	78	57
MIN	17	250	997	391	603	620	567	110	99	26	12	12
CFSM	.46	3.98	3.67	2.46	3.32	2.18	3.05	.66	.43	.74	.04	.03
IN.	.53	4.44	4.23	2.84	3.46	2.51	3.40	.77	.48	.85	.04	.03

CAL YR 1986	TOTAL 367402	MEAN 1007	MAX 19900	MIN 5.4	CFSM 1.32	IN. 17.88
WTR YR 1987	TOTAL 484528	MEAN 1327	MAX 18400	MIN 12	CFSM 1.74	IN. 23.59

TENNESSEE RIVER BASIN

03543500 SEWEE CREEK NEAR DECATUR, TN

LOCATION.--Lat 35°34'53", long 84°44'53", Meigs County, Hydrologic Unit 06020001, on right bank, 0.3 mi downstream from bridge on State Highway 58, 0.5 mi downstream from Dry Fork, 5.0 mi north of Decatur, and at mile 5.7.

DRAINAGE AREA.--117 mi².

PERIOD OF RECORD.--May 1934 to current year. Prior to October 1935, published as Suee Creek near Decatur.

REVISED RECORDS.--WSP 1910: 1936(M), 1939(M), 1943(M), 1946, 1948(M), 1949, 1951, 1957, 1958(P). WSP 2110: 1951 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 694.32 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: July 15-29. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--53 years, 189 ft³/s, 21.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,900 ft³/s, Jan. 7, 1946, gage height, 23.97 ft, from floodmarks, from rating curve extended above 11,300 ft³/s on basis of slope-area measurement at gage height 22.81 ft; minimum, 8.0 ft³/s, Jan. 12, 1981, result of freezeup; minimum gage height, 0.12 ft, July 31, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 10	0230	2,460	6.66	Mar. 1	0100	2,380	6.48
Jan. 19	1530	*3,070	*7.89				

Minimum discharge, 15 ft³/s, several days in October, Aug. 28, and several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	44	156	115	172	1630	131	76	47	31	24	17
2	15	41	192	108	321	713	123	80	44	55	24	16
3	15	40	175	96	294	476	137	75	41	42	23	16
4	15	38	149	90	220	351	164	72	40	68	23	17
5	16	40	128	83	194	276	166	69	39	50	25	16
6	15	38	114	78	178	227	162	66	37	313	27	17
7	15	41	104	75	167	200	155	63	35	208	33	18
8	15	63	241	71	158	190	145	60	34	100	23	24
9	16	69	1740	66	139	219	134	57	33	74	21	22
10	15	77	1790	66	126	193	122	57	33	77	22	19
11	20	71	1120	62	121	168	119	54	32	85	21	19
12	18	79	754	58	116	164	113	54	32	92	19	29
13	52	73	473	55	107	156	106	51	33	87	20	34
14	58	62	348	52	108	146	104	51	34	85	23	22
15	42	62	280	57	119	140	191	51	33	90	20	19
16	30	61	229	58	647	136	350	48	33	80	19	17
17	24	57	197	53	520	129	288	48	41	64	23	18
18	21	53	265	149	352	129	212	47	49	60	51	19
19	19	49	209	2510	261	229	178	45	35	55	35	19
20	18	68	178	880	211	182	157	45	41	57	27	19
21	17	96	154	484	200	167	142	101	38	50	21	18
22	17	83	137	388	327	156	129	100	44	42	20	17
23	17	87	150	311	710	140	119	63	49	37	19	17
24	18	565	479	231	416	134	111	89	36	34	19	17
25	348	471	307	526	318	137	103	56	36	32	18	17
26	248	1260	232	838	254	121	96	50	51	30	18	16
27	110	529	194	457	1320	113	90	47	40	29	17	16
28	83	294	167	355	1510	109	85	59	33	27	16	15
29	69	203	147	279	---	104	81	55	31	24	17	15
30	57	170	136	232	---	127	78	59	28	24	17	16
31	48	---	121	191	---	168	---	56	---	24	17	---
TOTAL	1486	4884	11066	9074	9586	7530	4291	1904	1132	2126	702	561
MEAN	47.9	163	357	293	342	243	143	61.4	37.7	68.6	22.6	18.7
MAX	348	1260	1790	2510	1510	1630	350	101	51	313	51	34
MIN	15	38	104	52	107	104	78	45	28	24	16	15
CFSM	.41	1.39	3.05	2.50	2.93	2.08	1.22	.52	.32	.59	.19	.16
IN.	.47	1.55	3.52	2.89	3.05	2.39	1.36	.61	.36	.68	.22	.18

CAL YR 1986 TOTAL 36413 MEAN 99.8 MAX 2210 MIN 11 CFSM .85 IN. 11.57
WTR YR 1987 TOTAL 54342 MEAN 149 MAX 2510 MIN 15 CFSM 1.27 IN. 17.27

TENNESSEE RIVER BASIN

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03560500 DAVIS MILL CREEK AT COPPERHILL, TN

LOCATION.--Lat 34°59'43", long 84°22'56", Polk County, Hydrologic Unit 06020203, on right bank 100 ft upstream from bridge on State Highway 68, 0.1 mi upstream from mouth, 0.4 mi northwest of Louisville and Nashville Railroad station, and 0.8 mi northwest of Post Office at Copperhill.

DRAINAGE AREA.--5.16 mi².

PERIOD OF RECORD.--July 1940 to September 1941 (published as Mill Creek at Copperhill), December 1948 to December 1977, July 1986 to current year.

REVISED RECORDS.--WSP 1206: Drainage area. WSP 2110: 1949-65 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,451.06 ft above National Geodetic Vertical Datum of 1929. July 16, 1940, to Sept. 30, 1941, water-stage recorder and sharp-crested weir at site 145 ft upstream at datum of 1.58 ft higher. Oct. 1, 1941, to Aug. 12, 1971, water-stage recorder and concrete San Dimas flume and dam at present site and datum.

REMARKS.--No estimated discharges. Records fair. Flow is predominately process water for Tennessee Chemical Company plant that is withdrawn from Ocoee River upstream from Davis Mill Creek and discharged to Davis Mill Creek upstream from the gage. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--29 years (water years 1941, 1950-77, 1987), 56.8 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,520 ft³/s, Oct. 6, 1949, gage height, 6.02 ft in gage well, 8.5 ft, from floodmarks, from rating curve extended above 150 ft³/s on basis of critical depth measurement of peak flow; minimum daily, 3.1 ft³/s, July 30, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, May 27, gage height, 2.44 ft³/s; minimum daily, 55 ft³/s, Oct. 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	70	95	86	99	125	86	109	121	98	139	110
2	105	68	76	85	134	89	85	107	117	99	145	117
3	109	73	81	82	105	94	89	112	117	97	128	118
4	104	76	92	84	82	92	88	105	303	96	109	109
5	111	78	91	84	96	82	89	92	85	95	109	109
6	108	78	89	87	96	89	93	105	79	98	106	107
7	98	100	87	82	95	88	93	107	85	97	109	109
8	103	100	89	83	95	88	89	105	95	95	155	108
9	105	106	94	86	94	96	95	110	97	95	120	110
10	102	102	94	84	91	75	81	111	96	94	111	110
11	101	104	86	84	92	84	78	112	95	94	109	96
12	106	101	81	85	95	86	81	105	91	92	108	94
13	173	98	77	84	93	85	90	99	95	91	108	105
14	118	98	81	86	87	86	135	106	96	90	108	107
15	112	99	87	86	98	92	143	101	98	90	109	105
16	107	97	83	89	107	96	116	94	98	87	109	104
17	107	96	85	91	97	89	111	115	98	96	110	103
18	109	97	88	176	95	100	103	106	96	97	110	98
19	110	97	87	193	84	99	104	96	100	94	109	98
20	107	107	88	101	77	92	106	119	112	101	108	99
21	106	101	88	95	100	89	104	108	96	104	110	98
22	102	101	90	96	107	90	111	103	97	101	113	97
23	106	155	90	92	96	91	124	116	99	103	108	98
24	105	116	92	94	102	98	119	111	97	104	103	98
25	270	105	88	123	101	93	105	119	97	108	108	98
26	88	141	88	107	108	92	95	121	107	111	113	99
27	67	96	88	95	169	86	77	178	97	117	111	100
28	55	97	87	98	250	88	76	218	96	119	111	102
29	56	94	86	95	---	87	80	153	95	123	113	107
30	55	94	85	102	---	92	105	144	94	130	112	118
31	63	---	84	101	---	84	---	132	---	134	109	---
TOTAL	3270	2945	2697	3016	2945	2817	2951	3619	3149	3150	3530	3131
MEAN	105	98.2	87.0	97.3	105	90.9	98.4	117	105	102	114	104
MAX	270	155	95	193	250	125	143	218	303	134	155	118
MIN	55	68	76	82	77	75	76	92	79	87	103	94

CAL YR 1986 TOTAL 17938 MEAN 97.5 MAX 270 MIN 55
WTR YR 1987 TOTAL 37220 MEAN 102 MAX 303 MIN 55

TENNESSEE RIVER BASIN

03563000 OCOEE RIVER AT EMF, TN

LOCATION.--Lat 35°05'48", long 84°32'07", Polk County, Hydrologic Unit 06020203, on left bank 700 ft downstream from Tennessee Valley Authority powerplant, 0.8 mi upstream from former village of Emf, 2.0 mi downstream from Goforth Creek, and at mile 19.6.

DRAINAGE AREA.--524 mi².

PERIOD OF RECORD.--October 1912 to current year. Prior to January 1913, monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 783: 1913-34. WSP 853: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 837.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 23-27. Records good. Flow regulated by Blue Ridge Lake (station 03558500) in Water Resources Data for Georgia, Ocoee No. 3 Lake (station 03562500), and by powerplant above station. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--75 years, 1,232 ft³/s, 31.93 in/yr unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft³/s, July 10, 1916, gage height, 13.7 ft, from rating curve extended above 17,000 ft³/s; minimum, 3.4 ft³/s, Sept. 20, 1962, gage height, 2.12 ft; minimum daily, 4.6 ft³/s, Sept. 14, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 19, 1906, discharge, 62,000 ft³/s, was the greatest known since at least 1840, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,860 ft³/s, Feb. 28, gage height, 8.06 ft; minimum, 14 ft³/s, Oct. 7, 8, gage height, 2.31 ft; minimum daily, 249 ft³/s, Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381	273	1390	1320	1050	4140	1150	1320	1160	731	1160	417
2	390	289	1420	1040	1270	1680	931	838	1110	913	1170	408
3	261	360	1410	1180	1240	1520	1120	652	1100	806	1150	431
4	518	399	1270	1080	1190	1440	922	909	509	786	1070	499
5	461	389	1350	1020	1090	1420	1190	1110	538	753	856	592
6	592	401	1350	1010	1070	1410	932	1110	893	920	905	661
7	363	422	1350	1020	1060	1410	910	904	560	806	878	524
8	345	658	1360	1010	1060	1410	1120	890	873	1070	884	485
9	375	618	1430	1010	1050	1480	1120	601	1090	926	890	648
10	362	426	2100	1010	1020	1420	1100	536	1100	945	908	623
11	249	512	1460	1010	1020	1420	1190	1050	1140	731	856	481
12	334	932	1400	1010	1010	1420	1200	1110	779	643	810	632
13	764	952	1360	1010	1010	1410	1100	1110	1190	1070	732	640
14	1200	959	1350	1000	1020	1410	1110	793	555	1100	816	585
15	710	670	1350	1010	1040	1400	1390	1110	719	1070	886	570
16	383	583	1400	1000	1110	1390	1550	1060	901	855	889	576
17	362	553	1370	1000	1030	1390	1510	640	1110	773	888	583
18	489	500	1360	1430	1050	1290	1430	929	776	845	726	576
19	448	556	1330	3900	1060	1440	1360	1110	789	783	724	667
20	768	797	1330	1640	1040	1370	1450	1110	703	920	737	651
21	460	1030	1310	1460	1040	1370	1460	1110	816	852	697	562
22	340	484	1320	1440	1050	1420	1550	1110	860	855	719	575
23	380	939	1340	1410	1070	1230	1660	621	873	901	725	719
24	270	1840	1360	1110	1090	1070	1450	649	861	922	686	799
25	2360	1470	1350	1180	1060	1080	1350	588	917	961	659	786
26	1400	1840	1330	1520	1040	1070	1080	1040	923	985	671	685
27	610	1770	1320	1130	2080	1080	1340	1080	715	937	679	612
28	398	1440	1320	1100	3250	989	1150	1090	623	807	691	772
29	315	1360	1320	1080	---	824	1010	1120	839	800	641	793
30	306	1360	1310	1070	---	809	1340	1050	859	1140	659	1070
31	291	---	1310	1080	---	1120	---	981	---	1150	624	---
TOTAL	16885	24782	42730	38290	33170	43332	37175	29331	25881	27756	25386	18622
MEAN	545	826	1378	1235	1185	1398	1239	946	863	895	819	621
MAX	2360	1840	2100	3900	3250	4140	1660	1320	1190	1150	1170	1070
MIN	249	273	1270	1000	1010	809	910	536	509	643	624	408
(†)	+2800	+8500	-6900	+4100	+11200	+10700	+3900	+2000	-100	-10000	-13300	-8300
MEAN‡	635	1109	1156	1367	1585	1743	1369	1011	859	573	390	344
CFSM‡	1.21	2.12	2.21	2.61	3.02	3.33	2.61	1.93	1.64	1.09	.74	.66
IN‡	1.40	2.36	2.54	3.00	3.15	3.83	2.91	2.22	1.83	1.26	.86	.73

CAL YR 1986 TOTAL 234128 MEAN 641 MAX 2360 MIN 49 MEAN‡ 654 CFSM‡ 1.25 IN‡ 16.96
WTR YR 1987 TOTAL 363340 MEAN 995 MAX 4140 MIN 249 MEAN‡ 1008 CFSM‡ 1.92 IN‡ 26.11

† Change in contents, in cfs-days, in Blue Ridge Lake (Georgia).

‡ Adjusted for change in contents in Blue Ridge Lake (Georgia).

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

185

03564500 OCOEE RIVER AT PARKSVILLE, TN

LOCATION.--Lat 35°05'48", long 84°39'15", Polk County, Hydrologic Unit 06020203, on right bank 0.4 mi downstream from Lake Ocoee Dam and Ocoee No. 1 powerplant of Tennessee Valley Authority at Parksville, and at mile 11.5.

DRAINAGE AREA.--595 mi².

PERIOD OF RECORD.--January 1911 to September 1916, March 1921 to current year.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1916, 1921-36 (adjusted runoff). WSP 1386: 1926.

GAGE.--Water-stage recorder. Datum of gage is 716.96 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Blue Ridge Lake (station 03558500) in Water Resources Data for Georgia, Ocoee No. 3 Lake (station 03562500), and Lake Ocoee (station 03564000). Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--71 years, 1,317 ft³/s, 30.06 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,700 ft³/s, Mar. 29, 1951, gage height, 20.22 ft; minimum daily, 10 ft³/s, Oct. 28, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 19, 1906, discharge, 65,000 ft³/s, was the greatest known flood since at least 1840, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,230 ft³/s, Oct. 25, gage height, 8.27 ft; minimum, 70 ft³/s, Mar. 17, gage height, 2.72 ft; minimum daily, 283 ft³/s, Oct. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	390	1640	1550	1220	3010	821	1170	1130	880	1170	432
2	344	426	1400	1550	1480	2800	683	799	1050	804	1080	528
3	356	364	1320	1390	1330	2810	1090	739	1120	661	1120	481
4	375	366	1420	1040	1500	2730	932	923	461	685	1090	515
5	373	337	1560	1040	1640	2730	868	1010	612	662	855	395
6	381	336	1550	996	1680	1940	603	957	612	818	905	467
7	375	354	1450	929	1280	2750	787	865	624	901	965	442
8	413	694	1540	883	1090	1710	911	1090	777	1060	797	418
9	423	543	1350	1310	1230	1530	1230	729	1050	882	927	508
10	443	579	1660	1220	1120	1580	1330	759	1060	727	908	616
11	317	402	1870	1030	1110	1620	1360	833	1060	723	871	626
12	328	480	2500	1050	1100	1560	1420	984	950	695	703	684
13	755	1170	2310	1090	1150	1650	1200	961	665	1060	985	690
14	1130	740	2320	1040	1100	1700	1190	943	626	1230	824	541
15	1120	1110	1720	955	1130	1640	1050	1090	770	1410	797	654
16	396	1090	1600	860	1150	1480	1180	773	1030	899	749	607
17	478	1020	1630	1090	1070	1440	1470	803	813	876	781	682
18	488	722	1470	1030	1330	1490	895	971	867	733	665	693
19	456	788	1590	1910	1510	1500	832	1010	1020	745	662	530
20	723	711	1500	2710	1170	1390	1540	1080	614	970	658	497
21	330	748	1370	2710	1100	1690	1650	1110	614	831	717	505
22	337	614	1600	2730	875	1510	1400	1060	853	833	734	827
23	330	1130	1400	2720	1530	1410	1670	650	1180	889	706	751
24	797	1740	1340	1890	1330	1260	1640	641	1060	861	645	653
25	3010	1850	1400	1710	1440	1120	1320	738	983	887	663	720
26	2520	2580	1380	1430	1420	868	1250	1030	1020	861	716	618
27	1340	2530	1420	1640	2000	817	1280	1230	693	905	731	625
28	304	2530	1380	1730	3200	788	1200	1170	694	858	712	679
29	289	2580	1410	1660	---	720	1190	1160	865	875	572	798
30	297	2600	1450	1310	---	789	1350	1060	902	1060	561	1060
31	283	---	1510	1210	---	1060	---	1030	---	922	539	---
TOTAL	19938	31524	49060	45413	38285	51092	35342	29368	25775	27203	24808	18242
MEAN	643	1051	1583	1465	1367	1648	1178	947	859	878	800	608
MAX	3010	2600	2500	2730	3200	3010	1670	1230	1180	1410	1170	1060
MIN	283	336	1320	860	875	720	603	641	461	661	539	395
CAL YR 1986	TOTAL 257092		MEAN 704		MAX 3010		MIN 261		MEAN+ 715		CFM+ 1.20	
WTR YR 1987	TOTAL 396050		MEAN 1085		MAX 3200		MIN 283		MEAN+ 1100		CFM+ 1.85	
											IN+ 16.31	
											IN+ 25.10	

† Adjusted for change in contents in Blue Ridge Lake (Georgia) and Lake Ocoee.

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

03565300 SOUTH CHESTUEE CREEK NEAR BENTON, TN

LOCATION.--Lat 35°10'02", long 84°42'59", Bradley County, Hydrologic Unit 06020002, on right bank 50 ft downstream from county highway bridge, 0.2 mi downstream from Climer Branch, 2.4 mi southwest of Benton Station, 2.8 mi north of Ocoee, 3.6 mi west of Benton, and at mile 9.3.

DRAINAGE AREA.--31.8 mi².

PERIOD OF RECORD.--October 1957 to December 1986 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 712.14 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--29 years (water years 1958-86), 50.2 ft³/s, 21.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s, Mar. 16, 1973, gage height, 12.11 ft, from rating curve extended above 3,200 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 1.5 ft³/s, July 20, 21, 1986.

EXTREMES FOR CURRENT PERIOD.--October to December 1986: Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 24	1630	*1,150	*7.44	No other peak greater than base discharge.			

Minimum daily discharge, 2.0 ft³/s, Oct. 4-5, 7-8.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1986 TO DECEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	8.0	47	---	---	---	---	---	---	---	---	---
2	2.2	9.5	63	---	---	---	---	---	---	---	---	---
3	2.1	9.0	48	---	---	---	---	---	---	---	---	---
4	2.0	7.8	37	---	---	---	---	---	---	---	---	---
5	2.0	7.6	31	---	---	---	---	---	---	---	---	---
6	2.1	7.9	28	---	---	---	---	---	---	---	---	---
7	2.0	9.1	26	---	---	---	---	---	---	---	---	---
8	2.0	14	77	---	---	---	---	---	---	---	---	---
9	3.6	14	262	---	---	---	---	---	---	---	---	---
10	3.9	14	474	---	---	---	---	---	---	---	---	---
11	3.0	11	207	---	---	---	---	---	---	---	---	---
12	3.0	15	127	---	---	---	---	---	---	---	---	---
13	13	12	76	---	---	---	---	---	---	---	---	---
14	18	9.7	57	---	---	---	---	---	---	---	---	---
15	6.0	12	49	---	---	---	---	---	---	---	---	---
16	4.2	12	43	---	---	---	---	---	---	---	---	---
17	3.5	11	38	---	---	---	---	---	---	---	---	---
18	3.4	10	38	---	---	---	---	---	---	---	---	---
19	3.4	9.4	32	---	---	---	---	---	---	---	---	---
20	3.2	50	29	---	---	---	---	---	---	---	---	---
21	3.1	36	26	---	---	---	---	---	---	---	---	---
22	3.1	19	24	---	---	---	---	---	---	---	---	---
23	3.2	93	32	---	---	---	---	---	---	---	---	---
24	3.5	620	143	---	---	---	---	---	---	---	---	---
25	331	212	62	---	---	---	---	---	---	---	---	---
26	48	421	46	---	---	---	---	---	---	---	---	---
27	20	128	38	---	---	---	---	---	---	---	---	---
28	13	69	34	---	---	---	---	---	---	---	---	---
29	10	52	30	---	---	---	---	---	---	---	---	---
30	8.2	42	28	---	---	---	---	---	---	---	---	---
31	8.0	---	26	---	---	---	---	---	---	---	---	---
TOTAL	536.0	1945.0	2278	---	---	---	---	---	---	---	---	---
MEAN	17.3	64.8	73.5	---	---	---	---	---	---	---	---	---
MAX	331	620	474	---	---	---	---	---	---	---	---	---
MIN	2.0	7.6	24	---	---	---	---	---	---	---	---	---
CFSM	.54	2.04	2.31	---	---	---	---	---	---	---	---	---
IN.	.63	2.28	2.66	---	---	---	---	---	---	---	---	---

CAL YR 1986 TOTAL 7950.5 MEAN 21.8 MAX 620 MIN 1.7 CFSM .69 IN. 9.30

TENNESSEE RIVER BASIN

187

03565500 OOSTANAULA CREEK NEAR SANFORD, TN

LOCATION.--Lat 35°19'39", long 84°42'19", McMinn County, Hydrologic Unit 06020002, on right bank 20 ft downstream from highway bridge, 1.3 mi southeast of Sanford, 3.5 mi northeast of Calhoun, and at mile 5.7.

DRAINAGE AREA.--57.0 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 716.51 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges; Feb. 19 to Mar. 10. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--33 years, 92.0 ft³/s, 21.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s, Mar. 16, 1973, gage height, 13.43 ft, from rating curve extended above 4,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 10 ft³/s, Sept. 30, Nov. 7, 1985, result of bridge construction upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	1845	927	5.89	Jan. 20	0145	*1,260	*7.24
Dec. 10	0600	724	5.17	Mar. 1	Unknown	Unknown	Unknown

Minimum discharge, 15 ft³/s, several days in October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	38	107	78	126	800	80	62	51	26	20	21
2	16	37	110	79	166	450	73	62	47	27	20	19
3	16	37	101	74	196	250	74	63	44	26	22	18
4	15	35	92	72	144	175	88	62	42	27	23	18
5	15	33	85	72	128	140	91	58	44	27	21	18
6	15	32	80	68	119	130	89	56	41	29	21	18
7	15	32	78	66	112	125	85	54	40	32	80	20
8	15	32	85	65	109	120	81	54	39	66	59	24
9	15	37	274	64	101	140	78	51	38	35	31	23
10	16	41	670	63	94	130	75	52	36	31	30	22
11	20	38	579	63	91	117	74	51	35	37	27	20
12	23	36	304	62	89	110	74	49	35	31	24	31
13	32	35	210	59	86	107	73	48	35	32	23	56
14	63	32	168	57	83	100	71	46	37	32	22	32
15	53	32	149	57	90	97	106	46	36	35	29	26
16	36	33	134	57	147	93	127	45	34	29	23	22
17	30	34	123	55	173	90	157	45	34	27	24	21
18	27	33	119	68	123	87	117	44	33	27	30	20
19	25	30	119	934	110	102	99	43	32	25	30	23
20	26	35	107	951	100	99	91	41	31	28	22	20
21	26	59	102	249	95	89	85	56	32	26	21	22
22	23	49	96	179	200	85	80	332	33	24	20	21
23	22	58	92	163	350	81	77	185	33	23	21	19
24	22	578	125	138	200	79	75	76	32	23	22	18
25	106	697	113	213	150	84	74	65	34	23	22	18
26	186	484	101	439	150	86	71	59	34	23	20	18
27	80	435	93	299	600	78	70	55	30	24	19	18
28	58	170	91	189	700	77	67	53	29	24	19	20
29	50	132	87	164	---	76	65	51	30	21	19	19
30	44	117	83	151	---	77	63	49	29	21	19	19
31	40	---	80	138	---	84	---	54	---	21	21	---
TOTAL	1147	3471	4757	5386	4832	4358	2530	2067	1080	882	804	664
MEAN	37.0	116	153	174	173	141	84.3	66.7	36.0	28.5	25.9	22.1
MAX	186	697	670	951	700	800	157	332	51	66	80	56
MIN	15	30	78	55	83	76	63	41	29	21	19	18
CFSM	.65	2.03	2.69	3.05	3.03	2.47	1.48	1.17	.63	.50	.46	.39
IN.	.75	2.27	3.10	3.52	3.15	2.84	1.65	1.35	.70	.58	.52	.43

CAL YR 1986	TOTAL 17209	MEAN 47.1	MAX 697	MIN 11	CFSM .83	IN. 11.23
WTR YR 1987	TOTAL 31978	MEAN 87.6	MAX 951	MIN 15	CFSM 1.54	IN. 20.86

TENNESSEE RIVER BASIN

03566000 HIWASSEE RIVER AT CHARLESTON, TN

LOCATION.--Lat 35°17'16", long 84°45'07", Bradley County, Hydrologic Unit 06020002, on left bank 250 ft upstream from Southern Railway bridge, 0.3 mi upstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.9.

DRAINAGE AREA.--2,298 mi².

PERIOD OF RECORD.--November 1898 to April 1899, November 1899 to April 1903, October 1919 to January 1940, January 1963 to January 1977, September 1979 to December 1981 (vane lost), August 1987 to current year. Gage-height records collected at this station during the period December 1884 to December 1889 are contained in the United States War Department Stages of Ohio River and Principal Tributaries, 1858-89, Part 1, and during period January 1890 to December 1943 in reports of the U.S. Weather Bureau.

REVISED RECORDS.--WSP 853: Drainage area. WSP 1436: 1902, 1922(M), 1928, 1936(M).

GAGE.--Water-stage recorder and velocity recorder, Datum of gage is 665.56 ft above National Geodetic Vertical Datum of 1929. Prior to July 18, 1925, nonrecording gages, and July 18, 1925, to Sept. 6, 1926, water-stage recorder, at Southern Railway bridge, 250 ft downstream at datum 1.50 ft higher. Auxiliary nonrecording gages at several sites and datums used periodically.

REMARKS.--Records poor. Some diversions above gage for industrial and municipal water supplies. Flow regulated by seven reservoirs (see p. 218 and Water Resources Data for Georgia and North Carolina). Daily discharge figures computed using areas as determined from a stage-area curve and velocities as determined from a velocity curve.

AVERAGE DISCHARGE.--37 years, (water years 1901-02, 1920-39, 1964-76, 1980-81), 4,795 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft³/s, Mar. 17, 1973, gage height, 29.39 ft; minimum daily, 275 ft³/s, Sept. 8, 1925; reverse flow has occurred for short periods each year since closure of Chickamauga Dam on Tennessee River in 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 31, 1886, reached a stage of 34.0 ft, present datum, discharge about 70,000 ft³/s.

EXTREMES FOR CURRENT PERIOD.--August to December 1987: Maximum discharge, 5,140 ft³/s, Aug. 23; maximum gage height, 16.10 ft, Aug 19; minimum daily discharge, 1320 ft³/s, Oct. 4 ; minimum gage height, 9.98 ft, Dec 7.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST 1987 TO DECEMBER 1987

MEAN VALUES

DAY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
1	---	1740	1810	2190	2010	---	---	---	---	---	---	---
2	---	1520	1830	2240	1910	---	---	---	---	---	---	---
3	---	1610	1690	2290	1750	---	---	---	---	---	---	---
4	---	1500	1320	2330	1800	---	---	---	---	---	---	---
5	---	1600	1640	2320	1830	---	---	---	---	---	---	---
6	---	1490	1800	2370	1800	---	---	---	---	---	---	---
7	---	1790	1930	2350	1730	---	---	---	---	---	---	---
8	---	1690	1960	2350	1890	---	---	---	---	---	---	---
9	---	1750	2220	2190	1720	---	---	---	---	---	---	---
10	---	1730	1980	1950	1780	---	---	---	---	---	---	---
11	---	1660	1750	2100	1960	---	---	---	---	---	---	---
12	---	1840	2140	2240	1780	---	---	---	---	---	---	---
13	---	1610	2510	2170	1720	---	---	---	---	---	---	---
14	---	1830	2620	2070	1870	---	---	---	---	---	---	---
15	---	1760	2630	2070	1780	---	---	---	---	---	---	---
16	---	1800	2580	2130	2170	---	---	---	---	---	---	---
17	---	1480	2450	2190	2110	---	---	---	---	---	---	---
18	---	1850	2210	2220	1840	---	---	---	---	---	---	---
19	2570	2110	2370	2210	1810	---	---	---	---	---	---	---
20	2600	1620	2480	2150	1690	---	---	---	---	---	---	---
21	2850	1790	2450	2230	1820	---	---	---	---	---	---	---
22	2630	2070	2540	2170	2190	---	---	---	---	---	---	---
23	2160	2140	2540	2200	2090	---	---	---	---	---	---	---
24	2490	1930	2290	2130	2270	---	---	---	---	---	---	---
25	2010	2180	2090	2080	2470	---	---	---	---	---	---	---
26	2170	1870	2120	2250	2460	---	---	---	---	---	---	---
27	2420	1410	2180	2170	2440	---	---	---	---	---	---	---
28	2210	1480	2240	2140	3040	---	---	---	---	---	---	---
29	1500	1690	2280	2010	3150	---	---	---	---	---	---	---
30	1600	1870	2360	2380	2880	---	---	---	---	---	---	---
31	1830	---	2220	---	2410	---	---	---	---	---	---	---
TOTAL	---	52410	67230	65890	64170	---	---	---	---	---	---	---
MEAN	---	1747	2169	2196	2070	---	---	---	---	---	---	---
MAX	---	2180	2630	2380	3150	---	---	---	---	---	---	---
MIN	---	1410	1320	1950	1690	---	---	---	---	---	---	---

TENNESSEE RIVER BASIN

189

03566420 WOLFTEVER CREEK NEAR OOLTEWAH, TN

LOCATION.--Lat 35°03'43", long 85°03'59", Hamilton County, Hydrologic Unit 06020001, on right downstream wingwall of county road bridge, 0.6 mi downstream from Southern Railway bridge, 0.9 mi south of Ooltewah, 1.6 mi upstream from Little Wolftever Creek, and at mile 16.1.

DRAINAGE AREA.--18.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 755.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--23 years, 32.1 ft³/s, 23.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s, Mar. 16, 1973, gage height, 9.75 ft; minimum, 0.94 ft³/s, July 28, 30, 31, Aug. 5, 6, 7, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	1430	846	5.52	Feb. 27	1115	879	5.63
Nov. 26	1000	855	5.55	Feb. 28	2145	798	5.31
Jan. 19	0400	*1330	*6.81				

Minimum discharge, 1.3 ft³/s, Oct. 1, 2, 3, 19, 20-23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.7	57	19	29	236	43	7.6	5.1	5.0	2.7	2.7
2	1.4	3.6	77	17	113	106	35	7.3	6.1	4.8	2.9	2.5
3	1.4	3.8	48	15	67	72	48	8.2	4.8	5.1	3.1	2.4
4	1.5	3.7	31	15	50	56	44	11	4.8	4.5	3.4	2.4
5	1.5	4.4	24	13	41	46	35	10	4.5	4.1	4.6	2.5
6	1.5	4.3	20	13	33	40	30	7.5	4.2	7.3	5.6	4.3
7	1.7	8.4	17	13	28	33	27	6.9	4.0	5.5	4.0	9.1
8	1.5	8.8	57	12	25	34	24	6.4	3.9	4.4	3.3	3.6
9	3.5	11	218	12	20	83	21	6.0	3.8	4.8	3.7	3.4
10	2.2	9.0	232	14	18	49	19	5.8	3.7	6.7	5.8	3.0
11	1.7	7.4	128	12	18	36	18	5.7	3.9	13	2.9	8.3
12	4.1	7.0	79	11	17	34	17	5.6	3.8	9.6	2.5	22
13	20	5.5	53	10	15	29	15	5.5	5.3	4.3	2.5	27
14	15	4.7	43	10	24	26	19	11	4.8	3.7	2.5	9.6
15	3.2	7.1	36	13	22	24	37	6.8	4.1	3.4	2.4	5.4
16	2.3	6.5	28	13	157	22	28	5.7	4.7	3.1	2.4	4.4
17	1.8	6.0	25	13	67	20	24	5.2	4.1	2.9	5.2	4.1
18	1.5	5.4	33	243	50	60	20	5.0	4.3	2.8	4.2	4.9
19	1.4	4.7	24	692	36	120	17	4.8	5.8	2.7	20	4.3
20	1.3	46	21	133	31	55	15	5.0	5.5	2.7	3.1	3.8
21	1.3	23	18	80	29	41	14	10	14	2.7	2.7	3.4
22	1.3	13	17	74	97	32	13	10	24	2.7	2.8	3.2
23	1.3	96	63	58	101	27	12	10	7.3	2.8	2.6	3.2
24	3.5	407	134	49	58	25	11	14	11	2.7	2.6	3.2
25	172	118	56	247	44	29	11	6.0	6.3	2.5	2.6	3.0
26	35	431	40	155	64	22	10	5.8	5.7	2.5	2.7	3.0
27	13	92	32	77	550	20	9.5	5.1	5.1	2.5	2.7	3.0
28	7.6	53	27	62	410	38	8.9	4.9	4.8	2.4	2.7	3.1
29	5.6	35	24	50	---	24	8.3	5.8	4.4	2.4	2.7	25
30	4.5	27	21	48	---	78	8.0	6.8	4.2	2.4	2.7	39
31	3.9	---	19	33	---	71	---	5.6	---	2.5	2.7	---
TOTAL	318.9	1456.0	1702	2226	2214	1588	641.7	221.0	178.0	128.5	116.3	257.5
MEAN	10.3	48.5	54.9	71.8	79.1	51.2	21.4	7.13	5.93	4.15	3.75	8.58
MAX	172	431	232	692	550	236	48	14	24	13	20	43
MIN	1.3	3.6	17	10	15	20	8.0	4.8	3.7	2.4	2.4	2.4
CFSM	.55	2.58	2.92	3.82	4.21	2.72	1.14	.38	.32	.22	.20	.46
IN.	.63	2.88	3.37	4.40	4.38	3.14	1.27	.44	.35	.25	.23	.51

CAL YR 1986	TOTAL	6214.6	MEAN	17.0	MAX	431	MIN	1.1	CFSM	.91	IN.	12.29
WTR YR 1987	TOTAL	11047.8	MEAN	30.3	MAX	692	MIN	1.3	CFSM	1.61	IN.	21.85

TENNESSEE RIVER BASIN

03567500 SOUTH CHICKAMAUGA CREEK NEAR CHICKAMAUGA, TN

LOCATION.--Lat 35°00'51", long 85°12'35", Hamilton County Hydrologic Unit 06020001, on left bank 0.1 mi upstream from bridge on U.S. Highway 11, 1.5 mi south of Chickamauga, 6.0 mi east of the city hall in Chattanooga, and at mile 12.2.

DRAINAGE AREA.--428 mi².

PERIOD OF RECORD.--October 1928 to September 1978, October 1980 to current year. Monthly discharge only for December 1930, published in WSP 1306. Gage-height record collected October 1978 to September 1980 (fragmentary). Prior to October 1937, published as Chickamauga Creek near Chickamauga.

REVISED RECORDS.--WSP 823: Drainage area. WSP 853: 1937. WSP 1386: 1932.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 644.12 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1930, nonrecording gage. Oct. 7, 1930, to Oct. 29, 1980, water-stage recorder at site 1,000 ft upstream at datum 7.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--57 years (water years 1929-78, 1981-87), 691 ft³/s, 21.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s, Mar. 17, 1973, gage height, 28.70 ft; maximum gage height, 30.75 ft, Mar. 17, 1973, present datum from floodmarks (backwater from Tennessee River); minimum discharge, 61 ft³/s, Oct. 8, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	1830	6,960	16.39	Jan. 20	0600	*12,500	*20.38
Nov. 27	0630	7,930	17.26	Mar. 1	1200	8,910	18.01

Minimum discharge, 72 ft³/s Oct. 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	213	1150	496	836	8610	1240	236	259	137	99	94
2	83	192	1400	479	1170	5560	953	229	197	140	97	94
3	81	177	1180	424	1340	2560	919	237	190	138	96	94
4	78	168	930	381	1030	1460	1090	320	183	138	104	92
5	75	172	768	353	858	1180	878	465	180	140	181	93
6	72	160	661	326	762	1020	788	270	169	136	196	94
7	72	184	582	308	704	890	704	235	155	136	132	98
8	72	207	714	299	654	836	643	218	149	189	142	138
9	86	212	1590	280	575	1620	590	204	144	149	127	123
10	97	196	3390	292	512	1650	543	189	140	146	119	133
11	95	176	2450	291	477	1130	510	186	139	139	113	141
12	105	199	1750	265	459	966	467	185	137	351	114	220
13	254	234	1290	246	433	868	436	187	160	243	107	191
14	673	198	1030	238	469	766	452	182	152	148	104	167
15	439	197	888	250	494	706	870	178	152	130	100	142
16	214	212	778	260	2120	655	742	189	221	122	99	127
17	159	212	688	259	1940	609	637	205	193	119	101	114
18	132	198	686	1730	1230	799	569	181	263	116	123	109
19	115	186	646	9300	961	2900	499	174	178	114	154	108
20	107	604	546	10700	806	2310	446	173	178	112	119	108
21	100	1140	483	5170	733	1310	412	238	257	110	106	107
22	97	640	431	1960	950	1030	385	237	693	116	102	104
23	95	1210	554	1550	1740	856	360	179	263	123	100	101
24	105	5540	2350	1220	1220	765	335	203	184	118	98	100
25	2550	5300	1780	2330	972	750	315	197	272	111	96	98
26	2700	6080	1140	4970	970	731	293	184	230	89	94	99
27	1660	7290	903	3370	5500	629	280	173	177	105	97	99
28	594	4950	772	1620	7890	613	271	219	154	108	99	99
29	382	1890	671	1280	---	552	254	171	141	104	96	119
30	296	1110	603	1140	---	1400	244	339	135	96	94	223
31	246	---	543	991	---	2040	---	372	---	97	94	---
TOTAL	11918	39447	33347	52778	37805	47771	17125	6955	6045	4220	3503	3629
MEAN	384	1315	1076	1703	1350	1541	571	224	201	136	113	121
MAX	2700	7290	3390	10700	7890	8610	1240	465	693	351	196	223
MIN	72	160	431	238	433	552	244	171	135	89	94	92
CFSM	.90	3.07	2.51	3.98	3.15	3.60	1.33	.52	.47	.32	.26	.28
IN.	1.04	3.43	2.90	4.59	3.29	4.15	1.49	.60	.53	.37	.30	.32

CAL YR 1986 TOTAL 153747 MEAN 421 MAX 7290 MIN 70 CFSM .98 IN. 13.36
WTR YR 1987 TOTAL 264543 MEAN 725 MAX 10700 MIN 72 CFSM 1.69 IN. 22.99

TENNESSEE RIVER BASIN

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03568000 TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.--Lat 35°05'12", long 85°16'43", Hamilton County, Hydrologic Unit 06020001, on right bank at Rivermont Golf and Country Club, 0.5 mi downstream from South Chickamauga Creek, 3.0 mi downstream from Chickamauga Dam, 3.5 mi upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6.

DRAINAGE AREA.--21,400 mi², approximately.

PERIOD OF RECORD.--April 1874 to current year. Monthly discharges only for some periods, published in WSP 1306. July 1930 to December 1935, published as "at Hales Bar, near Chattanooga." Gage-height records collected in this vicinity since 1874 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 353: 1874-1912. WSP 783: 1917. WSP 823: 1875(M). WSP 973: 1942. WSP 1306: 1916(M). WSP 1386: 1932-34 (station at Hales Bar near Chattanooga).

GAGE.--Water-stage recorder. Datum of gage is 621.12 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 1, 1939, nonrecording or recording gages at several sites from 7.0 mi upstream from Chattanooga to Hales Bar Dam 33 mi downstream at or within 0.2 ft of present datum, except nonrecording gage at Bridgeport, AL, 49.9 mi downstream at different datum Oct. 22, 1913, to Feb. 28, 1915, and Oct. 1, 1918, to Jan. 5, 1921. Auxiliary gages at several sites parts of periods since Feb. 28, 1915. Present auxiliary gage at site 2.2 mi downstream from base gage at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1936 by many upstream reservoirs (see p. 218 and Water Resources Data for adjoining states).

AVERAGE DISCHARGE.--113 years, 36,740 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 410,000 ft³/s, Mar. 1, 1875, gage height, 53.8 ft, present datum, at Walnut Street, from rating curve extended above 250,000 ft³/s; minimum daily, 1,200 ft³/s, Nov. 1, 1953; minimum gage height, 0.0 ft, Sept. 11-14, 1881, Sept. 19, 1883.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 57.9 ft, Mar. 11, 1867, present datum at Walnut Street, discharge about 459,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 109,000 ft³/s, Feb. 27; maximum gage height, 23.65 ft, Feb. 28; minimum daily discharge, 5,690 ft³/s, Sept. 26; minimum gage height, 11.13 ft, Jan. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18600	13200	43700	42400	42600	87400	28700	30500	25800	20900	31000	15300
2	21200	12500	44300	42600	43200	74300	26900	20500	27200	22000	30900	15700
3	20700	22100	40400	42800	43700	74500	21400	21200	26200	20800	28500	15100
4	17100	16900	36500	36400	43000	72800	16500	24800	22900	8250	30600	10500
5	18300	25000	34300	33400	42700	68300	11500	24500	17300	17000	30800	10500
6	17600	25000	42700	34200	42800	58100	12300	27600	10100	29500	29800	9750
7	15100	19100	40200	36700	42900	52100	17900	25900	14600	32400	33100	18800
8	14500	18600	32900	36500	42500	51700	15500	24300	24000	40100	30000	21800
9	12400	23500	42800	35300	42000	52400	14500	14300	26800	30900	19200	22300
10	12700	22600	46800	24900	42400	53000	11400	10300	24100	27900	28400	23200
11	9240	21500	46700	26100	37500	52600	8700	25000	24300	19000	30500	24700
12	8640	22200	45500	24700	35300	52700	8500	25100	25400	21200	32400	14000
13	10700	29500	44500	21700	35400	49700	8260	24600	16400	30500	27500	8750
14	14400	29200	43900	25300	21800	44500	15800	23800	15500	33100	31400	21300
15	19800	28900	43400	22100	16500	46200	23100	24800	21900	29800	23700	24100
16	21700	29200	43200	24800	27400	44900	22700	10900	23600	30100	23000	26800
17	19400	29200	43000	18100	34100	35400	24200	11600	27800	33900	25400	24800
18	8970	29700	43000	19200	34500	35400	28500	23600	24000	24500	20200	17300
19	8340	30500	43100	42900	38700	32900	31300	23200	19400	17900	30000	15900
20	23600	31700	43200	54500	39800	32600	30800	24200	11900	28300	31300	11000
21	24300	17600	42600	48300	42200	25800	31000	29100	13600	30200	29400	22400
22	22700	18500	42600	45300	23300	21600	28900	29800	17500	28600	17500	23100
23	23800	18700	42900	44700	37500	25500	21800	30000	25200	30200	11300	24700
24	23200	36100	45100	43800	43600	27200	30900	13900	22800	30900	24000	25400
25	29400	46300	42400	44100	43100	26800	28000	19600	23200	24800	26600	21800
26	31700	43400	39600	47100	53400	22500	30500	30400	13400	19500	27000	5690
27	25600	46800	41300	46500	87900	24100	25800	30000	7760	27900	26500	7450
28	23800	49400	42200	44500	103000	16400	29400	29700	6200	28500	24000	21500
29	24100	45900	42600	43900	---	11900	30100	26600	23700	30100	18100	20600
30	22700	44000	42900	43600	---	17500	29800	20300	27000	28700	6940	16400
31	23600	---	43000	42900	---	22800	---	18100	---	29200	22700	---
TOTAL	587890	846800	1311300	1139300	1182800	1313600	664660	718200	609560	826650	801740	540640
MEAN	18960	28230	42300	36750	42240	42370	22160	23170	20320	26670	25860	18020
MAX	31700	49400	46800	54500	103000	87400	31300	30500	27800	40100	33100	26800
MIN	8340	12500	32900	18100	16500	11900	8260	10300	6200	8250	6940	5690

CAL YR 1986 TOTAL 6834250 MEAN 18720 MAX 49400 MIN 4680
WTR YR 1987 TOTAL 10543100 MEAN 28890 MAX 103000 MIN 5690

03571000 SEQUATCHIE RIVER NEAR WHITWELL, TN

LOCATION.--Lat 35°12'22", long 85°29'48", Marion County, Hydrologic Unit 06020004, on right bank 250 ft upstream from county road bridge, 1.5 mi east of Whitwell, 3.0 mi upstream from bridge on State Highway 27, 4.5 mi downstream from Griffith Creek, and at mile 25.1.

DRAINAGE AREA.--402 mi², includes 18 mi² without surface drainage.

PERIOD OF RECORD.--October 1920 to current year. Prior to December 1920, monthly discharges only, published in WSP 1306.

REVISED RECORDS.--WSP 603: 1922(M). WSP 758: 1929(M). WSP 1033: 1943(M). WSP 1386: 1921-22, 1923-25(M), 1927-28(M), 1930(M), 1933(M). WSP 1910: Drainage area. WDR TN-76-1: 1973-75(P).

GAGE.--Water-stage recorder. Datum of gage is 632.73 ft above National Geodetic Vertical datum of 1929 (levels by Tennessee Valley Authority). Prior to Sept. 18, 1927, nonrecording gage at same site at datum 0.03 ft higher. Sept. 18, 1927, to Sept. 30, 1930, nonrecording gage at bridge 15 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Prior to 1950, some diurnal fluctuation caused by small mills above station. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--67 years, 738 ft³/s, 24.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s, Mar. 16, 1973, gage height, 17.65 ft; minimum, 16 ft³/s, Sept. 6-21, 27, 28, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1867 reached a stage of about 19 ft from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 27	0500	*8,870	*13.86	Mar. 1	1500	6,570	13.24
Dec. 10	1800	8,000	13.65	Apr. 15	2400	7,680	13.57
Jan. 19	2330	5,800	12.88				

Minimum discharge, 43 ft³/s, Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	309	1220	665	869	6390	1030	385	196	102	55	50
2	68	276	1110	607	1250	4840	918	358	180	98	58	48
3	65	251	1070	549	1790	2930	843	347	162	97	58	48
4	65	233	975	503	1510	2010	794	329	153	101	56	47
5	63	221	869	465	1230	1540	751	309	143	148	87	47
6	61	209	768	431	1060	1280	736	296	137	125	83	46
7	59	203	689	405	949	1100	728	277	133	114	113	48
8	58	209	720	379	857	998	704	260	126	122	110	55
9	58	255	3230	358	759	1030	669	245	121	122	80	62
10	58	443	7120	352	672	1100	615	234	118	109	70	53
11	58	709	6300	339	615	997	580	224	116	103	69	54
12	66	809	4610	320	578	917	559	214	114	95	68	59
13	123	703	2670	305	538	840	531	206	117	93	64	59
14	192	602	1870	295	513	777	766	199	116	110	61	64
15	199	532	1480	297	533	728	5890	191	113	92	58	93
16	205	486	1220	302	1300	682	6700	183	120	86	56	72
17	175	445	1070	298	2460	641	4790	179	115	81	54	61
18	147	405	1010	425	2000	655	2630	182	116	78	205	57
19	127	364	1020	4000	1550	1370	1950	170	118	76	191	55
20	111	455	987	4760	1250	1440	1510	165	124	74	114	56
21	103	667	875	2960	1110	1210	1200	165	115	70	89	54
22	96	649	780	1960	1130	1030	1010	214	115	68	80	51
23	90	693	746	1490	1900	899	877	324	121	65	72	49
24	89	2510	1460	1190	2030	812	773	262	124	64	67	48
25	1760	2590	1750	1220	1710	769	686	319	130	63	62	47
26	2330	5180	1510	2030	1390	695	611	285	128	61	60	46
27	1220	7550	1230	1950	3530	636	551	225	140	60	57	46
28	814	3760	1040	1610	6250	592	501	302	124	58	55	45
29	566	2340	913	1300	---	547	454	212	119	54	53	45
30	441	1660	818	1130	---	632	417	204	107	55	52	48
31	359	---	731	981	---	1030	---	186	---	54	52	---
TOTAL	9898	35718	51861	33876	41333	41117	40774	7651	3861	2698	2409	1613
MEAN	319	1191	1673	1093	1476	1326	1359	247	129	87.0	77.7	53.8
MAX	2330	7550	7120	4760	6250	6390	6700	385	196	148	205	93
MIN	58	203	689	295	513	547	417	165	107	54	52	45
CFSM	.79	2.96	4.16	2.72	3.67	3.30	3.38	.61	.32	.22	.19	.13
IN.	.92	3.31	4.80	3.13	3.82	3.80	3.77	.71	.36	.25	.22	.15

CAL YR 1986	TOTAL 181595	MEAN 498	MAX 7550	MIN 40	CFSM 1.24	IN. 16.80
WTR YR 1987	TOTAL 272809	MEAN 747	MAX 7550	MIN 45	CFSM 1.86	IN. 25.24

TENNESSEE RIVER BASIN

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03571850 TENNESSEE RIVER AT SOUTH PITTSBURG, TN

LOCATION.--Lat 35°00'41", long 85°41'51", Marion County, Hydrologic Unit 06030001, on right bank, 0.5 mi downstream from Tennessee State Highway 156, 0.5 mi downstream from Battle Creek, 0.5 mi east of South Pittsburg, 4.6 mi downstream from Sequatchie River, 6.5 mi downstream from Nickajack Dam, and at mile 418.2.

DRAINAGE AREA.--22,640 mi², approximately.

PERIOD OF RECORD.--July 1930 to September 1987 (discontinued). Published as "at Hales Bar, near Chattanooga, Tenn." July 1930 to July 1966.

REVISED RECORDS.--WSP 853: Drainage area. WSP 973: 1942. WSP 1306 (monthly runoff). WSP 1386: 1932-34.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 581.01 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 13, 1932, at site 12.9 mi upstream at datum 7.85 ft higher. Feb. 13, 1932, to July 17, 1966, at site 11.5 mi upstream at datum 7.50 ft higher. Since Jan. 27, 1939, auxiliary water-stage recorder at site 10.6 mi downstream.

REMARKS.--Estimated daily discharges: Feb. 23, 24. Records good. Flow regulated since 1936 by increasing number of reservoirs above station (see p. 218 and Water Resources Data for adjoining states).

AVERAGE DISCHARGE.--57 years, 37,660 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 315,000 ft³/s, Mar. 18, 1973, gage height, 34.33 ft; minimum daily, 2,900 ft³/s, Nov. 1, 15, 1953; minimum gage height, 1.21 ft, Oct. 27, 1931, site and datum used 1932-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 44.6 ft, March 1867, site and datum used 1932-65. Flood of Mar. 8, 1917, reached a stage of 37.4 ft, site and datum used 1932-65, discharge, 320,000 ft³/s, from rating curve extended above 225,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 153,000 ft³/s, Feb. 28; maximum gage height, 23.99 ft, Feb. 28; minimum daily discharge, 11,100 ft³/s, Sept. 5; minimum gage height, 11.12 ft, June 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21500	16800	61700	50000	51000	114000	39200	32800	32100	31300	35300	25200
2	25200	16100	52500	50000	51700	93900	33100	23700	35500	33000	35900	20200
3	25600	28100	52000	49700	55300	94000	33900	26700	32900	26000	36500	22800
4	20000	26100	47300	41200	55200	87600	26100	36100	26000	13400	37600	20300
5	20600	33100	47300	40100	52700	83400	16700	26800	23200	19600	32600	11100
6	19800	29900	47600	41900	53700	70200	22400	35300	17600	32600	34400	13900
7	22700	25900	41000	43800	52600	61900	25600	30300	18000	38600	37900	24500
8	18900	24900	43500	42600	51800	61300	24400	32200	34100	45200	35500	30000
9	17400	26600	55100	41400	52100	67200	19600	21500	35200	40900	24400	29800
10	17000	31000	73800	28700	50300	69400	16300	14000	29200	32400	32400	28100
11	13300	29300	67800	31000	47300	65300	14000	35000	27400	28800	37200	27900
12	13200	29300	63800	30500	43000	61100	14000	34800	30500	24600	41400	19600
13	17100	38500	61600	29800	40300	52100	21400	32500	23500	34800	36500	15600
14	20100	32700	52500	33200	29700	48900	24500	31500	19200	37200	37300	29200
15	24000	29300	52500	22500	20900	48300	36200	27100	31100	36800	24600	27300
16	27600	34800	54400	27700	38900	50100	34000	14500	25900	37200	27000	33000
17	29200	35600	51300	25500	47700	53400	37400	13800	33000	38800	31600	34100
18	12200	37400	54100	26900	44000	49600	35500	30200	30100	28900	28100	22900
19	11400	37000	52100	68100	46200	42000	39100	30600	18400	23400	34800	19800
20	30700	45000	51900	79500	51200	38100	42800	33900	21300	34900	36600	18200
21	27900	30000	51500	64300	50600	36200	41200	36700	18000	37100	35800	29600
22	32400	20500	56100	56700	32500	28200	40800	32000	25000	32200	28900	29300
23	29200	23600	51300	53900	45000	34100	33500	33000	33500	32100	16900	28100
24	30500	57100	52600	52900	55000	38400	32000	20100	31100	34100	31400	27900
25	33300	72100	54100	55200	53000	33300	34200	24200	30900	32700	31700	27500
26	42500	69200	52000	66500	68800	30500	25700	36900	17900	25100	32100	12300
27	40500	69800	51100	60600	113000	33000	34900	36900	14200	33500	34500	15700
28	33600	73200	47000	52900	139000	20500	37300	38000	16300	37400	25600	25800
29	28300	60400	49800	53300	---	18000	37600	33900	28400	35800	22400	31000
30	30800	56500	54800	52100	---	32500	36900	21100	32500	35500	14200	20700
31	28800	---	50300	56800	---	34800	---	24300	---	33400	28200	---
TOTAL	765300	1139800	1654400	1429300	1492500	1651300	910300	900400	792000	1007300	979300	721400
MEAN	24690	37990	53370	46110	53300	53270	30340	29050	26400	32490	31590	24050
MAX	42500	73200	73800	79500	139000	114000	42800	38000	35500	45200	41400	34100
MIN	11400	16100	41000	22500	20900	18000	14000	13800	14200	13400	14200	11100
CAL YR 1986	TOTAL	9213940	MEAN	25240	MAX	73800	MIN	9310				
WTR YR 1987	TOTAL	13443300	MEAN	36830	MAX	139000	MIN	11100				

TENNESSEE RIVER BASIN

03578000 ELK RIVER NEAR PELHAM, TN

LOCATION.--Lat 35°17'48", long 85°52'12", Grundy County, Hydrologic Unit 06030003, on right bank at downstream side of bridge on U.S. Highway 41, 1.1 mi southeast of Pelham, 1.8 mi upstream from Caldwell Creek, and at mile 194.2.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--October 1951 to current year. Prior to November 1951, monthly discharges only, published in WSP 1726.

REVISED RECORDS.--WRD TN 1973: 1963(P), 1965 (M), 1966(P), 1969(M), 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 981.62 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-8. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--36 years, 137 ft³/s, 28.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s, Mar. 16, 1973, gage height, 14.08 ft; minimum, 1.0 ft³/s, Sept. 27, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 26	1600	2,030	10.12	Jan. 19	1300	1,700	9.81
Dec. 10	0100	*2,970	*10.85	Feb. 27	1800	1,690	9.80

Minimum discharge, 1.6 ft³/s, Aug. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	61	170	89	104	1090	310	38	14	6.6	4.1	1.9
2	11	53	154	80	376	535	222	35	11	6.0	4.7	1.9
3	10	47	144	69	415	314	188	34	11	6.5	4.5	2.0
4	10	43	119	63	274	224	173	33	9.4	7.4	4.5	2.0
5	10	40	100	58	201	178	158	30	8.4	6.7	5.0	1.9
6	10	42	87	53	162	146	145	28	7.7	6.5	4.8	2.0
7	10	43	78	49	136	123	129	26	7.0	6.1	3.8	2.3
8	10	91	167	46	116	116	114	23	6.5	5.8	4.5	3.0
9	9.8	296	1740	44	96	182	100	21	6.1	5.7	4.7	3.3
10	9.1	479	2100	46	82	166	88	19	5.9	6.2	4.3	2.6
11	8.8	273	998	47	74	132	90	18	5.6	6.0	3.6	3.0
12	14	277	537	42	70	119	107	16	5.4	6.0	3.3	3.3
13	162	195	326	41	63	106	110	16	6.3	6.9	2.9	3.8
14	183	142	235	42	61	95	129	15	5.6	6.9	2.6	3.9
15	121	126	191	50	93	87	598	15	5.4	5.7	2.5	2.7
16	78	120	154	62	392	80	409	14	5.4	5.8	2.3	2.5
17	55	104	144	54	381	77	294	15	7.7	5.4	2.4	2.3
18	42	90	238	153	259	82	218	16	8.1	4.9	3.1	2.5
19	33	78	203	1290	188	130	169	14	8.8	4.5	3.1	2.5
20	28	150	167	857	154	116	136	13	7.6	4.2	2.1	2.3
21	24	234	136	372	147	102	115	13	8.3	4.1	1.9	2.2
22	21	169	115	255	217	91	99	12	21	4.0	1.8	2.0
23	19	176	128	195	560	81	86	12	21	3.9	2.0	2.1
24	18	844	403	152	372	75	76	13	25	3.8	1.9	2.1
25	434	824	365	201	256	78	68	17	17	3.6	2.0	2.2
26	803	1360	281	390	198	69	60	14	13	3.5	2.3	2.3
27	332	1150	214	263	1140	62	54	13	11	3.3	2.1	2.2
28	181	499	172	203	1220	61	49	12	9.0	3.9	2.1	2.2
29	124	289	140	171	---	56	45	11	7.7	4.4	2.0	2.7
30	94	209	121	150	---	281	42	9.7	6.7	4.6	2.0	3.7
31	74	---	102	122	---	520	---	16	---	4.3	1.9	---
TOTAL	2950.7	8504	10229	5709	7807	5574	4581	581.7	292.6	163.2	94.8	75.4
MEAN	95.2	283	330	184	279	180	153	18.8	9.75	5.26	3.06	2.51
MAX	803	1360	2100	1290	1220	1090	598	38	25	7.4	5.0	3.9
MIN	8.8	40	78	41	61	56	42	9.7	5.4	3.3	1.8	1.9
CFSM	1.45	4.32	5.03	2.81	4.25	2.74	2.33	.29	.15	.08	.05	.04
IN.	1.67	4.82	5.80	3.24	4.43	3.16	2.60	.33	.17	.09	.05	.04

CAL YR 1986 TOTAL 38087.0 MEAN 104 MAX 2100 MIN 3.2 CFMS 1.59 IN. 21.59
WTR YR 1987 TOTAL 46562.1 MEAN 128 MAX 2100 MIN 1.8 CFMS 1.94 IN. 26.40

TENNESSEE RIVER BASIN

195

03584500 ELK RIVER NEAR PROSPECT, TN

LOCATION.--Lat 35°01'39", long 86°56'52", Giles County, Hydrologic Unit 06030004, on right bank 50 ft upstream from county road bridge, 1.1 mi downstream from Richland Creek, 3.2 mi east of Prospect, 5.4 mi upstream from Ford Creek, 7.9 mi upstream from Tennessee-Alabama State line, and at mile 41.5.

DRAINAGE AREA.--1,784 mi².

PERIOD OF RECORD.--July 1904 to February 1908, January 1919 to current year. Published as "near Elkmont, Ala." 1904-8, 1919-34. Record for both sites published January to March 1934.

REVISED RECORDS.--WSP 523: 1904-8, 1919-20. WSP 823: Drainage area. WSP 1436: 1920-22, 1923(M), 1924, 1927, 1929, 1931-32(M).

GAGE.--Water-stage recorder. Datum of gage is 563.29 ft above National Geodetic Vertical Datum of 1929. July 1, 1904, to Feb. 2, 1908, and Jan. 20, 1919, to Mar. 31, 1934, nonrecording gage 11.9 mi downstream at datum 13.52 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Woods Reservoir (station 03579000) since May 1952, and Tims Ford Lake (station 03580740) since December 1970. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--71 years (water years 1905-7, 1920-87), 3,041 ft³/s, 23.15 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 117,000 ft³/s, Mar. 17, 1973, gage height, 40.12 ft, from rating curve extended above 63,000 ft³/s on basis of slope-area measurement at gage height 38.17 ft and contracted-opening measurement at gage height 38.96 ft; minimum, 78 ft³/s, Sept. 29, 1961 (caused by highway construction upstream).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1902 reached a stage of 40.9 ft, discharge, 130,000 ft³/s, and may have been equaled by a flood in March 1897, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,500 ft³/s, at 2000 hours Dec. 10, gage height, 29.16 ft; minimum, 132 ft³/s, Sept. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	1810	6320	4780	2360	25300	3650	754	481	322	230	158
2	547	1410	6020	4220	4200	12000	3900	723	456	578	236	142
3	558	1050	5770	3930	6660	9070	2480	707	498	725	231	134
4	531	972	5520	3190	4980	7690	2680	1310	433	1580	341	132
5	516	1390	5270	2360	3830	6840	2360	1530	371	1050	302	219
6	516	1590	5130	2270	3380	6360	1850	741	331	688	326	249
7	504	2310	4470	2080	2660	5970	1680	657	308	549	405	182
8	492	8120	5920	2330	2960	5060	1580	612	297	471	332	203
9	503	20000	21600	2250	2460	5030	1500	570	284	427	288	260
10	477	24100	30800	2480	2500	4220	1550	539	271	447	261	1760
11	489	9850	29300	1300	2890	4380	1390	514	264	459	258	1920
12	573	4720	11300	1240	2740	4660	1250	503	256	417	255	2070
13	895	3620	8080	1520	2540	4330	1110	495	268	458	238	1780
14	1480	3650	7000	1600	2630	4610	1710	477	331	640	237	557
15	1230	3520	6440	1750	2340	3990	3160	458	328	550	228	689
16	892	2830	6040	1360	2530	2960	2830	478	339	467	212	2280
17	755	2260	5810	1110	3840	2520	2650	471	435	396	199	2350
18	709	2260	5860	1560	3630	3000	2370	462	500	354	202	2480
19	645	2660	5740	10800	3360	3820	2070	441	437	322	242	2380
20	598	3350	5540	10600	3020	3370	1800	431	391	296	283	1770
21	584	4060	5340	5420	3090	3330	1670	417	395	285	258	439
22	568	3460	5180	4580	3580	2560	2460	584	379	279	231	494
23	559	4650	6760	3930	9960	2420	2440	798	400	282	206	940
24	584	12900	15000	3380	8330	2320	2350	863	477	304	192	306
25	2910	14600	10800	4790	5770	2230	1150	727	497	327	184	229
26	3050	22400	8970	8610	5530	1950	1010	589	487	292	182	207
27	1870	25000	7490	6100	21900	1820	936	540	411	271	180	194
28	1590	11600	5840	4960	28100	1740	893	485	345	252	184	184
29	2190	7800	4880	4240	---	1610	844	431	300	237	177	204
30	2160	6830	5130	3810	---	3620	796	495	264	230	180	536
31	1890	---	4980	2710	---	3620	---	548	---	225	178	---
TOTAL	31341	214772	268300	115260	151770	152400	58119	19350	11234	14180	7458	25448
MEAN	1011	7159	8655	3718	5420	4916	1937	624	374	457	241	848
MAX	3050	25000	30800	10800	28100	25300	3900	1530	500	1580	405	2480
MIN	476	972	4470	1110	2340	1610	796	417	256	225	177	132

CAL YR 1986 TOTAL 875295 MEAN 2398 MAX 30800 MIN 174
WTR YR 1987 TOTAL 1069630 MEAN 2930 MAX 30800 MIN 132

03588000 SHOAL CREEK AT LAWRENCEBURG, TN

LOCATION.--Lat 35°14'40", long 87°21'02", Lawrence County, Hydrologic Unit 06030005, on left bank at Lawrenceburg municipal water-supply intake, 500 ft downstream from Little Shoal Creek, 0.5 mi upstream from Crowson Creek, 0.9 mi west of courthouse in Lawrenceburg, and at mile 55.9.

DRAINAGE AREA.--55.4 mi².

PERIOD OF RECORD.--June 1932 to March 1934, March 1967 to current year.

REVISED RECORDS.--WSP 1306: Drainage area. WSP 2110: 1933.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 784.41 ft above National Geodetic Vertical Datum of 1929. June 7, 1932, to Mar. 31, 1934, nonrecording gage at site 500 ft downstream at datum 4.01 ft lower. Mar. 22, 1967, to Sept. 30, 1970, at site 1,300 ft downstream at datum 7.71 ft lower.

REMARKS.--No estimated daily discharges. Records good. About 6 ft³/s were diverted by Lawrenceburg water plant, some of which was returned to the stream through sewage treatment plant 0.6 mi downstream. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--21 years (water years 1933, 1968-87), 103 ft³/s, 25.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft³/s, Mar. 15, 1973, gage height, 18.71 ft, from rating curve extended above 6,700 ft³/s on basis of computation of peak flow over dam; minimum 13 ft³/s, Aug. 24, Sept. 1, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1846, 20.0 ft present site and datum, Mar. 28, 1902, discharge, 23,000 ft³/s; flood of Mar. 21, 1955, reached a stage of 17.2 ft, present site and datum, discharge 18,000 ft³/s, from report of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	0200	5,440	8.96	Dec. 9	1100	3,690	7.21
Nov. 26	0115	*6,690	*10.09	Feb. 27	0200	4,450	8.00
Dec. 9	0515	3,250	6.76	Feb. 28	0900	2,770	6.29

Minimum discharge, 13 ft³/s, Aug. 24, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	19	86	75	71	398	71	34	31	34	25	16
2	22	18	80	69	235	244	55	36	31	39	20	16
3	22	18	67	69	112	218	55	34	31	109	19	15
4	22	19	58	66	90	154	57	67	29	49	19	16
5	22	19	52	65	82	133	62	36	31	35	40	16
6	22	17	50	63	77	115	60	34	31	29	20	18
7	20	35	49	59	75	119	58	34	31	26	18	53
8	20	911	438	57	70	145	58	31	30	25	20	26
9	19	1800	2230	59	67	146	57	32	31	35	19	17
10	20	104	393	58	66	116	53	32	30	27	19	21
11	20	155	179	55	65	95	49	30	29	25	19	72
12	28	81	131	53	64	90	47	31	30	24	18	92
13	25	54	104	51	62	87	62	31	29	33	17	48
14	18	47	93	50	89	85	104	29	31	26	16	28
15	18	48	86	49	152	81	74	29	30	24	17	22
16	19	43	80	49	198	80	74	28	31	22	18	27
17	18	39	83	49	114	89	69	29	41	22	23	22
18	18	36	80	124	103	127	52	27	32	22	20	20
19	18	33	70	331	82	113	48	29	35	22	18	22
20	18	51	63	100	69	87	45	28	32	22	17	21
21	18	40	59	83	75	84	44	28	31	21	16	19
22	16	36	57	78	543	80	42	25	43	22	16	19
23	17	250	487	71	297	77	48	31	31	22	16	19
24	51	426	386	68	180	93	47	37	27	22	15	19
25	37	729	156	286	137	80	47	31	66	21	15	19
26	21	1710	121	141	513	64	47	32	50	22	15	18
27	20	172	104	92	1590	62	49	32	28	21	16	18
28	19	113	95	85	1440	61	49	30	28	19	16	19
29	20	94	88	82	---	63	47	31	28	20	17	41
30	13	85	84	81	---	78	44	34	28	19	17	21
31	19	---	79	74	---	81	---	31	---	19	17	---
TOTAL	667	7202	6188	2692	6718	3545	1674	1003	986	878	578	800
MEAN	21.5	240	200	86.8	240	114	55.8	32.4	32.9	28.3	18.6	26.7
MAX	51	1800	2230	331	1590	398	104	67	66	109	40	92
MIN	16	17	49	49	62	61	42	25	27	19	15	15
CFSM	.39	4.33	3.60	1.57	4.33	2.06	1.01	.58	.59	.51	.34	.48
IN.	.45	4.84	4.16	1.81	4.51	2.38	1.12	.67	.66	.59	.39	.54

CAL YR 1986	TOTAL 26825	MEAN 73.5	MAX 2230	MIN 16	CFSM 1.33	IN. 18.01
WTR YR 1987	TOTAL 32931	MEAN 90.2	MAX 2230	MIN 15	CFSM 1.63	IN. 22.11

TENNESSEE RIVER BASIN

197

03588400 CHISHOLM CREEK AT WESTPOINT, TN

LOCATION.--Lat 35°08'04", long 87°31'45", Lawrence County, Hydrologic Unit 06030005, on left bank at downstream side of pier of county road bridge, 0.3 mi northeast of Westpoint, and at mile 1.2.

DRAINAGE AREA.--43.0 mi².

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--25 years, 84.2 ft³/s, 26.59 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft³/s, Mar. 15, 1973, gage height, 14.74 ft, from rating curve extended above 4,100 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 7.8 ft³/s, Aug. 26, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	1545	1,490	7.23	Dec. 9	1600	*2,130	*8.15
Nov. 9	0245	1,960	7.94	Feb. 27	0530	2,070	8.08
Nov. 26	0445	1,790	7.70	Feb. 28	1530	1,610	7.43

Minimum discharge, 7.8 ft³/s, Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	90	56	54	468	58	33	27	18	13	11
2	14	17	76	49	99	237	58	32	24	21	14	9.9
3	14	16	60	43	89	177	59	32	22	18	14	9.2
4	14	16	49	39	82	144	55	47	20	24	14	9.6
5	13	22	41	36	76	126	52	46	18	61	17	10
6	13	22	37	33	68	113	50	36	18	29	16	11
7	13	36	34	32	62	102	49	34	17	23	15	13
8	13	665	135	30	56	100	47	31	17	21	14	14
9	13	1030	1310	29	48	93	44	28	16	26	13	15
10	13	228	484	33	43	81	42	27	16	31	12	13
11	13	270	242	29	40	73	44	27	16	23	16	40
12	16	195	170	27	38	66	45	30	16	21	15	48
13	31	136	133	26	35	61	45	28	26	20	14	41
14	20	105	109	25	42	58	94	26	21	33	13	39
15	16	88	93	25	45	56	92	26	20	22	11	23
16	14	68	80	25	119	54	99	29	19	19	11	22
17	13	53	76	24	125	51	95	28	20	18	10	22
18	13	43	67	43	117	61	88	32	20	17	12	18
19	13	36	56	119	104	80	81	34	19	16	13	21
20	13	52	49	94	93	66	74	29	20	15	12	24
21	13	45	43	83	88	63	67	28	18	14	10	19
22	13	39	39	76	236	60	62	28	17	16	9.6	17
23	13	91	114	64	340	58	57	25	17	17	9.1	17
24	29	248	241	57	209	71	51	24	20	29	9.1	17
25	146	270	191	93	156	66	46	25	41	20	8.8	17
26	58	905	153	113	214	60	43	29	39	16	8.5	17
27	32	260	126	101	1130	59	40	27	20	15	8.5	16
28	24	168	105	92	992	56	38	24	16	15	11	16
29	21	131	89	82	---	54	35	22	14	14	12	34
30	19	106	76	73	---	64	34	26	13	14	11	34
31	18	---	64	61	---	67	---	38	---	13	10	---
TOTAL	682	5378	4632	1712	4800	2945	1744	931	607	659	376.6	617.7
MEAN	22.0	179	149	55.2	171	95.0	58.1	30.0	20.2	21.3	12.1	20.6
MAX	146	1030	1310	119	1130	468	99	47	41	61	17	48
MIN	13	16	34	24	35	51	34	22	13	13	8.5	9.2
CFSM	.51	4.17	3.47	1.28	3.99	2.21	1.35	.70	.47	.49	.28	.48
IN.	.59	4.65	4.01	1.48	4.15	2.55	1.51	.81	.53	.57	.33	.53

CAL YR 1986 TOTAL 22909.9 MEAN 62.8 MAX 1310 MIN 9.9 CFSM 1.46 IN. 19.81
WTR YR 1987 TOTAL 25084.3 MEAN 68.7 MAX 1310 MIN 8.5 CFSM 1.60 IN. 21.70

03588500 SHOAL CREEK AT IRON CITY, TN

LOCATION.--Lat 35°01'27", long 87°34'44", Lawrence County, Hydrologic Unit 06030005, near center of span on downstream side of bridge on county road, 400 ft downstream from Holly Creek, 1,350 ft upstream from Louisville and Nashville Railroad bridge, 1,350 ft northeast of Iron City Post Office, and at mile 22.3.

DRAINAGE AREA.--348 mi².

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1113: 1927(M). WSP 1436: 1926(M), 1927-29, 1930(M), 1932, 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 534.22 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 25, 1931, nonrecording gage at railroad bridge, 1,350 ft downstream at datum 0.85 ft lower. Feb. 25, 1931, to Sept. 30, 1933, nonrecording gage at site 825 ft downstream and Oct. 1, 1933, to Sept. 30, 1957, water-stage recorder at site 750 ft downstream at datum 0.69 ft higher.

REMARKS.--Estimated daily discharges: July 3-9. Records good. Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--62 years, 642 ft³/s, 25.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 132,000 ft³/s, Mar. 21, 1955, gage height, 27.25 ft, site and datum then in use, present site and datum, 28.4 ft from high water profile, rating curve extended above 50,000 ft³/s on basis of slope-area measurement made 1,500 ft downstream; minimum, 38 ft³/s, Aug. 31, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1902 reached a stage about 3 ft higher than that of Mar. 21, 1955, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	1000	*15,300	*15.93	Feb. 27	1300	12,100	14.68
Nov. 26	1330	10,900	14.14	Feb. 28	2200	10,200	13.76
Dec. 9	2100	13,600	15.28				

Minimum discharge, 76 ft³/s, Sept. 3, 4, 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	140	731	559	535	5450	424	261	215	176	108	88
2	114	136	653	516	753	2090	412	252	192	195	116	82
3	114	133	562	467	820	1430	409	256	181	350	121	79
4	112	132	477	440	707	1120	384	322	162	680	111	79
5	111	147	423	415	648	919	372	426	162	370	140	78
6	106	167	388	388	599	799	387	312	166	230	173	78
7	107	178	365	381	559	706	360	286	146	185	143	83
8	106	2370	1010	352	531	700	352	262	144	170	117	99
9	106	11700	9530	355	474	713	342	249	146	160	108	124
10	106	2200	6080	373	433	619	329	235	145	327	106	99.9
11	105	1520	2150	341	416	548	337	230	145	233	141	230
12	113	1360	1470	316	426	503	336	236	144	184	129	382
13	192	926	1130	315	385	478	330	232	195	169	115	412
14	182	711	933	301	404	454	502	225	194	237	107	385
15	142	622	819	302	483	447	605	212	219	201	100	218
16	123	523	731	292	853	421	596	219	180	164	96	157
17	115	452	686	283	974	411	573	237	184	148	94	161
18	111	396	656	374	860	473	528	224	201	137	98	152
19	107	354	585	1320	765	606	481	248	198	129	127	138
20	105	458	536	1020	701	552	440	224	201	124	111	151
21	103	506	490	820	667	521	409	216	188	118	97	131
22	103	430	457	722	1110	490	380	245	168	122	91	118
23	103	720	742	636	2830	474	364	210	208	131	88	115
24	126	2510	2490	559	1630	503	348	212	196	221	85	114
25	719	2000	1670	735	1230	512	325	219	215	159	83	114
26	418	7700	1260	1160	1270	455	312	214	475	134	81	111
27	263	2410	1020	918	8540	444	298	205	260	123	81	110
28	204	1400	871	809	6570	416	290	188	178	130	91	108
29	176	1040	762	731	---	412	281	183	159	123	95	114
30	159	846	688	670	---	428	270	179	147	117	91	255
31	148	---	617	590	---	471	---	249	---	111	89	---
TOTAL	4913	44187	40982	17460	36173	24565	11776	7468	5714	6058	3333	4565.9
MEAN	158	1473	1322	563	1292	792	393	241	190	195	108	152
MAX	719	11700	9530	1320	8540	5450	605	426	475	680	173	412
MIN	103	132	365	283	385	411	270	179	144	111	81	78
CFSM	.46	4.23	3.80	1.62	3.71	2.28	1.13	.69	.55	.56	.31	.44
IN.	.53	4.72	4.38	1.87	3.87	2.63	1.26	.80	.61	.65	.36	.49

CAL YR 1986 TOTAL 183028.0 MEAN 501 MAX 11700 MIN 81 CFSM 1.44 IN. 19.56
WTR YR 1987 TOTAL 207194.9 MEAN 568 MAX 11700 MIN 78 CFSM 1.63 IN. 22.14

TENNESSEE RIVER BASIN

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03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LL), TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°03'54", long 88°15'08", Hardin County, Hydrologic Unit 06040001, at downstream end of lockwall in lower pool at Pickwick Landing Dam, 16.8 mi upstream from Savannah, Tennessee, and at mile 206.7.

DRAINAGE AREA.--32,820 mi², approximately.

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1976 to September 1981.

WATER TEMPERATURE: April 1976 to September 1981.

REMARKS.--Flow regulated by Pickwick Landing Dam and many other reservoirs above the station. Continuous discharge records are published under station 03593500 Tennessee River at Savannah, Tn.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 326 microsiemens, Sept. 18, 19, 1978; minimum, 116 microsiemens, Apr. 27, 1979.

WATER TEMPERATURES: Maximum, 31.5°C, July 7, 1978; minimum, 2.0°C, Feb. 8, 9, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT 24...	0915	36800	218	7.90	20.5	754	5.0	7.9	89	--	K7	77
JAN 29...	1130	98900	160	7.80	6.0	749	13	11.7	96	98	45	64
APR 30...	1130	44000	168	8.00	18.5	754	2.0	9.7	106	K6	K12	71
AUG 06...	1135	39900	190	7.75	30.0	759	2.6	4.1	55	K2	360	71

DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LILITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 24...	17	22	5.4	13	26	0.7	2.1	61	1.5	20	14	0.10
JAN 29...	10	20	3.5	6.5	18	0.4	1.7	54	1.7	16	7.9	<0.10
APR 30...	9	22	3.9	5.5	14	0.3	1.5	62	1.2	13	7.2	<0.10
AUG 06...	5	20	5.1	8.7	21	0.5	1.8	66	2.3	15	10	0.10

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 24...	3.9	132	120	0.18	13100	<0.010	0.180	0.030	0.030	0.50	0.060	0.030
JAN 29...	5.1	96	94	0.13	25600	<0.010	0.630	0.080	0.060	0.50	0.070	0.040
APR 30...	2.9	86	93	0.12	10200	0.010	0.400	0.030	0.050	0.60	0.030	0.020
AUG 06...	3.5	114	100	0.16	12300	<0.010	<0.100	0.010	0.020	0.70	0.050	0.040

K--Results based on non-ideal colony count.

TENNESSEE RIVER BASIN

03593005 TENNESSEE RIVER AT PICKWICK LANDING DAM (LL), TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
OCT 24...	0.020	20	1	35	<0.5	<1	<1	<3	3	4	<5	5
JAN 29...	0.030	80	<1	29	<0.5	1	<1	<3	2	86	<5	5
APR 30...	0.010	<10	<1	21	<0.5	<1	<1	<3	3	9	<5	<4
AUG 06...	0.020	20	1	23	<0.5	<1	<1	<3	3	7	<5	4

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SED- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	<1	<0.1	<10	3	<1	<1	78	<6	9	13	1290	84
JAN 29...	11	0.8	<10	<1	<1	<1	57	<6	9	11	2940	94
APR 30...	2	<0.1	<10	<1	<1	<1	62	<6	6	9	1070	81
AUG 06...	8	0.1	<10	2	<1	<1	71	<6	7	12	1290	58

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DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15700	28600	123000	68800	69100	200000	47200	36000	28600	9600	38600	12500
2	18100	25000	115000	68900	72000	192000	41000	29300	34600	16600	32800	15500
3	18500	30100	97800	64600	75800	189000	42600	31100	25900	18900	31100	13600
4	12200	28500	71900	56400	75900	156000	38800	30100	27200	19900	38400	11600
5	24700	31800	66100	49500	72700	140000	25900	26100	18500	9750	34000	16400
6	24200	32500	66300	42900	69200	126000	20400	31200	16100	35100	31400	11700
7	18700	30100	67300	42700	68600	113000	30100	30300	13000	32200	39200	11400
8	16600	28100	75600	50900	68600	111000	30000	24300	36000	37300	44700	25300
9	12600	38300	103000	50900	68100	109000	21300	7880	32700	32100	28100	28800
10	12900	62100	120000	44800	60300	108000	18700	8250	37300	37700	29100	27700
11	10100	68100	118000	32400	44400	106000	12800	31500	23000	31200	31800	27000
12	9540	68400	115000	33200	55100	105000	7460	38900	29600	33600	33600	22500
13	13600	68000	111000	32200	55700	92000	13800	33700	30600	34800	30100	29100
14	24700	64000	111000	32900	45500	60200	16400	33600	24500	36700	37700	32900
15	27900	58200	109000	26800	35700	72400	19900	30900	28600	22300	43900	41300
16	30000	44600	109000	32100	40100	72900	21000	11500	31500	27300	27200	34000
17	30200	46400	108000	28900	53200	72200	26200	8250	28200	35700	25300	25200
18	9340	53200	102000	25800	62600	44500	28700	24100	34200	35600	29200	26100
19	9100	53900	85600	58000	64000	44100	36100	28400	32300	24200	29500	19600
20	29700	54300	70600	92800	64500	42700	50400	28500	27500	32800	30000	15300
21	27800	54300	69800	99800	65300	51400	55300	33800	39500	30200	28800	21900
22	29800	49700	69100	101000	53100	45000	39700	39100	13200	28900	29900	34400
23	33100	49500	74500	101000	61100	37800	41300	15100	29600	20900	21200	31100
24	31800	66900	78800	101000	68600	41400	49300	9000	24100	30100	27200	24000
25	32300	97600	76800	101000	72100	38700	28800	28300	30300	30100	31400	18100
26	47500	128000	77200	102000	89000	51700	24900	45300	24000	24000	27900	10800
27	44100	143000	76900	102000	136000	56100	37800	37500	17300	30700	22700	10900
28	47300	149000	76700	101000	193000	30600	36500	42700	14200	31000	20900	18900
29	47800	143000	76500	109000	---	17700	35500	39000	15700	31100	18300	19300
30	48000	129000	72900	93600	---	29500	34600	38500	14300	28200	17700	18400
31	48500	---	69100	69500	---	41100	---	28600	---	34100	22800	---
TOTAL	806380	1924200	2763500	2016400	1959300	2597000	932460	880780	782100	882650	934500	655300
MEAN	26010	64140	89150	65050	69970	83770	31080	28410	26070	28470	30150	21840
MAX	48500	149000	123000	109000	193000	200000	55300	45300	39500	37700	44700	41300
MIN	9100	25000	66100	25800	35700	17700	7460	7880	13000	9600	17700	10800
CAL YR 1986	TOTAL 11661700		MEAN 31950		MAX 149000		MIN 1700					
WTR YR 1987	TOTAL 17134600		MEAN 46940		MAX 200000		MIN 7460					

TENNESSEE RIVER BASIN

03596000 DUCK RIVER BELOW MANCHESTER, TN

LOCATION.--Lat 35°28'15", long 86°07'18", Coffee County, Hydrologic Unit 06040002, on right bank 50 ft downstream from Powers Bridge, 2.0 mi southwest of Manchester, 3.2 mi downstream from Little Duck River, 7.0 mi upstream from Crumpton Creek, and at mile 265.4.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--April 1934 to current year.

REVISED RECORDS.--WSP 1436: 1946-47.

GAGE.--Water-stage recorder. Datum of gage is 878.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation for short periods during low flow by small reservoirs above station. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--53 years, 183 ft³/s, 23.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s, May 27, 1973, gage height, 20.95 ft, from rating curve extended above 12,000 ft³/s, based on contracted-opening measurement at gage height 15.04 ft, and slope-area measurements at gage heights 18.93 ft and 20.95 ft; minimum, 8.0 ft³/s, Aug. 12, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 23.2 ft from floodmarks by Tennessee Valley Authority, discharge, about 50,000 ft³/s. Flood in March 1902 reached approximately same stage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 9	1330	4,290	9.38	Feb. 27	1115	*5,760	*10.97
Dec. 9	1930	4,020	9.05				

Minimum discharge, 10 ft³/s, Aug. 13, result of upstream regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	46	302	121	134	981	162	46	51	26	25	17
2	27	44	275	113	501	495	127	45	40	32	28	17
3	27	42	226	102	526	350	121	45	32	27	29	17
4	26	42	172	96	305	270	115	43	29	29	28	17
5	25	46	137	91	220	227	102	42	27	24	47	17
6	25	48	117	85	177	200	92	41	25	23	44	17
7	24	103	105	81	153	178	87	41	25	22	31	20
8	24	950	418	77	136	220	83	40	24	22	25	23
9	25	3280	3100	75	116	602	80	39	23	22	22	35
10	24	856	1930	77	105	386	74	38	23	22	23	19
11	24	415	693	77	100	258	77	38	23	24	21	19
12	36	359	459	73	97	230	83	38	23	28	20	19
13	83	238	317	72	92	201	87	40	29	27	20	106
14	97	175	243	72	100	175	114	42	26	35	19	52
15	65	162	210	81	161	157	323	40	24	25	19	20
16	47	155	185	87	540	149	200	38	25	23	19	18
17	41	138	182	79	431	141	149	37	29	22	19	18
18	37	121	272	151	309	282	121	37	34	21	20	18
19	34	104	224	1460	233	360	98	37	26	20	26	18
20	32	119	179	539	189	235	84	36	26	19	19	17
21	31	152	150	334	221	181	75	36	26	19	18	17
22	30	118	132	264	633	151	68	36	29	20	18	17
23	29	174	227	205	1180	131	63	36	25	20	18	16
24	36	1090	883	162	451	122	59	37	23	20	18	16
25	227	666	489	316	305	120	56	41	24	19	18	16
26	187	1510	321	574	269	111	54	38	34	19	18	16
27	110	641	240	277	3710	103	52	36	32	20	18	15
28	80	352	196	205	1320	98	50	35	24	23	18	16
29	64	251	167	200	---	91	48	36	23	23	17	20
30	55	210	148	191	---	143	47	68	22	23	17	23
31	50	---	132	158	---	225	---	127	---	23	17	---
TOTAL	1650	12607	12831	6495	12714	7573	2951	1329	826	722	699	676
MEAN	53.2	420	414	210	454	244	98.4	42.9	27.5	23.3	22.5	22.5
MAX	227	3280	3100	1460	3710	981	323	127	51	35	47	106
MIN	24	42	105	72	92	91	47	35	22	19	17	15
CFSM	.50	3.93	3.87	1.96	4.24	2.28	.92	.40	.26	.22	.21	.21
IN.	.57	4.38	4.46	2.26	4.42	2.63	1.03	.46	.29	.25	.24	.24
CAL YR 1986	TOTAL 59066	MEAN 162	MAX 3280	MIN 21	CFSM 1.51	IN. 20.53						
WTR YR 1987	TOTAL 61073	MEAN 167	MAX 3710	MIN 15	CFSM 1.56	IN. 21.23						

03598000 DUCK RIVER NEAR SHELBYVILLE, TN

LOCATION.--Lat 35°28'49", long 86°29'57", Bedford County, Hydrologic Unit 06040002, on right bank 150 ft downstream from Sims Bridge, 2.1 mi upstream from Sugar Creek, 2.2 mi west of Shelbyville, 2.9 mi downstream from Flat Creek, and at mile 216.2.

DRAINAGE AREA.--481 mi².

PERIOD OF RECORD.--October 1933 to current year. Prior to April 1934, monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 783: 1934. WSP 853: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 683.51 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 2, 1966, at datum 2.0 ft higher.

REMARKS.--No estimated daily discharges. Records good. Prior to 1948, diurnal fluctuation caused by powerplant upstream. Flow regulated by Normandy Reservoir (station 03596460) since January 1976. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--54 years, 808 ft³/s, 22.81 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,900 ft³/s, Feb. 13, 1948, gage height, 38.40 ft, present datum, from floodmarks, from rating curve extended above 35,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 5.0 ft³/s, Aug. 23, 1936; minimum daily, 20 ft³/s, Sept. 2, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 39.6 ft present datum, discharge, about 70,000 ft³/s, from high water profile by Tennessee Valley Authority. Flood in March 1902 reached a stage about 2.0 ft higher than that in March 1929, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,500 ft³/s at 0800 hours Nov. 9, gage height, 21.94 ft; minimum, 93 ft³/s, Oct. 24; minimum daily, 100 ft³/s, Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	228	1700	531	884	4110	783	211	240	190	156	149
2	173	219	1620	498	1850	2950	609	218	232	188	157	146
3	171	214	1520	471	1860	2600	526	212	200	236	159	145
4	170	212	1390	446	1430	2310	446	206	184	243	156	144
5	169	222	1270	427	1200	2110	385	204	177	195	159	145
6	166	222	1180	332	1060	1880	348	195	174	172	189	177
7	166	505	1100	320	976	828	319	192	172	164	212	200
8	166	4550	1720	305	903	804	294	186	169	159	168	187
9	169	11700	8500	300	805	1440	262	192	167	157	161	208
10	167	4130	7280	301	461	1140	242	195	177	161	162	173
11	167	2220	3230	293	409	943	238	191	181	160	165	169
12	247	1980	2400	281	392	864	231	188	180	163	162	191
13	453	2210	2000	272	369	778	224	187	186	165	156	182
14	510	2010	1760	278	381	645	367	187	188	180	150	191
15	280	1920	1610	290	473	608	674	188	219	168	148	169
16	187	1820	1480	288	1510	578	496	245	244	162	147	170
17	145	1720	1410	277	1250	359	441	219	268	155	181	164
18	127	1630	1410	525	963	549	398	203	266	152	437	159
19	120	1550	1300	3850	1040	681	350	200	212	152	226	165
20	108	1550	1210	1770	999	499	312	196	206	148	171	162
21	104	1450	1120	1610	1040	435	287	197	207	147	154	156
22	101	913	1050	1370	2140	381	267	190	217	148	149	154
23	100	1230	1350	1180	4010	336	249	187	200	148	148	156
24	141	3830	2740	1040	2600	311	231	296	193	154	144	158
25	655	2750	1920	1720	2000	300	217	222	192	155	142	156
26	616	8140	1500	2220	1690	260	202	216	307	154	148	156
27	428	3340	1260	1500	8500	238	194	188	238	153	155	153
28	336	1990	1100	1280	5710	231	224	165	195	151	154	151
29	282	2040	1000	1140	---	226	219	178	185	150	151	152
30	253	1820	912	1060	---	1330	211	398	179	151	149	161
31	236	---	580	956	---	1250	---	275	---	151	148	---
TOTAL	7285	68315	59622	27131	46905	31974	10246	6527	6155	5132	5264	4949
MEAN	235	2277	1923	875	1675	1031	342	211	205	166	170	165
MAX	655	11700	8500	3850	8500	4110	783	398	307	243	437	208
MIN	100	212	580	272	369	226	194	165	167	147	142	144
(†)	-1200	-6900	-5400	+400	+7900	-200	+3900	-1000	-2300	-2500	-2600	-2700
MEAN †	196	2047	1749	888	1957	1025	472	178	128	84.9	85.9	75.0
CFSM †	.41	4.26	3.64	1.85	4.07	2.13	.98	.37	.27	.18	.18	.16
IN. †	.47	4.75	4.19	2.13	4.24	2.46	1.09	.43	.30	.20	.21	.17

CAL YR 1986 TOTAL 238445 MEAN 637 MAX 11700 MIN 98 MEAN† 653 CFSM† 1.36 IN.† 18.44
WTR YR 1987 TOTAL 266905 MEAN 766 MAX 11700 MIN 100 MEAN† 731 CFSM† 1.52 IN.† 20.64

† Change in contents, in cfs-days, in Normandy Lake.

‡ Adjusted for change in contents.

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

03599500 DUCK RIVER AT COLUMBIA, TN

LOCATION.--Lat 35°37'05", long 87°01'56", Maury County, Hydrologic Unit 06040003, on right bank 4 ft downstream from bridge on former U.S. Highway 31, 2 blocks north of public square in Columbia, 0.7 mi downstream from Columbia hydroelectric plant, 2.4 mi upstream from Rutherford Creek, and at mile 132.8.

DRAINAGE AREA.--1,208 mi².

PERIOD OF RECORD.--October 1904 to December 1908, April 1920 to current year. Monthly discharge only for some periods, published in WSP 1306. Gage-height records collected at same site, 1887-95, 1911 (fragmentary), 1947-71, published in reports of U.S. Weather Bureau.

REVISED RECORD.--WSP 783: 1929(M). WSP 853: Drainage area. WSP 1306: 1905-9, 1920-22, 1923(M).

GAGE.--Water-stage recorder. Datum of gage is 535.33 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 9, 1925, nonrecording gages near this site; all gages at datum 2.37 ft higher prior to Oct. 1, 1933.

REMARKS.--Flow regulated by Normandy Lake (station 03596460) since Jan. 1976.

COOPERATION.--Records of daily discharge since January 1982 furnished by Tennessee Valley Authority.

AVERAGE DISCHARGE.--70 years, (water years 1905-8, 1921-86), 1,992 ft³/s, 22.39 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,500 ft³/s, Mar. 17, 1973; maximum gage height, 51.75 ft Feb. 14, 1948; no flow Oct. 22, 1922.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1902, reached a stage of 48.0 ft, present datum, discharge, 50,700 ft³/s.

NOTE.--Records for 1987 water year were not available in time for inclusion in this report. These records will be published in a subsequent report.

03600085 CARTERS CREEK AT PETTY LANE NEAR CARTERS CREEK, TN

LOCATION.--Lat 35°43'39", long 86°59'19", Maury County, Hydrologic Unit 06040003, at bridge on Petty Lane, 0.8 mile north of Carters Creek, and at mile 4.7.

DRAINAGE AREA.--16.6 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

		DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	PH (STAND- ARD UNITS)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
		OCT 17...	1000	0.53	420	10.0	8.00	752	8.0	72		
		JAN 21...	0945	41	317	6.0	8.00	752	13.4	109		
		APR 14...	1100	18	270	15.5	8.46	742	8.8	90		
		JUN 02...	1045	1.9	385	22.0	7.63	749	6.1	71		
		AUG 12...	0815	0.16	385	23.5	7.51	743	3.9	47		
		DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	OIL AND GREASE, TOTAL RECOV- GRAVI- METRIC (MG/L)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM			
		OCT 17...	280	310	0	<1	2	0.00	80			
		JAN 21...	220	440	0	<1	15	1.7	93			
		APR 14...	K8600	K8200	0	<1	11	0.53	90			
		JUN 02...	K1900	K2100	0	<1	8	0.04	93			
		AUG 12...	4000	500	0	--	1	0.00	75			
		DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)
		OCT 17...	1	1	<100	<100	<1	<1	10	<1	32	2
		JAN 21...	<1	<1	<100	17	<1	<1	2	<1	6	5
		APR 14...	<1	<1	<100	19	<1	<1	3	<1	8	4
		DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CYANIDE TOTAL (MG/L AS CN)	CYANIDE DIS- SOLVED (MG/L AS CN)
		OCT 17...	5	<5	0.10	0.1	5	3	200	170	<0.010	<0.01
		JAN 21...	<5	<5	<0.10	<0.1	3	1	100	120	<0.010	<0.01
		APR 14...	6	<5	0.20	0.1	<1	1	110	130	<0.010	<0.01

03600086 CARTERS CREEK TRIBUTARY NEAR CARTERS CREEK, TN

LOCATION.--Lat 35°43'34", long 86°59'19", Maury County, Hydrologic Unit 06040003, at culvert on Carters Creek Road, 0.7 mile north of Carters Creek.

DRAINAGE AREA.--2.94 mi².

PERIOD OF RECORD.--October 1986 to September 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

		DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	PH (STAND- ARD UNITS)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
		OCT 17...	1150	0.11	680	12.0	8.20	752	9.4	89	
		JAN 21...	1230	8.0	1030	6.5	8.10	752	13.6	112	
		APR 14...	1415	9.1	950	9.0	8.07	742	9.0	80	
		JUN 02...	1230	0.38	>1000	23.0	8.13	749	7.5	--	
		AUG 12...	0930	0.02	1010	23.0	7.95	734	7.9	95	
		DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM		
		OCT 17...	50	280	0	<1	7	0.00	89		
		JAN 21...	32	220	0	<1	11	0.24	86		
		APR 14...	2900	4700	0	<1	2850	70	99		
		JUN 02...	K1500	K1600	0	<1	14	0.01	78		
		AUG 12...	1100	6000	0	--	5	0.00	93		
	DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)
	OCT 17...	1	<1	<100	100	<1	<1	10	<1	33	2
	JAN 21...	<1	<1	<100	21	<1	<1	<1	<1	5	3
	APR 14...	2	<1	100	25	<1	<1	6	<1	14	<1
	DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CYANIDE TOTAL (MG/L AS CN)	CYANIDE DIS- SOLVED (MG/L AS CN)
	OCT 17...	<5	<5	0.10	0.1	3	<1	530	540	<0.010	<0.01
	JAN 21...	<5	<5	<0.10	<0.1	6	5	1800	1800	<0.010	<0.01
	APR 14...	12	<5	0.80	<0.1	21	2	2400	1300	<0.010	<0.01

TENNESSEE RIVER BASIN

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03600088 CARTERS CREEK AT BUTLER RD AT CARTERS CREEK, TN

LOCATION.--Lat 35°43'02", long 86°59'45", Maury County, Hydrologic Unit 06040003, on left bank at end of Butler road bridge, 0.1 mi west of Carters Creek, 0.3 mi upstream from Terrell Branch, 3.7 mi upstream from Rutherford Creek, and at mile 3.7.

DRAINAGE AREA.--20.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1986 to September 1987. Occasional low-flow measurements, water year 1986.

GAGE.--Water-stage recorder, crest-stage gage and concrete weir. Datum of gage is 605.94 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, Oct. 1-25, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, Nov. 26, 1986, gage height, 13.67 ft; minimum, 0.11 ft³/s, Aug. 15, 16, 1987, gage height, 3.06 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	2230	1,370	9.25	Feb. 26	2300	1,210	8.68
Nov. 26	0045	*2,640	*13.67	Feb. 28	1030	1,520	9.74

Minimum discharge, 0.11 ft³/s Aug. 15, 16, gage height, 3.06 ft.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.2	48	25	31	186	18	5.6	1.8	1.5	.51	.42
2	.40	1.6	51	22	33	114	17	5.2	2.2	1.5	.64	.30
3	.40	1.1	45	19	30	84	15	5.1	1.6	3.5	.96	.22
4	.40	1.5	39	17	27	66	12	4.8	1.3	7.5	.52	.25
5	.50	4.5	35	15	25	55	11	4.4	1.1	4.2	.36	.19
6	.40	3.1	30	14	24	48	11	4.1	.92	2.2	.35	.25
7	.30	3.1	27	13	22	41	9.9	3.7	.81	1.8	.44	.19
8	.30	170	42	12	20	36	9.5	3.2	.71	1.6	.26	.14
9	.30	148	282	11	16	34	8.9	2.9	.62	1.9	.37	.12
10	.30	52	130	12	15	29	8.2	2.7	.53	1.8	.26	.12
11	.30	113	84	11	15	25	8.9	2.5	.53	1.7	.27	1.1
12	.40	67	61	10	14	22	8.2	2.4	.53	1.4	.20	2.2
13	.50	45	47	9.9	12	21	7.9	2.4	.65	1.3	.19	1.8
14	.60	36	40	9.6	13	20	29	2.3	.58	2.9	.25	.98
15	.70	31	36	9.1	14	18	32	2.3	.50	1.8	.12	.66
16	.80	27	31	8.7	26	17	35	2.1	.45	1.5	.14	.49
17	.70	25	29	8.4	32	14	33	2.1	.47	1.1	.18	.41
18	.60	21	27	53	35	15	28	1.9	.49	.87	.45	.30
19	.50	18	23	153	33	14	22	2.2	.49	.72	.29	.99
20	.50	20	21	66	31	13	18	2.0	.60	.62	.41	1.5
21	.40	18	18	50	32	11	15	1.9	1.0	.53	.23	.96
22	.50	16	16	42	173	11	13	2.0	3.0	.53	.44	.66
23	.80	32	116	34	135	9.9	12	9.3	1.7	.53	.33	.52
24	1.5	65	125	29	86	14	10	13	1.2	1.3	.31	.41
25	5.0	238	79	105	65	13	9.1	5.6	1.0	1.0	.36	.29
26	3.9	507	59	72	168	11	8.5	3.7	1.0	.70	.32	.25
27	2.8	102	47	53	334	10	8.0	2.8	.77	.62	.25	.20
28	1.5	71	40	45	645	9.6	7.4	2.0	.58	.53	2.5	.20
29	1.6	54	35	41	---	9.2	6.7	1.7	.56	.43	1.3	5.5
30	1.5	46	31	39	---	15	6.1	1.7	.47	.38	.74	8.1
31	1.2	---	27	34	---	21	---	2.0	---	.37	.50	---
TOTAL	29.90	1938.1	1721	1042.7	2106	1006.7	438.3	109.6	28.16	48.33	14.45	29.72
MEAN	.96	64.6	55.5	33.6	75.2	32.5	14.6	3.54	.94	1.56	.47	.99
MAX	5.0	507	282	153	645	186	35	13	3.0	7.5	2.5	8.1
MIN	.30	1.1	16	8.4	12	9.2	6.1	1.7	.45	.37	.12	.12
CFSM	.05	3.21	2.76	1.67	3.74	1.62	.73	.18	.05	.08	.02	.05
IN.	.06	3.59	3.19	1.93	3.90	1.86	.81	.20	.05	.09	.03	.05

WTR YR 1987 TOTAL 8512.83 MEAN 23.3 MAX 645 MIN .12 CFSM 1.16 IN. 15.75

03600088 CARTERS CREEK AT BUTLER RD AT CARTERS CREEK, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1986 to September 1987.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

		DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	PH (STAND- ARD UNITS)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
		OCT 17...	1300	0.64	510	13.0	8.20	752	8.7	84	
		JAN 21...	1430	49	453	7.0	8.20	752	13.5	112	
		APR 14...	1545	33	600	9.0	8.50	742	10.1	90	
		JUN 02...	1345	2.3	800	25.0	8.34	749	7.7	95	
		AUG 12...	1000	0.18	700	24.5	7.70	743	7.0	86	
		DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM		
		OCT 17...	40	270	0	<1	4	0.01	64		
		JAN 21...	70	210	0	<1	3	0.40	97		
		APR 14...	K12000	K3000	0	<1	56	5.0	98		
		JUN 02...	K1700	K2500	0	<1	6	0.04	83		
		AUG 12...	K1400	2900	0	--	4	0.00	92		
	DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)
	OCT 17...	1	<1	<100	<100	<1	<1	11	<1	30	2
	JAN 21...	<1	<1	<100	16	<1	<1	1	<1	4	1
	APR 14...	<1	<1	<100	<100	<1	1	<1	<1	2	<1
	DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CYANIDE TOTAL (MG/L AS CN)	CYANIDE DIS- SOLVED (MG/L AS CN)
	OCT 17...	5	<5	<0.10	<0.1	4	<1	360	360	<0.010	<0.01
	JAN 21...	<5	<5	<0.10	<0.1	2	1	400	410	0.010	<0.01
	APR 14...	<5	<5	0.20	<0.1	<1	2	540	530	<0.010	<0.01

03600500 BIG BIGBY CREEK AT SANDY HOOK, TN

LOCATION.--Lat 35°29'19", long 87°13'59", Maury County, Hydrologic Unit 06040003, on right bank 45 ft west of Louisville and Nashville Railroad track, 0.2 mi downstream from bridge on U.S. Highway 43, 0.4 mi northeast of Sandy Hook, 0.5 mi upstream from Dry Creek, 3.5 mi southwest of Mount Pleasant, and at mile 17.9.

DRAINAGE AREA.--17.5 mi².

PERIOD OF RECORD.--September 1953 to current year.

REVISED RECORDS.--WRD TN 1974: 1954(P), 1955, 1956-57(P), 1958(M), 1961(M), 1962-65(P), 1966 (M), 1967-68(P), 1969(M), 1970(P), 1971(M), 1972-73(P).

GAGE.--Water-stage recorder. Datum of gage is 670.44 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 10 ft³/s and fair below except for estimated daily discharges, Apr. 1-7, Apr. 17 to May 19, which are poor. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--34 years, 27.8 ft³/s, 21.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,700 ft³/s, Mar. 15, 1973, gage height, 11.55 ft, from rating curve extended above 1,400 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 1.0 ft³/s, Sept. 10, 1958, and July 9, 1959, caused by removal of gravel 0.2 mi upstream; minimum natural discharge, 1.1 ft³/s, Aug. 5, 6, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 25	2330	*2,770	*8.36	Feb. 28	1000	748	5.23
Feb. 27	0045	713	5.14				

Minimum daily discharge, 2.2 ft³/s, Oct. 19, 20, July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	3.6	19	7.1	13	176	25	7.7	9.5	6.6	2.7	3.5
2	4.6	3.4	17	6.3	51	76	20	7.5	8.7	5.3	2.7	3.2
3	4.2	3.3	15	5.5	40	50	16	7.5	5.9	25	2.4	3.2
4	4.2	3.4	13	5.7	29	38	16	7.7	5.4	26	4.2	3.1
5	3.5	5.7	12	6.3	23	32	17	22	4.1	12	4.1	3.1
6	3.0	4.9	11	6.5	19	28	17	12	3.7	6.8	3.6	3.1
7	3.1	9.8	10	6.5	16	24	18	9.0	3.4	4.9	3.1	3.3
8	2.7	156	51	6.1	14	25	18	7.6	3.0	5.0	3.0	5.6
9	2.6	207	348	6.4	11	26	17	7.0	2.7	15	2.9	3.6
10	2.5	37	151	7.2	9.5	21	16	7.0	2.5	12	2.9	3.3
11	2.5	118	63	6.6	8.8	19	17	7.1	2.5	6.3	2.9	7.5
12	5.0	49	39	6.7	8.3	18	16	8.0	2.8	4.6	3.0	8.9
13	7.0	22	27	7.0	8.1	17	15	7.4	4.3	20	3.0	10
14	4.6	14	22	7.9	12	16	25	6.9	2.9	35	3.1	6.4
15	3.2	10	19	10	15	16	41	6.5	3.2	9.0	3.0	4.5
16	2.6	7.2	16	13	58	15	80	6.3	3.1	5.7	3.0	4.1
17	2.4	5.6	16	14	50	15	45	6.2	6.0	4.0	3.6	4.1
18	2.3	4.4	15	28	39	18	22	6.3	3.8	3.2	5.5	3.8
19	2.2	3.7	13	86	30	17	14	6.5	3.6	2.6	4.0	6.6
20	2.2	13	12	39	26	16	10	6.1	3.8	2.3	3.7	4.6
21	2.3	9.9	11	27	25	15	9.6	6.4	4.9	2.2	3.5	4.0
22	2.3	7.5	10	21	155	15	9.2	5.8	4.2	2.6	3.3	3.8
23	2.3	28	81	16	161	14	8.7	6.3	14	50	3.2	3.7
24	6.7	115	126	14	72	20	10	6.9	11	18	3.1	3.6
25	20	314	63	73	44	19	13	11	8.9	4.6	3.1	3.5
26	6.8	434	36	69	92	17	9.8	20	10	3.2	2.9	3.3
27	4.6	75	24	40	343	17	8.8	8.3	6.0	2.7	8.8	3.2
28	3.8	40	17	28	437	17	8.5	6.3	4.6	2.4	5.4	3.1
29	3.4	28	13	23	---	16	8.3	5.6	4.3	2.7	4.0	17
30	3.4	22	10	18	---	23	7.9	14	3.9	2.6	3.8	7.3
31	3.2	---	8.1	14	---	29	---	12	---	2.5	3.7	---
TOTAL	127.7	1754.4	1288.1	624.8	1809.7	865	558.8	264.9	156.7	304.8	111.2	148.0
MEAN	4.12	58.5	41.6	20.2	64.6	27.9	18.6	8.55	5.22	9.83	3.59	4.93
MAX	20	434	348	86	437	176	80	22	14	50	8.8	17
MIN	2.2	3.3	8.1	5.5	8.1	14	7.9	5.6	2.5	2.2	2.4	3.1
CFSM	.24	3.34	2.37	1.15	3.69	1.59	1.06	.49	.30	.56	.20	.28
IN.	.27	3.73	2.74	1.33	3.85	1.84	1.19	.56	.33	.65	.24	.31

CAL YR 1986 TOTAL 7184.5 MEAN 19.7 MAX 560 MIN 1.3 CFSM 1.12 IN. 15.27
WTR YR 1987 TOTAL 8014.0 MEAN 22.0 MAX 437 MIN 2.2 CFSM 1.25 IN. 17.03

TENNESSEE RIVER BASIN

03602500 PINEY RIVER AT VERNON, TN

LOCATION.--Lat 35°52'16", long 87°30'05", Hickman County, Hydrologic Unit 06040003, on right bank at county highway bridge, 40 ft upstream from Pretty Creek, 0.2 mi northwest of Vernon, 2.3 mi downstream from Mill Creek, 6.5 mi north of Centerville, and at mile 8.3.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 758: 1927(M). WSP 823: Drainage area. WSP 1306: Drainage area at site used Feb. 9, 1931, to May 10, 1934. WSP 1436: 1926(M), 1927, 1929, 1930-31(M), 1932, 1934(M).

GAGE.--Water-stage recorder. Datum of gage is 461.72 ft above National Geodetic Vertical Datum of 1929. Prior to May 11, 1934, nonrecording gage; July 3, 1925, to Feb. 8, 1931, at site 350 ft upstream at datum 3.17 ft higher; Feb. 9, 1931, to May 10, 1934, at site 0.4 mi downstream at datum 0.40 ft higher. May 11, 1934, to Sept. 30, 1970, water-stage recorder at site 350 ft upstream; prior to June 29, 1965, at datum 3.17 ft higher, and 2.17 ft higher thereafter.

REMARKS.--Records good, except for estimated daily discharges, July 13 to Aug. 21 which are fair. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--62 years, 313 ft³/s, 22.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s, Dec. 21, 1926, gage height, 16.5 ft, site and datum then in use; minimum, 35 ft³/s, Sept. 19, 20, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1897 reached a stage of 17.5 ft, original site and datum, discharge, 37,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 9	1645	4,970	10.72	Feb. 28	1530	*7,540	*12.58

Minimum discharge, 53 ft³/s, Aug. 24, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	71	269	218	139	2440	172	177	111	86	70	72
2	89	72	249	202	154	1200	177	168	118	88	70	69
3	94	72	229	185	161	821	182	167	106	88	70	68
4	78	73	206	174	156	632	182	162	100	91	70	68
5	74	84	187	163	155	538	182	155	98	86	120	67
6	71	87	174	156	153	466	182	150	96	82	100	67
7	70	86	163	149	152	407	179	147	96	78	90	70
8	69	1040	167	143	149	373	179	142	94	73	80	76
9	69	776	1830	138	143	348	172	138	92	75	75	75
10	68	330	1230	139	139	309	169	136	93	81	140	73
11	68	406	687	135	135	280	170	135	94	78	110	83
12	70	420	491	129	136	257	163	133	93	73	95	180
13	74	272	376	127	131	239	169	132	107	73	85	99
14	72	209	309	124	133	228	592	128	94	72	80	79
15	69	179	273	124	133	218	724	144	86	70	75	72
16	68	161	241	121	148	211	669	141	78	70	70	70
17	69	145	220	118	159	203	616	134	97	70	90	80
18	68	132	196	126	163	208	523	128	91	70	140	76
19	67	119	174	142	165	198	447	126	87	70	85	77
20	67	116	160	137	171	184	389	123	114	70	70	75
21	66	107	145	133	180	182	345	120	100	70	64	70
22	66	101	133	135	221	179	314	118	103	150	61	68
23	67	104	164	135	545	177	287	115	137	120	58	68
24	76	120	554	131	531	175	261	114	128	100	55	68
25	107	157	517	138	460	172	236	119	99	90	55	68
26	90	1180	425	133	425	166	220	146	88	80	60	67
27	80	626	363	126	1450	161	209	118	84	75	74	67
28	77	428	315	127	4340	159	201	109	81	70	84	65
29	74	339	286	131	---	159	191	108	81	69	76	74
30	73	292	263	140	---	175	186	115	78	68	72	79
31	71	---	237	140	---	177	---	114	---	65	72	---
TOTAL	2290	8304	11233	4419	11127	11642	8688	4162	2924	2501	2516	2290
MEAN	73.9	277	362	143	397	376	290	134	97.5	80.7	81.2	76.3
MAX	107	1180	1830	218	4340	2440	724	177	137	150	140	180
MIN	66	71	133	118	131	159	163	108	78	65	55	65
CFSM	.38	1.43	1.88	.74	2.06	1.95	1.50	.70	.51	.42	.42	.40
IN.	.44	1.60	2.17	.85	2.14	2.24	1.67	.80	.56	.48	.48	.44

CAL YR 1986 TOTAL 72979 MEAN 200 MAX 1830 MIN 56 CFSM 1.04 IN. 14.06
WTR YR 1987 TOTAL 72096 MEAN 198 MAX 4340 MIN 55 CFSM 1.02 IN. 13.89

TENNESSEE RIVER BASIN

211

03603000 DUCK RIVER ABOVE HURRICANE MILLS, TN

LOCATION.--Lat 35°55'48", long 87°44'35", Humphreys County, Hydrologic Unit 06040003, on left bank 0.4 mi downstream from Tumbling Creek, 1.3 mi upstream from bridge on State Highway 13, 3.6 mi southeast of Hurricane Mills, and at mile 26.0.

DRAINAGE AREA.--2,557 mi².

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1951, published as "near Hurricane Mills."

REVISED RECORDS.--WSP 803: 1935. WSP 823: 1927(M). WSP 853: Drainage area. WSP 1436: 1926-28, 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 370.53 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 21, 1934, nonrecording gage and Feb. 21, 1934, to Sept. 30, 1951, water-stage recorder at bridge 5.6 mi downstream at datum 8.80 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since January 1976 by Normandy Lake (station 03596460). Prior to 1953 occasional regulation at low flow from small dams upstream. Minor diversions for irrigation. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--62 years, 4,074 ft³/s, 21.64 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 122,000 ft³/s, Feb. 14, 1948, gage height, 30.70 ft, from floodmark in gage house, present site and datum; minimum, 185 ft³/s, Sept. 11, 12, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,700 ft³/s, at 0600 hours Mar. 2, gage height, 21.80 ft; minimum, 437 ft³/s, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	913	6950	3870	4060	38100	2340	1360	1410	892	586	452
2	594	838	6020	3440	3700	41900	3890	1300	1710	855	604	445
3	615	794	5450	2910	3660	32600	3440	1270	1810	878	614	440
4	626	766	5070	2620	5020	13900	2900	1220	1360	1700	586	450
5	629	775	4580	2400	5910	9800	2580	1180	1170	1970	577	458
6	617	774	4060	2220	4850	8100	2380	1130	1050	1620	579	468
7	587	803	3640	2060	4090	6980	2200	1090	940	1610	611	483
8	555	2420	3380	1940	3630	6180	2050	1050	861	1320	622	511
9	529	5920	5420	1820	3280	5210	1920	1020	803	1090	572	541
10	516	14700	15000	1710	2980	4420	1820	986	768	1110	547	501
11	510	21900	23600	1660	2740	4890	1740	966	738	1400	558	499
12	531	25500	27000	1580	2530	4700	1680	942	726	1230	577	863
13	564	17300	18700	1510	2180	3990	1620	930	750	1040	545	889
14	607	8190	9110	1450	1980	3580	2060	912	759	1040	596	865
15	664	6120	6970	1400	1920	3300	2950	933	752	1210	679	793
16	670	5240	5870	1340	2040	3050	3720	928	763	1150	545	742
17	838	4560	5130	1290	2820	2790	4880	967	811	997	525	713
18	919	4080	4610	1310	4700	2650	4810	962	887	891	577	700
19	838	3670	4200	1520	5830	2590	4210	1040	982	823	701	696
20	737	3370	3960	6480	4930	2540	3650	1040	1320	768	727	691
21	648	3130	3730	12100	4390	2930	3210	966	1170	725	617	712
22	577	3010	3420	8520	4330	2820	2840	918	1080	692	632	686
23	527	3060	3240	5860	7140	2490	2550	908	1130	670	697	620
24	538	3010	5170	4870	14200	2300	2310	959	1410	673	596	578
25	654	5330	11900	4210	15300	2200	2110	1040	1210	717	530	549
26	780	14600	13600	5150	10700	2140	1940	1310	1210	703	489	526
27	867	24800	9710	7820	11500	1990	1790	1310	1140	655	469	512
28	952	27600	7260	8400	26200	1890	1660	1150	979	627	458	501
29	1350	21100	5940	6260	---	1790	1570	1040	917	666	466	543
30	1180	9460	5030	5110	---	1760	1460	980	849	620	475	741
31	1020	---	4360	4510	---	1870	---	996	---	592	475	---
TOTAL	21803	243733	242080	117340	166610	225450	78280	32803	31465	30934	17832	18168
MEAN	703	8124	7809	3785	5950	7273	2609	1058	1049	998	575	606
MAX	1350	27600	27000	12100	26200	41900	4880	1360	1810	1970	727	889
MIN	510	766	3240	1290	1920	1760	1460	908	726	592	458	440

CAL YR 1986 TOTAL 1016260 MEAN 2784 MAX 27600 MIN 501 MEAN† 2800 CFSM† 1.10 IN.† 14.87
WTR YR 1987 TOTAL 1226500 MEAN 3360 MAX 41900 MIN 440 MEAN† 3326 CFSM† 1.30 IN.† 17.66

† Adjusted for change in contents in Normandy Lake.

NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN
(Hydrologic bench-mark station)

LOCATION.--Lat 35°29'45", long 87°49'58", Perry County, Hydrologic Unit 06040004, on right bank 0.4 mi downstream from Little Opossum Creek, 0.5 mi downstream from bridge on State Highway 13, 1.3 mi north of Flat Woods, 3.9 mi upstream from Sinking Creek, and at mile 58.7.

DRAINAGE AREA.--447 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1920 to current year.

REVISED RECORDS.--WSP 758: 1933. WSP 803: 1935. WSP 823: Drainage area. WSP 1436: 1921(M), 1922-24, 1925(M), 1927(M), 1934(M), WRD TN 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 513.58 ft above National Geodetic Vertical Datum of 1929. Prior to May 27, 1934, nonrecording gage at same site and datum.

REMARKS.--Recods good except for estimated daily discharges, Aug. 28 to Sept. 30, which are poor.

AVERAGE DISCHARGE.--67 years, 749 ft³/s, 22.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,000 ft³/s, Feb. 13, 1948, gage height, 32.0 ft, from high-water mark in gage house, from rating curve extended above 50,000 ft³/s on basis of slope-area and contracted-opening measurements of peak flow and rainfall-runoff study; minimum, 65 ft³/s, Sept. 9, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Feb. 13, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 27	0600	6,350	12.03	Mar. 1	0530	*12,100	*17.45
Dec. 10	0800	6,290	11.97				

Minimum discharge, 111 ft³/s, Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	175	842	552	605	10100	496	329	296	222	151	130
2	150	173	742	513	701	3450	477	319	289	254	169	125
3	158	171	663	487	904	2000	481	314	276	256	181	120
4	154	174	589	457	807	1500	469	311	247	262	164	115
5	150	189	526	433	718	1220	451	324	227	386	155	115
6	148	212	484	410	658	1040	442	321	217	348	204	115
7	146	227	450	401	609	905	434	314	207	276	187	115
8	147	706	466	378	568	826	423	303	201	233	163	115
9	146	3020	2300	366	525	793	412	289	196	250	152	115
10	146	2510	5640	377	491	740	405	278	190	289	144	115
11	146	1250	2640	372	464	661	404	278	187	295	138	125
12	149	1470	1630	352	442	588	398	303	188	258	154	140
13	177	1030	1190	337	416	534	393	283	208	230	143	160
14	205	772	960	330	424	505	480	269	232	356	135	200
15	193	655	820	328	493	488	576	288	216	353	129	240
16	175	578	714	324	616	476	601	329	209	279	122	210
17	163	521	648	311	1030	474	634	298	236	232	121	190
18	154	483	613	338	1000	503	630	283	327	210	130	180
19	148	449	563	566	911	556	598	278	262	196	167	170
20	144	438	519	757	830	506	563	272	242	185	160	160
21	142	477	485	650	785	464	530	261	229	177	145	155
22	142	442	455	600	891	445	499	253	217	174	131	155
23	140	423	502	562	2680	431	472	251	210	177	124	150
24	156	736	1970	523	2220	438	445	261	206	243	124	145
25	359	1490	2020	686	1530	473	421	267	213	227	122	145
26	429	4730	1450	1500	1310	447	399	277	274	204	116	140
27	304	4430	1150	1260	5490	435	382	285	415	182	112	135
28	236	1780	973	998	7560	428	368	261	289	171	113	130
29	206	1230	828	851	---	419	351	238	225	164	115	130
30	192	976	707	792	---	427	338	228	204	166	120	140
31	182	---	612	696	---	498	---	233	---	161	125	---
TOTAL	5639	31917	34151	17507	35678	32770	13972	8798	7135	7416	4416	4380
MEAN	182	1064	1102	565	1274	1057	466	284	238	239	142	146
MAX	429	4730	5640	1500	7560	10100	634	329	415	386	204	240
MIN	140	171	450	311	416	419	338	228	187	161	112	115
CFSM	.41	2.38	2.46	1.26	2.85	2.36	1.04	.63	.53	.54	.32	.33
IN.	.47	2.66	2.84	1.46	2.97	2.73	1.16	.73	.59	.62	.37	.36

CAL YR 1986 TOTAL 176634 MEAN 484 MAX 7240 MIN 114 CFSM 1.08 IN. 14.70
WTR YR 1987 TOTAL 203779 MEAN 558 MAX 10100 MIN 112 CFSM 1.25 IN. 16.95

TENNESSEE RIVER BASIN

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03604000 BUFFALO RIVER NEAR FLAT WOODS, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: June 1964 to January 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 31.0°C, July 13-15, 1966; minimum, 0.0°C, many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT 16...	1030	172	110	8.50	14.0	756	3.0	9.3	91	49	47	52
JAN 22...	1115	597	66	7.90	5.5	745	3.5	13.8	112	180	210	40
APR 16...	1200	595	90	7.50	15.0	744	1.2	9.6	98	54	K21	43
JUL 22...	0945	173	105	7.20	25.0	754	0.80	9.8	120	60	290	49
DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LILITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 16...	11	17	2.3	1.5	6	0.1	0.90	41	0.2	4.5	2.0	<0.10
JAN 22...	6	13	1.8	1.4	7	0.1	1.1	--	0.8	8.7	2.4	<0.10
APR 16...	0	14	2.0	1.3	6	0.1	0.90	49	3.0	4.7	1.6	<0.10
JUL 22...	1	16	2.2	1.5	6	0.1	1.0	48	5.9	4.7	2.3	0.10
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 16...	7.1	74	60	0.10	34	<0.010	0.130	--	0.020	0.20	0.020	0.020
JAN 22...	5.2	51	54	0.07	82	<0.010	0.410	0.020	<0.010	<0.20	0.020	0.010
APR 16...	4.9	49	59	0.07	79	<0.010	0.160	<0.010	<0.010	0.40	0.030	0.010
JUL 22...	7.0	76	64	0.10	35	<0.010	<0.100	0.050	0.060	0.70	0.040	0.030
DATE	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
OCT 16...	0.010	<10	<1	24	<0.5	<1	<1	<3	2	33	<5	4
JAN 22...	<0.010	40	<1	15	<0.5	<1	<1	<3	1	58	<5	<4
APR 16...	0.010	20	<1	24	<0.5	1	<1	<3	<1	30	<5	<4
JUL 22...	0.010	20	<1	26	0.6	<1	<1	<3	3	23	<5	<4

K--Results based on non-ideal colony count.

TENNESSEE RIVER BASIN

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 16...	8	<0.1	<10	<1	<1	<1	62	<6	14	5	2.3	100
JAN 22...	6	<0.1	<10	1	<1	<1	48	<6	10	4	6.4	75
APR 16...	10	<0.1	<10	1	<1	<1	52	<6	26	6	9.6	74
JUL 22...	10	0.1	<10	<1	<1	<1	C 59	<6	5	7	3.3	93

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON, METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
OCT 16...	<0.4	<0.4	0.8	<0.4	0.7	<0.4	0.05	0.02
APR 16...	<0.4	<0.4	0.4	0.7	<0.4	0.7	0.06	0.02

03604500 BUFFALO RIVER NEAR LOBELVILLE, TN

LOCATION.--Lat 35°48'46", long 87°47'51", Perry County, Hydrologic Unit 06040004, on right bank 30 ft upstream from Standing Rock Bridge, 1.4 mi downstream from bridge on State Highway 13, 3.0 mi north of Lobelville, 13 mi downstream from Cane Creek, and at mile 17.7.

DRAINAGE AREA.--707 mi².

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1306.

REVISED RECORDS.--WSP 803: 1935. WSP 823: Drainage area. WSP 853: 1928-37. WSP 1436: 1932(M).

GAGE.--Water-stage recorder. Datum of gage 403.02 ft above National Geodetic Vertical Datum of 1929. Nov. 1, 1927, to May 31, 1934, nonrecording gage 40 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--60 years, 1,181 ft³/s, 22.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s, Feb. 14, 1948, gage height, 23.76 ft, from high-water mark in gage house, from rating curve extended above 40,000 ft³/s, on basis of slope-area measurement of peak flow; minimum, 135 ft³/s, Aug. 18, 1953, caused by regulations upstream at unknown location; minimum discharge unaffected by regulation, 142 ft³/s, Oct. 1-8, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Feb. 14, 1948. Flood of March 1902 reached a stage of about 21.8 ft, discharge not determined, from flood profile by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,200 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 28	0030	6,610	10.74	Mar. 2	0830	*12,700	*14.02
Dec. 11	0700	5,590	9.82				

Minimum discharge, 197 ft³/s, Sept. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	305	1560	1010	1100	11500	838	565	384	386	283	239
2	269	291	1350	916	1030	11600	854	549	419	384	272	229
3	254	282	1190	838	1090	4850	828	533	419	397	265	220
4	252	278	1070	783	1220	2900	817	519	423	547	288	212
5	262	292	959	730	1140	2270	792	508	394	601	295	206
6	255	308	864	687	1060	1900	762	499	368	548	273	200
7	245	322	792	651	989	1650	740	497	353	534	273	200
8	239	1360	758	623	927	1470	723	485	340	479	291	211
9	235	2260	1230	605	864	1360	700	467	333	430	273	213
10	231	3370	3850	594	806	1270	680	456	323	481	257	208
11	229	2800	5520	588	757	1180	674	438	315	497	247	243
12	232	1990	3450	578	718	1090	667	433	316	469	238	322
13	242	1880	2260	559	683	994	662	447	333	452	239	320
14	256	1470	1770	543	662	914	929	432	336	450	255	395
15	274	1190	1490	534	680	857	1230	433	342	453	239	399
16	283	1020	1290	525	814	818	1400	428	352	498	229	368
17	270	894	1160	515	1120	787	1430	449	372	452	236	336
18	258	792	1060	523	1460	799	1360	446	367	398	317	309
19	245	711	981	622	1450	868	1260	424	415	364	268	300
20	235	665	901	814	1360	901	1160	408	450	341	257	307
21	228	627	827	1000	1280	839	1070	398	431	323	262	299
22	225	625	767	950	1310	776	988	389	451	311	251	300
23	223	615	756	897	2260	739	912	381	418	313	237	285
24	241	653	1300	845	3670	727	843	389	408	320	222	269
25	338	981	2660	888	2920	740	779	435	377	333	211	259
26	395	3450	2480	1330	2260	746	726	434	370	344	209	251
27	471	5400	1980	1900	3890	723	683	422	368	332	205	245
28	443	5070	1670	1710	8760	705	645	410	448	313	203	240
29	389	2510	1460	1480	---	689	616	397	457	311	204	247
30	350	1880	1290	1320	---	711	588	404	390	300	233	342
31	324	---	1140	1210	---	784	---	391	---	289	246	---
TOTAL	8660	44291	49835	26768	46280	58157	26356	13866	11472	12650	7778	8174
MEAN	279	1476	1608	863	1653	1876	879	447	382	408	251	272
MAX	471	5400	5520	1900	8760	11600	1430	565	457	601	317	399
MIN	223	278	756	515	662	689	588	381	315	289	203	200
CFSM	.40	2.09	2.27	1.22	2.34	2.65	1.24	.63	.54	.58	.35	.39
IN.	.46	2.33	2.62	1.41	2.44	3.06	1.39	.73	.60	.67	.41	.43

CAL YR 1986	TOTAL 263778	MEAN 723	MAX 6000	MIN 211	CFSM 1.02	IN. 13.88
WTR YR 1987	TOTAL 314287	MEAN 861	MAX 11600	MIN 200	CFSM 1.22	IN. 16.53

TENNESSEE RIVER BASIN

03605555 TRACE CREEK ABOVE DENVER, TN

LOCATION.--Lat 36°03'08", long 87°54'27", Humphreys County, Hydrologic Unit 06040005, on left bank at bridge on U.S. Highway 70, 1.0 mi east of Denver, 3.9 mi northeast of New Johnsonville, and at mile 4.2.

DRAINAGE AREA.--31.9 mi².

PERIOD OF RECORD.--October 1963 to current year. Published as "near Denver" prior to October 1972.

REVISED RECORDS.--WDR TN-76-1: 1973-75(P).

GAGE.--Water-stage recorder. Datum of gage is 377.05 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1973, at site 1.1 mi upstream. Oct. 22 to Nov. 6, 1963, at different datum and Nov. 7, 1963, to Dec. 31, 1972, at datum 12.47 ft higher.

REMARKS.--No estimated daily discharges. Records fair except for period May 23 to Sept. 30, which are poor. Natural flow of stream effected by periodic transbasin diversion of water from the Duck River basin into the Trace Creek basin to supplement the Waverly municipal water supply. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--24 years, 50.6 ft³/s, 21.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s, May 6, 1984, gage height, 13.61 ft; maximum discharge at prior site and datum, 3,640 ft³/s, May 13, 1967, gage height, 9.08 ft; minimum discharge, 3.0 ft³/s, Aug. 9, 13, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1886, 14 ft January 1937, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,850 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 9	1145	*2,210	*7.53	No other peak greater than base discharge.			

Minimum daily discharge, 5.0 fts³/s, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	45	29	24	261	27	17	11	13	12	6.3
2	18	13	46	28	28	126	31	17	11	27	9.8	6.0
3	20	13	43	26	30	87	30	17	9.7	16	8.6	5.8
4	15	13	39	25	29	67	28	16	9.4	15	8.5	5.6
5	13	17	36	24	29	54	27	15	9.3	13	8.1	5.3
6	12	17	33	23	28	46	26	14	9.5	12	8.1	5.0
7	11	17	31	22	26	39	25	14	9.6	11	8.1	5.2
8	11	533	32	22	25	36	24	14	9.7	11	7.8	5.3
9	11	264	610	21	25	33	23	13	9.5	11	7.6	7.2
10	10	105	203	21	24	29	22	13	9.2	10	7.5	11
11	10	262	113	21	24	27	22	12	9.3	10	7.4	11
12	11	141	83	20	23	24	20	12	11	9.7	7.5	12
13	11	87	65	20	22	23	21	13	16	9.3	7.5	12
14	10	68	53	20	23	22	159	13	11	11	6.7	6.3
15	9.7	59	46	20	24	21	111	13	10	9.2	6.2	6.1
16	9.7	51	41	19	28	21	134	16	9.9	8.8	6.0	6.2
17	9.5	44	37	19	34	20	96	13	12	8.6	6.3	6.7
18	9.6	39	34	20	34	23	71	12	11	8.4	6.4	6.6
19	9.8	35	32	23	33	22	55	12	18	8.4	5.8	6.7
20	9.9	32	29	24	32	21	45	11	16	8.4	5.7	6.2
21	10	30	27	22	32	20	39	11	18	7.8	6.6	6.1
22	10	28	25	22	67	19	34	11	19	7.8	5.9	6.1
23	10	27	29	22	156	19	30	11	23	7.9	5.5	6.0
24	13	26	85	21	87	19	28	11	20	8.0	5.7	6.0
25	20	27	60	22	70	19	25	11	21	7.8	5.9	6.0
26	15	182	48	21	67	18	22	14	30	7.5	5.6	5.9
27	14	84	42	21	290	18	21	13	18	7.5	9.4	5.8
28	13	63	38	20	664	17	19	12	15	7.7	10	5.8
29	13	51	35	21	---	17	18	11	13	25	7.8	7.4
30	13	46	33	24	---	22	18	11	12	16	7.0	8.7
31	13	---	31	25	---	24	---	12	---	12	6.3	---
TOTAL	377.2	2387	2104	688	1978	1214	1251	405	411.1	345.8	227.3	206.3
MEAN	12.2	79.6	67.9	22.2	70.6	39.2	41.7	13.1	13.7	11.2	7.33	6.88
MAX	20	533	610	29	664	261	159	17	30	27	12	12
MIN	9.5	13	25	19	22	17	18	11	9.2	7.5	5.5	5.0
CFSM	.38	2.49	2.13	.70	2.21	1.23	1.31	.41	.43	.35	.23	.22
IN.	.44	2.78	2.45	.80	2.31	1.42	1.46	.47	.48	.40	.27	.24

CAL YR 1986 TOTAL 13267.7 MEAN 36.3 MAX 610 MIN 5.6 CFSM 1.14 IN. 15.47
WTR YR 1987 TOTAL 11594.6 MEAN 31.8 MAX 664 MIN 5.0 CFSM .99 IN. 13.52

03606500 BIG SANDY RIVER AT BRUCETON, TN

LOCATION.--Lat 36°02'19", long 88°13'42", Carroll County, Hydrologic Unit 06040005, on right bank on downstream end of abutment of county bridge, 700 ft downstream from bridge on U.S. Highway 70, 0.6 mi upstream from Cherry Creek, 0.9 mi east of Bruceton, and at mile 31.6.

DRAINAGE AREA.--205 mi².

PERIOD OF RECORD.--July 1929 to current year.

REVISED RECORDS.--WSP 853: Drainage area. WSP 923: 1929-35.

GAGE.--Water-stage recorder. Datum of gage is 380.58 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 1, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature are published in this report as miscellaneous water quality data.

AVERAGE DISCHARGE.--58 years, 289 ft³/s, 19.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s, Jan. 21, 1935, gage height, 16.16 ft from graph based on gage readings, from rating curve extended above 9,200 ft³/s; minimum, 28 ft³/s, Aug. 17-19, 22, Sept. 1, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1897 reached a stage of 18 ft, discharge, 25,000 ft³/s, and flood in March 1919 reached a stage of 17 ft, discharge, 21,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	1845	*3,000	*12.93	Mar. 1	0030	2,200	12.27

Minimum discharge, 36 ft³/s, Aug. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	80	182	128	133	2120	204	75	89	58	45	40
2	62	77	185	124	211	1860	166	74	114	61	45	39
3	79	77	170	120	208	1060	148	81	78	59	41	38
4	70	79	148	119	158	308	132	78	66	81	41	38
5	65	119	135	117	134	223	124	77	60	78	53	38
6	62	146	129	115	124	196	120	70	58	70	91	38
7	62	124	128	114	119	178	118	68	56	57	70	38
8	60	2500	153	111	116	169	116	65	55	51	47	50
9	60	2460	1100	113	109	163	112	63	54	53	42	44
10	59	1880	981	139	107	150	109	62	52	66	41	39
11	58	1480	819	132	108	139	124	62	52	60	41	40
12	64	704	504	121	110	133	119	62	56	53	40	51
13	73	387	217	118	107	131	123	62	70	56	39	69
14	71	232	174	115	121	130	592	60	71	70	39	130
15	66	201	161	117	140	128	427	70	61	51	38	65
16	63	184	152	118	363	127	372	66	84	46	37	53
17	61	171	153	111	364	125	254	62	140	44	37	129
18	62	159	159	143	263	234	186	62	128	42	46	97
19	61	136	143	204	202	283	152	61	155	41	45	65
20	61	136	134	159	176	216	132	62	119	40	41	61
21	62	139	126	135	176	170	125	62	102	40	40	52
22	34	139	122	129	372	148	111	60	123	40	39	50
23	85	141	181	122	744	136	105	66	70	54	38	48
24	101	151	473	116	548	140	101	65	60	73	37	47
25	208	168	346	130	298	144	96	69	58	53	37	46
26	142	531	223	139	273	125	93	94	63	46	36	46
27	110	421	174	124	1260	117	90	79	59	44	39	46
28	103	293	155	111	1670	113	85	66	50	43	42	45
29	79	192	143	155	---	110	81	60	47	55	43	61
30	77	164	138	201	---	165	78	84	46	52	41	95
31	79	---	133	155	---	250	---	111	---	45	41	---
TOTAL	2405	13671	8141	4055	8714	9691	4795	2158	2296	1682	1352	1698
MEAN	77.6	456	263	131	311	313	160	69.6	76.5	54.3	43.6	56.6
MAX	208	2500	1100	204	1670	2120	592	111	155	81	91	130
MIN	56	77	122	111	107	110	78	60	46	40	36	38
CFSM	.38	2.22	1.28	.64	1.52	1.52	.78	.34	.37	.26	.21	.28
IN.	.44	2.48	1.48	.74	1.58	1.76	.87	.39	.42	.31	.25	.31

CAL YR 1986	TOTAL 60834	MEAN 167	MAX 2500	MIN 45	CFSM .81	IN. 11.04
WTR YR 1987	TOTAL 60658	MEAN 166	MAX 2500	MIN 36	CFSM .81	IN. 11.00

TENNESSEE RIVER BASIN

RESERVOIRS IN TENNESSEE RIVER BASIN

03468500 DOUGLAS LAKE.--Lat 35°57'40", long 83°32'20", Sevier County, Hydrologic Unit 06010107, at Douglas Dam on French Broad River, 6.5 mi north of Sevierville, and at mile 32.3. DRAINAGE AREA, 4,541 mi². PERIOD OF RECORD, February 1943 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir formed by concrete main dam and 10 saddle dams. Spillway equipped with 11 radial gages, each 32 ft high by 40 ft wide and 8 sluice gates 10 ft high by 5.67 ft wide. Closure of dam was made Feb. 19, 1943; water in reservoir first reached minimum pool elevation Feb. 25, 1943. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,002.00 ft, top of gates, is 743,600 cfs-days, of which 631,200 cfs-days is controlled storage above elevation 940.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 760,000 cfs-days, July 25, 1949, elevation, 1,001.79 ft; minimum after first filling, 1,000 cfs-days, Jan. 16, 1956, elevation, 883.7 ft, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 607,400 cfs-days, June 8, elevation, 993.34 ft; minimum, 113,500 cfs-days, Jan. 9, elevation, 941.54 ft.

03476000 SOUTH HOLSTON LAKE.--Lat 36°31'15", long 82°05'11", Sullivan County, Hydrologic Unit 06010102, 470 ft upstream from South Holston Dam on South Fork Holston River, 7.0 mi southeast of Bristol, Virginia-Tennessee, and at mile 49.8. DRAINAGE AREA, 703 mi². PERIOD OF RECORD, November 1950 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 11, 1951, non-recording gage at same site and datum.

REMARKS.--Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers, each 3 ft wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft in diameter. Closure of dam was made Nov. 20, 1950; water in reservoir first reached minimum pool elevation Jan. 25, 1951. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,742.00 ft, spillway crest, is 385,200 cfs-days, of which 220,800 cfs-days is controlled storage above elevation 1,675.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 363,800 cfs-days, May 10, 1984, elevation, 1,736.86 ft; minimum after first filling, 57,700 cfs-days, Jan. 13, 1956, elevation, 1,614.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 363,200 cfs-days, Apr. 27, elevation, 1,736.92 ft; minimum, 208,000 cfs-days, Dec. 9, elevation, 1,691.55 ft.

03483500 WATAUGA LAKE.--Lat 36°19'20", long 82°07'16", Carter County, Hydrologic Unit 06010103, at Watauga Dam on Watauga River, 5 mi east of Elizabethton, and at mile 36.7. DRAINAGE AREA, 468 mi². PERIOD OF RECORD, December 1948 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by rock and rolled earthfill dam. Spillway is uncontrolled morning-glory type, 128 ft in diameter with six piers, each 3 ft wide to guide flow spilling into a concrete-lined shaft and tunnel 34 ft in diameter. Closure of dam was made Dec. 1, 1948; water in reservoir first reached minimum pool elevation Dec. 31, 1948. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,975.00 ft, spillway crest, is 341,300 cfs-days, of which 178,500 cfs-days is controlled storage above elevation 1,915.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 300,800 cfs-days, Apr. 19, 1987, elevation, 1,963.28 ft; minimum after first filling, 25,100 cfs-days, Jan. 13, 1956, elevation, 1,813.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 300,800 cfs-days, Apr. 19, elevation, 1,963.28 ft; minimum, 197,800 cfs-days, Dec. 23, elevation, 1,928.73 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
03468500 DOUGLAS LAKE				03476000 SOUTH HOLSTON LAKE			03483500 WATAUGA LAKE		
Sept. 30.....	952.41	179,800	-	1,709.52	262,700	-	1,936.77	219,800	-
Oct. 31.....	951.00	170,000	-9,800	1,702.67	240,900	-21,800	1,934.69	214,000	-5,800
Nov. 30.....	957.05	214,200	+44,200	1,694.04	215,100	-25,800	1,930.72	203,100	-10,900
Dec. 31.....	945.18	133,400	-80,800	1,695.24	218,600	+3,500	1,930.48	202,400	-700
CAL YR 1986	-	-	+6,800	-	-	-5,700	-	-	-2,300
Jan. 31.....	954.01	191,200	+57,800	1,699.78	232,100	+13,500	1,933.25	210,000	+7,600
Feb. 28.....	958.33	224,300	+33,100	1,713.74	276,700	+44,600	1,943.10	237,800	+27,800
Mar. 31.....	964.43	276,600	+52,300	1,719.60	297,000	+20,300	1,952.69	266,400	+28,600
Apr. 30.....	990.25	564,500	+287,900	1,735.67	358,100	+61,100	1,960.51	291,600	+25,200
May 31.....	993.02	602,900	+38,400	1,726.70	323,000	-35,100	1,954.76	272,900	-18,700
June 30.....	992.12	590,200	-12,700	1,722.38	307,000	-16,000	1,949.14	255,500	-17,400
July 31.....	985.44	501,800	-88,400	1,714.92	280,700	-26,300	1,939.89	228,600	-26,900
Aug. 31.....	972.15	351,400	-150,400	1,703.80	244,400	-36,300	1,933.38	210,300	-18,300
Sept. 30.....	963.97	272,500	-78,900	1,697.54	225,400	-19,000	1,930.73	203,100	-7,200
WTR YR 1987	-	-	+92,700	-	-	-37,300	-	-	-16,700

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03486800 BOONE LAKE.--Lat 36°26'26", long 82°26'16", Sullivan County, Hydrologic Unit 06010102, at Boone Dam on South Fork Holston River, 0.7 mi northeast of Spurgeon, 1.3 mi downstream from Watauga River, and at mile 18.6. DRAINAGE AREA, 1,840 mi². PERIOD OF RECORD, December 1952 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by gravity nonover-flow type concrete dam. Spillway is equipped with five radial gates, each 35 ft high by 35 ft wide. Storage began Dec. 16, 1952; water in reservoir first reached minimum pool elevation Jan. 5, 1953. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,385.0 ft, top of gates, is 97,500 cfs-days, of which 74,800 cfs-days is controlled storage above elevation 1,330 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 99,100 cfs-days, May 19, 1964, elevation 1,384.99 ft; minimum after first filling, 21,300 cfs-days, Jan. 23, 1956, elevation, 1,327.06 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 96,000 cfs-days, Apr. 18, elevation, 1,384.81 ft; minimum, 48,400 cfs-days, Jan. 12, elevation, 1,356.00 ft.

03487000 FORT PATRICK HENRY LAKE.--Lat 36°29'53", long 82°30'32", Sullivan County, Hydrologic Unit 06010102, at Fort Patrick Henry Dam on South Fork Holston River, 0.2 mi upstream from bridge on U. S. Highway 23, 4.5 mi southeast of Kingsport, and at mile 8.2. DRAINAGE AREA, 1,903 mi². PERIOD OF RECORD, October 1953 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by gravity nonover-flow type concrete dam. Spillway is equipped with five radial gates, each 35 ft high by 35 ft wide. Storage began Oct. 27, 1953; water in reservoir first reached minimum pool elevation Dec. 8, 1953. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,263 ft, top of gates, is 13,600 cfs-days, of which 2,200 cfs-days is controlled storage above elevation 1,258 ft, normal minimum pool. Reservoir is used for navigation, flood control and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 14,000 cfs-days, Feb. 11, 1954, elevation, 1,263.80 ft, minimum after first filling, 2,690 cfs-days, Sept. 19, 1986, elevation, 1,226.33 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,500 cfs-days, May 14, elevation, 1,262.90 ft; minimum, 2,710 cfs-days, Oct. 4, elevation, 1,226.42 ft.

03493500 CHEROKEE LAKE.--Lat 36°10'00", long 83°29'55", Jefferson County, Hydrologic Unit 06010104, at Cherokee Dam on Holston River, 0.3 mi upstream from bridge on State Highway 92, 2.7 mi upstream from Mill Spring Creek, 2.8 mi north of Jefferson City, and at mile 52.3. DRAINAGE AREA, 3,429 mi². PERIOD OF RECORD, December 1941 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with nine radial gates, each 32 ft high by 40 ft wide. Storage began Dec. 5, 1941; water in reservoir first reached minimum pool elevation Jan. 6, 1942. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,075.0 ft, top of gates, is 778,400 cfs-days, of which 580,300 cfs-days is controlled storage above elevation 1,020.0 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 779,400 cfs-days, May 11, 1944, maximum elevation, 1,074.47 ft May 30, 1973; minimum after first filling, 48,400 cfs-days, Jan. 7, 1954, elevation, 980.77 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 704,400 cfs-days, May 10, elevation, 1,070.10 ft; minimum, 256,100 cfs-days, Jan. 18, elevation, 1,028.58 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
03486800 BOONE LAKE				03487000 FORT PATRICK HENRY LAKE			03493500 CHEROKEE LAKE		
Sept. 30.....	1,378.08	83,100	-	1,226.96	2,800	-	1,034.82	305,300	-
Oct. 31.....	1,373.47	74,600	-8,500	1,235.91	4,600	+1,800	1,030.90	273,700	-31,600
Nov. 30.....	1,365.77	62,000	-12,600	1,261.50	12,900	+8,300	1,033.21	292,000	+18,300
Dec. 31.....	1,358.21	51,200	-10,800	1,262.89	13,500	+600	1,037.62	329,400	+37,400
CAL YR 1986	-	-	-400	-	-	+1,000	-	-	+67,400
Jan. 31.....	1,361.08	55,100	+3,900	1,260.20	12,300	-1,200	1,038.28	335,300	+5,900
Feb. 28.....	1,366.45	63,000	+7,900	1,260.59	12,500	+200	1,043.30	382,200	+46,900
Mar. 31.....	1,374.64	76,700	+13,700	1,260.67	12,500	0	1,049.14	442,200	+60,000
Apr. 30.....	1,382.48	92,000	+15,300	1,260.64	12,500	0	1,067.98	674,400	+232,200
May 31.....	1,381.19	89,300	-2,700	1,259.56	12,100	-400	1,067.96	674,100	-300
June 30.....	1,381.90	90,800	+1,500	1,260.53	12,500	+400	1,063.39	612,200	-61,900
July 31.....	1,381.10	89,100	-1,700	1,260.60	12,500	0	1,056.42	524,800	-87,400
Aug. 31.....	1,380.92	88,800	-300	1,261.87	13,100	+600	1,044.47	393,800	-131,000
Sept. 30.....	1,377.49	81,900	-6,900	1,260.78	12,600	-500	1,036.98	323,800	-70,000
WTR YR 1987	-	-	-1,200	-	-	+9,800	-	-	+18,500

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03499500 FORT LOUDOUN LAKE.--Lat 35°47'30", long 84°14'35", Loudon County, Hydrologic Unit 06010201, at Fort Loudoun Dam on Tennessee River, 1 mi northeast of Lenoir City, and at mile 602.3. DRAINAGE AREA, 9,550 mi². PERIOD OF RECORD, July 1943 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir formed by concrete dam with earth embankment. Spillway equipped with 14 radial gates, each 32 ft high by 40 ft wide. Closure of dam was made Aug. 2, 1943; water in reservoir first reached ordinary minimum pool elevation Sept. 4, 1943. Revised capacity table put into use Jan. 19, 1980. Total level pool capacity at elevation 815.00 ft, top of gates, is 424,000 cfs-days, of which 120,000 cfs-days is controlled flood storage above elevation 807.00 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power. Tellico-Fort Loudoun canal was opened Jan. 19, 1980. Canal is 1,000 ft long, and interconnects Tellico and Fort Loudoun Lakes at the dam. Spillway gates of Tellico Dam were closed Feb. 7, 1980, diverting all flow from Little Tennessee River.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 815.14 ft, May 8, 1984; minimum after first filling, 805.54 ft, Jan 18, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 185,000 cfs-days, May 21; maximum elevation, 813.31 ft May 22; minimum midnight contents, 144,000 cfs-days, Mar. 27, minimum elevation, 807.25 ft Mar. 27. Contents based on backwater profile.

03518200 CHILHOWEE LAKE.--Lat 35°32'43", long 84°03'02", Monroe County, Hydrologic Unit 06010204, at Chilhowee Dam on Little Tennessee River, 2.4 mi southwest of Chilhowee, 2.6 mi upstream from Citico Creek, 10.1 mi downstream from Calderwood Dam, and at mile 33.6. DRAINAGE AREA, 1,977 mi². PERIOD OF RECORD, August 1957 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with rockfill end abutments. Spillway controlled by six radial gates, each 38 ft high by 35 ft wide. Closure of dam was made June 9, 1957; storage began Aug. 1, 1957; water in reservoir first reached minimum pool elevation Aug. 9, 1957. Total capacity at elevation 874.0 ft, top of gates, is 24,800 cfs-days, of which 3,400 cfs-days is controlled storage above elevation 870.0 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Gage-height record furnished by Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 25,400 cfs-days, May 28, 1973, elevation, 874.60 ft; minimum after first filling, 18,100 cfs-days, May 18, 1963, elevation, 865.94 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 24,800 cfs-days, Oct. 27, elevation, 873.98 ft; minimum, 22,100 cfs-days, July 1, elevation, 870.88 ft.

03519800 TELlico LAKE.--Lat 35°46'53", long 84°15'10", Loudon County, Hydrologic Unit 06010201, at Tellico Dam on Little Tennessee River, 1.1 mi south of Lenoir City, and at mile 0.4. DRAINAGE AREA, 2,627 mi². PERIOD OF RECORD, December 1979 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir formed by concrete dam with earth embankment. Spillway equipped with 3 radial gates, each 42 ft high by 40 ft wide. Closure of dam was made Nov. 29, 1979; water in reservoir first reached ordinary minimum pool elevation Dec. 24, 1979. Total capacity at elevation 815.00 ft, top of gates, is 225,500 cfs-days, of which 63,800 cfs-days is controlled storage above elevation 807.00 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and indirectly, power. Tellico-Fort Loudoun canal was opened Jan. 19, 1980. Canal is 1,000 ft long, and interconnects Tellico and Fort Loudoun Lakes at the dam. Spillway gates of Tellico Dam were closed Feb. 7, 1980, diverting all flow from Little Tennessee River.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 228,700 cfs-days, May 8, 1984, elevation, 815.37 ft; minimum after first filling, 155,400 cfs-days, Jan. 11, 1985, elevation, 807.31 ft; minimum elevation, 806.96 ft, Jan. 14, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 200,600 cfs-days, May 22, elevation, 813.38 ft; minimum, 155,500 cfs-days, Mar. 27, elevation, 807.33 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03499500	FORT LOUDOUN LAKE†		03518200	CHILHOWEE LAKE		03519800	TELlico LAKE	
Sept. 30.....	812.66	180,800	-	872.42	23,400	-	812.72	195,400	-
Oct. 31.....	812.66	180,800	0	873.39	24,300	+900	812.70	195,300	-100
Nov. 30.....	808.68	153,200	-27,600	873.36	24,300	0	808.72	165,400	-29,900
Dec. 31.....	807.96	149,000	-4,200	873.22	24,200	-100	808.05	160,500	-4,900
CAL YR 1986	-	-	-2,000	-	-	+600	-	-	-11,500
Jan. 31.....	808.80	153,900	+4,900	873.31	24,200	0	808.84	166,200	+5,700
Feb. 28.....	808.34	151,200	-2,700	872.87	23,800	-400	808.43	163,300	-2,900
Mar. 31.....	807.99	148,800	-2,400	873.34	24,200	+400	808.07	160,700	-2,600
Apr. 30.....	812.37	179,000	+30,200	873.56	24,400	+200	812.41	193,000	+32,300
May 31.....	812.82	181,800	+2,800	873.42	24,300	-100	812.87	196,600	+3,600
June 30.....	812.70	181,400	-400	870.95	22,200	-2,100	812.77	195,800	-800
July 31.....	812.47	179,600	-1,800	872.47	23,500	+1,300	812.52	193,900	-1,900
Aug. 31.....	812.53	179,800	+200	873.53	24,400	+900	812.57	194,300	+400
Sept. 30.....	812.70	181,200	+1,400	873.52	24,400	0	812.76	195,800	+1,500
WTR YR 1987	-	-	+400	-	-	+1,000	-	-	+400

† Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03532500 NORRIS LAKE.--Lat 36°13'29", long 84°05'29", Anderson County, Hydrologic Unit 06010205, at Norris Dam on Clinch River, 2.5 mi northwest of Norris, and at mile 79.8. DRAINAGE AREA, 2,912 mi². PERIOD OF RECORD, June 1935 to current year. GAGE, water-stage recorder. Datum of gage is 0.11 ft above National Geodetic Vertical Datum of 1929. Gage readings have been reduced to National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete gravity dam with three drum gates, each 100 ft wide by 14 ft high. Some storage began in June 1935; dam was completely closed and placed in operation Mar. 4, 1936; water in reservoir first reached minimum pool elevation Mar. 24, 1936. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 1,034.11 ft, top of gates, is 1,286,600 cfs-days, of which 969,000 cfs-days is controlled storage above elevation 960.11 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,236,700 cfs-days, Feb. 11, 1937, elevation, 1,031.21 ft; minimum after first filling, 75,500 cfs-days, Jan. 24, 1956, elevation, 909.46 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 999,400 cfs-days, Apr. 28, elevation, 1,018.28 ft; minimum, 448,500 cfs-days, Nov. 7, elevation, 975.60 ft.

03535900 MELTON HILL LAKE.--Lat 35°53'04", 84°18'01", Loudon-Roane County line, Hydrologic Unit 06010207, 9 mi southwest of Oak Ridge, 19 mi west of Knoxville, 57 mi downstream from Norris Dam on Clinch River, and at mile 23.1. DRAINAGE AREA, 3,343 mi². PERIOD OF RECORD, August 1962 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete gravity dam. Spillway is equipped with three radial gates, each 42 ft high by 40 ft wide. Dam completed and storage began May 1, 1963; water in reservoir first reached minimum pool elevation May 23, 1963. Revised capacity table put into use Jan. 1, 1971. Total capacity at elevation 796 ft, top of gates, is 63,500 cfs-days, of which 16,100 cfs-days is controlled storage above elevation 790.0 ft, normal minimum pool. Reservoir is used for navigation, power, and recreation.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 64,900 cfs-days, Mar. 16, 1973, elevation, 796.45 ft; minimum after first filling, 35,100 cfs-days, Feb. 9, 1966, elevation, 784.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 60,800 cfs-days, Dec. 25, elevation, 795.11 ft; minimum, 47,400 cfs-days, Mar. 19, elevation, 790.00 ft.

03543000 WATTS BAR LAKE.--Lat 35°37'13", long 84°47'00", Rhea County, Hydrologic Unit 06010201, at Watts Bar Dam on Tennessee River, 6.5 mi southeast of Spring City, 72.4 mi downstream from Fort Loudoun Dam, and at mile 529.9. DRAINAGE AREA, 17,310 mi², approximately. PERIOD OF RECORD, October 1941 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with 20 radial gates, each 32 ft high by 40 ft wide, also one 2-section leaf trashway gate 16.3 ft high by 24 ft wide. Storage began with partial closure Dec. 12, 1941, and final closure Jan. 1, 1942; water in reservoir first reached minimum navigation pool elevation Feb. 17, 1942. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 745.0 ft, top of gates, is 592,400 cfs-days, of which 191,000 cfs-days is controlled flood storage above elevation 735.0 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 745.40 ft, Mar. 17, 1973; minimum after first filling, 733.44 ft, Mar. 20, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 524,000 cfs-days, Apr. 25; maximum elevation, 741.88 ft, Apr. 26; minimum midnight contents, 410,000 cfs-days, Mar. 18; minimum elevation, 735.20 ft Jan. 13. Contents based on backwater profile.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
03532500 NORRIS LAKE				03535900 MELTON HILL LAKE			03543000 WATTS BAR LAKE†		
Sept. 30.....	983.58	527,600	-	794.39	58,700	-	740.94	508,100	-
Oct. 31.....	977.75	468,100	-59,500	794.28	58,400	-300	738.39	460,300	-47,800
Nov. 30.....	982.59	517,100	+49,000	793.49	56,200	-2,200	737.40	442,600	-17,700
Dec. 31.....	989.78	596,600	+79,500	794.63	59,400	+3,200	736.15	425,400	-17,200
CAL YR 1986	-	-	+100,300	-	-	+2,000	-	-	+9,400
Jan. 31.....	992.33	626,800	+30,200	791.76	51,700	7,700	737.08	436,800	+11,400
Feb. 28.....	998.01	697,800	+71,000	792.39	53,300	+1,600	736.18	426,600	-10,200
Mar. 31.....	1,001.78	748,000	+50,200	793.73	56,900	+3,600	736.20	424,400	-2,200
Apr. 30.....	1,018.05	993,800	+245,800	794.48	59,000	+2,100	740.66	503,800	+79,400
May 31.....	1,014.48	935,600	-58,200	793.67	56,700	-2,300	740.34	496,700	-7,100
June 30.....	1,011.96	896,000	-39,600	793.91	57,400	+700	740.36	498,200	+1,500
July 31.....	1,004.05	779,400	-116,600	793.70	56,800	-600	740.83	507,100	+8,900
Aug. 31.....	991.81	620,600	-158,800	794.31	58,500	+1,700	740.21	495,000	-12,100
Sept. 30.....	985.74	550,900	-69,700	794.00	57,600	-900	740.86	507,500	+12,500
WTR YR 1987	-	-	+23,300	-	-	-1,100	-	-	-600

† Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03564000 LAKE OCOEE.--Lat 35°05'40", long 84°38'53", Polk County, Hydrologic Unit 06020003, at Lake Ocoee Dam on Ocoee River at Parksville, 13.8 mi east of Cleveland, and at mile 11.9. DRAINAGE AREA, 595 mi². PERIOD OF RECORD, June 1914 to current year. Prior to October 1953, published as "Parksville (Ocoee No. 1) Reservoir," and October 1953 to September 1968, as "Parksville Lake." GAGE, nonrecording gage. Datum of gage is 6.89 ft above National Geodetic Vertical Datum of 1929. Gage readings have been reduced to National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with 347 ft of spillway. Spillway is equipped with four floodgates, each 6 ft high by 20 ft wide and 265 ft of flashboards about 5.7 ft high. Crest of spillway under gates is at elevation 830.82 ft; remainder of spillway is 1.0 ft higher. Dam completed and storage began in 1911. Capacity of reservoir has been considerably reduced by silting. Revised capacity table put into use Jan. 1, 1979. Total capacity at elevation 837.55 ft, about top of flashboards, is 42,300 cfs-days, of which 15,600 cfs-days is controlled storage above elevation 817.9 ft, normal minimum pool. Reservoir is used for power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum midnight contents observed, 53,300 cfs-days, July 9, 1916; maximum midnight elevation observed, 840.2 ft, Feb. 10, 1946; minimum contents observed, 27,300 cfs-days, Jan. 27, 1956, elevation, 817.7 ft; minimum midnight elevation observed, 814.8 ft, Dec. 14, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 40,800 cfs-days, July 14, elevation, 829.5 ft; minimum contents observed, 32,800 cfs-days, Jan. 12, elevation, 820.5 ft.

03566500 CHICKAMAUGA LAKE.--Lat 35°06'07", long 85°13'42", Hamilton County, Hydrologic Unit 06020001, at Chickamauga Dam on Tennessee River, 5.8 mi northeast of Chattanooga, 58.9 mi downstream from Watts Bar Dam, and at mile 471.0. DRAINAGE AREA, 20,790 mi², approximately. PERIOD OF RECORD, October 1939 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with eighteen 2-section lift gates, each 40.44 ft high by 40 ft wide. Storage began Feb. 6, 1940; water in reservoir first reached minimum navigation pool elevation Mar. 10, 1940. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 685.44 ft, top of gates, is 372,600 cfs-days, of which 175,000 cfs-days is controlled flood storage above elevation 675.0 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 686.10 ft, Mar. 18, 1973; minimum after first filling, 673.27 ft, Jan. 21, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 326,000 cfs-days, Apr. 23; maximum elevation, 683.04 ft, May 24; minimum midnight contents, 206,000 cfs-days, Mar. 17, minimum elevation, 674.91 ft, Mar. 25. Contents based on backwater profile.

03570520 NICKAJACK LAKE.--Lat 35°00'07", long 85°37'14", Marion County, Hydrologic Unit 06020001, at Nickajack Dam on Tennessee River, 2 mi upstream from Sequatchie River, 5 mi south of Jasper, 46.3 mi downstream from Chickamauga Dam, and at mile 424.7. DRAINAGE AREA, 21,870 mi², approximately. PERIOD OF RECORD, December 1967 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with earth embankments on each side. The spillway, with crest at elevation 595.0 ft, is equipped with 10 radial gates, each 40 ft high by 40 ft wide. A trash gate, 5.5 ft high by 15 ft wide, is located between the spillway and powerhouse. Dam was completed and storage began on Dec. 14, 1967. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 635.0 ft, top of gates, is 127,200 cfs-days, of which 16,200 cfs-days is controlled storage above elevation 632.0 ft, ordinary minimum. Reservoir is used for navigation and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 634.99 ft, Apr. 19, 1969; minimum after first filling, 630.82 ft, Feb. 20, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 131,000 cfs-days, Feb. 27; maximum elevation, 634.28 ft, June 22; minimum midnight contents, 118,000 cfs-days, Oct. 28, minimum elevation, 631.97 ft, Mar. 6. Contents based on backwater profile.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03564000 LAKE OCOEE			03566500 CHICKAMAUGA LAKE†			03570520 NICKAJACK LAKE†		
Sept. 30.....	834.7	39,100	-	680.88	286,700	-	633.33	119,700	-
Oct. 31.....	834.5	38,900	-200	678.66	249,400	-37,300	633.62	121,200	+1,500
Nov. 30.....	830.1	35,000	-3,900	677.61	233,700	-15,700	633.89	125,400	+4,200
Dec. 31.....	828.9	34,000	-1,000	675.85	214,100	-19,600	633.21	122,000	-3,400
CAL YR 1986	-	-	-900	-	-	+2,100	-	-	+4,000
Jan. 31.....	828.5	33,700	-300	677.01	225,100	+11,000	633.89	125,200	+3,200
Feb. 28.....	832.1	36,700	+3,000	676.03	224,900	-200	632.26	127,800	+2,600
Mar. 31.....	829.8	34,700	-2,000	676.90	224,600	-300	633.74	121,900	-5,900
Apr. 30.....	835.2	39,600	+4,900	682.28	314,800	+90,200	633.30	121,000	-900
May 31.....	835.1	39,500	-100	682.40	315,000	+200	633.00	119,300	-1,700
June 30.....	835.2	39,600	+100	682.10	309,300	-5,700	633.72	122,900	+3,600
July 31.....	835.5	39,900	+300	681.11	293,400	-15,900	633.99	124,700	+1,800
Aug. 31.....	835.5	39,900	0	680.98	288,300	-5,100	633.48	120,700	-4,000
Sept. 30.....	835.6	40,000	+100	680.63	282,400	-5,900	633.59	121,100	+400
WTR YR 1987	-	-	+900	-	-	-4,300	-	-	+1,400

† Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03580740 TIMS FORD LAKE.--Lat 35°11'51", long 86°16'41", Franklin County, Hydrologic Unit 06030003, in intake tower near left bank at Tims Ford Dam on Elk River, 0.4 mi upstream from bridge on State Highway 50, 9.5 mi west of Winchester, and at mile 133.4. DRAINAGE AREA, 529 mi². PERIOD OF RECORD, December 1970 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with compacted rockfill impervious earth core embankments. Spillway equipped with three radial gates, each 42 ft high by 40 ft wide. Storage began Dec. 1, 1970; water in reservoir first reached minimum pool elevation Feb. 23, 1971, and first filling was completed June 3, 1971. Total capacity at elevation 895 ft, top of gates, is 306,500 cfs-days, of which 142,400 cfs-days is controlled storage above elevation 865 ft, normal minimum pool. Reservoir is used for flood control, power, and recreation.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 296,300 cfs-days, Mar. 17, 1973, elevation, 893.24 ft; minimum after first filling 154,000 cfs-days, Oct. 15, 1972, elevation, 862.24 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 245,800 cfs-days, Nov. 27, elevation, 883.90 ft; minimum, 189,500 cfs-days, Jan. 14, elevation, 871.48 ft.

03593000 PICKWICK LAKE.--Lat 35°04'16", long 88°15'04", Hardin County, Hydrologic Unit 06040001, at Pickwick Landing Dam on Tennessee River, 1.5 mi north of town of Pickwick Dam, 6.1 mi upstream from Lick Creek, 52.7 mi downstream from Wilson Dam, and at mile 206.7. DRAINAGE AREA, 38,820 mi², approximately. PERIOD OF RECORD, October 1937 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway equipped with twenty-two 2-section lift gates, each 40 ft high by 40 ft wide, one of which is used as a trash gate. Dam completed and storage began Feb. 8, 1938; water in reservoir first reached minimum pool elevation Feb. 18, 1938. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 418.0 ft, top of gates, is 557,100 cfs-days, of which 210,200 cfs-days is controlled flood storage above elevation 408.0 ft, minimum navigation pool. Reservoir is used for navigation, flood control, and power.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 419.49 ft, Mar. 30, 1944; minimum after first filling, 407.12 ft, Dec. 18, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 502,000 cfs-days, Nov. 28; maximum elevation, 415.10 ft, Nov. 29; minimum midnight contents, 362,000 cfs-days, Feb. 9, minimum elevation, 408.21 ft, Feb. 10. Contents based on backwater profile.

03596460 NORMANDY LAKE.--Lat 35°27'55", long 86°14'48", Coffee County, Hydrologic Unit 06040002, at Normandy Dam on Duck River, 1.5 mi northeast of Normandy, 2.6 mi downstream from Riley Creek, 8 mi north of Tullahoma, and at mile 248.6. DRAINAGE AREA, 195 mi². PERIOD OF RECORD, January 1976 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete gravity dam with riprapped and rolled earthfill embankment on left side. Spillway is equipped with two radial gates, each 40 ft high by 36 ft wide. Storage began Jan. 5, 1976; water in reservoir first reached minimum pool elevation Mar. 22, 1976. Revised capacity table put into use Jan. 1, 1977. Total capacity at elevation 880 ft, top of gates, is 64,000 cfs-days, of which 30,400 cfs-days is controlled storage above elevation 859 ft, normal minimum pool. Reservoir is used for flood control, water supply, water quality control, recreation, and shoreline development.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 63,500 cfs-days, May 19, 1983, elevation, 879.70 ft; minimum after first filling, 26,800 cfs-days, Nov. 27, 1981, elevation, 853.12 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 56,600 cfs-days, Nov. 10, elevation, 875.79 ft; minimum, 38,800 cfs-days, Dec. 23, elevation, 863.61 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03580740 TIMS FORD LAKE			03593000 PICKWICK LAKE†			03596460 NORMANDY LAKE		
Sept. 30.....	883.52	244,000	-	410.88	401,600	-	873.43	52,900	-
Oct. 31.....	882.78	240,300	-3,700	410.34	393,100	-8,500	872.69	51,700	-1,200
Nov. 30.....	882.80	240,400	+100	413.97	473,300	+80,200	867.95	44,800	-6,900
Dec. 31.....	873.62	198,500	-41,900	409.47	383,500	-89,800	864.00	39,400	-5,400
CAL YR 1986	-	-	+17,700	-	-	+19,500	-	-	+5,900
Jan. 31.....	875.10	204,800	+6,300	409.98	388,100	+4,600	864.31	39,800	+400
Feb. 28.....	881.42	233,600	+28,800	413.90	485,500	+97,400	870.03	47,700	+7,900
Mar. 31.....	879.39	224,000	-9,600	412.05	425,600	-59,900	869.86	47,500	-200
Apr. 30.....	881.73	235,100	+11,100	413.73	460,700	+35,100	872.46	51,400	+3,900
May 31.....	882.35	238,200	+3,100	413.62	460,000	-700	871.83	50,400	-1,000
June 30.....	882.83	240,500	+2,300	414.09	468,400	+8,400	870.27	48,100	-2,300
July 31.....	882.60	239,400	-1,100	412.83	441,400	-27,000	868.53	45,600	-2,500
Aug. 31.....	882.47	238,700	-700	411.40	412,400	-29,000	866.66	43,000	-2,600
Sept. 30.....	878.97	222,100	-16,600	410.95	402,800	-9,600	864.68	40,300	-2,700
WTR YR 1987	-	-	-21,900	-	-	+1,200	-	-	-12,600

† Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03609000 KENTUCKY LAKE.--Lat. 37°00'49", long 88°16'06", Marshall County, KY, Hydrologic Unit 06040006, at Kentucky Dam on Tennessee River at Gilbertsville, KY, and at mile 22.4. DRAINAGE AREA, 40,200 mi², approximately. PERIOD OF RECORD, July 1944 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete dam with 24 lift gates 50 ft high by 40 ft wide. Storage began Aug. 16, 1944, and final closure was Aug. 30, 1944. Water in reservoir reached minimum pool elevation Apr. 7, 1945. Revised capacity table put into use Jan. 1, 1971. Total level pool capacity at elevation 375.0 ft, top of gates, is 3,090,000 cfs-days, of which 2,020,700 cfs-days is controlled storage above 354.0 ft, ordinary minimum pool. Reservoir is used for navigation, flood control, and power. Barkley-Kentucky Canal opened July 13, 1966, for navigation and power use. Canal is 1.75 miles long and interconnects Lake Barkley and Kentucky Lake at a point 2.2 mi upstream from Barkley Dam. For daily discharges through the canal, see Kentucky reports.

COOPERATION.--Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.87 ft, May 24, 1983; minimum after first filling, 348.02 ft, Mar. 11, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 1,519,000 cfs-days, Mar. 2; maximum elevation, 359.74 ft, Apr. 23; minimum midnight contents, 1,077,000 cfs-days, Jan. 16, minimum elevation, 353.70 ft, Jan. 19.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
03609000 KENTUCKY LAKE†			
Sept. 30.....	355.47	1,153,400	-
Oct. 31.....	355.41	1,165,600	+12,200
Nov. 30.....	354.48	1,245,800	+80,200
Dec. 31.....	354.81	1,159,100	-86,700
CAL YR 1986	-	-	+70,100
Jan. 31.....	354.74	1,153,200	-5,900
Feb. 28.....	354.59	1,425,400	+272,200
Mar. 31.....	354.88	1,123,500	-301,900
Apr. 30.....	359.12	1,436,200	+312,700
May 31.....	359.20	1,445,000	+8,800
June 30.....	359.00	1,413,600	-31,400
July 31.....	357.86	1,338,800	-74,800
Aug. 31.....	356.10	1,213,100	-125,700
Sept. 30.....	354.98	1,126,200	-86,900
WTR YR 1987	-	-	-27,200

OTHER RESERVOIRS.--The following small reservoirs in the Tennessee River basin are described below, but records of contents are not published herein.

03466400 DAVY CROCKETT LAKE on Nolichucky River at Nolichucky Dam, with a total capacity of 1,300 cfs-days, none of which is controlled storage.

03517900 CALDERWOOD LAKE on Little Tennessee River at Calderwood, with a total capacity of 20,800 cfs-days of which 840 cfs-days is controlled storage.

03562500 OCOEE NO. 3 LAKE on Ocoee River at Ocoee No. 3 Dam, 5.0 miles west of Ducktown, with a total capacity of 1,660 cfs-days, of which 1,550 cfs-days is controlled storage. Records of contents previous to 1971 water year published as Ocoee No. 3 Lake near Ducktown, TN.

† Contents based on backwater profile.

07024300 BEAVER CREEK AT HUNTINGDON, TN

LOCATION.--Lat 35°59'56", long 88°26'01", Carroll County, Hydrologic Unit 08010203, on left bank on downstream end of bridge pier on U.S. Highway 70, 0.3 mi southwest of Huntingdon, 0.6 mi downstream from Brier Creek, and at mile 5.6.

DRAINAGE AREA.--55.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1946, 1948, 1952-54, 1958-61 and annual maximum, water years 1954-62. October 1962 to current year.

REVISED RECORDS.--WSP 1920: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 364.20 ft above National Geodetic Vertical Datum of 1929 (Tennessee State Highway Department bench mark). Dec. 21, 1945, to Oct. 3, 1962, nonrecording gage at site 30 ft downstream at same datum; Jan. 6, 1954, to Oct. 3, 1962, crest-stage gage at same site at datum 1.17 ft higher.

REMARKS.--No estimated daily discharges. Records poor.

AVERAGE DISCHARGE.--25 years, 112 ft³/s, 27.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,350 ft³/s, Sept. 9, 1970 from rating curve extended above 3,600 ft³/s, on basis of contracted opening measurement of peak flow; maximum gage height, 15.20 ft, Sept. 13, 1982; minimum discharge, 19 ft³/s, May 17, 1965, part of each day Aug. 23-31, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	2045	*2,640	*12.18	No other peak greater than base discharge.			

Minimum discharge, 22 ft³/s, July 22, 23, Aug. 14, 15, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	35	62	43	53	1200	85	28	25	49	26	27
2	25	36	63	41	148	363	64	28	25	32	26	26
3	25	36	53	39	83	101	54	28	25	44	29	27
4	25	38	45	39	59	72	47	28	25	44	42	27
5	24	66	43	38	52	61	45	27	25	38	29	27
6	24	53	41	38	46	56	44	27	25	33	29	27
7	24	101	41	37	46	52	44	27	25	30	27	30
8	24	1780	67	38	44	51	43	27	25	26	26	46
9	24	1590	591	41	38	50	40	27	25	23	25	31
10	24	382	958	50	38	42	39	27	25	29	31	29
11	24	251	282	44	39	39	46	26	25	35	27	30
12	33	139	85	40	40	38	40	26	27	56	25	58
13	33	66	62	40	38	38	49	26	28	52	25	45
14	28	54	55	40	50	39	290	26	25	37	24	43
15	26	50	53	40	64	40	240	26	25	35	23	37
16	26	46	52	38	301	40	181	26	40	33	23	44
17	25	43	52	37	275	40	106	26	89	32	25	139
18	24	41	51	67	132	128	75	28	41	29	27	48
19	24	38	44	87	91	180	62	26	36	27	27	34
20	24	41	42	56	76	85	53	26	36	26	26	30
21	25	40	40	48	81	62	47	26	38	24	26	27
22	25	39	38	47	212	53	45	26	37	23	24	27
23	27	40	91	42	548	48	43	26	51	26	25	26
24	57	42	228	40	274	54	39	26	36	34	25	27
25	97	94	93	54	96	48	36	27	33	28	25	26
26	48	342	65	46	146	41	33	32	39	27	25	25
27	39	157	56	37	800	41	33	26	34	27	32	25
28	37	72	51	47	1170	39	30	26	31	27	42	24
29	37	58	48	91	---	40	29	26	28	29	30	60
30	37	55	46	102	---	90	28	26	25	28	28	46
31	35	---	43	61	---	119	---	25	---	27	28	---
TOTAL	975	5825	3541	1508	5040	3350	2010	828	974	1010	852	1118
MEAN	31.5	194	114	48.6	180	108	67.0	26.7	32.5	32.6	27.5	37.3
MAX	97	1780	958	102	1170	1200	290	32	89	56	42	139
MIN	24	35	38	37	38	38	28	25	25	23	23	24
CFSM	.57	3.50	2.06	.88	3.24	1.95	1.21	.48	.58	.59	.50	.67
IN.	.65	3.90	2.37	1.01	3.38	2.25	1.35	.55	.65	.68	.57	.75
CAL YR 1986	TOTAL 26392	MEAN 72.3	MAX 1780	MIN 19	CFSM 1.30	IN. 17.69						
WTR YR 1987	TOTAL 27031	MEAN 74.1	MAX 1780	MIN 23	CFSM 1.33	IN. 18.11						

OBION RIVER BASIN

07024300 BEAVER CREEK AT HUNTINGDON, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1963-65, 1979-82, 1986-87.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, DIS- SUS- PENDED (MG/L)	SEDI- MENT, DIS- SUS- PENDED (T/DAY)
OCT						
16...	1045	25	51	17.0	22	1.5
DEC						
04...	1140	45	50	13.0	15	1.8
JAN						
15...	1410	41	69	10.0	9	1.0
FEB						
19...	1640	86	--	6.0	71	16
26...	1745	612	--	--	470	777
APR						
07...	0950	44	70	11.0	25	3.0
JUL						
09...	1100	30	55	22.5	45	3.6
AUG						
18...	1430	28	53	21.5	73	5.5

OBION RIVER BASIN

227

07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD, TN

LOCATION.--Lat 36°07'05", long 88°48'39", Weakley County, Hydrologic Unit 08010203, on left bank 75 ft downstream from bridge on U.S. Highway 45E, 1.1 mi downstream from Mosley Branch, 2.5 mi south of Greenfield, and 9.7 mi upstream from confluence with Middle Fork.

DRAINAGE AREA.--383 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1929 to current year.

REVISED RECORDS.--WSP 1311: 1936(M). WSP 1920: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 300.36 ft above National Geodetic Vertical Datum of 1929. Prior to June 22, 1939, recording gage at site 75 ft upstream at same datum.

REMARKS.--Estimated daily discharges: May 7-17, 20-22, 24-27 and Sept. 19-30. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--58 years, 582 ft³/s, 20.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s, Jan. 22, 1937, gage height, 17.82 ft, from floodmarks, from rating curve extended above 14,000 ft³/s; minimum, 61 ft³/s, Aug. 21, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 2	1800	*4,230	*14.02	No other peak greater than base discharge.			

Minimum daily discharge, 81 ft³/s, Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	157	317	238	280	3610	282	172	163	124	87	86
2	151	148	290	230	437	4120	304	164	145	137	86	85
3	154	143	266	223	370	3910	295	158	139	403	86	84
4	147	141	245	219	369	2750	274	156	135	263	86	83
5	143	211	230	213	344	1190	255	157	130	270	86	82
6	138	187	217	209	315	642	240	155	125	214	85	82
7	136	197	207	204	290	490	230	140	120	187	85	82
8	136	568	205	200	277	418	222	135	116	166	85	82
9	140	984	1170	199	244	374	215	130	113	215	84	82
10	144	1090	1110	204	225	335	208	127	111	131	238	82
11	145	1390	1230	204	213	308	210	122	107	121	97	82
12	145	1610	1410	204	206	306	204	117	104	118	89	82
13	145	1350	1210	203	200	281	207	113	114	113	88	82
14	145	784	687	200	207	267	438	110	115	111	88	83
15	143	502	454	200	211	254	502	108	118	111	88	88
16	140	382	357	198	403	244	680	107	236	110	87	117
17	137	310	307	195	523	236	721	106	262	106	87	180
18	135	270	278	212	718	286	583	170	207	98	86	131
19	134	242	258	229	604	402	474	115	217	95	87	118
20	132	224	244	238	472	424	395	107	214	91	86	98
21	132	208	231	252	388	400	342	122	196	89	86	93
22	130	196	220	254	753	360	304	190	177	86	86	90
23	128	188	244	246	982	320	274	162	164	85	87	87
24	131	180	334	236	916	295	249	128	155	117	87	85
25	172	185	342	234	972	275	233	150	181	111	87	83
26	188	218	371	224	988	257	219	175	182	96	87	82
27	206	310	350	225	1880	244	210	190	142	93	87	81
28	212	422	315	223	3140	231	198	162	136	91	87	96
29	203	432	287	240	---	221	189	155	130	90	87	160
30	187	367	265	253	---	225	181	152	125	89	87	120
31	169	---	248	264	---	245	---	149	---	89	87	---
TOTAL	4695	13596	13899	6873	16927	23920	9338	4404	4579	4220	2846	2868
MEAN	151	453	448	222	605	772	311	142	153	136	91.8	95.6
MAX	212	1610	1410	264	3140	4120	721	190	262	403	238	180
MIN	128	141	205	195	200	221	181	106	104	85	84	81
CFSM	.40	1.18	1.17	.58	1.58	2.01	.81	.37	.40	.36	.24	.25
IN.	.46	1.32	1.35	.67	1.64	2.32	.91	.43	.44	.41	.28	.28

CAL YR 1986	TOTAL 124633	MEAN 341	MAX 2190	MIN 100	CFSM .89	IN. 12.10
WTR YR 1987	TOTAL 108165	MEAN 296	MAX 4120	MIN 81	CFSM .77	IN. 10.50

OBION RIVER BASIN

07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1979-82, 1986-87.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
16...	1410	139	50	15.0	25	9.4
NOV						
20...	0930	228	--	45.0	30	18
DEC						
04...	1600	243	60	9.0	22	14
JAN						
15...	1040	197	70	9.0	9	4.8
FEB						
19...	1250	620	--	4.0	141	236
26...	1845	1040	--	--	294	828
27...	1100	1800	--	--	298	1450
APR						
07...	1415	231	70	13.0	38	24
MAY						
29...	1045	152	80	24.0	112	46
JUL						
08...	1130	166	63	25.5	83	37
AUG						
17...	1530	87	68	26.5	37	8.7

OBION RIVER BASIN

229

07026000 OBION RIVER AT OBION, TN
(National stream-quality accounting network station)

LOCATION.--Lat 36°15'04", long 89°11'33", Obion County, Hydrologic Unit 08010202, near left bank on downstream end of bridge pier on old U.S. Highway 51, 0.5 mi upstream from Richland Creek, 0.6 mi south of Obion, 14.5 mi downstream from North Fork, and at mile 62.4.

DRAINAGE AREA.--1,852 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1929 to September 1958, October 1966 to current year. Gage height and discharge records at this site from 1964 to 1975 are in reports of U.S. Army Corps of Engineers.

REVISED RECORD.--WSP 1211: 1930, 1943. WSP 2120: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.48 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1932, nonrecording gage at present site at datum 5.00 ft higher; Oct. 1, 1932, to Aug. 2, 1939, nonrecording gage, and Aug. 3, 1939, to Sept. 1958, water-stage recorder at present site at datum 15.00 ft higher.

REMARKS.--Estimated daily discharges: Feb. 15 to Mar. 2, and July 29 to Aug. 4. Records fair.

COOPERATION.--Thirty six discharge measurements furnished by the U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--50 years, (water years 1930-58, 1967-87), 2690 ft³/s, 19.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 99,500 ft³/s, Jan. 24, 1937, gage height, 40.4 ft present datum; minimum, under conditions of no backwater, 230 ft³/s, Oct. 7-9, 1943; minimum daily discharge, 15 ft³/s, backwater from Mississippi River, Feb. 4, 1937; reverse flow of 57 ft³/s measured by current meter on that date.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 21,000 ft³/s, Mar. 1; minimum discharge, 411 ft³/s, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	634	995	901	1200	21000	1320	715	1230	1200	457	470
2	643	604	1100	878	1980	20300	1260	657	768	2240	454	463
3	647	586	1100	850	1970	16500	1240	608	652	1040	450	459
4	649	603	963	851	1300	10500	1110	574	607	2740	485	448
5	1360	770	883	854	1070	7500	976	526	582	4940	514	440
6	1030	1520	829	850	964	5200	903	490	562	1380	516	427
7	638	1100	804	802	900	3200	862	475	546	727	494	419
8	529	7590	853	807	827	1600	848	467	533	540	477	513
9	513	8350	11300	803	784	1300	846	455	526	1120	469	527
10	513	4570	15800	905	718	1150	804	440	518	2910	3630	451
11	529	4020	10000	949	704	1100	824	666	518	958	1430	440
12	658	4020	8000	909	710	1060	834	513	512	683	656	441
13	732	2920	5000	866	702	1060	1010	517	976	604	543	437
14	641	2100	3340	898	773	950	5790	487	578	645	508	473
15	618	1420	2070	896	944	900	4620	1470	593	592	494	693
16	579	1160	1560	881	4300	870	3110	939	1450	549	481	965
17	545	1010	1270	859	5000	925	2640	509	1160	524	467	2670
18	529	897	1110	924	3000	1980	2040	1370	662	508	546	1800
19	516	804	1010	1270	2000	3050	1660	2090	1130	487	593	811
20	506	762	937	1290	1800	2520	1410	614	809	473	468	650
21	506	713	868	1130	2000	1820	1250	495	1610	466	460	602
22	503	672	809	1060	4500	1560	1140	460	1360	462	458	575
23	501	653	796	1040	11000	1360	1060	467	1290	466	492	558
24	644	614	2140	981	12000	1200	986	576	664	536	500	532
25	2880	633	1930	971	11000	1160	927	684	716	1380	483	516
26	1440	1290	1450	976	10000	1070	885	694	2780	658	472	501
27	940	1800	1270	926	11500	991	866	677	920	507	490	482
28	809	1270	1150	887	19000	950	840	609	599	480	550	471
29	750	1180	1060	986	---	896	805	569	517	470	502	522
30	698	1070	998	1290	---	952	773	551	469	465	487	559
31	663	---	955	1340	---	1240	---	594	---	460	481	---
TOTAL	23228	55335	82350	29830	112646	115864	43639	20958	25837	31210	19507	19315
MEAN	749	1844	2656	962	4023	3738	1455	676	861	1007	629	644
MAX	2880	8350	15800	1340	19000	21000	5790	2090	2780	4940	3630	2670
MIN	501	586	796	802	702	870	773	440	469	460	450	419
CFSM	.40	.99	1.43	.52	2.17	2.02	.79	.37	.47	.54	.34	.35
IN.	.47	1.11	1.65	.60	2.26	2.33	.88	.42	.52	.63	.39	.39

CAL YR 1986 TOTAL 677551 MEAN 1856 MAX 18000 MIN 481 CFSM 1.00 IN. 13.61
WTR YR 1987 TOTAL 579719 MEAN 1588 MAX 21000 MIN 419 CFSM .86 IN. 11.64

OBION RIVER BASIN

07026000 OBION RIVER AT OBION, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1975 to September 1981.

WATER TEMPERATURE: June 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 488 microsiemens, Dec. 14, 1976; minimum, 35 microsiemens, July 21, 22, 1975.

WATER TEMPERATURES: Maximum, 33.5°C, June 18, 1978; minimum, -0.5°C, several days in Jan. and Feb. 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT 22...	1050	542	105	7.50	17.5	761	120	--	90	K14000	100	34
JAN 27...	1415	985	105	7.22	2.0	755	8.4	12.2	89	2300	46	27
APR 28...	1230	872	100	7.26	20.5	762	1.8	8.6	96	2800	39	30
AUG 04...	1100	428	90	7.10	30.0	755	17	7.4	99	2700	55	26
DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 22...	9	5.4	5.0	8.2	33	0.6	1.7	--	1.5	12	14	<0.10
JAN 27...	0	6.4	2.6	10	43	0.9	1.7	32	3.7	8.7	11	<0.10
APR 28...	0	7.2	3.0	6.9	32	0.6	1.6	34	3.6	8.4	5.1	<0.10
AUG 04...	0	6.6	2.2	7.1	36	0.6	1.6	32	5.0	4.9	5.1	0.20
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 22...	12	62	77	0.08	91	0.010	0.600	0.150	0.140	0.50	0.200	0.120
JAN 27...	11	64	72	0.09	170	<0.010	0.570	0.380	0.430	0.80	0.130	0.060
APR 28...	9.8	63	63	0.09	148	<0.010	0.420	<0.010	<0.010	0.60	0.130	0.060
AUG 04...	13	57	60	0.08	66	<0.010	0.260	0.010	<0.010	0.50	0.170	0.090
DATE	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
OCT 22...	0.080	50	<1	18	<0.5	1	<1	<3	3	140	5	<4
JAN 27...	0.050	20	<1	29	<0.5	1	<1	<3	<1	170	<5	<4
APR 28...	0.050	30	<1	30	<0.5	<1	<1	<3	3	230	<5	<4
AUG 04...	0.040	10	1	35	<0.5	<1	<1	<3	2	<3	<5	4

K--Results based on non-ideal colony count.

07026000 OBION RIVER AT OBION, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDEDED (MG/L)	MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)	SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 22...	76	0.1	<10	<4	<1	<1	32	<6	17	27	40	97
JAN 27...	280	2.7	<10	<1	<1	<1	40	<6	10	--	--	94
APR 28...	120	<0.1	<10	<1	<1	<1	50	<6	6	--	--	91
AUG 04...	86	2.5	<10	<1	<1	<1	43	<6	3	134	155	74

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
OCT 17...	1145	544	78	14.0	383	563
DEC 04...	1135	965	90	8.5	30	78
JAN 14...	1140	922	120	8.0	32	80
FEB 26...	1140	2570	--	--	157	1090
APR 08...	1345	785	110	14.0	45	95
MAY 15...	1300	1800	105	22.5	1910	9280
JUL 01...	1135	1340	100	24.5	1160	4200
29...	1415	637	--	29.5	732	1260
AUG 20...	1120	502	90	27.0	94	127

OBION RIVER BASIN

07026370 NORTH REELFOOT CREEK AT STATE HIGHWAY 22, NEAR CLAYTON, TN

LOCATION.--Lat 36°27'50", long 89°15'13", Obion County, Hydrologic Unit 08010202, on left bank on upstream side of bridge on State Highway 22, 0.9 mi northwest of Clayton, 9.9 mi west of intersection of State Highways 22 and 5, and 11.8 mi northeast of the spillway at Reelfoot Lake.

DRAINAGE AREA.--56.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1980 to October 1983, April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 290.78 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 17-20, Dec. 10, Mar. 2-3, May 25-26. Records fair.

AVERAGE DISCHARGE.--6 years, (water years 1981-83, 1985-87), 60.6 ft³/s, 14.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s, Dec. 3, 1982, gage height, 19.30 ft; no flow several days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	0430	839	15.93	Feb. 28	1430	1,530	18.45
Dec. 9	0715	*1,850	*19.00	May 31	2245	1,130	17.41

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	3.1	9.0	6.8	10	425	18	2.1	248	5.1	.04	.00
2	.14	3.3	8.4	5.9	45	304	20	1.7	64	4.7	.00	.00
3	.09	2.8	6.8	5.1	21	232	18	1.5	41	.56	.00	.00
4	.10	2.6	5.4	6.6	16	109	16	1.3	26	69	.00	.00
5	.04	4.4	4.2	7.4	13	58	14	1.1	16	152	8.2	.00
6	.00	5.5	3.2	8.8	11	40	13	.97	11	84	.33	.00
7	.00	5.9	2.7	10	9.5	31	13	.75	7.9	30	.14	.00
8	.00	423	4.8	8.2	8.6	27	14	.65	5.6	14	.08	.00
9	.00	285	1370	9.9	6.7	22	13	.54	4.0	9.0	.07	.00
10	.00	168	493	16	5.7	19	13	.47	2.8	6.3	.64	.00
11	.00	67	357	12	5.7	16	15	.42	2.1	4.6	.54	.00
12	71	33	324	10	5.7	14	13	1.1	1.4	3.3	.30	.00
13	21	18	294	9.5	5.2	13	41	.63	1.0	2.9	.24	.00
14	12	12	272	8.9	15	13	259	.45	.66	4.8	.19	.00
15	7.2	9.2	219	8.5	30	12	219	.88	.56	3.0	.15	.00
16	4.6	6.8	85	7.9	90	11	104	.73	.55	2.7	.11	.00
17	3.0	6.6	39	6.9	57	11	50	.66	.45	1.8	.46	.00
18	4.1	6.1	24	30	44	144	31	.91	.21	1.2	.16	.00
19	4.5	5.7	18	26	35	51	21	1.1	.21	.80	.05	.00
20	4.7	5.3	14	18	26	38	16	.75	.16	.45	.05	.00
21	4.5	4.4	12	15	22	31	13	.63	.16	.21	.03	.00
22	4.1	4.8	9.6	13	24	26	11	.48	.71	.16	.00	.00
23	3.6	4.7	9.7	11	31	22	9.1	.43	.30	.14	.00	.00
24	11	4.4	54	9.2	24	21	7.7	123	.16	.17	.00	.00
25	97	8.1	22	8.4	19	18	6.6	130	.13	2.8	.00	.00
26	47	103	17	6.0	91	16	5.5	47	.10	.32	.00	.00
27	22	45	13	5.0	289	15	4.8	27	.09	.14	.00	.00
28	12	24	11	5.2	969	14	3.7	16	.13	.06	.00	.00
29	7.5	15	9.4	6.8	---	13	3.1	11	.09	.04	.00	.00
30	4.1	11	8.6	9.0	---	17	2.6	8.7	.07	.04	.00	.00
31	3.0	---	7.6	7.1	---	19	---	172	---	.03	.00	---
TOTAL	348.38	1297.7	3727.4	318.1	1929.1	1802	988.1	554.95	435.54	404.32	11.78	.00
MEAN	11.2	43.3	120	10.3	68.9	58.1	32.9	17.9	14.5	13.0	.38	.00
MAX	97	423	1370	30	969	425	259	172	248	152	8.2	.00
MIN	.00	2.6	2.7	5.0	5.2	11	2.6	.42	.07	.03	.00	.00
CFSM	.20	.77	2.14	.18	1.22	1.03	.59	.32	.26	.23	.01	.00
IN.	.23	.86	2.46	.21	1.27	1.19	.65	.37	.29	.27	.01	.00

CAL YR 1986 TOTAL 21917.84 MEAN 60.0 MAX 1370 MIN .00 CFSM 1.07 IN. 14.48
WTR YR 1987 TOTAL 11817.26 MEAN 32.4 MAX 1370 MIN .00 CFSM .58 IN. 7.81

OBION RIVER BASIN

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07026370 NORTH REELFOOT CREEK AT STATE HIGHWAY 22, NEAR CLAYTON, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1979 to October 1983, April 1984 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1982 to October 1983, April 1984 to current year.

INSTRUMENTATION.-- Sediment pumping sampler October 1982 to October 1983, April 1984 to current year.

REMARKS.--No flow October 6-11, August 2-4, August 22 to September 30.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,010 mg/L, June 11, 1985; minimum daily mean, 0 mg/L, many days each year.

SEDIMENT LOADS: Maximum daily, 12,800 tons, June 11, 1985; minimum daily, 0 ton, many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,120 mg/L, May 25; minimum daily mean, 0 mg/L, many days.

SEDIMENT LOADS: Maximum daily, 7,200 tons, December 9; minimum 0 ton, many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT				
15...	1730	6.9	180	14.0
29...	1515	7.4	180	15.0
NOV				
07...	0845	4.0	180	13.5
14...	0925	12	112	4.0
20...	0940	5.0	175	9.0
26...	1315	148	130	11.0
DEC				
03...	1205	7.1	220	8.0
09...	1600	1180	95	11.5
09...	1655	1180	90	11.5
10...	1215	492	80	10.0
10...	1445	484	80	9.5
17...	1000	39	105	7.5
22...	1430	8.7	--	4.5
30...	1430	8.4	--	3.0
JAN				
07...	0945	11	320	4.5
14...	1130	8.9	340	4.5
23...	0845	10	220	0.0
29...	0905	5.5	--	2.0
FEB				
04...	1000	16	320	5.0
MAR				
18...	1035	136	190	12.5
25...	1040	16	410	13.0
APR				
07...	1230	13	480	12.0
13...	1105	12	500	16.0
14...	1120	252	260	16.5
17...	1100	50	320	16.0
21...	1015	13	400	20.0
30...	0955	3.1	420	19.0
MAY				
08...	0930	0.53	480	19.0
18...	1455	0.84	480	23.0
22...	1235	0.50	460	25.5
26...	0945	52	--	26.0
JUN				
04...	1215	27	260	24.0
10...	0925	3.1	--	25.0
JUL				
01...	1500	0.16	160	23.0
08...	1030	14	150	26.0
15...	1120	3.4	170	23.5
20...	1135	0.52	--	23.5

OBION RIVER BASIN

07026370 NORTH REELFOOT CREEK AT STATE HIGHWAY 22, NEAR CLAYTON, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.11	25	.01	3.1	41	.34	9.0	83	2.0
2	.14	34	.01	3.3	40	.36	8.4	80	1.8
3	.09	23	.01	2.8	38	.29	6.8	74	1.4
4	.10	18	.00	2.6	33	.23	5.4	66	.96
5	.04	9	.00	4.4	49	.58	4.2	62	.70
6	.00	0	.00	5.5	60	.89	3.2	60	.52
7	.00	0	.00	5.9	200	3.2	2.7	57	.42
8	.00	0	.00	423	1490	2120	4.8	60	.78
9	.00	0	.00	285	780	600	1370	1830	7200
10	.00	0	.00	168	500	227	493	1070	1420
11	.00	0	.00	67	203	37	357	780	752
12	71	1240	557	33	133	12	324	660	577
13	21	250	14	18	121	5.9	294	500	397
14	12	105	3.4	12	118	3.8	272	390	286
15	7.2	89	1.7	9.2	106	2.6	219	340	201
16	4.6	78	.97	6.8	96	1.8	85	250	57
17	3.0	75	.61	6.6	85	1.5	39	180	19
18	4.1	71	.79	6.1	76	1.3	24	159	10
19	4.5	69	.84	5.7	70	1.1	18	145	7.0
20	4.7	66	.84	5.3	65	.93	14	132	5.0
21	4.5	60	.73	4.4	65	.77	12	120	3.9
22	4.1	50	.55	4.8	60	.78	9.6	106	2.7
23	3.6	41	.40	4.7	55	.70	9.7	175	4.6
24	11	110	3.3	4.4	50	.59	54	496	88
25	97	433	130	8.1	340	7.4	22	240	14
26	47	210	27	103	1180	449	17	165	7.6
27	22	125	7.4	45	120	15	13	155	5.4
28	12	89	2.9	24	98	6.4	11	148	4.4
29	7.5	64	1.3	15	93	3.8	9.4	139	3.5
30	4.1	49	.54	11	90	2.7	8.6	130	3.0
31	3.0	45	.36	---	---	---	7.6	119	2.4
TOTAL	348.38	---	754.66	1297.7	---	3507.96	3727.4	---	11079.07
JANUARY			FEBRUARY			MARCH			
1	6.8	109	2.0	10	156	9.0	425	670	769
2	5.9	98	1.6	45	418	64	304	520	427
3	5.1	83	1.1	21	140	7.9	232	400	251
4	6.6	81	1.4	16	82	3.5	109	290	85
5	7.4	74	1.5	13	75	2.6	58	192	30
6	8.8	80	1.9	11	70	2.1	40	174	19
7	10	82	2.2	9.5	65	1.7	31	157	13
8	8.2	68	1.5	8.6	59	1.4	27	140	10
9	9.9	105	2.8	6.7	50	.90	22	122	7.2
10	16	110	4.8	5.7	38	.58	19	111	5.7
11	12	88	2.9	5.7	26	.40	16	101	4.4
12	10	83	2.2	5.7	19	.29	14	90	3.4
13	9.5	80	2.1	5.2	18	.25	13	88	3.1
14	8.9	75	1.8	15	310	13	13	86	3.0
15	8.5	78	1.8	30	492	46	12	85	2.8
16	7.9	78	1.7	90	704	233	11	82	2.4
17	6.9	77	1.4	57	225	35	11	89	2.6
18	30	619	54	44	160	19	144	1150	669
19	26	375	26	35	130	12	51	380	52
20	18	260	13	26	120	8.4	38	250	26
21	15	175	7.1	22	100	5.9	31	175	15
22	13	140	4.9	24	190	12	26	148	10
23	11	123	3.7	31	140	12	22	120	7.1
24	9.2	110	2.7	24	50	3.2	21	92	5.2
25	8.4	97	2.2	19	45	2.3	18	89	4.3
26	6.0	85	1.4	91	648	584	16	88	3.8
27	5.0	75	1.0	289	906	749	15	88	3.6
28	5.2	63	.88	969	2210	6270	14	84	3.2
29	6.8	56	1.0	---	---	---	13	85	3.0
30	9.0	61	1.5	---	---	---	17	109	5.0
31	7.1	58	1.1	---	---	---	19	100	5.1
TOTAL	318.1	---	155.18	1929.1	---	8099.42	1802	---	2450.9

07026370 NORTH REELFOOT CREEK AT STATE HIGHWAY 22, NEAR CLAYTON, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	18	87	4.2	2.1	75	.43	248	2240	2290
2	20	81	4.4	1.7	70	.32	64	720	124
3	18	73	3.5	1.5	62	.25	41	400	44
4	16	69	3.0	1.3	55	.19	26	260	18
5	14	65	2.5	1.1	45	.13	16	184	7.9
6	13	63	2.2	.97	42	.11	11	176	5.2
7	13	58	2.0	.75	38	.08	7.9	168	3.6
8	14	52	2.0	.65	35	.06	5.6	160	2.4
9	13	48	1.7	.54	31	.05	4.0	151	1.6
10	13	57	2.0	.47	30	.04	2.8	143	1.1
11	15	98	4.0	.42	27	.03	2.1	128	.73
12	13	82	2.9	1.1	41	.12	1.4	112	.42
13	41	376	254	.63	54	.09	1.0	95	.26
14	259	1300	1030	.45	50	.06	.66	82	.15
15	219	690	408	.88	43	.10	.56	68	.10
16	104	350	98	.73	41	.08	.55	53	.08
17	50	280	38	.66	40	.07	.45	38	.05
18	31	226	19	.91	35	.09	.21	34	.02
19	21	190	11	1.1	31	.09	.21	33	.02
20	16	168	7.3	.75	30	.06	.16	30	.01
21	13	151	5.3	.63	28	.05	.16	25	.01
22	11	150	4.5	.48	23	.03	.71	46	.09
23	9.1	143	3.5	.43	18	.02	.30	32	.03
24	7.7	131	2.7	123	2440	3150	.16	23	.01
25	6.6	120	2.1	130	3120	1440	.13	16	.01
26	5.5	107	1.6	47	490	62	.10	15	.00
27	4.8	97	1.3	27	330	24	.09	18	.00
28	3.7	92	.92	16	300	13	.13	22	.01
29	3.1	88	.74	11	240	7.1	.09	22	.01
30	2.6	82	.58	8.7	300	7.0	.07	15	.00
31	---	---	---	172	2070	4910	---	---	---
TOTAL	988.1	---	1922.94	554.95	---	9615.65	435.54	---	2499.80
JULY				AUGUST			SEPTEMBER		
1	5.1	602	27	.04	42	.00	.00	0	.00
2	4.7	410	5.2	.00	0	.00	.00	0	.00
3	.56	200	.30	.00	0	.00	.00	0	.00
4	69	1770	1050	.00	0	.00	.00	0	.00
5	152	1500	616	8.2	773	31	.00	0	.00
6	84	590	134	.33	310	.28	.00	0	.00
7	30	178	14	.14	188	.07	.00	0	.00
8	14	131	5.0	.08	161	.03	.00	0	.00
9	9.0	104	2.5	.07	140	.03	.00	0	.00
10	6.3	98	1.7	.64	142	.25	.00	0	.00
11	4.6	90	1.1	.54	109	.16	.00	0	.00
12	3.3	82	.73	.30	75	.06	.00	0	.00
13	2.9	92	.72	.24	68	.04	.00	0	.00
14	4.8	170	2.2	.19	60	.03	.00	0	.00
15	3.0	152	1.2	.15	53	.02	.00	0	.00
16	2.7	137	1.0	.11	45	.01	.00	0	.00
17	1.8	120	.58	.46	400	.50	.00	0	.00
18	1.2	105	.34	.16	290	.13	.00	0	.00
19	.80	90	.19	.05	112	.02	.00	0	.00
20	.45	70	.09	.05	97	.01	.00	0	.00
21	.21	64	.04	.03	85	.01	.00	0	.00
22	.16	60	.03	.00	0	.00	.00	0	.00
23	.14	55	.02	.00	0	.00	.00	0	.00
24	.17	48	.02	.00	0	.00	.00	0	.00
25	2.8	710	5.4	.00	0	.00	.00	0	.00
26	.32	250	.22	.00	0	.00	.00	0	.00
27	.14	94	.04	.00	0	.00	.00	0	.00
28	.06	83	.01	.00	0	.00	.00	0	.00
29	.04	71	.01	.00	0	.00	.00	0	.00
30	.04	58	.01	.00	0	.00	.00	0	.00
31	.03	47	.00	.00	0	.00	---	---	---
TOTAL	404.32	---	1869.65	11.78	---	32.65	.00	---	.00

TOTAL LOAD FOR YEAR: 41987.52

OBION RIVER BASIN

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN

LOCATION.--Lat 36°26'20", long 89°15'37", Obion County, Hydrologic Unit 08010202, at county road bridge, 1.7 mi above confluence with North Reelfoot Creek, and 2 mi southwest of Clayton.

DRAINAGE AREA.--38.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1955, 1956, 1964, 1983. May 1984 to current year.

REVISED RECORDS.--WRD TN-85-1: 1984.

GAGE.--Water-stage recorder. Datum of gage is 289.50 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 11, Feb. 9, Mar. 2, Aug. 23-27, Sept. 17, 28-30. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft³/s, Dec. 9, 1986, gage height, 22.94 ft; no flow several days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	0330	2,090	20.16	Apr. 14	0015	923	15.16
Dec. 9	0630	*3,550	*22.94	June 1	0015	1,160	16.39
Feb. 28	1245	2,380	20.58				

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.9	9.6	8.6	19	481	18	4.8	356	14	2.1	.00
2	.86	2.5	12	8.5	50	236	22	4.8	116	9.3	2.0	.00
3	.20	3.1	9.2	6.7	27	139	18	4.7	51	1.2	1.9	.00
4	.22	3.5	8.5	10	20	70	14	9.8	25	34	1.7	.00
5	.27	9.6	8.0	9.5	20	46	13	9.7	13	50	3.1	.00
6	.35	3.2	8.1	7.6	19	35	12	13	5.9	23	2.1	.00
7	.27	4.4	7.9	6.9	18	30	11	10	2.0	2.2	1.7	.00
8	.20	488	12	4.4	16	28	11	9.0	.73	1.7	1.7	.00
9	.18	68	1580	9.8	10	24	9.4	8.8	.29	1.6	1.6	.00
10	.18	38	384	21	11	20	9.0	7.9	.26	1.9	44	.00
11	.15	34	310	12	13	18	15	7.2	.24	1.7	27	.00
12	51	17	278	8.8	14	14	10	12	1.4	1.6	11	.00
13	.90	14	171	8.5	14	12	130	18	1.9	1.5	6.3	.00
14	.64	15	98	10	35	15	374	12	1.2	1.5	5.1	.00
15	1.6	14	55	12	58	12	184	15	.72	1.8	4.1	.00
16	1.1	10	27	11	39	10	120	48	.59	1.8	3.9	.00
17	1.3	8.1	16	8.0	34	13	67	27	1.2	1.7	3.3	40
18	1.9	5.1	12	29	36	203	45	22	1.4	1.5	3.1	3.4
19	1.7	4.5	11	28	34	57	35	26	5.5	1.2	5.0	1.7
20	1.3	5.3	12	17	28	37	28	17	5.6	1.3	4.1	1.2
21	1.2	4.8	11	14	27	29	23	11	4.8	1.3	3.0	.89
22	1.3	5.2	8.7	15	33	23	19	6.9	2.8	1.2	2.4	.79
23	1.1	5.3	11	9.8	34	20	16	3.4	111	1.1	1.5	.76
24	38	6.2	17	8.2	24	19	13	45	57	2.8	1.0	.73
25	66	10	19	8.7	21	16	11	55	29	5.8	.30	.58
26	7.6	99	12	5.5	102	13	9.9	19	18	3.7	.11	.52
27	10	23	8.1	4.2	272	11	9.3	8.7	7.1	3.0	.30	.42
28	6.6	17	8.6	5.8	1010	10	7.3	4.2	2.4	2.0	1.1	.26
29	4.0	13	10	14	---	9.2	6.3	1.7	.88	2.0	.53	.04
30	2.7	12	9.2	19	---	21	5.5	1.1	.63	2.2	.32	.00
31	1.2	---	8.9	12	---	21	---	176	---	1.9	.0	---
TOTAL	205.22	944.7	3152.8	353.5	2038	1692.2	1265.7	618.7	823.54	181.5	145.36	51.29
MEAN	6.62	31.5	102	11.4	72.8	54.6	42.2	20.0	27.5	5.85	4.69	1.71
MAX	66	488	1580	29	1010	481	374	176	356	50	44	40
MIN	.15	1.9	7.9	4.2	10	9.2	5.5	1.1	.24	1.1	.00	.00
CFSM	.17	.82	2.63	.30	1.89	1.41	1.09	.52	.71	.15	.12	.04
IN.	.20	.91	3.04	.34	1.96	1.63	1.22	.60	.79	.17	.14	.03

CAL YR 1986 TOTAL 17512.77 MEAN 48.0 MAX 1580 MIN .03 CFSM 1.24 IN. 16.87
WTR YR 1987 TOTAL 11472.41 MEAN 31.4 MAX 1580 MIN .00 CFSM .81 IN. 11.05

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1983 to September 1987 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: May 1984 to September 1987 (discontinued).

INSTRUMENTATION.--Sediment pumping sampler since May 1984.

REMARKS.--No flow September 1-16, 30.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 7,460 mg/L, May 27, 1984; minimum daily mean, 0 mg/L, many days most years.

SEDIMENT LOADS: Maximum daily, 18,500 tons, May 27, 1984; minimum, 0 ton, many days most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,600 mg/L, June 23; minimum daily mean 0 mg/L, several days.

SEDIMENT LOADS: Maximum daily, 13,100 tons, February 28; minimum 0 ton, several days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT				
15...	1550	2.4	245	13.5
30...	0935	3.4	260	15.0
NOV				
06...	1540	3.2	285	13.5
14...	0835	17	180	4.0
20...	0810	5.4	270	9.5
26...	1350	112	180	11.0
DEC				
03...	1010	10	280	7.5
10...	1015	498	110	9.0
10...	1140	498	100	9.5
17...	0820	15	--	7.0
22...	1225	8.3	--	3.5
30...	1350	10	310	3.5
JAN				
07...	0825	7.6	320	4.5
14...	1250	12	370	5.0
23...	0740	8.5	250	0.0
28...	1535	8.7	390	1.0
FEB				
27...	1000	256	260	8.0
MAR				
12...	1250	14	380	5.5
18...	0935	133	220	12.0
25...	0940	15	380	11.5
APR				
02...	1020	23	400	10.0
07...	1000	11	420	11.0
13...	1000	8.8	405	15.0
14...	1000	464	250	15.0
17...	1005	68	340	14.0
21...	0900	23	380	19.0
30...	1145	4.5	470	20.0
MAY				
18...	1430	19	320	25.0
22...	1050	7.2	320	26.0
26...	0900	21	280	26.0
JUN				
01...	0800	338	220	24.5
04...	1010	26	300	24.0
10...	0840	0.26	--	25.0
JUL				
01...	1435	2.7	230	25.0
08...	1005	1.4	215	26.0
15...	1050	1.5	260	23.0
AUG				
20...	1240	4.5	220	27.0
26...	1220	0.11	210	27.0

OBION RIVER BASIN

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	1.2	50	.16	1.9	29	.16	9.6	90	2.3
2	.86	50	.12	2.5	29	.20	12	75	2.4
3	.20	37	.02	3.1	29	.24	9.2	62	1.5
4	.22	31	.02	3.5	27	.26	8.5	60	1.4
5	.27	30	.02	9.6	53	1.4	8.0	57	1.2
6	.35	30	.03	3.2	59	.51	8.1	54	1.2
7	.27	31	.02	4.4	65	.77	7.9	51	1.1
8	.20	32	.02	488	1620	4640	12	45	1.5
9	.18	31	.02	68	390	72	1580	1980	9360
10	.18	31	.02	38	250	26	384	920	954
11	.15	29	.01	34	300	28	310	790	661
12	51	1520	384	17	140	6.4	278	700	525
13	.90	350	.85	14	112	4.2	171	580	268
14	.64	95	.16	15	100	4.1	98	440	116
15	1.6	48	.21	14	97	3.7	55	280	42
16	1.1	35	.10	10	90	2.4	27	230	17
17	1.3	35	.12	8.1	85	1.9	16	175	7.6
18	1.9	35	.18	5.1	80	1.1	12	145	4.7
19	1.7	36	.17	4.5	73	.89	11	140	4.2
20	1.3	36	.13	5.3	68	.97	12	135	4.4
21	1.2	35	.11	4.8	63	.82	11	129	3.8
22	1.3	34	.12	5.2	59	.83	8.7	125	2.9
23	1.1	33	.10	5.3	55	.79	11	220	6.5
24	38	211	72	6.2	51	.85	17	350	16
25	66	269	71	10	300	8.1	19	225	12
26	7.6	89	1.8	99	872	360	12	175	5.7
27	10	75	2.0	23	200	12	8.1	140	3.1
28	6.6	62	1.1	17	132	6.1	8.6	118	2.7
29	4.0	47	.51	13	118	4.1	10	95	2.6
30	2.7	35	.26	12	105	3.4	9.2	85	2.1
31	1.2	32	.10	---	---	---	8.9	78	1.9
TOTAL	205.22	---	535.48	944.7	---	5192.18	3152.8	---	12035.8
JANUARY			FEBRUARY			MARCH			
1	8.6	72	1.7	19	160	8.2	481	900	1170
2	8.5	68	1.6	50	225	30	236	550	350
3	6.7	62	1.1	27	75	5.5	139	350	131
4	10	58	1.6	20	54	2.9	70	250	47
5	9.5	55	1.4	20	52	2.8	46	188	23
6	7.6	53	1.1	19	49	2.5	35	163	15
7	6.9	50	.93	18	46	2.2	30	138	11
8	4.4	49	.58	16	43	1.9	28	112	8.5
9	9.8	72	1.9	10	42	1.1	24	92	6.0
10	21	73	4.1	11	35	1.0	20	83	4.5
11	12	62	2.0	13	29	1.0	18	75	3.6
12	8.8	55	1.3	14	25	.95	14	65	2.5
13	8.5	48	1.1	14	24	.91	12	60	1.9
14	10	40	1.1	35	410	39	15	57	2.3
15	12	35	1.1	58	765	168	12	52	1.7
16	11	30	.89	39	225	24	10	48	1.3
17	8.0	24	.52	34	85	7.8	13	45	1.6
18	29	80	6.3	36	57	5.5	203	1380	1320
19	28	80	6.0	34	48	4.4	57	310	48
20	17	57	2.6	28	40	3.0	37	280	28
21	14	40	1.5	27	38	2.8	29	200	16
22	15	40	1.6	33	300	27	23	140	8.7
23	9.8	38	1.0	34	300	28	20	91	4.9
24	8.2	42	.93	24	200	13	19	80	4.1
25	8.7	46	1.1	21	125	7.1	16	70	3.0
26	5.5	58	.88	102	885	789	13	65	2.3
27	4.2	57	.65	272	699	666	11	60	1.8
28	5.8	52	.81	1010	3640	13100	10	55	1.5
29	14	69	2.6	---	---	---	9.2	53	1.3
30	19	77	4.0	---	---	---	21	103	5.8
31	12	64	2.1	---	---	---	21	102	5.8
TOTAL	353.5	---	56.09	2038	---	14945.56	1692.2	---	3232.1

07026400 SOUTH REELFOOT CREEK NEAR CLAYTON, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	18	85	4.1	4.8	40	.52	356	1300	1510
2	22	90	5.3	4.8	34	.44	116	530	166
3	18	75	3.6	4.7	30	.38	51	350	48
4	14	65	2.5	9.8	51	1.3	25	200	13
5	13	54	1.9	9.7	30	.79	13	140	4.9
6	12	42	1.4	13	55	1.9	5.9	122	1.9
7	11	31	.92	10	72	1.9	2.0	105	.57
8	11	30	.89	9.0	58	1.4	.73	88	.17
9	9.4	29	.74	8.8	55	1.3	.29	74	.06
10	9.0	30	.73	7.9	51	1.1	.26	65	.05
11	15	50	2.0	7.2	45	.87	.24	59	.04
12	10	32	.86	12	250	8.1	1.4	53	.20
13	130	1370	3040	18	300	15	1.9	45	.24
14	374	1290	1580	12	120	3.9	1.2	37	.12
15	184	400	199	15	90	3.6	.72	34	.07
16	120	300	97	48	444	78	.59	32	.05
17	67	210	38	27	120	8.7	1.2	25	.08
18	45	195	24	22	101	6.0	1.4	23	.09
19	35	155	15	26	102	7.2	5.5	53	.79
20	28	125	9.5	17	95	4.4	5.6	45	.68
21	23	98	6.1	11	90	2.7	4.8	55	.71
22	19	88	4.5	6.9	85	1.6	2.8	47	.36
23	16	80	3.5	3.4	73	.67	111	5600	2090
24	13	74	2.6	45	2240	966	57	360	55
25	11	70	2.1	55	491	77	29	450	35
26	9.9	66	1.8	19	175	9.0	18	580	28
27	9.3	61	1.5	8.7	142	3.3	7.1	220	4.2
28	7.3	55	1.1	4.2	131	1.5	2.4	140	.91
29	6.3	50	.85	1.7	118	.54	.88	120	.29
30	5.5	46	.68	1.1	105	.31	.63	105	.18
31	---	---	---	176	2970	7140	---	---	---
TOTAL	1265.7	---	5052.17	618.7	---	8349.42	823.54	---	3961.66
JULY			AUGUST			SEPTEMBER			
1	14	363	33	2.1	75	.43	.00	0	.00
2	9.3	425	11	2.0	71	.38	.00	0	.00
3	1.2	150	.49	1.9	65	.33	.00	0	.00
4	34	1220	499	1.7	59	.27	.00	0	.00
5	50	690	93	3.1	168	1.4	.00	0	.00
6	23	150	9.3	2.1	121	.69	.00	0	.00
7	2.2	88	.52	1.7	101	.46	.00	0	.00
8	1.7	65	.30	1.7	91	.42	.00	0	.00
9	1.6	57	.25	1.6	81	.35	.00	0	.00
10	1.9	49	.25	44	2180	312	.00	0	.00
11	1.7	46	.21	27	600	44	.00	0	.00
12	1.6	44	.19	11	128	3.8	.00	0	.00
13	1.5	41	.17	6.3	123	2.1	.00	0	.00
14	1.5	35	.14	5.1	116	1.6	.00	0	.00
15	1.8	68	.33	4.1	105	1.2	.00	0	.00
16	1.8	60	.29	3.9	93	.98	.00	0	.00
17	1.7	54	.25	3.3	80	.71	40	537	180
18	1.5	48	.19	3.1	78	.65	3.4	110	1.0
19	1.2	40	.13	5.0	55	.74	1.7	97	.45
20	1.3	30	.11	4.1	38	.42	1.2	82	.27
21	1.3	28	.10	3.0	45	.36	.89	65	.16
22	1.2	28	.09	2.4	53	.34	.79	49	.10
23	1.1	28	.08	1.5	60	.24	.76	32	.07
24	2.8	91	.69	1.0	62	.17	.73	31	.06
25	5.8	111	1.7	.30	70	.06	.58	30	.05
26	3.7	97	.97	.11	72	.02	.52	29	.04
27	3.0	78	.63	.30	68	.06	.42	28	.03
28	2.0	62	.33	1.1	100	.30	.26	18	.01
29	2.0	87	.47	.53	73	.10	.04	9	.00
30	2.2	85	.50	.32	42	.04	.00	0	.00
31	1.9	80	.41	.0	15	.00	---	---	---
TOTAL	181.5	---	655.09	145.36	---	374.62	51.29	---	182.24

TOTAL LOAD FOR YEAR: 54571.77

07026507 REELFOOT CREEK AT WALNUT LOG, TN

LOCATION.-- Lat 36°27'25", long 89°20'00", Obion County, Hydrologic Unit 08010202, on the Reelfoot National Wildlife Refuge, Grassy Island Unit, 1.3 mi southwest of Walnut Log.

DRAINAGE AREA.--113 mi².

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1986 to current year.

WATER TEMPERATURE: July 1986 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1986.

REMARKS.--No flow July 23, 1987 to August 10, 1987, August 13, 1987 to September 30, 1987. Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 452 microsiemens, May 13, 1987; minimum, 96 microsiemens, Dec. 10, 1986.

WATER TEMPERATURE: Maximum, 30.8°C, July 26, 1986; minimum recorded, 2.1°C, Feb. 18, 1987.

EXTREMES FOR CURRENT PERIOD.--July 1986 to September 1987.

SPECIFIC CONDUCTANCE: Maximum, 452 microsiemens, May 13; minimum, 96 microsiemens, Dec. 10.

WATER TEMPERATURE: Maximum, 30.8°C, July 26; minimum, 2.1°C, Feb. 18.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	216	183	194	249	248	249
2	---	---	---	---	---	---	193	185	190	251	245	248
3	---	---	---	---	---	---	197	192	195	248	244	246
4	---	---	---	---	---	---	199	196	197	243	239	241
5	---	---	---	---	---	---	200	197	198	243	240	241
6	---	---	---	---	---	---	205	200	202	246	242	243
7	---	---	---	---	---	---	211	204	207	243	239	242
8	---	---	---	---	---	---	217	211	215	245	240	244
9	---	---	---	---	---	---	223	217	219	250	241	245
10	---	---	---	---	---	---	222	219	220	242	237	240
11	---	---	---	---	---	---	232	221	226	---	---	---
12	---	---	---	---	---	---	235	233	234	---	---	---
13	---	---	---	---	---	---	238	235	237	---	---	---
14	---	---	---	---	---	---	238	236	237	---	---	---
15	---	---	---	---	---	---	238	235	236	---	---	---
16	---	---	---	---	---	---	236	231	234	---	---	---
17	---	---	---	---	---	---	236	232	234	---	---	---
18	---	---	---	265	259	262	241	234	238	---	---	---
19	---	---	---	265	257	259	244	239	241	---	---	---
20	---	---	---	258	254	256	246	242	244	---	---	---
21	---	---	---	258	253	254	248	245	246	---	---	---
22	---	---	---	260	253	257	251	246	249	---	---	---
23	---	---	---	258	254	256	249	245	247	---	---	---
24	---	---	---	254	249	252	247	244	245	---	---	---
25	---	---	---	251	244	248	255	247	249	---	---	---
26	---	---	---	246	238	243	256	240	250	208	202	203
27	---	---	---	238	233	236	249	243	246	213	202	207
28	---	---	---	236	231	234	253	243	247	213	206	209
29	---	---	---	235	231	233	256	248	253	219	208	211
30	---	---	---	240	232	236	254	249	252	219	210	213
31	---	---	---	240	201	229	251	246	249	---	---	---
MONTH	---	---	---	---	---	---	256	183	230	---	---	---

07026507 REELFOOT CREEK AT WALNUT LOG, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	215	209	213	211	203	205	275	253	265	148	145	146
2	215	212	213	218	204	211	255	245	250	149	147	148
3	218	212	214	219	209	213	257	249	252	149	147	148
4	220	216	218	212	209	211	302	257	284	154	149	151
5	221	216	219	214	208	211	311	299	305	156	154	155
6	228	217	220	215	209	212	301	279	289	173	155	164
7	224	218	222	235	214	223	283	245	263	166	154	160
8	226	219	223	241	225	232	247	241	245	161	156	158
9	225	218	223	241	232	237	238	98	147	177	156	164
10	225	219	221	245	236	240	99	96	97	178	173	175
11	227	220	224	251	242	246	112	99	104	180	174	177
12	226	205	215	248	240	245	126	113	119	181	174	179
13	208	190	197	276	248	261	127	125	126	178	173	175
14	189	152	175	276	219	256	128	126	127	182	175	178
15	153	145	150	222	203	214	128	126	127	179	164	172
16	157	149	152	214	193	207	128	125	127	165	158	162
17	160	155	157	201	183	190	128	127	127	171	158	163
18	165	158	161	203	189	194	129	127	128	172	162	167
19	167	160	164	219	194	205	130	128	129	204	175	194
20	170	164	167	216	202	210	130	128	129	190	184	188
21	171	166	168	235	213	227	131	128	130	187	184	185
22	173	169	171	239	231	235	134	129	131	190	184	187
23	175	172	173	250	232	241	136	132	133	193	179	184
24	175	166	171	239	232	234	141	136	138	179	169	173
25	170	166	167	249	234	240	141	140	141	173	169	170
26	180	169	174	248	236	240	143	140	141	184	171	177
27	191	176	182	248	241	245	141	139	140	184	182	183
28	192	176	182	262	248	253	142	140	141	185	182	184
29	206	184	198	265	260	262	145	140	142	185	148	168
30	214	200	211	273	261	267	143	141	142	157	154	156
31	212	197	205	---	---	---	145	142	143	161	145	156
MONTH	228	145	192	276	183	229	311	96	167	204	145	169
	FEBRUARY			MARCH			APRIL			MAY		
1	161	159	160	129	121	126	238	234	236	415	328	386
2	167	159	162	126	120	122	237	212	218	428	385	411
3	167	156	162	145	120	129	255	226	246	428	415	423
4	164	158	161	139	124	133	282	253	274	433	417	430
5	170	163	165	138	127	131	282	249	271	417	401	408
6	170	165	167	146	129	132	260	231	245	436	405	420
7	176	166	169	152	139	146	240	238	239	446	422	425
8	177	167	172	150	146	148	263	238	251	435	430	432
9	176	173	175	155	148	151	260	245	251	437	430	433
10	176	174	175	156	155	155	266	248	260	427	423	425
11	177	173	175	158	156	157	345	273	304	421	404	411
12	178	175	176	158	156	157	299	275	284	431	381	388
13	189	177	185	159	155	157	281	276	278	452	395	436
14	192	189	190	159	156	158	265	209	221	358	304	320
15	199	191	195	159	158	159	210	208	209	329	303	319
16	203	200	202	162	159	160	208	207	207	304	284	289
17	204	202	203	163	160	161	212	205	207	346	284	334
18	206	203	204	182	162	171	214	208	210	336	262	304
19	205	204	205	183	179	181	217	211	213	289	275	285
20	205	204	204	184	180	182	221	214	216	296	288	292
21	205	201	203	187	182	184	225	218	220	308	296	301
22	206	204	205	187	184	185	225	222	223	315	307	309
23	207	204	205	189	184	186	230	224	227	336	312	316
24	207	205	206	196	188	190	244	230	238	320	178	282
25	208	205	207	207	198	204	262	242	253	250	151	170
26	209	208	208	250	210	234	288	264	279	213	180	195
27	209	204	207	230	212	218	288	280	284	274	214	234
28	206	118	161	213	207	210	362	288	326	292	247	257
29	---	---	---	239	211	219	355	311	321	314	262	269
30	---	---	---	285	217	253	321	315	317	293	264	271
31	---	---	---	257	232	243	---	---	---	279	131	250
MONTH	209	118	186	285	120	172	362	205	251	452	131	336

OBION RIVER BASIN

07026507 REELFOOT CREEK AT WALNUT LOG, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	178	97	132	226	185	213	---	---	---	---	---	---
2	192	166	182	206	182	195	---	---	---	---	---	---
3	204	193	198	209	200	203	---	---	---	---	---	---
4	207	201	204	208	200	203	---	---	---	---	---	---
5	214	204	208	206	109	140	---	---	---	---	---	---
6	221	215	217	138	127	133	---	---	---	---	---	---
7	225	218	221	147	139	141	---	---	---	---	---	---
8	241	221	225	156	147	152	---	---	---	---	---	---
9	268	225	233	169	156	163	---	---	---	---	---	---
10	270	230	242	175	168	172	---	---	---	---	---	---
11	267	246	256	185	174	179	196	188	191	---	---	---
12	---	---	---	193	184	188	199	192	196	---	---	---
13	---	---	---	201	192	195	---	---	---	---	---	---
14	---	---	---	202	196	199	---	---	---	---	---	---
15	---	---	---	206	198	201	---	---	---	---	---	---
16	---	---	---	216	204	208	---	---	---	---	---	---
17	---	---	---	220	213	216	---	---	---	---	---	---
18	---	---	---	220	214	218	---	---	---	---	---	---
19	---	---	---	221	217	219	---	---	---	---	---	---
20	---	---	---	223	219	221	---	---	---	---	---	---
21	---	---	---	224	217	221	---	---	---	---	---	---
22	---	---	---	219	202	205	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	206	198	204	---	---	---	---	---	---	---	---	---
27	206	201	203	---	---	---	---	---	---	---	---	---
28	212	204	206	---	---	---	---	---	---	---	---	---
29	213	206	209	---	---	---	---	---	---	---	---	---
30	227	210	213	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER, DEGREES CENTIGRADE, JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	28.8	27.4	28.1	21.3	20.5	20.9
2	---	---	---	---	---	---	27.6	26.3	26.9	23.5	20.4	21.7
3	---	---	---	---	---	---	26.6	25.3	25.9	23.8	21.7	22.7
4	---	---	---	---	---	---	25.8	24.2	25.0	24.6	23.1	23.8
5	---	---	---	---	---	---	26.1	23.7	24.8	24.4	23.2	23.7
6	---	---	---	---	---	---	26.5	24.2	25.2	24.2	22.0	23.0
7	---	---	---	---	---	---	26.9	25.3	26.1	22.8	21.2	22.1
8	---	---	---	---	---	---	25.9	24.9	25.3	21.9	20.1	20.9
9	---	---	---	---	---	---	26.5	24.5	25.3	22.5	19.6	20.9
10	---	---	---	---	---	---	27.1	25.2	26.0	24.6	21.0	22.5
11	---	---	---	---	---	---	26.6	25.3	26.0	---	---	---
12	---	---	---	---	---	---	25.5	24.1	24.9	---	---	---
13	---	---	---	---	---	---	26.0	23.6	24.6	---	---	---
14	---	---	---	---	---	---	27.1	24.0	25.3	---	---	---
15	---	---	---	---	---	---	27.7	25.0	26.2	---	---	---
16	---	---	---	---	---	---	27.1	25.7	26.2	---	---	---
17	---	---	---	---	---	---	26.5	25.1	25.7	---	---	---
18	---	---	---	29.6	27.6	28.4	27.2	25.1	26.0	---	---	---
19	---	---	---	29.8	28.3	29.0	27.6	25.5	26.4	---	---	---
20	---	---	---	29.6	28.3	29.0	26.8	25.4	26.1	---	---	---
21	---	---	---	29.1	27.8	28.4	26.8	25.0	25.9	---	---	---
22	---	---	---	28.2	26.9	27.6	27.4	25.3	26.3	---	---	---
23	---	---	---	28.5	26.7	27.5	28.1	26.0	27.0	---	---	---
24	---	---	---	29.2	27.1	28.1	27.5	26.1	26.9	---	---	---
25	---	---	---	30.1	27.7	28.8	27.3	25.5	26.4	---	---	---
26	---	---	---	30.8	28.7	29.5	28.4	25.9	27.1	26.7	24.9	25.7
27	---	---	---	29.6	28.2	28.9	27.7	26.3	27.1	26.8	25.0	25.9
28	---	---	---	30.1	28.5	29.2	26.2	22.5	24.3	26.9	25.0	26.0
29	---	---	---	29.9	28.9	29.5	22.3	20.8	21.6	26.8	25.2	26.0
30	---	---	---	29.4	26.9	28.0	22.2	19.9	21.0	26.7	25.2	25.9
31	---	---	---	28.9	27.1	27.8	21.5	20.5	21.0	---	---	---
MONTH	---	---	---	---	---	---	28.8	19.9	25.5	---	---	---

07026507 REELFOOT CREEK AT WALNUT LOG, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	26.0	24.4	25.3	15.6	13.4	14.3	9.8	9.0	9.3	4.2	3.9	4.1
2	25.2	23.6	24.4	14.7	13.5	14.2	10.0	9.3	9.8	4.3	3.6	3.9
3	25.4	24.2	24.8	13.4	12.8	13.1	9.3	6.1	8.1	4.0	3.3	3.7
4	25.7	24.6	25.1	12.7	12.5	12.6	8.1	5.1	6.8	3.4	2.3	2.9
5	24.7	22.7	23.6	13.0	12.5	12.8	6.3	4.8	5.6	3.8	3.0	3.4
6	22.5	19.4	21.1	13.1	12.7	12.9	5.0	3.9	4.7	4.5	3.6	3.9
7	19.1	17.4	18.3	14.1	12.9	13.2	5.9	4.1	5.1	5.1	4.5	4.9
8	17.8	16.3	17.1	16.3	14.4	15.3	9.0	6.0	7.0	5.3	4.5	4.9
9	18.1	16.2	17.1	15.7	13.7	14.8	12.2	9.6	11.5	5.1	3.9	4.3
10	17.5	17.1	17.3	13.5	11.7	12.2	9.3	5.0	6.9	4.5	4.0	4.2
11	17.7	16.6	17.1	11.7	10.6	11.3	5.0	3.6	4.4	4.3	3.5	3.9
12	17.7	16.9	17.5	10.4	8.8	9.7	4.9	3.4	4.1	4.8	4.2	4.5
13	16.8	14.4	15.6	8.5	5.1	6.9	4.2	3.0	3.7	4.4	4.0	4.2
14	14.3	12.8	13.5	5.2	3.4	4.2	4.1	2.4	3.3	5.4	4.5	4.9
15	12.6	11.4	12.1	4.7	3.5	4.1	5.7	3.8	4.6	7.0	5.5	6.0
16	12.7	11.1	11.9	6.8	4.6	5.6	7.9	5.1	6.3	7.0	6.1	6.5
17	13.6	11.5	12.5	9.9	6.9	8.4	8.5	7.8	8.1	5.9	4.5	5.1
18	14.6	12.4	13.4	11.6	9.9	10.6	8.2	6.3	7.4	4.9	4.5	4.7
19	15.3	13.2	14.2	10.3	8.8	9.3	6.5	5.1	5.8	4.5	4.0	4.2
20	15.4	13.5	14.5	9.5	6.7	8.5	5.8	4.0	5.0	4.1	3.7	4.0
21	15.8	14.1	14.9	6.6	5.7	6.2	5.3	3.6	4.6	4.3	3.9	4.1
22	15.9	14.4	15.1	6.9	5.0	5.6	5.0	3.7	4.4	4.7	4.3	4.5
23	15.7	15.2	15.5	6.9	5.5	6.2	4.7	4.1	4.3	4.6	3.8	4.3
24	15.5	14.8	15.1	6.6	5.9	6.3	4.4	4.2	4.3	3.7	3.2	3.4
25	15.0	14.7	14.8	6.6	5.8	6.1	4.4	3.3	3.9	3.1	2.2	2.6
26	15.0	14.5	14.7	10	6.6	8.9	4.4	4.1	4.3	3.4	2.2	2.6
27	15.0	13.9	14.5	9.4	6.6	7.7	4.0	3.4	3.6	3.8	3.2	3.5
28	14.6	13.0	13.9	6.9	6.5	6.7	4.0	3.2	3.6	4.3	3.8	4.1
29	15.5	13.5	14.4	9.1	6.4	7.1	4.1	3.7	3.8	4.1	3.1	3.6
30	14.7	13.7	14.2	9.0	6.4	7.0	4.1	3.7	3.9	4.7	3.5	4.2
31	14.2	12.9	13.6	---	---	---	4.2	3.8	4.0	5.0	4.5	4.7
MONTH	26.0	11.1	16.7	16.3	3.4	9.4	12.2	2.4	5.6	7.0	2.2	4.2
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	4.6	4.8	9.3	7.8	8.5	11.6	6.7	8.3	21.7	20.0	20.8
2	7.2	5.1	6.3	10.7	6.3	8.4	11.5	9.3	10.2	21.7	20.3	21.0
3	8.1	6.9	7.4	11.6	7.0	9.3	9.2	7.7	8.5	21.4	20.7	21.0
4	7.5	5.9	6.6	12.0	7.6	9.8	9.9	6.6	8.3	20.6	19.9	20.2
5	6.8	6.0	6.4	11.7	9.0	10.4	12.6	8.3	9.9	20.3	19.0	19.6
6	7.1	6.6	6.9	13.7	10.1	11.6	12.4	10.5	11.6	20.0	18.9	19.5
7	6.8	5.6	6.4	14.6	10.7	12.6	13.9	11.4	12.4	20.5	18.8	19.5
8	7.6	6.3	6.8	14.2	12.2	13.3	16.3	11.9	13.6	20.9	19.2	20.0
9	5.9	4.3	5.0	14.2	12.2	13.4	17.6	13.8	15.4	21.4	19.5	20.3
10	5.1	4.1	4.6	11.8	8.0	9.5	16.3	14.7	15.7	22.2	19.8	20.7
11	6.2	4.3	5.1	7.7	5.8	6.6	16.1	13.5	14.6	23.3	21.3	22.1
12	9.1	5.9	7.2	8.0	4.5	5.9	16.1	14.7	15.4	23.2	22.3	22.8
13	8.9	7.2	8.2	9.4	5.7	7.3	17.4	15.1	15.9	22.6	21.8	22.2
14	10.1	8.8	9.3	11.1	7.6	9.2	18.1	16.3	17.2	22.9	21.5	22.0
15	10.0	7.9	9.1	13.7	10.7	11.9	16.6	14.3	15.2	24.0	22.2	22.9
16	7.8	4.7	6.2	14.8	13.4	14.0	15.3	13.2	14.0	24.6	23.2	23.8
17	4.6	2.9	4.0	14.5	12.9	13.8	19.7	14.3	16.1	24.7	23.5	24.0
18	3.7	2.1	2.7	18.5	12.8	15.2	20.3	16.7	18.3	24.4	22.4	23.4
19	3.9	3.3	3.6	18.2	13.0	15.3	21.3	17.6	19.1	25.2	21.9	23.3
20	4.4	3.9	4.2	17.2	14.3	15.6	22.3	18.8	20.2	25.6	23.1	24.2
21	6.7	4.4	5.2	17.9	13.7	15.3	23.5	20.6	21.9	24.4	22.8	23.6
22	6.5	5.2	5.9	17.1	14.7	15.8	23.5	21.0	22.2	24.4	22.2	23.2
23	6.7	4.4	5.4	17.7	14.3	15.6	20.6	18.2	19.1	24.1	22.3	23.3
24	6.4	5.7	6.1	17.2	15.3	16.2	17.9	16.3	17.1	23.6	21.3	22.5
25	8.6	5.4	6.5	15.2	13.2	14.1	18.0	15.9	16.7	23.1	21.1	22.0
26	8.7	8.3	8.5	15.4	11.9	13.4	19.2	15.9	17.0	24.3	20.8	22.5
27	9.8	8.3	8.9	16.6	13.2	14.6	21.0	18.2	19.1	25.4	22.2	23.7
28	10.8	8.4	9.5	17.1	13.8	15.3	20.3	18.7	19.4	25.4	22.0	23.7
29	---	---	---	17.0	14.3	15.7	20.7	17.7	18.7	25.2	22.2	23.6
30	---	---	---	14.1	7.0	10.3	22.0	19.6	20.5	24.0	22.3	23.3
31	---	---	---	7.9	5.8	6.8	---	---	---	23.4	21.3	21.9
MONTH	10.8	2.1	6.3	18.5	4.5	12.1	23.5	6.6	15.7	25.6	18.8	22.1

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

[illegible]

OBION RIVER BASIN

245

07026640 RUNNING SLOUGH NEAR LEDFORD, KY

LOCATION.--Lat 36°32'28", long 89°18'59", Fulton County, Hydrologic Unit 08010202, on county road on right bank, 1.1 mi northwest of Ledford.

DRAINAGE AREA.--10.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1982 to October 1983, April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 279.14 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 19 to Feb. 23. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 278 ft³/s, May 7, 1984, gage height, 8.86 ft; maximum gage height, 8.98 ft May 19, 1983; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 10	0615	*89	*6.21				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	5.5	5.0	85	7.1	1.6	7.4	.00	.00	.00
2	.00	.00	.00	5.2	9.0	64	6.3	1.5	2.3	.00	.00	.00
3	.00	.00	.00	5.7	9.0	26	5.0	1.9	1.6	.00	.00	.00
4	.00	.00	.00	6.5	8.0	9.3	6.2	2.1	2.2	.00	.00	.00
5	.00	.00	.00	6.2	6.5	5.9	6.1	2.5	2.2	.00	.00	.00
6	.00	.00	.00	6.4	5.0	5.4	5.5	2.9	1.9	.00	.00	.00
7	.00	.00	.00	6.3	4.2	5.9	4.8	3.3	1.4	.00	.00	.00
8	.00	.00	.18	6.2	4.0	6.7	4.6	3.5	1.0	.00	.00	.00
9	.00	.00	62	6.6	3.8	6.3	5.1	3.2	.68	.00	.00	.00
10	.00	.00	87	6.8	3.7	6.3	6.2	2.9	.40	.00	.00	.00
11	.00	.00	64	5.8	3.7	7.4	6.0	2.8	.19	.00	.00	.00
12	.00	.00	36	5.7	3.6	6.9	5.4	10	.02	.00	.00	.00
13	.00	.00	21	5.3	3.5	7.6	6.7	9.0	.00	.00	.00	.00
14	.00	.00	15	4.9	3.5	7.8	14	1.8	.00	.00	.00	.00
15	.00	.00	13	4.9	16	7.8	16	1.8	.00	.00	.00	.00
16	.00	.00	11	4.4	18	5.9	9.4	1.8	.00	.00	.00	.00
17	.00	.00	9.1	4.1	14	5.0	5.5	1.8	.00	.00	.00	.00
18	.00	.00	7.2	6.8	12	7.4	3.6	1.7	.00	.00	.00	.00
19	.00	.00	6.1	5.6	9.0	13	4.2	1.8	.02	.00	.00	.00
20	.00	.00	5.2	5.8	7.1	9.6	6.0	1.8	.0	.00	.00	.00
21	.00	.00	4.3	4.0	6.0	8.4	23	1.5	.30	.00	.00	.00
22	.00	.00	4.6	3.8	6.1	8.2	15	1.5	.0	.00	.00	.00
23	.00	.00	5.7	3.5	5.7	6.5	9.7	1.2	.0	.00	.00	.00
24	.00	.00	11	3.3	6.1	6.5	7.5	1.2	.0	.00	.00	.00
25	.00	.00	15	3.1	6.5	6.9	6.8	1.2	.00	.00	.00	.00
26	.00	.00	12	3.4	7.1	7.6	6.3	1.3	.00	.00	.00	.00
27	.00	.00	8.1	3.3	11	8.2	5.7	1.7	.00	.00	.00	.00
28	.00	.00	6.3	3.2	49	8.6	4.8	2.0	.00	.00	.00	.00
29	.00	.00	5.3	3.1	---	7.6	5.5	2.3	.00	.00	.00	.00
30	.00	.00	4.7	3.0	---	7.6	3.1	3.1	.00	.00	.00	.00
31	.00	.00	5.0	3.0	---	7.6	---	4.2	.00	.00	.00	.00
TOTAL	.00	.00	418.78	151.4	246.1	382.9	221.1	80.9	21.61	.00	.00	.00
MEAN	.00	.00	13.5	4.88	8.79	12.4	7.37	2.61	.72	.00	.00	.00
MAX	.00	.00	87	6.8	49	85	23	10	7.4	.00	.00	.00
MIN	.00	.00	.00	3.0	3.5	5.0	3.1	1.2	.00	.00	.00	.00
CFSM	.00	.00	1.25	.45	.81	1.14	.68	.24	.07	.00	.00	.00
IN.	.00	.00	1.44	.52	.85	1.32	.76	.28	.07	.00	.00	.00

CAL YR 1986 TOTAL 3358.23 MEAN 9.20 MAX 230 MIN .00 CFSM .85 IN. 11.56
WTR YR 1987 TOTAL 1522.78 MEAN 4.17 MAX 87 MIN .00 CFSM .39 IN. 5.24

07026640 RUNNING SLOUGH NEAR LEDFORD, KY--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--July 1982 to October 1983, April 1984 to September 1987 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: JULY 1982 to October 1983, April 1984 to September 1987 (discontinued).

INSTRUMENTATION.--Sediment pumping sampler July 1982 to October 1983, April 1984 to September 1987.

REMARKS.--No flow many days.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,300 mg/L, May 15, 1986; minimum daily mean, 0 mg/L, many days each year.

SEDIMENT LOADS: Maximum daily, 764 tons, May 15, 1986; minimum daily, 0 ton, many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean 420 mg/L, December 10; minimum daily mean 0 mg/L, many days.

SEDIMENT LOADS: Maximum daily, 99 tons, December 10; minimum 0 ton, many days. .

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
APR 23...	1005	10	700	18.0
JUN 02...	0935	2.5	460	23.0

07026640 RUNNING SLOUGH NEAR LEDFORD, KY--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	.0	0	.00	.0	0	.00	.0	0	.00
2	.0	0	.00	.0	0	.00	.0	0	.00
3	.0	0	.00	.0	0	.00	.0	0	.00
4	.0	0	.00	.0	0	.00	.0	0	.00
5	.0	0	.00	.0	0	.00	.0	0	.00
6	.0	0	.00	.0	0	.00	.0	0	.00
7	.0	0	.00	.0	0	.00	.0	0	.00
8	.0	0	.00	.0	0	.00	.18	15	.01
9	.0	0	.00	.0	0	.00	62	341	68
10	.0	0	.00	.0	0	.00	87	420	99
11	.0	0	.00	.0	0	.00	64	338	58
12	.0	0	.00	.0	0	.00	36	65	6.3
13	.0	0	.00	.0	0	.00	21	195	11
14	.0	0	.00	.0	0	.00	15	173	7.0
15	.0	0	.00	.0	0	.00	13	160	5.6
16	.0	0	.00	.0	0	.00	11	148	4.4
17	.0	0	.00	.0	0	.00	9.1	123	3.0
18	.0	0	.00	.0	0	.00	7.2	100	1.9
19	.0	0	.00	.0	0	.00	6.1	84	1.4
20	.0	0	.00	.0	0	.00	5.2	82	1.2
21	.0	0	.00	.0	0	.00	4.3	80	.93
22	.0	0	.00	.0	0	.00	4.6	78	.97
23	.0	0	.00	.0	0	.00	5.7	95	1.5
24	.0	0	.00	.0	0	.00	11	118	3.5
25	.0	0	.00	.0	0	.00	15	112	4.5
26	.0	0	.00	.0	0	.00	12	100	3.2
27	.0	0	.00	.0	0	.00	8.1	89	1.9
28	.0	0	.00	.0	0	.00	6.3	83	1.4
29	.0	0	.00	.0	0	.00	5.3	80	1.1
30	.0	0	.00	.0	0	.00	4.7	72	.91
31	.0	0	.00	---	---	---	5.0	70	.95
TOTAL	.0	---	.00	.0	---	.00	418.78	---	287.67
JANUARY				FEBRUARY			MARCH		
1	5.5	68	1.0	5.0	---	---	85	165	38
2	5.2	63	.88	9.0	---	---	64	134	23
3	5.7	59	.91	9.0	---	---	26	113	7.9
4	6.5	54	.95	8.0	---	---	9.3	96	2.4
5	6.2	50	.84	6.5	---	---	5.9	80	1.3
6	6.4	45	.78	5.0	---	---	5.4	75	1.1
7	6.3	39	.66	4.2	---	---	5.9	70	1.1
8	6.2	37	.62	4.0	---	---	6.7	64	1.2
9	6.6	33	.59	3.8	---	---	6.3	60	1.0
10	6.8	31	.57	3.7	---	---	6.3	55	.94
11	5.8	31	.49	3.7	---	---	7.4	51	1.0
12	5.7	32	.49	3.6	---	---	6.9	45	.84
13	5.3	32	.46	3.5	---	---	7.6	44	.90
14	4.9	31	.41	3.5	---	---	7.8	42	.88
15	4.9	28	.37	16	---	---	7.8	40	.84
16	4.4	29	.34	18	---	---	5.9	35	.56
17	4.1	28	.31	14	---	---	5.0	35	.47
18	6.8	25	.46	12	---	---	7.4	32	.64
19	5.6	21	.32	9.0	---	---	13	30	1.1
20	5.8	---	---	7.1	---	---	9.6	27	.70
21	4.0	---	---	6.0	---	---	8.4	24	.54
22	3.8	---	---	6.1	---	---	8.2	20	.44
23	3.5	---	---	5.7	28	.43	6.5	15	.26
24	3.3	---	---	6.1	23	.38	6.5	11	.19
25	3.1	---	---	6.5	21	.37	6.9	9	.17
26	3.4	---	---	7.1	30	.58	7.6	7	.14
27	3.3	---	---	11	90	2.7	8.2	4	.09
28	3.2	---	---	49	188	25	8.6	8	.19
29	3.1	---	---	---	---	---	7.6	10	.21
30	3.0	---	---	---	---	---	7.6	12	.25
31	3.0	---	---	---	---	---	7.6	18	.37
TOTAL	151.4	---	---	246.1	---	---	382.9	---	88.72

07026640 RUNNING SLOUGH NEAR LEDFORD, KY--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	7.1	20	.38	1.6	44	.19	7.4	222	4.4
2	6.3	22	.37	1.5	35	.14	2.3	220	1.4
3	5.0	25	.34	1.9	25	.13	1.6	185	.80
4	6.2	25	.42	2.1	15	.09	2.2	150	.89
5	6.1	22	.36	2.5	19	.13	2.2	119	.71
6	5.5	22	.33	2.9	20	.16	1.9	88	.45
7	4.8	21	.27	3.3	19	.17	1.4	60	.23
8	4.6	23	.35	3.5	18	.17	1.0	47	.13
9	5.1	40	.55	3.2	15	.13	.68	38	.07
10	6.2	51	.85	2.9	18	.14	.40	32	.03
11	6.0	68	1.1	2.8	18	.14	.19	25	.01
12	5.4	88	1.3	10	34	.92	.02	10	.00
13	6.7	104	1.9	9.0	50	1.2	.0	0	.00
14	14	140	5.3	1.8	40	.19	.0	0	.00
15	16	132	5.7	1.8	32	.16	.0	0	.00
16	9.4	119	3.0	1.8	30	.15	.0	0	.00
17	5.5	105	1.6	1.8	32	.16	.0	0	.00
18	3.6	85	.83	1.7	35	.16	.0	0	.00
19	4.2	78	.88	1.8	35	.17	.02	12	.00
20	6.0	102	1.7	1.8	32	.16	.0	0	.00
21	23	132	8.2	1.5	37	.15	.30	30	.02
22	15	103	4.2	1.5	39	.16	.0	0	.00
23	9.7	68	1.8	1.2	37	.12	.0	0	.00
24	7.5	59	1.2	1.2	39	.13	.0	0	.00
25	6.8	60	1.1	1.2	52	.17	.00	0	.00
26	6.3	60	1.0	1.3	56	.20	.00	0	.00
27	5.7	59	.91	1.7	58	.27	.00	0	.00
28	4.8	57	.74	2.0	65	.35	.00	0	.00
29	5.5	58	.86	2.3	67	.42	.00	0	.00
30	3.1	52	.44	3.1	67	.56	.00	0	.00
31	---	---	---	4.2	90	1.0	---	---	---
TOTAL	221.1	---	47.98	80.9	---	8.39	21.61	---	9.14
JULY			AUGUST			SEPTEMBER			
1	.00	0	.00	.00	0	.00	.00	0	.00
2	.00	0	.00	.00	0	.00	.00	0	.00
3	.00	0	.00	.00	0	.00	.00	0	.00
4	.00	0	.00	.00	0	.00	.00	0	.00
5	.00	0	.00	.00	0	.00	.00	0	.00
6	.00	0	.00	.00	0	.00	.00	0	.00
7	.00	0	.00	.00	0	.00	.00	0	.00
8	.00	0	.00	.00	0	.00	.00	0	.00
9	.00	0	.00	.00	0	.00	.00	0	.00
10	.00	0	.00	.00	0	.00	.00	0	.00
11	.00	0	.00	.00	0	.00	.00	0	.00
12	.00	0	.00	.00	0	.00	.00	0	.00
13	.00	0	.00	.00	0	.00	.00	0	.00
14	.00	0	.00	.00	0	.00	.00	0	.00
15	.00	0	.00	.00	0	.00	.00	0	.00
16	.00	0	.00	.00	0	.00	.00	0	.00
17	.00	0	.00	.00	0	.00	.00	0	.00
18	.00	0	.00	.00	0	.00	.00	0	.00
19	.00	0	.00	.00	0	.00	.00	0	.00
20	.00	0	.00	.00	0	.00	.00	0	.00
21	.00	0	.00	.00	0	.00	.00	0	.00
22	.00	0	.00	.00	0	.00	.00	0	.00
23	.00	0	.00	.00	0	.00	.00	0	.00
24	.00	0	.00	.00	0	.00	.00	0	.00
25	.00	0	.00	.00	0	.00	.00	0	.00
26	.00	0	.00	.00	0	.00	.00	0	.00
27	.00	0	.00	.00	0	.00	.00	0	.00
28	.00	0	.00	.00	0	.00	.00	0	.00
29	.00	0	.00	.00	0	.00	.00	0	.00
30	.00	0	.00	.00	0	.00	.00	0	.00
31	.00	0	.00	.00	0	.00	---	---	---
TOTAL	.00	---	.00	.00	---	.00	.00	---	.00

OBION RIVER BASIN

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07026690 REELFOOT LAKE NEAR PHILLIPPY, TN

LOCATION.--Lat 36°27'59", long 89°20'56", Lake County, Hydrologic Unit 08010202, 1.85 mi southeast of Phillippy, 3.0 mi northeast of New Markham.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.22 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 13.85 ft, May 8, 1984; minimum, 9.71 ft, Aug. 2, 3, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.81 ft, Mar. 1-2; minimum, 10.32 ft, Oct. 9-10.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.50	10.46	10.49	10.58	10.56	10.57	11.18	11.11	11.14	11.98	11.98	11.98
2	10.50	10.49	10.50	10.56	10.51	10.53	11.19	11.18	11.18	11.98	11.98	11.98
3	10.54	10.50	10.52	10.57	10.54	10.56	11.18	11.18	11.18	11.99	11.98	11.98
4	10.55	10.52	10.53	10.60	10.56	10.58	11.18	11.17	11.18	12.00	11.99	11.99
5	10.51	10.44	10.47	10.62	10.60	10.61	11.17	11.17	11.17	12.00	12.00	12.00
6	10.44	10.40	10.41	10.64	10.62	10.63	11.17	11.17	11.17	12.04	12.00	12.02
7	10.40	10.40	10.40	10.74	10.64	10.66	11.20	11.17	11.18	12.03	11.99	12.01
8	10.40	10.39	10.40	10.85	10.77	10.82	11.38	11.20	11.21	11.99	11.99	11.99
9	10.39	10.32	10.38	10.91	10.85	10.88	12.17	11.45	11.77	12.02	11.99	12.00
10	10.33	10.32	10.32	10.96	10.91	10.93	12.41	12.20	12.35	12.02	12.02	12.02
11	10.36	10.33	10.35	10.98	10.97	10.98	12.41	12.41	12.41	12.03	12.02	12.02
12	10.54	10.37	10.47	10.99	10.94	10.98	12.41	12.39	12.40	12.04	12.03	12.04
13	10.52	10.51	10.51	10.94	10.90	10.92	12.39	12.38	12.39	12.04	12.04	12.04
14	10.53	10.52	10.53	11.01	10.94	10.98	12.40	12.39	12.40	12.04	12.04	12.04
15	10.53	10.52	10.53	11.03	11.01	11.02	12.40	12.39	12.40	12.04	12.01	12.03
16	10.52	10.51	10.52	11.03	11.03	11.03	12.39	12.34	12.37	12.01	12.00	12.00
17	10.52	10.50	10.52	11.03	11.03	11.03	12.34	12.28	12.32	12.02	12.00	12.00
18	10.50	10.47	10.49	11.03	11.01	11.03	12.28	12.22	12.25	12.03	12.02	12.03
19	10.48	10.47	10.47	11.03	11.00	11.01	12.21	12.17	12.20	12.10	12.03	12.08
20	10.47	10.47	10.47	11.04	11.04	11.04	12.17	12.12	12.14	12.10	12.10	12.10
21	10.47	10.45	10.47	11.04	11.04	11.04	12.11	12.06	12.09	12.10	12.10	12.10
22	10.46	10.45	10.46	11.04	11.04	11.04	12.06	12.01	12.03	12.10	12.10	12.10
23	10.46	10.46	10.46	11.04	11.01	11.04	12.01	12.00	12.00	12.10	12.10	12.10
24	10.53	10.46	10.49	11.00	10.98	10.99	12.04	12.00	12.02	12.10	12.06	12.07
25	10.63	10.55	10.61	11.05	10.98	11.01	12.04	12.04	12.04	12.06	12.03	12.03
26	10.63	10.61	10.62	11.12	11.06	11.10	12.04	12.03	12.04	12.06	12.03	12.05
27	10.61	10.60	10.61	11.11	11.10	11.10	12.03	12.01	12.02	12.07	12.06	12.07
28	10.61	10.60	10.60	11.10	11.10	11.10	12.01	12.00	12.00	12.07	12.06	12.06
29	10.60	10.57	10.59	11.11	11.10	11.10	12.00	11.99	11.99	12.11	12.06	12.08
30	10.57	10.54	10.55	11.11	11.11	11.11	12.00	11.98	11.99	12.11	12.09	12.10
31	10.57	10.55	10.56	---	---	---	11.98	11.98	11.98	12.09	12.09	12.09
MONTH	10.63	10.32	10.49	11.12	10.51	10.91	12.41	11.11	11.89	12.11	11.98	12.04

07026690 REELFOOT LAKE NEAR PHILLIPY, TN--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	12.13	12.09	12.10	12.81	12.72	12.79	11.92	11.84	11.87	11.92	11.90	11.91
2	12.14	12.13	12.13	12.81	12.73	12.77	11.89	11.85	11.87	11.91	11.90	11.90
3	12.15	12.13	12.14	12.73	12.65	12.69	11.85	11.82	11.83	11.90	11.90	11.90
4	12.13	12.10	12.12	12.64	12.59	12.62	11.82	11.78	11.80	11.90	11.86	11.88
5	12.10	12.09	12.09	12.59	12.56	12.58	11.80	11.78	11.80	11.86	11.85	11.86
6	12.09	12.07	12.09	12.56	12.48	12.52	11.80	11.80	11.80	11.86	11.86	11.86
7	12.07	12.07	12.07	12.47	12.39	12.43	11.81	11.80	11.81	11.86	11.85	11.85
8	12.07	11.98	12.03	12.39	12.31	12.35	11.81	11.81	11.81	11.84	11.82	11.83
9	11.99	11.98	11.98	12.32	12.22	12.27	11.81	11.81	11.81	11.82	11.80	11.82
10	12.00	11.99	11.99	12.21	12.15	12.17	11.84	11.81	11.82	11.81	11.80	11.80
11	12.00	12.00	12.00	12.14	12.12	12.14	11.88	11.84	11.86	11.81	11.78	11.79
12	12.00	11.97	11.99	12.12	12.06	12.09	11.88	11.85	11.86	11.78	11.77	11.77
13	11.96	11.95	11.95	12.06	12.03	12.04	11.98	11.85	11.89	11.77	11.77	11.77
14	11.96	11.95	11.96	12.03	12.02	12.02	12.11	11.98	12.05	11.77	11.76	11.77
15	11.97	11.94	11.96	12.02	12.00	12.01	12.15	12.11	12.13	11.76	11.74	11.76
16	11.94	11.93	11.93	12.00	11.93	11.97	12.15	12.14	12.15	11.74	11.73	11.73
17	12.01	11.94	11.98	11.96	11.89	11.91	12.15	12.15	12.15	11.73	11.73	11.73
18	12.02	12.01	12.02	12.04	11.97	12.02	12.15	12.15	12.15	11.73	11.73	11.73
19	12.02	12.02	12.02	12.04	12.03	12.04	12.15	12.15	12.15	11.73	11.73	11.73
20	12.03	12.02	12.03	12.03	12.00	12.01	12.15	12.14	12.14	11.73	11.73	11.73
21	12.03	12.03	12.03	12.00	11.96	11.96	12.14	12.11	12.13	11.73	11.72	11.72
22	12.03	12.03	12.03	11.96	11.94	11.96	12.11	12.08	12.10	11.72	11.69	11.69
23	12.03	12.03	12.03	11.94	11.89	11.92	12.09	12.02	12.06	11.69	11.65	11.66
24	12.03	12.03	12.03	11.94	11.89	11.92	12.02	11.94	11.98	11.76	11.63	11.67
25	12.03	12.03	12.03	11.94	11.94	11.94	11.94	11.94	11.94	11.86	11.79	11.83
26	12.05	12.03	12.03	11.94	11.86	11.90	11.96	11.94	11.95	11.88	11.86	11.87
27	12.20	12.05	12.12	11.85	11.81	11.83	11.96	11.96	11.96	11.89	11.88	11.88
28	12.70	12.23	12.42	11.81	11.78	11.78	11.95	11.94	11.94	11.88	11.86	11.86
29	---	---	---	11.78	11.77	11.78	11.97	11.94	11.95	11.86	11.85	11.85
30	---	---	---	11.79	11.75	11.76	11.97	11.92	11.95	11.85	11.82	11.84
31	---	---	---	11.84	11.78	11.80	---	---	---	11.99	11.83	11.86
MONTH	12.70	11.93	12.05	12.81	11.75	12.13	12.15	11.78	11.96	11.99	11.63	11.80
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	12.06	11.99	12.00	11.76	11.67	11.70	11.37	11.37	11.37	10.81	10.80	10.81
2	12.07	12.06	12.07	11.75	11.72	11.74	11.37	11.35	11.36	10.82	10.79	10.80
3	12.07	12.04	12.06	11.74	11.72	11.73	11.35	11.34	11.34	10.80	10.74	10.78
4	12.04	12.01	12.04	11.75	11.73	11.74	11.34	11.28	11.32	10.78	10.73	10.75
5	12.01	12.01	12.01	11.76	11.75	11.75	11.28	11.24	11.26	10.79	10.73	10.73
6	12.01	12.00	12.01	11.76	11.74	11.75	11.25	11.24	11.25	10.79	10.70	10.71
7	12.00	11.98	11.98	11.76	11.73	11.75	11.25	11.23	11.25	10.70	10.70	10.70
8	11.98	11.96	11.98	11.75	11.72	11.73	11.23	11.22	11.22	10.70	10.64	10.66
9	11.94	11.93	11.94	11.73	11.73	11.73	11.22	11.20	11.20	10.63	10.63	10.63
10	11.92	11.91	11.91	11.73	11.72	11.73	11.24	11.20	11.23	10.63	10.62	10.63
11	11.91	11.90	11.90	11.72	11.70	11.71	11.22	11.17	11.20	10.62	10.61	10.61
12	11.89	11.88	11.88	11.70	11.68	11.69	11.17	11.16	11.17	10.62	10.61	10.61
13	11.88	11.86	11.86	11.68	11.65	11.67	11.17	11.15	11.16	10.62	10.55	10.60
14	11.84	11.84	11.84	11.65	11.63	11.64	11.16	11.16	11.16	10.58	10.55	10.55
15	11.84	11.81	11.82	11.63	11.61	11.61	11.16	11.11	11.15	10.68	10.56	10.60
16	11.80	11.72	11.78	11.61	11.59	11.60	11.11	11.05	11.09	10.69	10.65	10.67
17	11.82	11.68	11.76	11.59	11.57	11.58	11.10	11.05	11.08	10.80	10.65	10.74
18	11.83	11.72	11.75	11.57	11.54	11.56	11.08	11.08	11.08	10.77	10.66	10.72
19	11.83	11.74	11.79	11.54	11.47	11.51	11.11	11.08	11.11	10.74	10.57	10.67
20	11.81	11.73	11.77	11.47	11.44	11.46	11.11	11.10	11.10	10.73	10.55	10.66
21	11.84	11.77	11.80	11.44	11.43	11.44	11.10	11.10	11.10	10.68	10.57	10.64
22	11.97	11.71	11.81	11.43	11.41	11.42	11.10	11.03	11.08	10.59	10.48	10.56
23	11.85	11.71	11.80	11.42	11.40	11.41	11.07	10.95	10.99	10.61	10.48	10.54
24	11.89	11.68	11.76	11.49	11.42	11.45	10.95	10.93	10.94	10.59	10.43	10.52
25	11.77	11.69	11.72	11.49	11.47	11.49	10.96	10.93	10.94	10.53	10.39	10.49
26	11.72	11.70	11.70	11.47	11.43	11.46	10.94	10.92	10.93	10.49	10.39	10.46
27	11.70	11.68	11.69	11.43	11.41	11.42	10.94	10.92	10.93	10.57	10.38	10.46
28	11.68	11.68	11.68	11.40	11.39	11.40	10.92	10.90	10.91	10.46	10.44	10.45
29	11.68	11.66	11.67	11.39	11.39	11.39	10.90	10.87	10.89	10.54	10.44	10.50
30	11.67	11.62	11.65	11.39	11.38	11.38	10.88	10.86	10.87	10.52	10.38	10.46
31	---	---	---	11.38	11.37	11.38	10.88	10.81	10.86	---	---	---
MONTH	12.07	11.62	11.85	11.76	11.37	11.58	11.37	10.81	11.11	10.82	10.38	10.62

07026695 BAYOU DU CHIEN NEAR WALNUT LOG, TN

LOCATION.-- Lat 36°28'09", long 89°23'50", Obion County, Hydrologic Unit 08010202, at Walnut Log.

DRAINAGE AREA.-- 27.8 mi².

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1986 to current year.

WATER TEMPERATURE: July 1986 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1986.

REMARKS.--No flow July 17 to Dec. 7, 1986, June 13 to Sept. 30, 1987.

EXTREMES FOR CURRENT PERIOD.--July 1986 to September 1987:

SPECIFIC CONDUCTANCE: Maximum, 583 microsiemens, Apr. 27, 28; minimum, 125 microsiemens, Dec. 9.

WATER TEMPERATURE: Maximum, 28.3°C, May 21-23; minimum, 1.7°C, Jan. 25-26.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	380	375	377
2	---	---	---	---	---	---	---	---	---	379	372	375
3	---	---	---	---	---	---	---	---	---	380	376	378
4	---	---	---	---	---	---	---	---	---	380	373	376
5	---	---	---	---	---	---	---	---	---	380	374	377
6	---	---	---	---	---	---	---	---	---	379	371	375
7	---	---	---	---	---	---	---	---	---	385	369	376
8	---	---	---	---	---	---	337	326	329	380	370	374
9	---	---	---	---	---	---	339	125	211	386	380	384
10	---	---	---	---	---	---	187	144	164	408	387	396
11	---	---	---	---	---	---	189	180	184	417	403	408
12	---	---	---	---	---	---	182	175	178	417	407	412
13	---	---	---	---	---	---	192	181	186	414	405	411
14	---	---	---	---	---	---	209	193	200	416	411	414
15	---	---	---	---	---	---	233	210	220	418	409	414
16	---	---	---	---	---	---	252	234	242	412	405	409
17	---	---	---	---	---	---	280	253	265	412	408	410
18	---	---	---	---	---	---	296	281	290	413	407	410
19	---	---	---	---	---	---	323	297	306	415	408	411
20	---	---	---	---	---	---	352	325	338	413	406	411
21	---	---	---	---	---	---	371	353	361	414	407	411
22	---	---	---	---	---	---	394	371	380	416	413	414
23	---	---	---	---	---	---	408	395	404	415	408	413
24	---	---	---	---	---	---	410	405	408	414	411	413
25	---	---	---	---	---	---	414	407	410	414	411	412
26	---	---	---	---	---	---	409	374	390	416	412	414
27	---	---	---	---	---	---	378	374	375	421	416	419
28	---	---	---	---	---	---	384	378	380	426	422	423
29	---	---	---	---	---	---	384	376	381	428	327	372
30	---	---	---	---	---	---	385	377	382	341	333	336
31	---	---	---	---	---	---	379	377	378	341	332	336
MONTH	---	---	---	---	---	---	---	---	---	428	327	396

07026695 BAYOU DU CHIEN NEAR WALNUT LOG, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	332	329	331	203	188	198	339	337	338	532	527	530
2	335	329	333	200	161	180	374	340	355	529	524	526
3	340	330	334	211	176	197	376	365	371	525	518	522
4	339	331	335	221	211	215	365	358	361	527	515	520
5	337	334	335	232	221	226	377	362	369	525	520	522
6	338	335	337	234	232	233	403	377	383	524	520	522
7	340	336	338	244	232	238	397	389	392	524	520	521
8	343	340	341	258	245	249	399	393	397	526	522	523
9	341	340	341	298	258	270	396	389	393	526	522	523
10	349	341	344	288	193	211	391	388	390	526	522	524
11	350	347	349	210	199	204	405	391	397	524	519	522
12	366	344	351	222	211	217	404	396	400	523	486	517
13	349	343	345	256	223	236	394	363	385	478	231	356
14	354	346	349	299	257	274	404	351	363	246	201	226
15	375	353	364	358	303	327	438	418	430	226	204	213
16	352	317	328	406	360	380	441	433	438	219	209	213
17	360	322	344	418	403	410	434	426	429	225	217	220
18	351	327	338	403	335	373	435	428	431	226	222	224
19	342	339	341	337	323	331	453	436	444	232	224	228
20	355	343	349	386	334	367	453	435	449	234	230	232
21	358	355	356	378	364	370	440	428	432	239	234	236
22	356	347	352	374	371	373	458	435	448	246	235	240
23	349	344	346	378	374	376	464	447	457	243	240	242
24	373	347	360	381	374	376	480	462	469	246	234	242
25	376	360	371	393	380	385	532	481	506	259	237	247
26	358	337	350	396	371	382	558	533	545	244	236	238
27	355	332	343	397	361	386	583	558	569	254	244	250
28	328	182	265	360	354	357	583	564	579	261	254	258
29	---	---	---	362	358	360	572	551	563	267	263	264
30	---	---	---	360	343	353	550	531	539	275	268	270
31	---	---	---	342	332	336	---	---	---	280	264	276
MONTH	376	182	342	418	161	303	583	337	434	532	201	353
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	277	265	269	---	---	---	---	---	---	---	---	---
2	284	262	276	---	---	---	---	---	---	---	---	---
3	275	259	268	---	---	---	---	---	---	---	---	---
4	262	245	254	---	---	---	---	---	---	---	---	---
5	248	231	243	---	---	---	---	---	---	---	---	---
6	238	231	234	---	---	---	---	---	---	---	---	---
7	231	227	229	---	---	---	---	---	---	---	---	---
8	229	226	227	---	---	---	---	---	---	---	---	---
9	230	227	228	---	---	---	---	---	---	---	---	---
10	234	230	231	---	---	---	---	---	---	---	---	---
11	240	230	234	---	---	---	---	---	---	---	---	---
12	245	240	243	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

07026695 BAYOU DU CHIEN NEAR WALNUT LOG, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	3.8	3.2	3.5
2	---	---	---	---	---	---	---	---	---	3.7	3.1	3.5
3	---	---	---	---	---	---	---	---	---	3.6	2.6	3.2
4	---	---	---	---	---	---	---	---	---	4.1	2.1	3.0
5	---	---	---	---	---	---	---	---	---	4.3	3.2	3.8
6	---	---	---	---	---	---	---	---	---	5.4	3.4	4.3
7	---	---	---	---	---	---	---	---	---	5.0	4.2	4.6
8	---	---	---	---	---	---	8.0	6.6	7.3	5.6	4.3	4.9
9	---	---	---	---	---	---	12.1	8.7	10.9	5.1	4.2	4.5
10	---	---	---	---	---	---	10.9	6.9	8.8	4.3	3.8	4.2
11	---	---	---	---	---	---	6.8	5.3	6.0	3.9	3.2	3.6
12	---	---	---	---	---	---	5.3	4.5	5.0	4.4	2.8	3.6
13	---	---	---	---	---	---	4.5	3.7	4.1	5.5	3.4	4.3
14	---	---	---	---	---	---	3.6	3.0	3.4	6.0	5.2	5.6
15	---	---	---	---	---	---	4.3	3.3	3.8	6.6	6.0	6.3
16	---	---	---	---	---	---	5.7	4.1	4.9	6.3	5.8	6.1
17	---	---	---	---	---	---	6.8	5.8	6.4	5.8	4.9	5.2
18	---	---	---	---	---	---	7.3	6.2	6.7	5.3	4.9	5.1
19	---	---	---	---	---	---	6.7	5.7	6.2	4.9	4.0	4.5
20	---	---	---	---	---	---	6.3	4.9	5.6	4.7	3.4	4.0
21	---	---	---	---	---	---	6.0	4.6	5.2	4.6	3.2	3.9
22	---	---	---	---	---	---	5.7	4.1	5.0	4.0	3.2	3.5
23	---	---	---	---	---	---	5.0	4.4	4.7	3.6	2.8	3.3
24	---	---	---	---	---	---	4.6	4.4	4.6	3.4	2.3	2.9
25	---	---	---	---	---	---	4.4	3.8	4.1	2.3	1.7	2.0
26	---	---	---	---	---	---	4.2	3.8	4.1	2.7	1.7	2.2
27	---	---	---	---	---	---	3.8	3.2	3.5	3.8	2.6	3.2
28	---	---	---	---	---	---	3.6	2.7	3.1	4.2	3.6	3.9
29	---	---	---	---	---	---	3.8	2.6	3.1	6.6	3.6	4.7
30	---	---	---	---	---	---	3.3	2.8	3.1	7.0	5.5	6.1
31	---	---	---	---	---	---	3.8	3.0	3.4	6.1	4.4	5.3
MONTH	---	---	---	---	---	---	---	---	---	7.0	1.7	4.15
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.8	5.1	5.5	9.5	8.2	8.9	13.3	8.6	10.9	23.2	20.6	21.9
2	6.7	5.7	6.2	9.2	7.4	8.3	12.3	10.4	11.4	23.0	20.7	22.0
3	8.4	6.3	7.2	10.0	8.0	8.9	12.0	9.4	10.7	22.2	21.3	21.8
4	8.1	5.9	7.1	10.4	8.2	9.4	13.0	8.5	10.7	22.0	20.5	21.2
5	8.2	6.1	7.1	10.9	9.5	10.1	14.0	9.7	11.9	22.1	19.5	20.8
6	7.9	7.0	7.5	12.2	9.9	10.9	14.2	11.4	12.8	21.8	19.8	20.9
7	8.3	6.0	7.1	13.9	10.6	12.1	15.2	12.0	13.4	22.8	19.5	21.0
8	9.0	6.6	7.7	13.6	11.9	12.8	16.8	12.6	14.5	23.2	20.1	21.7
9	6.4	4.8	5.6	14.1	12.5	13.1	17.9	14.0	15.9	23.2	20.2	21.7
10	6.6	4.4	5.4	12.2	8.9	10.4	17.2	15.3	16.2	23.4	20.5	22.0
11	8.1	5.3	6.4	8.7	7.4	8.2	17.9	13.4	15.5	24.5	21.8	23.0
12	9.4	7.0	8.1	9.3	6.1	7.6	17.2	15.6	16.5	24.4	22.7	23.4
13	9.7	7.4	8.5	9.8	6.4	7.8	18.5	15.8	17.1	22.7	21.3	22.1
14	11.0	8.7	9.7	12.0	7.9	9.6	18.9	17.1	17.8	23.4	21.2	22.1
15	9.9	8.9	9.6	13.8	10.3	11.9	17.5	15.3	16.4	25.6	22.1	23.4
16	8.8	5.9	7.5	15.4	13.1	14.0	15.9	14.6	15.3	26.2	23.8	24.9
17	5.9	3.7	4.8	15.5	12.9	14.2	19.5	14.7	16.8	26.2	24.3	25.2
18	3.9	3.3	3.6	16.7	13.8	14.6	20.6	16.3	18.2	25.6	24.3	24.8
19	4.0	3.4	3.7	16.7	14.3	15.6	21.8	18.0	19.6	26.1	24.1	25.0
20	4.3	3.8	4.0	17.5	15.1	16.2	23.2	19.0	20.8	27.7	25.2	26.4
21	6.4	4.2	5.1	18.3	14.6	16.4	24.1	20.5	22.4	28.3	26.1	27.2
22	5.9	5.2	5.5	18.0	15.1	16.5	24.0	21.6	22.9	28.3	25.9	27.2
23	7.9	4.7	6.0	18.5	14.8	16.5	22.0	18.8	20.4	28.3	26.0	27.2
24	7.2	6.0	6.5	17.7	15.4	16.4	20.5	17.4	18.7	27.0	25.0	26.0
25	9.2	6.0	7.5	15.8	14.0	15.0	20.6	16.2	18.2	26.5	24.1	25.2
26	8.4	7.6	8.0	17.1	12.7	14.7	20.9	16.7	18.7	27.3	24.2	25.5
27	9.1	8.3	8.7	18.2	14.4	16.0	22.5	18.3	20.1	27.5	25.3	26.3
28	9.5	8.8	9.1	18.2	14.3	16.2	22.3	18.1	20.2	27.7	25.4	26.5
29	---	---	---	18.2	15.3	16.6	22.2	17.9	19.9	27.9	25.7	26.8
30	---	---	---	15.1	9.7	12.2	23.9	19.5	21.4	27.3	26.0	26.7
31	---	---	---	11.8	8.9	10.2	---	---	---	27.4	25.0	25.8
MONTH	11.0	3.3	6.74	18.5	6.1	12.6	24.1	8.5	16.8	28.3	19.5	24.1

07026695 BAYOU DU CHIEN NEAR WALNUT LOG, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

[illegible]

07027000 REELFOOT LAKE NEAR TIPTONVILLE, TN

LOCATION.--Lat 36°21'09", long 89°25'07", Lake County, Hydrologic Unit 08010202, at Middle Landing in Reelfoot Lake State Park, 0.4 mi east of Blue Bank, 0.8 mi west of the spillway, and 3.3 mi southeast of Tiptonville.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.22 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.65 ft, from recorded range in stage, about Apr. 26, 1973; minimum, 9.59 ft, July 6, 7, 8, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of about 17.0 ft, at spillway, present datum, from information by local resident. Minimum stage at spillway, 9.30 ft, Nov. 20, 21, 1953 at a datum of 270.29 ft above National Geodetic Vertical Datum of 1929.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.85 ft, Mar. 3; minimum 10.55 ft, Oct. 12.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.69	10.60	10.65	10.81	10.80	10.80	11.39	11.36	11.37	12.15	12.12	12.13
2	10.69	10.67	10.69	10.87	10.80	10.84	11.37	11.33	11.35	12.16	12.12	12.13
3	10.68	10.59	10.64	10.81	10.77	10.79	11.38	11.36	11.37	12.20	12.13	12.15
4	10.66	10.58	10.62	10.84	10.78	10.81	11.41	11.37	11.38	12.20	12.17	12.18
5	10.68	10.65	10.66	10.86	10.84	10.85	11.41	11.40	11.40	12.17	12.17	12.17
6	10.69	10.63	10.66	10.85	10.83	10.84	11.40	11.38	11.39	12.17	11.97	12.10
7	10.63	10.62	10.63	10.91	10.82	10.85	11.40	11.36	11.38	12.20	12.14	12.18
8	10.61	10.60	10.61	11.07	10.95	11.02	11.52	11.40	11.42	12.19	12.18	12.18
9	10.63	10.60	10.61	11.14	11.04	11.10	12.06	11.62	11.89	12.22	12.14	12.18
10	10.64	10.61	10.62	11.17	11.13	11.14	12.30	12.06	12.18	12.22	12.16	12.19
11	10.61	10.56	10.58	11.24	11.17	11.22	12.43	12.31	12.37	12.21	12.17	12.19
12	10.78	10.55	10.68	11.38	11.22	11.26	12.54	12.44	12.49	12.22	12.18	12.20
13	10.78	10.75	10.77	11.35	11.28	11.31	12.58	12.53	12.56	12.23	12.21	12.23
14	10.76	10.75	10.75	11.27	11.22	11.24	12.57	12.55	12.56	12.22	12.21	12.21
15	10.75	10.75	10.75	11.25	11.22	11.24	12.57	12.56	12.57	12.33	12.22	12.26
16	10.75	10.71	10.73	11.26	11.25	11.25	12.56	12.51	12.54	12.33	12.29	12.31
17	10.74	10.72	10.72	11.26	11.26	11.26	12.51	12.46	12.48	12.31	12.26	12.28
18	10.74	10.73	10.74	11.37	11.25	11.28	12.48	12.39	12.44	12.40	12.33	12.36
19	10.73	10.71	10.72	11.33	11.25	11.29	12.40	12.34	12.37	12.33	12.17	12.26
20	10.71	10.71	10.71	11.27	11.23	11.25	12.33	12.27	12.30	12.32	12.30	12.31
21	10.71	10.70	10.70	11.29	11.26	11.27	12.26	12.22	12.24	12.33	12.31	12.32
22	10.70	10.69	10.69	11.26	11.23	11.25	12.22	12.20	12.21	12.33	12.30	12.32
23	10.71	10.68	10.70	11.34	11.24	11.27	12.32	12.22	12.26	12.33	12.27	12.32
24	10.85	10.70	10.78	11.33	11.29	11.30	12.32	12.26	12.29	12.42	12.34	12.38
25	10.84	10.81	10.82	11.33	11.27	11.30	12.26	12.23	12.24	12.44	12.38	12.41
26	10.84	10.81	10.83	11.35	11.26	11.32	12.24	12.22	12.23	12.37	12.37	12.37
27	10.84	10.83	10.83	11.37	11.35	11.36	12.22	12.17	12.20	12.37	12.32	12.35
28	10.83	10.81	10.82	11.37	11.35	11.36	12.17	12.14	12.15	12.32	12.31	12.31
29	10.85	10.81	10.82	11.36	11.35	11.36	12.14	12.04	12.10	12.32	12.09	12.26
30	10.87	10.83	10.85	11.41	11.36	11.38	12.15	12.12	12.14	12.36	12.28	12.31
31	10.83	10.80	10.81	---	---	---	12.14	12.13	12.14	12.33	12.31	12.32
MONTH	10.87	10.55	10.72	11.41	10.77	11.16	12.58	11.33	12.06	12.44	11.97	12.25

07027000 REELFOOT LAKE NEAR TIPTONVILLE, TN--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
FEBRUARY				MARCH				APRIL				MAY			
1	12.37	12.30	12.32	12.73	12.34	12.58	12.16	11.92	12.04	12.14	12.10	12.13			
2	12.38	12.34	12.36	12.81	12.75	12.78	12.19	12.13	12.17	12.11	12.03	12.08			
3	12.41	12.35	12.38	12.85	12.81	12.83	12.20	12.14	12.17	12.12	12.05	12.08			
4	12.39	12.38	12.39	12.83	12.77	12.80	12.21	12.15	12.17	12.17	12.11	12.14			
5	12.39	12.34	12.36	12.77	12.67	12.70	12.17	12.11	12.14	12.13	12.11	12.12			
6	12.35	12.32	12.34	12.68	12.64	12.65	12.13	12.09	12.11	12.11	12.09	12.10			
7	12.32	12.26	12.30	12.63	12.58	12.61	12.11	12.09	12.10	12.08	12.07	12.08			
8	12.44	12.25	12.33	12.58	12.51	12.56	12.10	12.08	12.09	12.08	12.05	12.06			
9	12.35	12.23	12.28	12.57	12.51	12.53	12.09	12.07	12.08	12.06	12.03	12.04			
10	12.23	12.18	12.20	12.53	12.40	12.47	12.11	12.03	12.07	12.03	11.91	12.01			
11	12.20	12.15	12.18	12.40	12.31	12.35	12.08	11.99	12.05	12.01	11.99	12.00			
12	12.21	12.16	12.19	12.31	12.24	12.28	12.12	12.05	12.09	12.02	11.98	12.00			
13	12.21	12.17	12.19	12.24	12.19	12.21	12.13	12.01	12.07	12.01	12.00	12.01			
14	12.24	12.18	12.22	12.19	12.08	12.14	12.18	12.07	12.13	12.00	11.98	11.99			
15	12.46	12.24	12.34	12.13	12.05	12.09	12.28	12.16	12.22	12.02	11.97	11.98			
16	12.43	12.31	12.37	12.15	12.12	12.13	12.34	12.28	12.31	11.99	11.97	11.98			
17	12.30	12.29	12.30	12.22	12.05	12.11	12.38	12.34	12.36	11.97	11.89	11.94			
18	12.29	12.28	12.29	12.22	11.95	12.12	12.39	12.38	12.38	11.97	11.92	11.94			
19	12.29	12.28	12.28	12.20	12.13	12.17	12.39	12.39	12.39	11.95	11.93	11.94			
20	12.28	12.28	12.28	12.20	12.19	12.20	12.39	12.38	12.39	11.93	11.91	11.92			
21	12.28	12.27	12.28	12.19	12.16	12.18	12.37	12.35	12.36	11.92	11.90	11.91			
22	12.31	12.27	12.28	12.17	12.15	12.16	12.36	12.27	12.31	11.94	11.87	11.91			
23	12.29	12.27	12.28	12.15	12.04	12.11	12.36	12.22	12.27	11.93	11.87	11.91			
24	12.28	12.27	12.27	12.11	11.98	12.05	12.30	12.25	12.27	12.02	11.85	11.92			
25	12.27	12.26	12.26	12.05	11.88	11.98	12.26	12.22	12.24	12.06	12.01	12.03			
26	12.38	12.26	12.30	12.04	12.04	12.04	12.21	12.20	12.20	12.06	12.05	12.06			
27	12.36	12.33	12.34	12.05	12.04	12.04	12.26	12.16	12.20	12.06	12.03	12.05			
28	12.53	12.28	12.42	12.07	12.05	12.06	12.20	12.18	12.19	12.05	12.01	12.03			
29	---	---	---	12.15	12.04	12.08	12.18	12.04	12.11	12.03	11.99	12.02			
30	---	---	---	12.23	12.14	12.20	12.16	12.08	12.12	12.12	12.01	12.05			
31	---	---	---	12.16	12.09	12.12	---	---	---	12.16	12.04	12.07			
MONTH	12.53	12.15	12.31	12.85	11.88	12.33	12.39	11.92	12.19	12.17	11.85	12.02			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
JUNE				JULY				AUGUST				SEPTEMBER			
1	12.19	12.14	12.18	12.04	11.92	11.97	11.62	11.59	11.61	11.15	11.11	11.13			
2	12.23	12.20	12.21	12.05	12.03	12.04	11.59	11.56	11.58	11.10	11.08	11.09			
3	12.33	12.25	12.28	12.04	12.02	12.03	11.57	11.55	11.56	11.10	11.08	11.09			
4	12.30	12.27	12.28	12.04	11.89	12.02	11.58	11.53	11.56	11.08	11.06	11.07			
5	12.27	12.25	12.26	12.02	11.97	12.00	11.55	11.53	11.54	11.06	11.04	11.05			
6	12.25	12.23	12.24	12.00	11.96	11.98	11.53	11.49	11.51	11.04	11.02	11.03			
7	12.23	12.18	12.20	12.01	11.97	11.99	11.49	11.46	11.48	11.04	11.00	11.02			
8	12.18	12.16	12.17	12.02	11.98	12.00	11.46	11.41	11.44	11.03	10.99	11.01			
9	12.17	12.15	12.16	12.01	11.97	11.99	11.44	11.37	11.40	10.99	10.97	10.98			
10	12.15	12.14	12.15	11.99	11.96	11.98	11.50	11.47	11.48	10.99	10.95	10.96			
11	12.14	12.09	12.12	11.98	11.96	11.97	11.48	11.45	11.46	10.95	10.92	10.93			
12	12.10	12.06	12.08	11.96	11.92	11.94	11.46	11.42	11.44	10.93	10.91	10.92			
13	12.08	12.08	12.08	11.97	11.92	11.94	11.42	11.39	11.40	10.94	10.91	10.92			
14	12.08	12.04	12.07	11.94	11.92	11.93	11.39	11.36	11.37	10.91	10.88	10.89			
15	12.06	12.04	12.05	11.91	11.86	11.89	11.36	11.33	11.34	10.95	10.86	10.88			
16	12.06	12.03	12.04	11.87	11.85	11.86	11.33	11.29	11.31	10.93	10.84	10.90			
17	12.06	12.03	12.05	11.85	11.82	11.84	11.33	11.29	11.31	10.98	10.86	10.92			
18	12.05	11.99	12.03	11.83	11.75	11.79	11.44	11.30	11.35	10.95	10.93	10.94			
19	12.05	12.04	12.04	11.75	11.74	11.75	11.37	11.35	11.36	10.97	10.92	10.94			
20	12.04	11.99	12.01	11.75	11.73	11.74	11.35	11.33	11.33	10.91	10.89	10.90			
21	12.05	12.00	12.03	11.73	11.71	11.72	11.33	11.28	11.31	10.90	10.87	10.89			
22	12.04	11.94	12.03	11.71	11.67	11.69	11.34	11.26	11.27	10.89	10.87	10.87			
23	12.08	12.02	12.05	11.71	11.56	11.67	11.31	11.28	11.30	10.87	10.84	10.86			
24	12.10	12.04	12.05	11.77	11.66	11.72	11.27	11.23	11.26	10.84	10.83	10.83			
25	12.07	12.03	12.04	11.75	11.68	11.72	11.23	11.19	11.21	10.83	10.80	10.82			
26	12.06	12.02	12.04	11.71	11.69	11.70	11.19	11.14	11.17	10.82	10.80	10.81			
27	12.04	11.98	12.00	11.73	11.68	11.70	11.29	11.15	11.19	10.80	10.78	10.80			
28	11.98	11.93	11.95	11.69	11.66	11.68	11.25	11.19	11.21	10.78	10.76	10.78			
29	11.93	11.90	11.92	11.69	11.65	11.66	11.19	11.18	11.18	10.86	10.76	10.81			
30	11.97	11.90	11.92	11.65	11.62	11.64	11.18	11.15	11.16	10.84	10.79	10.82			
31	---	---	---	11.64	11.60	11.62	11.17	11.14	11.16	---	---	---			
MONTH	12.33	11.90	12.13	12.05	11.56	11.84	11.62	11.14	11.36	11.15	10.76	10.93			

07027002 REELFOOT LAKE SPILLWAY NEAR TIPTONVILLE, TN

LOCATION.-- Lat 36°21'09", long 89°25'39", Lake County, Hydrologic Unit 08010202, at spillway at State Highway 22, 4.0 miles southeast of Tiptonville.

DRAINAGE AREA.-- 240 mi².

PERIOD OF RECORD.-- Water year 1975-76, July 1986 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1986 to current year.

WATER TEMPERATURE: July 1986 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1986.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 369 microsiemens, Nov. 26, 1987; minimum 68 microsiemens, Dec. 9, 1986.

WATER TEMPERATURE: Maximum, 36.8°C, July 27, 1987; minimum, 0.0°C, Jan. 25, 1987.

EXTREMES FOR CURRENT PERIOD.-- July 1986 to September 1987:

SPECIFIC CONDUCTANCE: Maximum, 369 microsiemens, Nov. 26; minimum, 68 microsiemens, Dec. 9.

WATER TEMPERATURE: Maximum, 36.8°C, July 27, 1987; minimum, 0.0°C, Jan. 25.

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	205	189	196	197	192	194
2	---	---	---	---	---	---	194	181	189	199	188	195
3	---	---	---	---	---	---	190	182	186	238	193	201
4	---	---	---	---	---	---	189	180	183	239	195	215
5	---	---	---	---	---	---	195	186	192	203	191	197
6	---	---	---	---	---	---	200	186	192	208	190	197
7	---	---	---	---	---	---	186	186	184	197	191	194
8	---	---	---	---	---	---	189	182	185	195	188	192
9	---	---	---	---	---	---	193	181	185	197	191	194
10	---	---	---	---	---	---	194	183	189	198	193	195
11	---	---	---	---	---	---	189	179	183	198	193	196
12	---	---	---	---	---	---	183	178	180	216	182	195
13	---	---	---	---	---	---	197	179	186	206	186	196
14	---	---	---	---	---	---	199	190	193	203	195	199
15	---	---	---	---	---	---	193	188	191	201	194	198
16	---	---	---	---	---	---	190	185	188	201	189	197
17	---	---	---	---	---	---	191	174	184	199	191	196
18	---	---	---	213	196	204	186	177	182	205	194	199
19	---	---	---	204	184	195	183	177	180	290	199	242
20	---	---	---	203	177	190	183	177	180	234	207	220
21	---	---	---	203	180	200	181	178	179	205	197	201
22	---	---	---	184	177	180	188	181	183	208	198	203
23	---	---	---	212	178	182	195	186	190	205	195	200
24	---	---	---	207	182	190	191	183	187	203	198	200
25	---	---	---	201	190	195	190	185	187	207	199	202
26	---	---	---	203	185	194	200	186	192	207	199	204
27	---	---	---	214	189	202	194	182	188	207	201	203
28	---	---	---	210	185	203	185	182	183	207	202	205
29	---	---	---	205	183	196	185	181	183	210	199	205
30	---	---	---	208	191	198	191	185	188	207	199	204
31	---	---	---	207	196	199	192	188	191	---	---	---
MONTH	---	---	---	---	---	---	205	174	186	290	182	201

07027002 REELFOOT LAKE SPILLWAY NEAR TIPTONVILLE, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	207	197	202	213	187	200	251	209	223	182	147	152
2	204	200	202	201	189	197	292	233	260	189	162	172
3	204	199	202	209	191	196	274	231	246	196	163	171
4	207	201	205	218	206	211	268	218	238	182	170	174
5	207	193	201	223	203	213	246	202	231	172	168	170
6	201	196	198	239	214	228	261	235	245	188	162	175
7	200	196	198	276	205	226	257	217	239	189	160	171
8	206	199	202	337	89	162	277	218	250	159	157	158
9	208	192	201	227	183	206	234	68	137	165	157	159
10	198	194	196	220	192	199	196	166	180	214	168	180
11	201	196	198	246	204	231	175	163	171	204	175	183
12	269	177	196	246	204	231	177	174	176	171	157	167
13	189	186	187	200	189	192	178	175	176	163	156	158
14	200	188	193	201	186	192	177	175	176	176	158	165
15	206	190	198	249	195	222	176	173	175	203	157	177
16	219	191	203	243	192	220	173	168	170	163	157	161
17	210	192	200	244	192	207	175	169	172	170	163	167
18	202	191	198	235	192	214	175	157	164	171	168	170
19	205	195	199	215	197	204	172	163	168	174	167	170
20	208	196	200	252	203	227	175	172	174	168	166	167
21	202	193	198	241	192	223	176	171	174	170	167	168
22	202	197	199	238	197	218	175	170	173	171	166	168
23	202	199	201	242	201	218	171	162	168	170	165	166
24	273	198	209	221	209	214	170	161	164	171	166	168
25	271	199	216	232	212	216	174	165	172	173	169	171
26	197	193	195	369	236	295	165	158	162	173	170	172
27	204	189	194	279	225	250	172	159	163	175	173	174
28	205	193	198	240	204	225	176	171	173	174	172	173
29	220	194	205	231	197	210	176	170	173	176	125	169
30	198	184	192	227	197	210	172	156	161	166	156	163
31	220	190	196	---	---	---	158	149	154	166	163	164
MONTH	273	177	199	369	89	215	292	68	187	214	125	168
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	167	164	165	169	155	163	210	182	187	206	197	201
2	169	166	168	168	166	167	229	190	203	202	195	198
3	168	164	166	170	167	168	212	184	198	201	192	196
4	169	165	166	171	169	170	203	181	189	199	193	196
5	172	168	171	173	170	172	196	180	186	194	190	192
6	172	170	171	173	171	172	192	182	187	199	190	193
7	172	171	172	175	172	174	196	180	185	200	190	194
8	172	161	168	177	174	175	206	179	187	199	191	195
9	169	160	165	182	172	175	213	180	189	223	194	198
10	170	166	169	184	178	181	195	182	188	213	196	200
11	170	166	168	181	175	178	188	183	185	260	200	229
12	172	168	169	177	176	177	213	187	200	218	200	206
13	172	169	170	180	176	178	210	183	193	219	200	203
14	173	170	171	185	177	181	254	193	214	207	199	202
15	171	166	169	191	181	186	224	189	210	276	196	203
16	169	166	168	194	180	189	190	183	186	252	198	208
17	169	166	168	185	176	180	185	182	184	208	197	201
18	170	166	168	179	172	176	183	180	182	272	201	226
19	167	165	166	176	174	175	183	180	182	289	275	285
20	170	166	168	176	174	175	184	180	182	296	288	292
21	171	168	170	177	174	175	183	179	181	308	296	301
22	171	169	170	178	176	177	182	179	180	315	307	309
23	172	169	170	178	176	177	187	179	181	336	312	316
24	171	169	170	182	176	178	190	183	187	320	178	282
25	172	170	171	184	180	182	191	183	187	250	151	170
26	171	168	170	182	178	180	207	182	185	204	180	194
27	171	168	170	183	179	181	188	185	186	211	200	205
28	170	161	167	184	179	181	189	184	187	210	204	205
29	---	---	---	182	176	179	191	189	190	208	204	206
30	---	---	---	187	176	178	201	192	197	208	200	205
31	---	---	---	200	179	187	---	---	---	227	95	194
MONTH	173	160	169	200	155	177	254	179	189	336	95	220

07027002 REELFOOT LAKE SPILLWAY NEAR TIPTONVILLE, TN--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	221	158	193	188	176	182	197	189	193	---	---	---
2	223	203	210	243	189	215	199	191	195	---	---	---
3	206	197	201	193	176	184	205	190	195	---	---	---
4	199	188	195	188	180	183	204	185	194	---	---	---
5	201	192	195	---	---	---	196	185	190	---	---	---
6	205	193	200	---	---	---	191	182	187	---	---	---
7	208	188	199	---	---	---	192	183	186	---	---	---
8	206	193	198	---	---	---	192	187	190	---	---	---
9	197	184	192	---	---	---	193	185	190	---	---	---
10	213	179	194	---	---	---	238	175	187	---	---	---
11	198	195	196	---	---	---	184	180	182	---	---	---
12	197	187	190	---	---	---	189	182	186	---	---	---
13	206	189	196	---	---	---	199	185	192	---	---	---
14	214	196	206	---	---	---	200	193	196	---	---	---
15	206	192	200	---	---	---	198	193	196	---	---	---
16	226	191	205	---	---	---	199	191	195	---	---	---
17	226	194	208	---	---	---	195	187	190	---	---	---
18	225	196	207	194	177	182	190	177	184	---	---	---
19	202	197	199	189	180	183	184	177	180	---	---	---
20	202	199	200	192	180	187	189	181	184	---	---	---
21	227	192	202	197	185	189	195	190	192	---	---	---
22	235	193	212	201	186	193	191	183	186	---	---	---
23	307	193	230	199	186	191	188	180	185	---	---	---
24	232	188	212	203	188	195	188	179	183	---	---	---
25	231	182	205	195	177	185	190	183	186	---	---	---
26	236	182	208	183	176	180	192	185	189	---	---	---
27	232	181	210	189	178	184	199	180	187	---	---	---
28	241	181	208	207	185	192	215	186	201	---	---	---
29	243	182	204	201	189	195	201	182	191	---	---	---
30	239	181	194	199	180	190	---	---	---	---	---	---
31	---	---	---	192	187	189	---	---	---	---	---	---
MONTH	307	158	202	---	---	---	238	175	189	---	---	---

TEMPERATURE, WATER, DEGREES CENTIGRADE, JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	31.4	29.5	30.5	23.9	23.1	23.5
2	---	---	---	---	---	---	32.3	29.0	30.5	26.3	23.2	24.4
3	---	---	---	---	---	---	31.4	29.1	30.0	26.0	24.2	25.0
4	---	---	---	---	---	---	29.8	27.5	28.6	25.5	24.2	24.6
5	---	---	---	---	---	---	28.9	27.8	28.2	25.7	24.3	25.1
6	---	---	---	---	---	---	28.1	27.3	27.7	27.5	24.2	25.7
7	---	---	---	---	---	---	28.2	27.4	27.8	26.8	23.6	25.0
8	---	---	---	---	---	---	27.9	26.8	27.3	24.0	21.3	22.8
9	---	---	---	---	---	---	28.7	26.4	27.2	23.5	22.5	23.1
10	---	---	---	---	---	---	28.1	26.5	27.1	23.6	22.9	23.2
11	---	---	---	---	---	---	28.2	26.8	27.6	24.3	23.4	23.7
12	---	---	---	---	---	---	27.6	26.2	27.1	27.2	23.4	25.1
13	---	---	---	---	---	---	30.0	25.6	27.6	27.2	24.8	26.2
14	---	---	---	---	---	---	29.2	27.6	28.2	26.5	24.8	25.4
15	---	---	---	---	---	---	28.7	27.3	27.8	25.1	24.3	24.6
16	---	---	---	---	---	---	28.2	27.4	27.7	27.0	24.0	25.2
17	---	---	---	---	---	---	30.2	26.9	28.1	26.4	25.0	25.7
18	---	---	---	29.5	28.2	28.7	29.6	28.2	29.0	26.0	24.6	25.2
19	---	---	---	31.3	29.1	29.7	29.7	28.0	29.0	25.1	23.9	24.4
20	---	---	---	32.7	29.2	30.8	29.1	27.6	28.5	26.9	24.6	25.4
21	---	---	---	32.3	30.1	31.5	28.4	26.8	27.9	26.1	25.3	25.7
22	---	---	---	31.4	30.2	30.9	28.1	27.3	27.7	25.2	24.4	24.7
23	---	---	---	32.9	30.0	31.3	29.1	27.1	27.9	26.3	24.6	25.1
24	---	---	---	32.7	31.1	31.5	29.5	27.8	28.7	26.4	25.4	25.8
25	---	---	---	31.1	30.2	30.7	29.4	28.1	28.6	26.6	25.6	26.1
26	---	---	---	31.2	30.2	30.6	29.9	27.8	28.5	26.8	25.8	26.3
27	---	---	---	30.0	29.0	29.4	30.3	28.6	29.4	27.2	26.0	26.5
28	---	---	---	31.2	29.5	30.2	28.8	23.8	26.0	27.1	26.4	26.7
29	---	---	---	31.5	30.0	31.0	23.7	21.9	23.0	27.0	26.0	26.5
30	---	---	---	31.1	30.2	30.6	24.2	22.5	23.3	27.1	26.2	26.7
31	---	---	---	31.7	30.1	30.8	24.0	23.2	23.7	---	---	---
MONTH	---	---	---	---	---	---	32.3	21.9	27.7	27.5	21.3	25.1

OBION RIVER BASIN

07027002 REELFOOT LAKE SPILLWAY NEAR TIPTONVILLE, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	26.8	25.9	26.3	18.4	16.5	17.3	9.2	8.8	9.0	3.3	2.8	3.2
2	26.1	25.2	25.6	17.8	15.8	17.0	9.4	8.8	9.2	3.2	2.5	3.0
3	26.0	25.5	25.8	15.9	15.2	15.4	8.8	8.3	8.6	3.1	2.5	3.0
4	25.8	25.3	25.6	15.2	14.5	14.8	8.2	7.5	7.9	2.9	2.2	2.5
5	25.2	23.9	24.5	14.5	14.3	14.4	7.5	6.8	7.2	3.3	2.3	2.8
6	23.9	21.0	22.6	14.4	14.2	14.3	7.2	6.6	6.9	4.7	3.2	3.8
7	23.3	19.9	21.5	14.4	14.1	14.2	7.1	6.8	6.9	4.4	4.2	4.4
8	22.3	20.9	21.5	16.7	14.8	15.9	7.5	7.0	7.2	4.6	4.0	4.3
9	23.1	20.5	21.7	16.2	14.2	15.2	12.7	7.7	11.2	4.5	4.1	4.2
10	22.5	20.1	21.2	14.1	12.4	13.0	9.7	5.9	7.8	4.1	3.6	4.0
11	20.1	19.4	19.8	12.5	10.8	11.7	6.4	5.2	5.8	3.4	2.9	3.1
12	20.0	18.6	19.4	10.7	8.7	10.1	5.9	5.4	5.7	3.4	2.7	3.1
13	18.6	16.7	17.6	8.4	4.5	6.3	5.6	4.7	5.3	4.3	3.2	3.7
14	18.1	15.5	16.9	4.3	3.6	4.0	5.7	5.0	5.5	4.8	4.2	4.5
15	18.9	16.4	17.7	5.3	4.1	4.9	5.7	5.4	5.6	5.8	4.8	5.2
16	17.9	17.0	17.5	6.3	5.3	5.7	6.5	5.3	5.7	5.5	4.8	5.2
17	19.7	16.8	18.1	8.5	6.4	7.6	6.3	5.6	6.0	4.7	4.1	4.3
18	20.0	18.0	19.0	9.5	8.4	9.0	6.1	5.6	5.9	4.4	4.2	4.3
19	20.5	18.4	19.2	9.2	8.3	8.7	6.1	5.4	5.8	4.3	3.6	4.0
20	19.7	18.0	18.5	8.8	8.5	8.7	6.6	5.5	6.0	3.8	3.1	3.4
21	21.0	17.6	18.9	8.7	7.9	8.4	6.3	5.6	6.0	3.9	2.9	3.4
22	18.7	17.7	18.0	8.6	8.0	8.3	6.0	5.4	5.7	3.6	2.0	3.1
23	17.7	17.5	17.6	8.8	8.4	8.6	5.5	5.0	5.2	2.1	1.4	1.8
24	17.5	16.2	17.1	8.6	7.9	8.2	5.0	4.7	4.9	1.5	.6	1.1
25	16.2	15.3	15.8	8.1	7.7	7.9	5.1	4.7	4.9	.6	.0	.3
26	16.1	15.7	15.9	9.8	8.1	9.0	4.7	4.1	4.4	.4	.1	.2
27	16.3	15.5	15.8	9.3	8.4	8.9	4.0	3.6	3.8	.5	.3	.4
28	16.2	15.5	15.8	8.5	8.1	8.3	4.1	3.6	3.8	1.0	.5	.7
29	17.2	15.8	16.4	8.7	8.0	8.3	4.3	3.4	3.9	1.6	.5	.0
30	17.1	16.2	16.7	8.8	8.3	8.5	4.0	3.3	3.5	2.6	.5	1.4
31	16.7	16.2	16.5	---	---	---	3.5	3.1	3.3	4.8	1.9	3.7
MONTH	26.8	15.3	19.5	18.4	3.6	10.4	12.7	3.1	6.1	5.8	.0	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.4	3.8	4.1	8.8	7.6	8.2	11.5	9.3	10.3	23.2	22.0	22.5
2	4.5	3.7	4.1	9.8	7.2	8.4	10.9	10.1	10.4	22.1	21.3	21.7
3	6.8	4.3	5.6	9.9	8.3	9.1	10.1	8.9	9.3	21.7	20.9	21.2
4	6.3	5.3	5.8	10.5	8.4	9.4	9.2	7.9	8.6	21.6	21.1	21.4
5	6.1	4.9	5.7	10.2	8.6	9.5	10.5	8.2	9.2	21.9	20.5	21.2
6	6.7	6.0	6.4	10.3	9.4	9.9	11.4	9.9	10.7	22.4	20.6	21.4
7	8.3	6.0	7.0	13.9	9.9	11.4	13.9	11.2	12.0	24.8	20.8	22.3
8	7.9	6.1	7.2	12.9	12.1	12.5	16.2	12.0	13.8	24.8	22.1	23.5
9	6.0	4.6	5.5	12.6	11.6	12.0	18.0	14.2	15.5	25.3	22.4	23.2
10	5.9	5.0	5.6	11.9	8.9	10.2	15.9	13.7	14.8	23.7	22.0	22.6
11	6.7	5.3	6.0	8.7	8.1	8.5	15.2	13.6	14.1	23.4	21.3	21.9
12	9.4	6.6	7.8	9.4	7.9	8.7	15.5	14.6	15.1	23.3	21.8	22.5
13	8.8	7.5	8.3	10.1	8.8	9.5	15.1	14.1	14.6	25.6	22.3	23.3
14	9.5	8.2	8.8	11.0	9.3	10.1	16.2	14.6	15.4	25.3	22.8	24.1
15	8.6	7.6	8.3	12.3	9.9	11.2	16.0	15.4	15.7	29.4	23.3	25.5
16	8.1	5.6	6.9	13.3	12.1	12.6	16.1	14.8	15.5	26.4	25.3	25.8
17	5.5	4.5	5.0	12.6	11.7	12.2	20.2	15.4	17.3	25.7	23.8	24.9
18	4.8	3.9	4.5	13.9	12.1	12.6	21.5	17.3	18.9	24.2	22.4	23.5
19	4.3	3.9	4.1	16.6	13.4	15.0	22.5	16.4	18.5	25.2	21.9	23.3
20	4.7	4.0	4.3	16.6	14.7	15.6	25.3	19.0	20.9	25.6	23.1	24.2
21	6.9	4.4	5.6	19.3	15.3	16.8	27.9	19.3	23.0	24.4	22.8	23.6
22	6.4	5.5	6.0	15.4	13.8	14.8	24.7	21.5	22.9	24.4	22.2	23.2
23	7.0	5.2	6.0	15.3	14.5	14.9	21.7	19.9	21.1	24.1	22.3	23.3
24	6.6	6.2	6.4	16.2	14.8	15.4	19.7	18.1	19.0	23.6	21.3	22.5
25	9.0	5.8	7.3	15.4	13.8	14.7	19.8	16.8	18.4	23.1	21.1	22.0
26	8.2	6.9	7.7	16.4	13.0	14.8	22.3	18.6	19.6	25.9	20.8	23.5
27	7.0	6.9	7.0	18.6	15.2	16.7	21.2	18.8	19.8	26.2	25.4	25.8
28	8.8	7.0	7.6	18.7	15.9	16.9	23.2	19.4	21.1	27.3	25.8	26.4
29	---	---	---	16.3	14.2	15.6	21.5	20.3	20.9	27.5	26.6	26.9
30	---	---	---	14.0	9.6	11.6	23.8	20.6	22.0	27.9	26.7	27.2
31	---	---	---	10.7	9.1	9.8	---	---	---	27.6	21.5	26.2
MONTH	9.5	3.7	6.2	19.3	7.2	12.2	27.9	7.9	16.3	29.4	20.5	23.6

07027002 REELFOOT LAKE SPILLWAY NEAR TIPTONVILLE, TN--Continued

TEMPERATURE, WATER, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.1	24.3	25.8	28.2	27.6	27.9	30.7	28.7	29.3	---	---	---
2	27.6	26.3	26.7	27.7	26.7	27.1	30.7	29.8	30.2	---	---	---
3	28.1	26.9	27.6	30.8	26.1	27.7	32.4	30.1	30.8	---	---	---
4	27.1	25.2	26.3	28.7	27.0	27.6	33.2	30.2	31.4	---	---	---
5	28.2	25.2	26.5	27.6	27.0	27.4	32.3	30.6	31.3	---	---	---
6	30.1	26.1	27.6	---	---	---	32.6	29.3	30.9	---	---	---
7	28.2	26.4	27.3	---	---	---	32.6	30.3	31.3	---	---	---
8	27.1	25.8	26.4	---	---	---	31.2	29.9	30.4	---	---	---
9	31.5	26.2	27.7	---	---	---	31.1	29.5	30.2	---	---	---
10	30.6	27.2	27.8	---	---	---	31.2	27.8	29.9	---	---	---
11	27.3	26.9	27.1	---	---	---	32.1	29.0	30.4	---	---	---
12	27.2	26.8	27.0	---	---	---	32.5	29.4	30.9	---	---	---
13	27.1	26.7	26.9	---	---	---	31.6	29.7	30.5	---	---	---
14	29.0	26.3	26.9	---	---	---	29.9	28.9	29.4	---	---	---
15	30.7	26.6	28.0	---	---	---	29.8	28.9	29.4	---	---	---
16	30.6	28.2	28.9	---	---	---	30.1	28.9	29.4	---	---	---
17	31.4	28.0	29.0	---	---	---	30.6	29.6	30.0	---	---	---
18	29.4	28.1	28.6	28.7	27.1	28.0	30.3	28.1	29.5	---	---	---
19	28.0	27.3	27.6	28.4	27.8	28.2	32.4	28.2	29.8	---	---	---
20	27.8	27.2	27.4	29.2	27.3	28.1	30.6	29.5	30.0	---	---	---
21	28.4	27.6	27.8	31.2	28.8	29.4	29.5	29.0	29.3	---	---	---
22	28.5	27.9	28.2	29.9	29.2	29.6	30.5	29.0	29.5	---	---	---
23	28.6	27.5	27.8	29.3	28.5	28.9	30.3	27.7	28.9	---	---	---
24	29.8	25.5	27.7	28.7	27.6	28.2	28.4	25.9	27.2	---	---	---
25	33.1	23.9	27.8	29.0	27.7	28.3	28.5	26.9	27.5	---	---	---
26	32.5	29.2	30.1	32.6	28.0	29.3	28.3	27.5	27.9	---	---	---
27	31.0	28.9	29.7	36.8	29.4	30.5	28.1	27.7	27.9	---	---	---
28	28.8	27.6	28.3	31.5	29.9	30.7	27.7	26.0	26.6	---	---	---
29	29.0	27.6	28.2	30.3	29.3	29.7	27.4	25.2	26.3	---	---	---
30	28.9	28.2	28.4	30.1	29.0	29.4	---	---	---	---	---	---
31	---	---	---	29.6	28.7	29.2	---	---	---	---	---	---
MONTH	33.1	23.9	27.7	---	---	---	33.2	25.2	29.5	---	---	---

07027010 RUNNING REELFOOT BAYOU NEAR OWL CITY, TN

LOCATION.--Lat 36°19'53", long 89°24'02", Obion County, Hydrologic Unit 08010202, at bridge on county road, 1.5 mi downstream of the spillway at Reelfoot Lake, and 1.6 mi east of Owl City.

DRAINAGE AREA.--247 mi².

PERIOD OF RECORD.--July 1982 to October 1983, April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 264.96 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow is regulated by a spillway located 1.5 mi upstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft³/s, Dec. 9, 1986, gage height 17.46 ft; maximum gage height, 17.97 ft, May 18, 1983; no flow part of each day Sept. 15-16, 1984, due to construction work in channel.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 2,010 ft³/s, Dec. 9, gage height, 17.46 ft; minimum 0.82 ft³/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	4.1	20	16	1030	13	11	229	24	6.1	3.0
2	2.0	1.6	4.2	19	37	954	14	9.7	23	13	6.1	3.0
3	2.0	1.5	4.1	17	158	962	12	9.5	16	6.4	6.0	2.9
4	2.0	1.8	2.2	19	246	941	12	17	14	7.0	6.1	2.9
5	2.0	2.0	3.5	17	237	877	12	15	11	6.9	5.7	2.8
6	10	1.6	2.7	15	227	827	10	11	8.5	8.0	7.1	2.9
7	2.0	2.1	3.7	16	216	799	9.6	9.8	6.8	5.1	7.5	2.7
8	1.5	364	5.4	17	228	770	9.1	9.2	6.6	5.6	7.7	2.9
9	1.9	18	1340	17	213	751	8.3	9.7	5.8	7.6	8.1	2.7
10	2.2	1.5	345	16	182	722	7.3	10	5.7	11	114	2.6
11	1.7	2.2	192	18	177	651	7.6	12	5.4	11	7.3	2.3
12	3.3	2.0	329	16	178	601	8.1	8.3	5.2	11	6.3	2.3
13	1.5	1.6	370	18	179	466	19	9.1	5.0	7.8	6.7	2.1
14	1.8	1.4	369	17	188	328	92	9.6	4.9	11	8.0	2.1
15	1.8	2.0	496	21	256	308	26	25	4.8	7.8	8.5	3.1
16	1.9	2.2	780	30	261	320	56	26	5.2	7.1	8.4	2.8
17	1.9	2.2	754	19	221	317	66	11	5.6	7.5	7.5	7.6
18	2.2	1.8	734	38	218	392	79	56	5.7	297	212	3.2
19	1.9	1.7	685	20	211	339	85	21	7.4	34	15	3.5
20	1.9	1.8	641	20	208	345	162	11	5.1	8.5	4.3	3.1
21	1.9	2.0	607	21	206	338	384	9.2	5.5	7.0	4.1	2.8
22	1.7	1.9	332	20	210	325	385	7.8	5.5	7.0	3.9	3.5
23	1.6	2.0	51	18	212	308	363	7.5	29	6.5	3.8	3.2
24	1.9	1.7	242	29	205	286	225	22	6.6	9.4	3.8	2.6
25	2.8	1.3	359	51	201	269	38	36	6.1	199	3.6	2.4
26	1.9	8.5	351	32	237	281	28	9.2	6.7	19	3.5	1.9
27	1.4	7.0	339	14	321	168	25	6.9	6.4	5.9	4.1	1.3
28	1.3	5.2	321	14	1020	19	22	12	6.4	5.9	3.5	1.3
29	1.3	4.3	208	10	---	17	11	11	6.4	5.7	2.8	4.2
30	1.3	3.8	24	15	---	16	10	26	8.2	6.0	3.0	1.6
31	1.6	---	21	16	---	14	---	124	---	6.0	3.0	---
TOTAL	65.9	452.2	9919.9	630	6469	14741	2199.0	572.5	467.5	774.7	497.5	85.3
MEAN	2.13	15.1	320	20.3	231	476	73.3	18.5	15.6	25.0	16.0	2.84
MAX	10	364	1340	51	1020	1030	385	124	229	297	212	7.6
MIN	1.3	1.3	2.2	10	16	14	7.3	6.9	4.8	5.1	2.8	1.3
CFSM	.01	.06	1.30	.08	.94	1.93	.30	.07	.06	.10	.06	.01
IN.	.01	.07	1.49	.09	.97	2.22	.33	.09	.07	.12	.07	.01

CAL YR 1986 TOTAL 75048.5 MEAN 206 MAX 1410 MIN 1.3 CFSM .83 IN. 11.30
WTR YR 1987 TOTAL 36874.1 MEAN 101 MAX 1340 MIN 1.3 CFSM .41 IN. 5.55

HATCHIE RIVER BASIN

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07029500 HATCHIE RIVER AT BOLIVAR, TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°16'31", long 88°58'36", Hardeman County, Hydrologic Unit 08010208, on left bank 25 ft upstream of bridge on State Highway 18, 250 ft upstream from Illinois Central Gulf Railroad bridge, 0.6 mi downstream from Spring Creek, 1.5 mi northeast of Bolivar, and at mile 135.1.

DRAINAGE AREA.--1,480 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 323.49 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Sept. 3-30. Records good except for estimated daily discharges which are poor.

AVERAGE DISCHARGE.--58 years, 2,405 ft³/s, 22.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft³/s, Mar. 18, 1973, gage height, 21.66 ft from rating curve extended above 34,000 ft³/s; minimum, 78 ft³/s, Sept. 2, 1943.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 13	1400	17,400	17.36	Mar. 2	1600	*22,300	*18.13

Minimum discharge, 123 ft³/s, Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	435	6010	4630	2180	14900	1830	801	1410	801	236	229
2	134	373	6420	4000	2050	21300	1910	733	1260	776	225	213
3	139	347	6320	3250	2300	20600	1870	696	1240	856	212	210
4	138	335	5870	2340	2420	17300	1790	701	1070	928	234	210
5	161	365	5290	1790	2340	13700	1680	737	939	1170	252	208
6	153	406	4690	1500	2170	10800	1590	728	814	1340	239	204
7	153	497	4000	1300	1960	8880	1480	685	716	1220	227	200
8	144	2030	3150	1190	1760	7340	1380	637	649	1070	226	198
9	154	3280	4410	1120	1560	6260	1300	589	594	962	223	196
10	160	3980	7180	1070	1390	5470	1230	548	554	886	219	194
11	164	4330	8390	1060	1260	4800	1170	524	523	885	218	192
12	191	4290	12300	1090	1180	4100	1170	543	527	812	288	190
13	229	4240	17200	1070	1150	3260	1260	638	610	704	380	400
14	255	4550	15200	1010	1180	2370	2180	747	632	640	365	250
15	279	4990	12300	995	1260	1880	3620	702	650	609	367	220
16	283	5590	9990	973	1470	1620	4310	659	638	564	334	210
17	256	5840	8250	956	1940	1500	4200	686	790	516	293	208
18	236	5650	7050	995	2380	1740	4260	658	913	473	308	208
19	214	5130	6100	1290	2620	2380	4380	634	1110	436	339	206
20	203	4690	5280	1750	2790	2930	4400	601	1160	400	299	206
21	189	3760	4580	2030	2940	2970	4210	557	1040	378	297	206
22	185	2650	3780	2170	3160	2990	3720	528	907	353	290	204
23	183	2030	3010	2180	3940	2940	2820	668	859	326	267	204
24	247	1910	3630	2070	4110	2780	1980	792	982	315	245	202
25	483	2400	4140	1990	4110	2490	1520	962	1220	325	231	200
26	923	3270	4310	2370	4390	2220	1220	1550	1590	330	221	198
27	1260	3880	4220	2650	6710	2010	1050	2090	1690	330	222	196
28	1190	4280	4370	2740	8820	1840	977	2390	1440	318	332	194
29	896	4540	4750	2770	---	1660	932	2380	1110	285	303	192
30	666	5130	5020	2720	---	1560	867	2230	928	260	261	192
31	530	---	4970	2530	---	1670	---	1850	---	242	239	---
TOTAL	10565	95198	202180	59599	75540	178260	66306	29244	28565	19510	8392	6340
MEAN	341	3173	6522	1923	2698	5750	2210	943	952	629	271	211
MAX	1260	5840	17200	4630	8820	21300	4400	2390	1690	1340	380	400
MIN	134	335	3010	956	1150	1500	867	524	523	242	212	190
CFSM	.23	2.14	4.41	1.30	1.82	3.89	1.49	.64	.64	.43	.18	.14
IN.	.27	2.39	5.08	1.50	1.90	4.48	1.67	.74	.72	.49	.21	.16

CAL YR 1986 TOTAL 630784 MEAN 1728 MAX 17200 MIN 134 CFSM 1.17 IN. 15.85
WTR YR 1987 TOTAL 779699 MEAN 2136 MAX 21300 MIN 134 CFSM 1.44 IN. 19.59

HATCHIE RIVER BASIN

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1964, 1968, 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1980 to September 1982, October 1983 to September 1986.

WATER TEMPERATURE: June 1980 to September 1982, October 1983 to September 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 380 microsiemens, Sept. 5, 6, 1985; minimum, 28 microsiemens, Apr. 18, 1982.

WATER TEMPERATURE: Maximum, 31.5°C, July 15, 16, 1980; minimum recorded, 0.0°C, Dec. 23, 1983 to Jan. 3, 1984, several days in 1985, minimum observed, -0.5°C, Jan. 3, 1984.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT 23...	1300	230	--	7.38	16.0	760	110	8.3	--	K37	K68	20
JAN 28...	1115	2760	--	6.78	3.0	760	38	11.9	--	K950	K1200	22
APR 29...	0945	930	84	7.10	19.0	758	9.0	6.9	75	70	48	25
AUG 05...	0900	232	155	6.90	27.0	759	40	7.7	97	4100	4200	24
DATE	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 23...	0	5.5	1.5	16	61	2	1.8	24	2.0	12	14	<0.10
JAN 28...	8	6.3	1.5	3.1	22	0.3	1.5	14	4.6	14	5.1	<0.10
APR 29...	2	7.0	1.8	5.3	30	0.5	1.4	23	3.5	11	6.1	<0.10
AUG 05...	0	6.7	1.8	18	59	2	2.3	29	7.0	12	19	0.10
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 23...	11	76	79	0.10	47	0.010	0.340	1.30	1.30	1.4	0.080	0.030
JAN 28...	8.6	92	50	0.13	687	0.020	0.250	0.160	0.150	1.2	0.080	0.050
APR 29...	8.2	53	56	0.07	133	<0.010	0.230	0.340	0.280	1.4	0.060	0.020
AUG 05...	10	84	90	0.11	53	0.300	0.560	1.10	1.20	1.1	0.150	0.080
DATE	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
OCT 23...	0.020	50	1	16	<0.5	<1	<1	<3	2	220	<5	4
JAN 28...	0.030	--	1	36	1	2	<1	<3	2	860	<5	4
APR 29...	0.020	60	<1	28	<0.5	1	<1	<3	2	610	<5	<4
AUG 05...	0.030	60	1	26	<0.5	<1	<1	3	4	210	<5	4

K--Results based on non-ideal colony count.

07029500 HATCHIE RIVER AT BOLIVAR, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 23...	99	10	<10	2	<1	<1	56	<6	7	34	21	--
JAN 28...	110	<0.1	<10	1	<1	<1	48	<6	11	46	343	88
APR 29...	250	<0.1	<10	<1	<1	<1	61	<6	8	31	78	82
AUG 05...	250	0.1	<10	8	<1	<1	68	<6	8	59	37	94

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 15...	1300	284	58	25.5	29	22
JAN 16...	1200	969	100	7.0	19	50
FEB 20...	1715	2920	--	6.0	56	442
APR 06...	1515	1550	95	10.5	41	172
MAY 27...	1500	2160	70	24.0	441	2570
JUL 10...	1400	876	100	27.5	38	90
AUG 19...	1500	330	103	28.5	42	37

HATCHIE RIVER BASIN

07030100 CANE CREEK AT RIPLEY, TN

LOCATION.--Lat 35°45'25", long 89°33'05", Lauderdale County, Hydrologic Unit 08010208, on right bank, at bridge on State Highway 19, 1.3 miles upstream from Hyde Creek, 1.5 miles northwest of Ripley.

DRAINAGE AREA.--33.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to September 1962. Annual maximum, water years 1963-70. October 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 295.93 ft above National Geodetic Vertical Datum of 1929. Aug. 21, 1963 to Sept. 30, 1970, crest-stage gage at same site at datum 21.83 ft higher.

REMARKS.--Estimated daily discharges: May 13-17. Records good. Natural flow affected by upstream discharge of Ripley sewage effluent.

AVERAGE DISCHARGE.--7 years, (water years 1958-62, 1986-87), 43.5 ft³/s, 17.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,590 ft³/s March 12, 1986, gage height, 22.06 ft; minimum 0.1 ft³/s May 19, 24-26, Sept. 25, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	0130	1,770	14.58	May 25	2000	1,630	14.10
Dec. 9	0730	*2,470	*16.41	July 3	0715	1,790	14.59
Feb. 28	1115	2,360	16.15				

Minimum discharge, .11 ft³/s, Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	1.8	2.5	2.7	10	92	10	5.7	91	62	1.6	2.5
2	2.1	1.2	2.6	2.6	91	58	9.3	4.7	23	38	.97	2.3
3	2.1	1.3	2.4	2.6	12	42	8.6	3.9	11	360	1.5	2.8
4	3.6	3.2	2.1	2.6	7.4	21	7.9	4.2	7.3	122	1.7	2.6
5	2.6	14	2.0	2.7	5.8	15	7.1	3.7	5.8	29	1.6	2.2
6	2.2	3.0	1.9	2.8	4.9	12	7.3	4.0	5.0	11	1.7	1.5
7	2.3	83	1.5	2.7	4.2	9.8	7.8	3.7	3.8	5.5	1.8	38
8	2.1	441	28	2.7	3.6	8.9	8.5	3.6	4.3	3.5	1.9	7.4
9	2.0	38	551	3.8	3.4	8.5	7.1	3.3	4.4	3.1	1.4	3.2
10	2.0	26	60	5.6	3.3	7.4	6.9	2.6	4.6	3.1	1.8	2.7
11	1.8	226	23	3.9	3.4	6.9	7.4	3.2	4.6	2.8	1.9	3.1
12	1.3	16	11	3.5	3.4	6.6	6.4	3.6	22	1.9	2.1	2.6
13	1.6	8.4	7.4	3.7	3.2	5.8	131	3.8	12	1.9	2.0	1.7
14	2.0	5.3	5.9	3.5	3.6	5.7	119	4.1	4.8	2.0	2.4	2.5
15	2.1	4.2	5.0	3.3	3.4	5.2	80	4.1	4.8	2.0	2.3	2.3
16	2.0	3.3	4.3	3.4	5.4	5.3	46	3.4	8.6	1.7	1.5	4.4
17	2.0	3.5	3.8	3.2	6.6	6.7	21	2.7	4.7	1.7	2.6	6.9
18	1.9	3.2	3.6	6.5	7.5	176	15	3.7	4.1	1.5	3.1	3.1
19	1.8	3.1	3.4	6.8	6.3	23	12	3.4	13	.89	3.0	2.8
20	1.9	3.2	3.1	4.5	5.2	15	11	3.4	16	1.4	2.7	1.6
21	2.1	2.7	2.7	3.9	5.2	12	9.0	3.2	35	1.5	2.6	2.2
22	2.1	2.3	2.8	3.8	48	11	8.0	3.3	13	2.1	2.1	2.1
23	2.0	2.2	24	3.5	18	10	7.2	18	29	18	2.5	2.2
24	42	2.0	50	3.5	8.9	18	6.5	51	15	217	2.3	2.1
25	38	3.5	8.0	4.4	7.0	11	5.6	234	7.2	161	2.4	2.2
26	2.6	7.5	5.1	4.0	429	9.1	4.9	131	4.7	37	2.5	1.9
27	2.0	2.9	4.1	4.1	185	8.6	5.6	48	3.7	14	11	1.2
28	1.9	2.1	3.6	5.4	784	7.9	6.5	23	2.7	6.8	6.6	2.2
29	1.9	2.1	3.4	6.5	---	7.2	5.0	14	2.9	3.7	5.7	20
30	2.0	2.1	3.1	5.2	---	14	5.0	12	25	2.2	3.7	5.0
31	2.0	---	2.9	3.8	---	13	---	91	---	1.8	2.9	---
TOTAL	140.5	918.1	834.2	121.2	1678.7	652.6	592.6	703.3	393.0	1120.09	83.87	137.3
MEAN	4.53	30.6	26.9	3.91	60.0	21.1	19.8	22.7	13.1	36.1	2.71	4.58
MAX	42	441	551	6.8	784	176	131	234	91	360	11	38
MIN	1.3	1.2	1.5	2.6	3.2	5.2	4.9	2.6	2.7	.89	.97	1.2
CFSM	.13	.90	.79	.12	1.77	.62	.58	.67	.39	1.07	.08	.14
IN.	.15	1.01	.92	.13	1.84	.72	.65	.77	.43	1.23	.09	.15

CAL YR 1986 TOTAL 8299.22 MEAN 22.7 MAX 1350 MIN 1.2 CFSM .67 IN. 9.10
WTR YR 1987 TOTAL 7375.39 MEAN 20.2 MAX 784 MIN .89 CFSM .60 IN. 8.09

07030100 CANE CREEK AT RIPLEY, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1985 to September 1987 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1985 to September 1987 (discontinued).

INSTRUMENTATION.--Sediment pumping sampler since October 1985.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,700 mg/L, June 24, 1987; minimum daily mean, 10 mg/L, May 21, 1987.

SEDIMENT LOADS: Maximum daily, 19,100 tons, March 12, 1986; minimum daily, 0.06 ton, November 10, 1985, August 16, 1987.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,700 mg/L, June 24; minimum daily mean, 10 mg/L, May 21.

SEDIMENT LOADS: Maximum daily, 4,500 tons, July 3; minimum daily, 0.06 ton, August 16.

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	2.5	59	.40	1.8	38	.18	2.5	74	.50
2	2.1	39	.23	1.2	30	.10	2.6	62	.44
3	2.1	33	.19	1.3	33	.12	2.4	44	.29
4	3.6	219	2.1	3.2	41	.35	2.1	25	.14
5	2.6	310	2.2	14	246	12.7	2.0	23	.12
6	2.2	64	.38	3.0	168	1.4	1.9	21	.11
7	2.3	44	.27	83	709	1190	1.5	25	.10
8	2.1	36	.20	441	1300	2630	28	526	65
9	2.0	25	.14	38	267	27	551	1510	3540
10	2.0	19	.10	26	299	100	60	712	115
11	1.8	20	.10	226	485	498	23	578	36
12	1.3	31	.11	16	110	4.8	11	372	11
13	1.6	57	.25	8.4	110	2.5	7.4	204	4.1
14	2.0	60	.32	5.3	117	1.7	5.9	112	1.8
15	2.1	31	.18	4.2	130	1.5	5.0	98	1.3
16	2.0	28	.15	3.3	128	1.2	4.3	80	.93
17	2.0	26	.14	3.5	97	.92	3.8	75	.77
18	1.9	26	.13	3.2	73	.63	3.6	58	.56
19	1.8	29	.14	3.1	51	.43	3.4	60	.55
20	1.9	44	.23	3.2	51	.44	3.1	55	.46
21	2.1	48	.27	2.7	45	.33	2.7	51	.37
22	2.1	39	.22	2.3	40	.25	2.8	48	.36
23	2.0	31	.17	2.2	35	.21	24	534	125
24	42	450	150	2.0	28	.15	50	826	178
25	38	368	79	3.5	139	1.3	8.0	431	9.3
26	2.6	113	.79	7.5	256	5.2	5.1	306	4.2
27	2.0	80	.43	2.9	128	1.0	4.1	196	2.2
28	1.9	56	.29	2.1	102	.58	3.6	142	1.4
29	1.9	46	.24	2.1	93	.53	3.4	78	.72
30	2.0	35	.19	2.1	88	.50	3.1	83	.69
31	2.0	36	.19	---	---	---	2.9	64	.50
TOTAL	140.5	---	239.75	918.1	---	4484.01	834.2	---	4101.90

HATCHIE RIVER BASIN

07030100 CANE CREEK AT RIPLEY, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	2.7	49	.36	10	288	34	92	525	130
2	2.6	44	.31	91	984	414	58	330	52
3	2.6	40	.28	12	208	6.7	42	310	35
4	2.6	41	.29	7.4	135	2.7	21	300	17
5	2.7	42	.31	5.8	70	1.1	15	275	11
6	2.8	48	.36	4.9	57	.75	12	205	6.6
7	2.7	50	.36	4.2	42	.48	9.8	180	4.8
8	2.7	40	.29	3.6	40	.39	8.9	156	3.7
9	3.8	33	.34	3.4	37	.34	8.5	137	3.1
10	5.6	43	.65	3.3	31	.28	7.4	125	2.5
11	3.9	50	.53	3.4	24	.22	6.9	111	2.1
12	3.5	47	.44	3.4	25	.23	6.6	108	1.9
13	3.7	46	.46	3.2	26	.22	5.8	105	1.6
14	3.5	54	.51	3.6	29	.28	5.7	102	1.6
15	3.3	68	.61	3.4	44	.40	5.2	100	1.4
16	3.4	62	.57	5.4	57	.83	5.3	97	1.4
17	3.2	56	.48	6.6	57	1.0	6.7	350	6.3
18	6.5	55	.97	7.5	49	.99	176	1080	950
19	6.8	54	.99	6.3	43	.73	23	475	29
20	4.5	53	.64	5.2	36	.51	15	225	9.1
21	3.9	50	.53	5.2	31	.44	12	148	4.8
22	3.8	55	.56	48	340	83	11	142	4.2
23	3.5	61	.58	18	147	7.1	10	138	3.7
24	3.5	72	.68	8.9	98	2.4	18	260	13
25	4.4	73	.93	7.0	66	1.2	11	170	5.0
26	4.0	74	.80	429	1160	2970	9.1	130	3.2
27	4.1	69	.76	185	427	213	8.6	142	3.3
28	5.4	64	.93	784	1670	4470	7.9	120	2.6
29	6.5	56	.98	---	---	---	7.2	105	2.0
30	5.2	45	.63	---	---	---	14	125	4.7
31	3.8	33	.34	---	---	---	13	87	3.1
TOTAL	121.2	---	17.47	1678.7	---	8213.29	652.6	---	1319.7
APRIL			MAY			JUNE			
1	10	50	1.4	5.7	57	.88	91	2830	877
2	9.3	48	1.2	4.7	49	.62	23	1690	105
3	8.6	47	1.1	3.9	43	.45	11	756	22
4	7.9	45	.96	4.2	39	.44	7.3	267	5.3
5	7.1	43	.82	3.7	33	.33	5.8	225	3.5
6	7.3	41	.81	4.0	25	.27	5.0	195	2.6
7	7.8	41	.86	3.7	24	.24	3.8	162	1.7
8	8.5	57	1.3	3.6	20	.19	4.3	130	1.5
9	7.1	51	.98	3.3	21	.19	4.4	125	1.5
10	6.9	45	.84	2.6	21	.15	4.6	129	1.6
11	7.4	35	.70	3.2	19	.16	4.6	140	1.7
12	6.4	30	.52	3.6	18	.17	22	1120	138
13	131	801	1190	3.8	16	.16	12	1400	45
14	119	736	306	4.1	17	.19	4.8	400	5.2
15	80	590	295	4.1	19	.21	4.8	250	3.2
16	46	600	75	3.4	16	.15	8.6	800	19
17	21	211	12	2.7	14	.10	4.7	700	8.9
18	15	133	6.2	3.7	13	.13	4.1	500	5.5
19	12	125	4.1	3.4	12	.11	13	1110	84
20	11	115	3.4	3.4	11	.10	16	1300	56
21	9.0	102	2.5	3.2	10	.09	35	2410	427
22	8.0	92	2.0	3.3	90	.80	13	2800	98
23	7.2	90	1.7	18	471	46	29	2210	219
24	6.5	89	1.6	51	1420	534	15	3700	150
25	5.6	82	1.2	234	3260	3400	7.2	1100	21
26	4.9	70	.93	131	1420	502	4.7	600	7.6
27	5.6	60	.91	48	1160	150	3.7	600	6.0
28	6.5	48	.84	23	676	42	2.7	600	4.4
29	5.0	38	.51	14	525	20	2.9	400	3.1
30	5.0	45	.61	12	445	14	25	1220	258
31	---	---	---	91	1940	1940	---	---	---
TOTAL	592.6	---	1915.99	703.3	---	6654.13	393.0	---	2582.3

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

TOTAL LOAD FOR YEAR: 39190.68

HATCHIE RIVER BASIN

07030137 CANE CREEK AT THREE POINT, TN

LOCATION.--Lat 35°41'36", long 89°41'43", Lauderdale County, Hydrologic Unit 08010108, on left bank, at bridge on State Highway 87, 0.2 mile east of Three Point, and at mile 5.0.

DRAINAGE AREA.--79.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1985 to July 1987 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 232.37 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 4-9, June 15, 18, 27-30, July 12-31. Records poor. Flow affected by backwater from Hatchie River much of the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,950 ft³/s, March 12, 1986, gage height, 27.96 ft; minimum, 0.75 ft³/s, Oct. 9, 1986.

EXTREMES FOR CURRENT PERIOD.--October to July: Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	0400	2,080	17.01	Feb. 28	1300	*4,170	*22.59
Dec. 9	0930	3,360	20.66	May 31	2300	2,450	18.16
Feb. 26	2215	3,040	19.81	July 3	1100	1,970	16.62

Minimum discharge, 0.75 ft³/s, Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1986 TO JULY 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.2	6.5	6.4	23	529	16	12	515	195	---	---
2	2.1	2.1	6.0	6.2	222	87	16	11	72	87	---	---
3	2.0	2.2	5.7	6.1	45	46	15	10	39	731	---	---
4	11	2.7	5.5	6.2	27	34	15	7.0	32	161	---	---
5	13	26	5.3	6.4	21	33	14	5.1	22	84	---	---
6	3.3	15	5.1	6.3	15	29	14	4.4	11	27	---	---
7	2.0	42	5.0	6.4	10	26	15	4.3	7.6	14	---	---
8	2.8	887	67	6.3	8.8	23	16	3.3	5.5	25	---	---
9	1.5	96	1330	6.8	8.9	21	14	3.6	5.2	9.1	---	---
10	1.8	16	222	13	8.8	18	13	3.3	5.2	5.9	---	---
11	1.7	402	63	10	8.8	16	16	17	4.9	5.3	---	---
12	1.9	48	37	6.6	8.7	15	13	13	36	4.0	---	---
13	1.9	14	26	6.5	8.7	14	72	7.0	28	4.5	---	---
14	1.9	13	22	6.4	8.8	14	498	4.9	6.2	3.5	---	---
15	2.3	11	15	6.4	8.7	12	108	4.5	2.7	3.0	---	---
16	2.1	6.9	8.5	6.4	13	12	125	5.6	27	2.8	---	---
17	2.2	6.0	6.4	6.4	15	32	23	4.2	9.2	2.5	---	---
18	2.0	5.3	5.8	6.4	17	420	18	3.7	5.9	2.1	---	---
19	1.8	4.8	6.0	16	16	54	16	13	59	1.8	---	---
20	1.7	4.7	6.2	10	12	40	15	18	51	2.2	---	---
21	1.8	4.7	6.4	6.3	11	28	14	8.2	34	2.5	---	---
22	2.0	4.6	6.8	6.7	73	26	14	7.3	35	5.2	---	---
23	2.4	4.5	25	7.3	98	24	14	51	15	41	---	---
24	22	4.4	120	5.5	36	43	14	59	18	440	---	---
25	132	4.4	43	6.7	37	35	13	291	30	370	---	---
26	11	17	13	8.2	716	23	12	391	18	86	---	---
27	3.4	12	9.5	10	1180	21	14	63	2.4	33	---	---
28	2.6	8.5	8.5	12	2470	19	14	21	1.4	16	---	---
29	2.4	6.0	8.0	14	---	18	13	11	1.4	9.7	---	---
30	2.2	7.0	7.4	14	---	17	12	7.5	86	5.0	---	---
31	2.9	---	7.0	14	---	27	---	313	---	3.5	---	---
TOTAL	245.8	1680.0	2108.6	255.9	5127.2	1756	1186	1377.9	1185.6	2382.6	---	---
MEAN	7.93	56.0	68.0	8.25	183	56.6	39.5	44.4	39.5	76.9	---	---
MAX	132	887	1330	16	2470	529	498	391	515	731	---	---
MIN	1.5	2.1	5.0	5.5	8.7	12	12	3.3	1.4	1.8	---	---
CFSM	.10	.70	.85	.10	2.29	.71	.50	.56	.50	.96	---	---
IN.	.11	.78	.98	.12	2.39	.82	.55	.64	.55	1.11	---	---

CAL YR 1986 TOTAL 16155.5 MEAN 44.3 MAX 2490 MIN 1.4 CFSM .56 IN. 7.53

07030137 CANE CREEK AT THREE POINT, TN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1985 to July 1987 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: October 1985 to July 1987 (discontinued).

INSTRUMENTATION.--Sediment pumping sampler since October 1985.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 17,300 mg/L, June 6, 1986; minimum daily mean, 10 mg/L, January 6-7, 1986.

SEDIMENT LOADS: Maximum daily 69,600 tons, February 28, 1987; minimum daily, 0.11 ton, September 15, 1986.

EXTREMES FOR CURRENT PERIOD.--October 1986 to July 1987.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 9,880 mg/L, May 31; minimum daily mean, 13 mg/L, January 5.

SEDIMENT LOADS: Maximum daily, 69,600 tons, February 28; minimum daily, 0.14 ton, July 19-20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO JULY 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
OCT				
15...	0845	2.5	1050	13.5
24...	1300	8.2	950	15.5
30...	1500	2.1	320	15.5
NOV				
06...	1020	15	725	14.0
07...	1335	5.4	725	14.5
12...	1415	41	130	9.5
19...	0930	4.8	370	11.0
24...	1110	4.4	--	9.5
DEC				
04...	1330	5.4	550	8.5
09...	0930	3350	88	14.5
09...	1135	3020	70	14.5
09...	1320	2450	70	14.0
09...	1645	788	80	14.0
30...	1615	7.4	295	4.0
JAN				
09...	1230	6.8	560	5.0
14...	1200	6.4	775	6.5
21...	1540	6.8	710	4.5
29...	1405	14	--	7.0
FEB				
24...	1335	35	240	7.0
MAR				
05...	1200	33	170	14.0
11...	1330	16	320	10.0
20...	1210	40	200	15.0
APR				
01...	1245	14	460	10.0
16...	1230	86	160	15.0
MAY				
07...	1300	5.2	800	23.0
21...	1200	5.7	440	28.0
28...	1115	26	280	26.0
JUN				
08...	1705	7.9	400	29.0
JUL				
02...	1345	75	130	26.0
23...	1155	12	480	26.5

HATCHIE RIVER BASIN

07030137 CANE CREEK AT THREE POINT, TN--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO JULY 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	2.1	40	.23	2.2	140	.83	6.5	64	1.1
2	2.1	40	.23	2.1	135	.77	6.0	67	1.1
3	2.0	41	.22	2.2	123	.73	5.7	68	1.0
4	11	950	28	2.7	175	1.3	5.5	60	.89
5	13	750	26	26	650	46	5.3	37	.53
6	3.3	400	3.6	15	800	32	5.1	25	.34
7	2.0	290	1.6	42	880	285	5.0	26	.35
8	2.8	160	1.2	887	8760	21700	67	26	4.7
9	1.5	72	.29	96	1250	870	1330	4180	20800
10	1.8	81	.39	16	800	35	222	1260	755
11	1.7	97	.45	402	8750	12500	63	825	140
12	1.9	92	.47	48	975	126	37	700	70
13	1.9	50	.26	14	315	12	26	550	39
14	1.9	31	.16	13	320	11	22	430	26
15	2.3	44	.27	11	320	9.5	15	490	20
16	2.1	39	.22	6.9	300	5.6	8.5	410	9.4
17	2.2	33	.20	6.0	310	5.0	6.4	190	3.3
18	2.0	40	.22	5.3	275	3.9	5.8	140	2.2
19	1.8	65	.32	4.8	200	2.6	6.0	110	1.8
20	1.7	40	.18	4.7	138	1.8	6.2	105	1.8
21	1.8	31	.15	4.7	101	1.3	6.4	135	2.3
22	2.0	30	.16	4.6	60	.75	6.8	119	2.2
23	2.4	34	.22	4.5	30	.36	25	143	9.7
24	22	925	139	4.4	18	.21	120	1050	340
25	132	2380	1420	4.4	30	.36	43	775	90
26	11	340	10	17	350	16	13	550	19
27	3.4	280	2.6	12	340	11	9.5	480	12
28	2.6	240	1.7	8.5	280	6.4	8.5	420	9.6
29	2.4	205	1.3	6.0	220	3.6	8.0	425	9.2
30	2.2	150	.89	7.0	117	2.2	7.4	340	6.8
31	2.9	141	1.1	---	---	---	7.0	375	7.1
TOTAL	245.8	---	1641.63	1680.0	---	35691.16	2108.6	---	22386.38
JANUARY			FEBRUARY			MARCH			
1	6.4	143	2.5	23	400	25	529	1100	1570
2	6.2	42	.70	222	3610	2500	87	700	164
3	6.1	18	.30	45	700	85	46	320	40
4	6.2	15	.25	27	350	26	34	270	25
5	6.4	13	.22	21	200	11	33	155	14
6	6.3	14	.24	15	168	6.8	29	150	12
7	6.4	17	.29	10	55	1.5	26	141	9.9
8	6.3	19	.32	8.8	25	.59	23	140	8.7
9	6.8	20	.37	8.9	15	.36	21	195	11
10	13	39	1.4	8.8	15	.36	18	115	5.6
11	10	40	1.1	8.8	16	.38	16	70	3.0
12	6.6	42	.75	8.7	19	.45	15	55	2.2
13	6.5	50	.88	8.7	23	.54	14	65	2.6
14	6.4	55	.95	8.8	42	1.0	14	98	3.7
15	6.4	55	.95	8.7	35	.82	12	53	1.9
16	6.4	65	1.1	13	24	.84	12	31	1.0
17	6.4	79	1.4	15	26	1.1	32	45	3.9
18	6.4	80	1.4	17	35	1.6	420	2180	2470
19	16	53	2.7	16	37	1.6	54	610	89
20	10	33	1.0	12	43	1.4	40	360	39
21	6.3	30	.51	11	28	.83	28	300	23
22	6.7	22	.40	73	848	450	26	280	20
23	7.3	30	.59	98	826	302	24	250	16
24	5.5	22	.33	36	200	19	43	590	68
25	6.7	45	.81	37	150	15	35	300	28
26	8.2	42	.93	716	4050	23000	23	180	11
27	10	35	.95	1180	3520	15700	21	140	7.9
28	12	30	.97	2470	8400	69600	19	130	6.7
29	14	32	1.2	---	---	---	18	100	4.9
30	14	28	1.1	---	---	---	17	85	3.9
31	14	22	.83	---	---	---	27	63	4.6
TOTAL	255.9	---	27.44	5127.2	---	111753.16	1756	---	4670.5

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1986 TO JULY 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	16	40	1.7	12	70	2.5	515	4490	10300
2	16	34	1.5	11	78	2.3	72	1400	272
3	15	33	1.3	10	80	2.2	39	900	95
4	15	31	1.3	7.0	70	1.3	32	400	35
5	14	35	1.3	5.1	54	.74	22	300	18
6	14	32	1.2	4.4	54	.64	11	300	8.9
7	15	34	1.4	4.3	60	.70	7.6	100	2.1
8	16	34	1.5	3.3	52	.46	5.5	55	.82
9	14	32	1.2	3.6	42	.41	5.2	45	.63
10	13	38	1.3	3.3	37	.33	5.2	32	.45
11	16	42	1.8	17	648	89.0	4.9	22	.29
12	13	28	.98	13	400	14	36	3350	948
13	72	2790	3120	7.0	100	1.9	28	1400	106
14	498	3300	4800	4.9	106	1.4	6.2	220	3.7
15	108	1520	383	4.5	135	1.6	2.7	100	.73
16	125	878	445	5.6	118	1.8	27	1500	176
17	23	450	28	4.2	82	.93	9.2	1350	34
18	18	220	11	3.7	76	.76	5.9	962	38
19	16	175	7.6	13	200	7.0	59	2000	592
20	15	107	4.3	18	230	11	51	1450	200
21	14	100	4.1	8.2	130	2.9	34	1700	281
22	14	80	3.0	7.3	114	2.2	35	1750	165
23	14	63	2.4	51	2400	502	15	1750	71
24	14	68	2.6	59	1800	1470	18	1400	68
25	13	80	2.8	291	6960	12900	30	1410	231
26	12	80	2.6	391	3470	6910	18	600	29
27	14	72	2.7	63	1950	332	2.4	200	1.3
28	14	58	2.2	21	900	51	1.4	80	.30
29	13	35	1.2	11	600	13	1.4	53	.20
30	12	48	1.6	7.5	300	6.1	86	4040	4030
31	---	---	---	313	9880	38700	---	---	---
TOTAL	1186	---	8840.57	1377.9	---	61035.16	1185.6	---	17708.41
JULY				AUGUST			SEPTEMBER		
1	195	6210	3340	---	---	---	---	---	---
2	87	1750	411	---	---	---	---	---	---
3	731	8930	27000	---	---	---	---	---	---
4	161	1890	1300	---	---	---	---	---	---
5	84	1610	507	---	---	---	---	---	---
6	27	900	66	---	---	---	---	---	---
7	14	450	17	---	---	---	---	---	---
8	25	600	40	---	---	---	---	---	---
9	9.1	190	4.7	---	---	---	---	---	---
10	5.9	169	2.7	---	---	---	---	---	---
11	5.3	149	2.1	---	---	---	---	---	---
12	4.0	125	1.4	---	---	---	---	---	---
13	4.5	105	1.3	---	---	---	---	---	---
14	3.5	87	.82	---	---	---	---	---	---
15	3.0	65	.53	---	---	---	---	---	---
16	2.8	51	.39	---	---	---	---	---	---
17	2.5	40	.27	---	---	---	---	---	---
18	2.1	35	.20	---	---	---	---	---	---
19	1.8	29	.14	---	---	---	---	---	---
20	2.2	23	.14	---	---	---	---	---	---
21	2.5	25	.17	---	---	---	---	---	---
22	5.2	150	1.4	---	---	---	---	---	---
23	41	550	61	---	---	---	---	---	---
24	440	---	---	---	---	---	---	---	---
25	370	---	---	---	---	---	---	---	---
26	86	---	---	---	---	---	---	---	---
27	33	---	---	---	---	---	---	---	---
28	16	---	---	---	---	---	---	---	---
29	9.7	---	---	---	---	---	---	---	---
30	5.0	---	---	---	---	---	---	---	---
31	3.5	---	---	---	---	---	---	---	---
TOTAL	2382.6	---	---	---	---	---	---	---	---

LOOSAHATCHIE RIVER BASIN

07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TN

LOCATION.--Lat 35°18'37", long 89°38'23", Shelby County, Hydrologic Unit 08010209, on left bank 20 ft downstream from bridge on U.S. Highways 70 and 79, 1.5 mi upstream from Beaver Creek, 1.5 mi northeast of Arlington, and at mile 30.4.

DRAINAGE AREA.--262 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--18 years, 347 ft³/s, 17.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft³/s, Mar. 13, 1975, gage height, 24.96 ft; minimum, 66 ft³/s, Apr. 6, 7, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	0445	7,730	18.61	Feb. 28	1545	7,750	18.63
Dec. 9	1415	*7,810	*18.68	Apr. 14	0200	6,380	17.15

Minimum discharge, 79 ft³/s, Nov. 2, 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	80	84	109	107	5300	161	102	132	118	90	91
2	81	80	83	106	445	731	131	103	126	113	89	89
3	81	79	83	105	229	246	116	102	123	192	89	89
4	83	80	82	105	142	173	109	100	120	143	89	89
5	85	87	82	104	122	147	105	99	119	104	89	89
6	82	82	82	104	116	132	102	98	117	99	89	89
7	81	917	81	104	112	122	101	98	116	98	89	89
8	81	7060	225	103	110	118	99	97	115	98	89	94
9	81	2880	5970	102	104	115	100	96	114	99	89	91
10	81	342	3320	102	102	106	97	95	113	98	89	90
11	81	1520	536	102	102	101	98	96	112	98	91	91
12	81	302	193	102	102	100	98	100	112	96	91	92
13	82	127	140	101	101	100	872	94	113	96	91	177
14	82	104	123	101	106	101	3920	93	148	95	91	112
15	82	101	117	100	116	102	512	225	118	94	91	95
16	82	96	111	100	393	102	317	125	131	93	91	93
17	82	92	109	100	219	108	210	107	228	93	91	92
18	82	90	107	99	158	3120	165	99	114	97	116	90
19	82	87	102	103	134	512	141	96	125	95	109	90
20	82	93	99	99	123	216	130	94	160	94	92	90
21	82	92	97	98	141	162	123	94	241	94	92	90
22	82	87	95	98	655	143	123	93	265	94	91	89
23	82	86	389	99	1030	132	122	107	118	115	91	89
24	316	86	1060	98	298	172	113	444	116	332	91	89
25	483	95	268	121	196	145	111	1680	118	208	91	89
26	103	260	164	130	2010	121	109	1590	162	101	91	89
27	89	117	136	112	4920	116	107	234	109	95	91	89
28	86	92	124	111	5940	113	107	159	102	93	96	89
29	84	86	117	118	---	109	105	141	101	91	91	90
30	83	84	115	118	---	133	104	137	101	90	91	90
31	81	---	112	110	---	208	---	133	---	90	91	---
TOTAL	3206	15384	14406	3264	18333	13306	8708	6931	3989	3516	2852	2815
MEAN	103	513	465	105	655	429	290	224	133	113	92.0	93.8
MAX	483	7060	5970	130	5940	5300	3920	1680	265	332	116	177
MIN	81	79	81	98	101	100	97	93	101	90	89	89
CFSM	.39	1.96	1.77	.40	2.50	1.64	1.11	.85	.51	.43	.35	.36
IN.	.46	2.18	2.05	.46	2.60	1.89	1.24	.98	.57	.50	.40	.40

CAL YR 1986 TOTAL 70662 MEAN 194 MAX 7060 MIN 79 CFSM .74 IN. 10.03
WTR YR 1987 TOTAL 96710 MEAN 265 MAX 7060 MIN 79 CFSM 1.01 IN. 13.73

WOLF RIVER BASIN

275

07031660 WOLF RIVER AT WALNUT GROVE ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°07'58", long 89°51'18", Shelby County, Hydrologic Unit 08010210, on right bank at upstream end of bridge on Walnut Grove Road, 0.5 mile east of Interstate Highway 240, and at mile 15.4.

DRAINAGE AREA.--709 mi.²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year. Prior to September 1977 published as "near Germantown" and Oct. 1978 to Sept. 1986 "at Germantown".

GAGE.--Water-stage recorder. Datum of gage is 225.82 ft above National Geodetic Vertical Datum of 1929. Prior to April 21, 1986 water-stage recorder at site 2.1 miles upstream at datum 9.94 ft higher.

REMARKS.--Estimated daily discharges: May 25, 26, 28, June 17, 18, 22, 24, 28, 29, July 1, 2, 8-10, Aug. 10-11, Aug. 27 to Sept. 7, and Sept. 10-30. Records fair.

AVERAGE DISCHARGE.--18 years, 990 ft³/s, 18.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,400 ft³/s, Mar. 14, 1975, gage height, 27.98 ft, site and datum then in use; minimum, 190 ft³/s, Sept. 15, 16, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 8	0300	*9,590	*17.49	Feb. 28	1615	8,490	16.29
Dec. 9	1200	7,700	15.39	Apr. 13	2330	9,490	17.39

Minimum daily discharge, 195 ft³/s, Sept. 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	314	878	406	488	7550	570	322	616	563	255	217
2	222	286	726	365	1290	7150	500	345	520	517	251	212
3	221	265	589	347	1270	5930	462	327	454	458	266	210
4	228	331	512	337	898	4690	447	322	417	433	264	209
5	223	320	480	323	630	3380	427	317	405	398	276	208
6	224	284	461	315	537	2360	403	307	392	394	291	207
7	226	1940	462	311	498	1250	388	300	369	373	256	207
8	229	5790	811	302	470	737	380	298	353	411	248	351
9	226	2720	5160	320	440	612	373	291	332	570	243	229
10	232	2910	2630	317	417	544	368	284	320	423	346	215
11	233	3710	3170	316	399	492	365	289	310	385	340	205
12	265	3230	3390	305	390	459	618	294	427	359	288	198
13	246	2830	3690	305	383	435	2680	289	340	345	254	600
14	248	2220	3170	306	401	417	4350	287	415	334	248	330
15	248	1750	2440	317	439	402	2280	288	370	325	249	250
16	247	1070	1420	324	954	386	1940	277	370	317	251	230
17	250	684	736	327	814	485	1740	287	384	311	244	270
18	254	538	581	363	715	3410	1800	368	355	299	275	240
19	240	453	513	425	645	2340	1650	354	449	289	432	220
20	234	445	464	432	674	2290	1200	331	472	280	375	210
21	240	415	426	405	719	1570	775	313	836	276	271	205
22	253	396	400	400	1070	968	597	302	691	302	239	200
23	256	360	794	407	1600	753	511	334	665	289	232	200
24	992	386	1620	409	1480	698	459	918	1570	383	220	199
25	950	626	1500	671	1210	574	419	2420	921	447	213	198
26	675	1010	1270	791	2610	490	385	1410	846	435	211	197
27	523	910	1050	656	3630	440	363	1440	1050	368	244	196
28	435	923	866	562	6530	413	351	1430	838	302	277	195
29	425	952	729	525	---	405	343	873	560	292	248	210
30	378	949	571	502	---	496	335	695	481	274	232	195
31	346	---	466	469	---	605	---	680	---	261	223	---
TOTAL	10193	39017	41975	12560	31601	52731	27479	16992	16528	11413	8262	7013
MEAN	329	1301	1354	405	1129	1701	916	548	551	368	267	234
MAX	992	5790	5160	791	6530	7550	4350	2420	1570	570	432	600
MIN	221	265	400	302	383	386	335	277	310	261	211	195
CFSM	.46	1.83	1.91	.57	1.59	2.40	1.29	.77	.78	.52	.38	.33
IN.	.53	2.05	2.20	.66	1.66	2.77	1.44	.89	.87	.60	.43	.37

CAL YR 1986 TOTAL 220094 MEAN 603 MAX 5790 MIN 221 CFSM .85 IN. 11.54
WTR YR 1987 TOTAL 275764 MEAN 756 MAX 7550 MIN 195 CFSM 1.07 IN. 14.46

WOLF RIVER BASIN

07031660 WOLF RIVER AT WALNUT GROVE ROAD AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986-87.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV 04...	1145	255	50	15.5	56	39
DEC 12...	1330	3570	55	7.0	602	5800
JAN 23...	1330	400	--	6.0	407	440
FEB 27...	1325	2940	110	9.5	1010	8020
28...	1345	9090	--	--	1960	48100
APR 20...	1150	1220	50	21.0	397	1310
MAY 22...	1640	341	--	29.0	96	88
JUL 02...	1600	476	--	29.5	231	297
AUG 11...	1400	329	--	28.0	289	257

07032000 MISSISSIPPI RIVER AT MEMPHIS, TN
(National stream-quality accounting network station)

LOCATION.--Lat 35°07'37", long 90°04'25", Shelby County, Hydrologic Unit 08010100, on left bank 50 ft downstream from Harahan Bridge at Memphis, 1.3 mi downstream from Beale Street gage, 3.5 mi downstream from Wolf River, 62.4 mi upstream from St. Francis River, and at mile 734.8.

DRAINAGE AREA.--932,800 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

Discharge: January 1933 to current year. Monthly discharge only for some periods, published in WSP 1311.

Gage heights: October 1934 to September 1951 and October 1952 to September 1980 in reports of Geological Survey.

Since November 1871, at Beale Street gage, in reports of Mississippi River Commission, December 1890 to

August 1932 at Beale Street gage, September 1932 to December 1934 at nonrecording gage 1,000 ft downstream, and since December 1934 at water-stage recorder at present site, in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 183.91 ft above National Geodetic Vertical Datum of 1929.

Prior to Apr. 16, 1934, Beale Street nonrecording gage 1.3 mi upstream at present datum. Apr. 16 to

Dec. 21, 1934, nonrecording gage 1,000 ft downstream at present datum.

REMARKS.--Flow regulated by many locks, dams, and reservoirs.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--48 years, 474,200 ft³/s, 343,600,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980,000 ft³/s, Feb. 8, 1937; maximum gage height, 48.69 ft, Feb. 10, 1937; minimum discharge, 79,200 ft³/s, Aug. 26, 1936; minimum gage height, -5.70 ft, Sept. 21, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage prior to 1937, 46.55 ft, Apr. 9, 1913, at Beale Street gage or about 45.2 ft at present site.

NOTE.--Records for 1982, 1983, 1984, 1985, 1986, and 1987 water years were not available in time for inclusion in this report. These records will be published in a subsequent report.

07032000 MISSISSIPPI RIVER AT MEMPHIS, TN--Continued

WATER-QUALITY RECORDS

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

PERIOD DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1973 to September 1981.

WATER TEMPERATURES: February 1973 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 571 microsiemens, July 30, 1977; minimum daily, 174 microsiemens, Feb. 7, 1979.

WATER TEMPERATURES: Maximum daily, 32.0°C, July 22, 24, 1981; minimum daily, 0.0°C, Jan. 12-14, 17, 18, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
NOV 25...	1300	80513	80020	77000	437	7.80	9.0	36	8.4	74
MAR 25...	0800	80513	80020	93000	420	8.08	11.5	32	10.5	97
MAY 26...	1400	80513	80020	34000	462	7.70	25.5	38	7.8	96
AUG 11...	1230	80513	80020	42000	460	8.25	30.0	2.7	7.1	95

DATE	TIME	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
NOV 25...	1300	751	K20000	7600	170	66	46	14	19	19
MAR 25...	0800	756	K10	K20	180	61	47	15	18	18
MAY 26...	1400	760	300	940	180	50	47	15	22	21
AUG 11...	1230	758	220	K24	190	57	48	16	24	22

DATE	TIME	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3	CAR- BONATE WAT WH TOTAL FIELD MG/L AS CO3	BICAR- BONATE WAT WH TOTAL FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
NOV 25...	1300	0.7	3.4	107	0	130	59	15	0.20	9.1
MAR 25...	0800	0.6	2.8	118	0	140	57	18	0.20	4.7
MAY 26...	1400	0.7	3.7	129	0	160	71	19	0.20	5.7
AUG 11...	1230	0.8	3.8	129	0	160	73	19	0.20	3.6

DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
NOV 25...	1300	263	233	0.36	--	<0.010	1.30	0.180	0.030	0.92
MAR 25...	0800	260	234	0.35	1.58	0.020	1.60	0.070	0.090	0.93
MAY 26...	1400	285	262	0.39	1.28	0.020	1.30	0.050	0.040	0.55
AUG 11...	1230	266	266	0.36	--	<0.010	0.930	0.010	0.020	1.3

K--Results based on non-ideal colony count.

07032000 MISSISSIPPI RIVER AT MEMPHIS, TN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BARIUM, DIS- SOLVED (UG/L AS BA)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)
NOV 25...	1300	1.1	0.230	0.030	0.070	67	30	1	<0.5	<1
MAR 25...	0800	1.0	0.160	0.050	0.040	53	10	<1	<0.5	<1
MAY 26...	1400	0.60	0.220	0.070	0.060	85	20	1	<0.5	<1
AUG 11...	1230	1.3	0.170	0.090	0.070	76	10	2	<0.5	<1

DATE	TIME	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
NOV 25...	1300	<1	<3	2	25	<5	13	11	<0.1
MAR 25...	0800	<1	<3	8	16	<5	9	1	0.2
MAY 26...	1400	<1	<3	3	10	<5	13	3	<0.1
AUG 11...	1230	<1	<3	2	9	<5	<4	1	<0.1

DATE	TIME	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 25...	1300	<10	2	1	<1	190	17	139	78
MAR 25...	0800	<10	2	<1	<1	190	43	88	69
MAY 26...	1400	<10	<1	1	<1	230	7	133	96
AUG 11...	1230	<10	5	<1	<1	230	9	51	83

NONCONNAH CREEK BASIN

07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN

LOCATION.--Lat 35°02'59", long 89°49'08", Shelby County, Hydrologic Unit 08010211, on left bank at downstream side of bridge on Winchester Road, 2.6 mi south of Germantown, and at mile 17.3.

DRAINAGE AREA.--68.2 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-1964, 1969; October 1969 to May 1985, October 1985 to current year.

REVISED RECORDS.--WRD TN 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 262.92 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).

REMARKS.--Estimated daily discharges: Mar. 2-4, June 8-10, July 16-21, Aug. 24-26, Sept. 3-6 and 27-28. Records fair except for estimated discharges, which are poor.

AVERAGE DISCHARGE.--17 years, (water years 1970-84, 1986-87), 100 ft³/s, 19.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,680 ft³/s, Mar. 12, 1975, gage height, 27.11 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 7	2045	*7,240	*20.80	Feb. 28	1030	5,020	16.71
Dec. 9	0915	4,730	16.15	Mar. 18	0330	3,780	14.36
Feb. 26	1900	3,890	14.56	Apr. 13	1930	5,970	18.49

No flow several days in Oct.

REVISIONS.--The peak discharges and annual maximums (*) reported for water years 1985 and 1986 have been revised to 4,890 ft³/s, Dec. 20, 1984, gage height, 16.63 ft, and *5,150 ft³/s, Apr. 23, 1985, gage height, 16.96 ft. The peak discharge for June 5, 1986 (1215) has been revised to *3,360 ft³/s, gage height, *13.54 ft, superseding figures published in reports for 1985 and 1986.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.08	4.3	4.3	58	582	27	1.1	43	98	2.2	.62
2	.00	.06	4.1	3.2	672	90	13	11	2.8	26	4.5	.47
3	.00	.05	4.1	4.4	110	25	9.7	3.9	1.3	9.8	2.5	.42
4	2.9	26	2.6	6.1	28	11	7.1	2.1	.77	5.9	3.5	.38
5	.73	14	1.8	4.0	13	8.3	5.4	1.5	.54	2.9	2.0	.36
6	.21	2.9	1.8	2.9	9.9	7.1	4.4	3.8	.45	1.6	1.2	.34
7	.11	1700	1.2	2.2	7.5	6.1	4.0	3.6	.41	1.1	.92	3.2
8	.04	2350	194	2.3	6.2	5.8	3.1	4.4	.38	.89	.69	13
9	.02	372	2130	7.3	4.5	5.2	3.3	2.3	.36	4.0	.58	1.7
10	.01	95	346	8.7	3.6	4.4	3.2	1.2	.35	2.5	167	18
11	.00	850	51	5.1	3.2	3.5	3.9	4.5	.52	1.3	18	52
12	10	64	24	3.4	3.0	2.9	63	2.0	31	1.0	3.7	5.1
13	2.8	16	14	2.5	2.4	2.7	1980	.88	7.8	.84	2.0	120
14	.21	11	13	2.0	3.3	2.4	1000	3.3	35	.74	1.2	7.0
15	.11	10	10	2.1	12	2.3	96	4.4	3.9	.61	.77	18
16	.05	5.9	9.7	2.1	189	2.0	27	3.6	4.4	.55	.58	21
17	.02	3.9	9.9	2.1	57	167	13	1.1	41	.52	.54	3.3
18	.02	3.3	9.6	20	20	1650	9.0	1.1	4.9	.48	58	3.9
19	.01	1.3	7.9	35	12	157	6.9	1.2	119	.47	12	5.7
20	.01	36	6.1	12	10	31	5.5	.74	60	.45	4.6	1.4
21	.01	10	5.1	8.7	13	14	4.5	.51	12	.44	1.4	1.2
22	.00	6.7	4.6	7.5	393	9.2	3.7	219	9.4	22	.88	.67
23	.00	8.0	623	5.8	215	7.3	2.7	61	3.1	10	.62	.50
24	726	10	391	6.5	36	30	2.2	420	2.4	8.7	.45	.42
25	154	273	55	430	17	11	1.8	352	334	2.3	.42	.34
26	13	267	22	84	1410	6.0	1.4	90	235	3.7	.40	.31
27	3.6	30	13	21	984	4.8	1.9	12	14	4.9	33	.29
28	1.0	10	9.8	15	3180	3.8	2.9	7.7	6.3	1.6	12	.27
29	.37	6.7	7.4	14	---	6.6	1.7	5.1	3.1	1.2	2.3	1.1
30	.23	4.9	6.2	12	---	77	2.0	5.6	86	4.3	1.3	1.3
31	.14	---	4.8	8.6	---	86	---	12	---	2.3	.84	---
TOTAL	915.61	6187.79	3987.0	744.8	7472.6	3021.4	3309.3	1242.63	1063.18	221.09	340.09	282.29
MEAN	29.5	206	129	24.0	267	97.5	110	40.1	35.4	7.13	11.0	9.41
MAX	726	2350	2130	430	3180	1650	1980	420	334	98	167	120
MIN	.00	.05	1.2	2.0	2.4	2.0	1.4	.51	.35	.44	.40	.27
CFSM	.43	3.02	1.89	.35	3.91	1.43	1.62	.59	.52	.10	.16	.14
IN.	.50	3.38	2.17	.41	4.08	1.65	1.81	.68	.58	.12	.19	.15

CAL YR 1986 TOTAL 17157.37 MEAN 47.0 MAX 2350 MIN .00 CFSM .69 IN. 9.36
WTR YR 1987 TOTAL 28787.50 MEAN 78.9 MAX 3180 MIN .00 CFSM 1.16 IN. 15.70

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.

Crest-stage partial-record stations

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 for each gage is developed from current meter or indirect measurements of peak flow. 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 is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1987

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
CUMBERLAND RIVER BASIN							
03409000	White Oak Creek at Sunbright, TN	Lat 36°14'38", long 84°40'14", Morgan County, Hydrologic Unit 05130104, at bridge on U.S. Highway 27 in Sunbright. Datum of gage is 1,294.05 ft above National Geodetic Vertical Datum of 1929.	13.5	1934, 1955-82, 1985-87	11- 9-86	7.12	-
03418201	Doe Creek at Gainesboro, TN	Lat 36°21'23", long 85°39'20", Jackson County, Hydrologic Unit 05130106, at bridge on Highway 56, at Gainesboro. Datum of gage is 519.37 ft above National Geodetic Vertical Datum of 1929.	5.72	1978-87	11- 9-86	4.66	-
03420360	Mud Creek tributary No. 2 near Summitville, TN	Lat 35°36'10", long 86°01'33", Coffee County, Hydrologic Unit 05130107, at culvert under county road, 3.5 miles northwest of Summitville, and 0.7 mile upstream from mouth.	2.28	1967-87	2-28-87	5.58	1,670
03420600	Owen Branch near Centertown, TN	Lat 35°42'30", long 85°53'05", Warren County, Hydrologic Unit 05130107, at bridge on U.S. Highway 70-S, 2.4 miles southeast of Centertown.	4.60	1955-87	11- 9-86	2.71	55
03421200	Charles Creek near McMinnville, TN	Lat 35°43'00", long 85°46'05", Warren County, Hydrologic Unit 05130107, at bridge on county road at Faulkner Springs, 2.7 miles north of McMinnville.	31.1	1955-87	11- 9-86	11.00	5,100
03424900	Mulherrin Creek near Gordonsville, TN	Lat 36°11'28", long 85°57'11", Smith County, Hydrologic Unit 05130108, at bridge on State Highway 53, 1.3 miles upstream from mouth, 1.5 miles northwest of Gordonsville.	26.9	1982, 1986-87	11- 9-86	21.80	-
03425045	Peyton Creek at Monoville, TN	Lat 36°18'37", long 85°59'21", Smith County, Hydrologic Unit 05130201, at county road bridge 0.9, mile northwest of Monoville. Datum of gage is 459.39 ft above National Geodetic Vertical Datum of 1929.	44.7	1986-87	11- 9-86	33.56	-

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
CUMBERLAND RIVER BASIN--Continued							
03425357	Darwin Branch tributary at Hartsville, TN	Lat 36°23'54", long 86°09'08", Trousdale County, Hydrologic Unit 05130201, at culvert on New Hall Town Road, 0.9 miles northwest of Hartsville.	0.66	1986-87	11- 9-86	22.04	-
03425365	Second Creek near Walnut Grove, TN	Lat 36°24'01", long 86°12'48", Trousdale County, Hydrologic Unit 05130201, at culvert on State Highways 10 and 25, 2.6 miles west of Hartsville.	3.47	1986-87	11- 9-86	27.06	-
03425500	Spring Creek near Lebanon, TN	Lat 36°10'49", long 86°14'29", Wilson County, Hydrologic Unit 05130201, at bridge on Eastover Road, 3.4 miles southeast of Lebanon. Datum of gage is 556.08 ft above National Geodetic Vertical Datum of 1929.	35.3	1955-61†, 1962-87	11- 8-86	9.12	6,080
03425700	Spencer Creek near Lebanon, TN	Lat 36°14'20", long 86°24'03", Wilson County, Hydrologic Unit 05130201, at bridge on county road, 100 ft north of junction of county road and U.S. Highway 70, 6.5 miles west of square in Lebanon.	3.32	1955-87	11- 8-86	6.65	928
03426874	Brawleys Fork below Bradyville, TN	Lat 35°44'44", long 86°10'14", Cannon County, Hydrologic Unit 05130203, at bridge on Bradyville Pike, 0.5 mile northwest of Bradyville.	15.4	1983-87	11- 9-86	27.28	2,700
034269424	Reed Creek near Bradyville, TN	Lat 35°44'44", long 86°12'31", Rutherford County, Hydrologic Unit 05130203, at bridge on Bradyville Pike, 2.4 miles northwest of Bradyville.	3.52	1983-87	11- 9-86	4.44	-
03428043	Lytle Creek at Sanbyrne Drive at Murfreesboro, TN	Lat 35°49'38", long 86°23'28", Rutherford County, Hydrologic Unit 05130203, at bridge on Sanbyrne Drive, 1 mile south of intersection of Highways 41 and 231 in Murfreesboro. Datum of gage is 591.91 ft above National Geodetic Vertical Datum of 1929.	17.6	1978-87	11- 9-86	1.67	-
03430118	McCrory Creek at Ironwood Drive at Donelson, TN	Lat 36°09'07", long 86°39'02", Davidson County, Hydrologic Unit 05130203, at bridge under Ironwood Drive, 1.3 miles southeast of intersection of U.S. Highway 70 (Lebanon Road) and Donelson Pike in Donelson. Datum of gage is 430.63 ft above National Geodetic Vertical Datum of 1929.	7.31	1977-87a	11-26-86	6.51	1,120
03430400	Mill Creek at Nolensville, TN	Lat 35°57'32", long 86°40'31", Williamson County, Hydrologic Unit 05130202, at bridge on Sunset Road, 0.6 mile northwest of Nolensville. Datum of gage is 586.18 ft above National Geodetic Vertical Datum of 1929.	12.0	1965-87	11-26-86	8.17	6,500
03431000	Mill Creek near Antioch, TN	Lat 36°04'54", long 86°40'50", Davidson County, Hydrologic Unit 05130202, at bridge on Franklin-Limestone Road, 1.6 miles north of Antioch. Datum of gage is 472.93 ft above National Geodetic Vertical Datum of 1929.	64.0	1954-61†, 1962-63, 1964-75†, 1976-87	11-26-86	14.13	6,360

See footnotes at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
CUMBERLAND RIVER BASIN--Continued							
03431040	Sevenmile Creek at Blackman Road, at Nashville, TN	Lat 36°04'21", long 86°44'00", Davidson County, Hydrologic Unit 05130202, at bridge on Blackman Road, 7.0 miles southeast of State capitol in Nashville. Datum of gage is 499.08 ft above National Geodetic Vertical Datum of 1929.	12.2	1965-87	11-26-86	6.23	-
03431060	Mill Creek at Thompson Lane, near Woodbine, TN	Lat 36°07'04", long 86°43'08", Davidson County, Hydrologic Unit 05130202, at bridge on Thompson Lane, 1.5 miles northeast of intersection of Thompson Lane and Nolensville Road (U.S. Highway 31-A, 41-A) in Woodbine. Datum of gage is 432.55 ft above National Geodetic Vertical Datum of 1929.	93.4	1965-87	11-26-86	12.78	8,290
03431062	Mill Creek tributary at Glenrose Avenue, at Woodbine, TN	Lat 36°07'02", long 86°43'37", Davidson County, Hydrologic Unit 05130202, at culvert under Glenrose Avenue, 1.1 miles northeast of intersection of Nolensville Road and Thompson Lane in Woodbine, and 750 ft upstream from mouth. Datum of gage is 443.52 ft above National Geodetic Vertical Datum of 1929.	1.17	1977-87a	11-25-86	5.96	474
03431120	West Fork Browns Creek at General Bates Drive, at Nashville, TN	Lat 36°06'29", long 86°47'07", Davidson County, Hydrologic Unit 05130202, at bridge on General Bates Drive, 4.0 miles south of State capitol in Nashville. Datum of gage is 499.94 ft above National Geodetic Vertical Datum of 1929.	3.30	1965-87	11-25-86	5.06	799
03431240	East Fork Browns Creek at Baird-Ward Printing Company, at Nashville, TN	Lat 36°06'33", long 86°46'00", Davidson County, Hydrologic Unit 05130202, at bridge on access road to Baird-Ward Printing Co., Plant No. 1, 500 ft west of 100-Oaks Shopping Center, and 4.0 miles southeast of State capitol in Nashville. Datum of gage is 497.91 ft above National Geodetic Vertical Datum of 1929.	1.58	1965-87	5-20-87	3.73	296
03431340	Browns Creek at Factory Street, at Nashville, TN	Lat 36°08'26", long 86°45'31", Davidson County, Hydrologic Unit 05130202, at bridge on Factory Street, 800 ft downstream from Louisville and Nashville Railroad bridge, and 2.3 miles southeast of State capitol in Nashville. Datum of gage is 420.66 ft above National Geodetic Vertical Datum of 1929.	13.2	1965-87	11-25-86	6.88	-
03431490	Pages Branch at Avondale, TN	Lat 36°12'22", long 86°46'24", Davidson County, Hydrologic Unit 05130202, at culvert under Trinity Lane, 900 ft east of intersection of Interstate 65 and Trinity Lane at Avondale, 0.9 mile upstream from mouth.	2.01	1977-87a	7- 5-87	4.43	620

See footnotes at end of the table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
CUMBERLAND RIVER BASIN--Continued							
03431550	Earthman Fork at Whites Creek, TN	Lat 36°15'55", long 86°49'51", Davidson County, Hydrologic Unit 05130202, at bridge on Whites Creek Pike in town of Whites Creek, 1,800 ft upstream from mouth.	6.29	1965-87	11-25-86	6.34	1,030
03431573	Ewing Creek at Richmond Hill Drive at Parkwood, TN	Lat 36°13'50", long 86°46'28", Davidson County, Hydrologic Unit 05130202, at bridge on Richmond Hill Drive, 1.0 mile southeast of Parkwood. Datum of gage is National Geodetic Vertical Datum of 1929.	2.17	1976-87	11- 8-86	495.13	-
03431575	Ewing Creek at Brick Church Pike at Parkwood, TN	Lat 36°13'58", long 86°46'54", Davidson County, Hydrologic Unit 05130202, at bridge on Brick Church Pike, 0.4 mile upstream from North Fork, 0.8 mile south of Parkwood. Datum of gage is National Geodetic Vertical Datum of 1929.	3.02	1976-87	11- 8-86	476.55	-
03431578	Ewing Creek at Gwynwood Drive near Jordania, TN	Lat 36°13'58", long 86°47'32" Davidson County, Hydrologic Unit 05130202, at bridge on county road, 0.3 mile downstream from North Fork, 3.4 miles northeast of Bordeaux, 4.5 miles northeast of Jordonia, and at mile 2.1. Datum of gage is National Geodetic Vertical Datum of 1929.	9.98	1976-87	2-28-87	462.25	-
03431581	Ewing Creek below Knight Road, near Bordeaux, TN	Lat 36°13'55", long 86°48'14", Davidson County, Hydrologic Unit 05130202, at downstream side of bridge on Knight Road, 3.0 miles northeast of Bordeaux. Datum of gage is National Geodetic Vertical Datum of 1929.	13.3	1976-87	2-28-87	447.68	-
03431677	Sugartree Creek at YMCA Access Road, at Green Hills, TN	Lat 36°06'13", long 86°49'12", Davidson County, Hydrologic Unit 05130202, at bridge on YMCA Access Road, 0.5 mile southwest of Hillsboro High School, at Green Hills. Datum of gage is National Geodetic Vertical Datum of 1929.	1.51	1976-87	8-17-87	544.93	-
03431679	Sugartree Creek at Abbott Martin Road, at Green Hills, TN	Lat 36°06'23", long 86°49'17", Davidson County, Hydrologic Unit 05130202, at bridge on Abbott Martin Road, at intersection of Bedford Avenue and Abbott Martin Road, at Green Hills. Datum of gage is National Geodetic Vertical Datum of 1929.	2.19	1976-87	8-17-87	530.94	-
03431795	Bednigo Branch tributary at Chestnut Grove, TN	Lat 36°25'10", long 86°54'11", Robertson County, Hydrologic Unit 05130206, at culvert on Coopertown Road, 0.6 mile southwest of Crunk, 0.6 mile northeast of Chestnut Grove.	0.47	1986-87	12- 9-86	20.35	-
*03432470	Murfrees Fork above Burwood, TN	Lat 35°48'58", long 86°57'20", Williamson County, Hydrologic Unit 05130204, at county road bridge, just downstream from Cayce Branch, 1.6 miles east of Burwood.	7.43	1986-87	11-25-86	21.14	-

See footnotes at end of the table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

					Annual Maximum		
Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (ft)	Dis-charge (ft ³ /s)
CUMBERLAND RIVER BASIN--Continued							
*03432925	Little Harpeth River at Granny White Pike, at Brentwood, TN	Lat 36°01'30", long 86°49'09", Williamson County, Hydrologic Unit 05130204, at bridge on Granny White Pike, 2.0 miles southwest of Brentwood. Datum of gage is 618.29 ft above National Geodetic Vertical Datum of 1929.	22.0	1978-87	11-26-86	11.42	2,510
03434590	Jones Creek near Burns, TN	Lat 36°06'15", long 87°19'05", Dickson County, Hydrologic Unit 05130204, at bridge on Rock Church Road, 3.5 miles north of Burns and at mile 21.9.	13.3	1984-87	12- 9-86	6.90	1,530
03434616	Hall Branch near Charlotte, TN	Lat 36°11'48", long 87°20'30", Dickson County, Hydrologic Unit 05130204, at Culvert under State Highway 48, 1.4 miles north of Charlotte and at mile 2.6.	0.50	1984-87	12- 9-86	13.08	162
034350021	Bartons Creek near Cumberland Furnace, TN	Lat 36°15'02", long 87°20'00", Dickson County, Hydrologic Unit 05130205, at bridge on Stayton road, 1.9 miles south-east of Cumberland Furnace.	22.29	1984-87	12- 9-86	11.90	-
0343500213	Bartons Creek trib-utary near Stayton, TN	Lat 36°15'19", long 87°19'12", Dickson County, Hydrologic Unit 05130205, at Culvert under Jackson Lane road, 1.5 miles southeast of Stayton, 2.5 miles southeast of Cumberland Furnace.	0.51	1984-87	12- 9-86	11.05	-
*034351113	Honey Run Creek below Cross Plains, TN	Lat 36°32'31", long 86°42'14", Robertson County, Hydrologic Unit 05130206, at Empson Bridge on county road, 0.4 mile above mouth of Empson branch, 0.6 mile southwest of Cross Plains.	25.8	1986-87	11-26-86	22.34	-
03435930	Spring Creek trib-utary near Cedar Hill, TN	Lat 36°32'08", long 86°59'26", Robertson County, Hydrologic Unit 05130206, at culvert on Kinney Road, 1.2 miles southeast of Cedar Hill.	1.40	1986-87	2-28-87	19.06	-
03436505	Cummings Creek nr Dotsonville, TN	Lat 36°29'18", long 87°28'06", Montgomery County, Hydrologic Unit 05130205, at bridge on Dotsonville Road, 1.1 miles northeast of Dotsonville.	2.65	1984-87	4-14-87	6.77	-
03436700	Yellow Creek near Shiloh, TN	Lat 36°20'55", long 87°32'20", Montgomery County, Hydrologic Unit 05130205, at bridge on State Highway 13, 2.6 miles west of Shiloh, 3.0 miles downstream from Leatherwood Creek, 9.0 miles east of Erin. Datum of gage is 390.13 ft above National Geodetic Ver-tical Datum of 1929.	124	1957-80†, 1982-87	2-28-87	9.43	2,830
TENNESSEE RIVER BASIN							
03461230	Caney Creek near Cosby, TN	Lat 35°47'03", long 83°12'11", Cocke County, Hydrologic Unit 06010106, at culvert under State Highway 32, 3.3 miles southeast of Cosby.	1.62	1967-87	1987	<3.23	<18

See footnotes at end of the table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued							
03465607	Cherokee Creek near Embreeville, TN	Lat 36°12'24", long 82°29'23", Washington County, Hydrologic Unit 06010108, at culvert on county road, 0.5 mile southeast of Mayday, 1.4 miles northwest of Kansas City, and at mile 1.3.	22.9	1984-87	4-17-87	15.79	-
*03465780	Clear Fork near Fairview, TN	Lat 36°19'33", long 82°33'47", Washington County, Hydrologic Unit 06010108, at culvert on State Highway 81, 2.0 miles southwest of Sulfur Springs, and at mile 3.8.	10.5	1983-87	3- 1-87	4.11	-
03466865	Roaring Fork north of Greeneville, TN	Lat 36°12'45", long 82°50'15", Greene County, Hydrologic Unit 06010108, at bridge on county road, 2.3 miles northwest of Bradburn Hill, and at mile 7.3.	16.1	1983-87	1-19-87	4.94	-
03466890	Lick Creek near Albany, TN	Lat 36°14'54", long 82°55'34", Greene County, Hydrologic Unit 06010108, at State Highway 70 bridge, 0.3 mile downstream from Puncheon Camp Creek, 1.0 mile northwest of Albany, and at mile 33.7.	172	1984-87	1-19-87	13.32	-
03467480	Bent Creek at Taylor Gap, TN	Lat 36°14'08", long 83°06'41", Hamblen County, Hydrologic Unit 06010108, at bridge on county road (Mountain Valley Road), 2.1 miles southwest of Bulls Gap, 5.0 miles southeast of Russellville.	2.18	1986-87	1-19-87	14.35	-
03467992	Carter Branch near White Pine, TN	Lat 36°07'05", long 83°18'55", Jefferson County, Hydrologic Unit 06010108, at bridge on county road, 1.6 miles northeast of Kimbrough Crossroad, 1.8 miles northwest of White Pine.	4.25	1986-87	1-19-87	6.04	-
*03467993	Cedar Creek near Valley Home, TN	Lat 36°08'03", long 83°18'47", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 1.7 miles southeast of Valley Home, 1.9 miles southeast of Witt, 2.2 miles northwest of White Pine.	2.01	1986-87	1-19-87	12.42	-
*03467998	Sinking Fork at White Pine, TN	Lat 36°07'21", long 83°17'44", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 0.9 mile northwest of White Pine, 2.7 miles northeast of Kimbrough Crossroad.	6.38	1986-87	1-19-87	6.14	-
03470215	Dumplin Creek at Mt. Hareb, TN	Lat 36°04'59", long 83°25'51", Jefferson County, Hydrologic Unit 06010107, at culvert on county road, 0.8 mile southeast of Mt. Hareb, 4.3 miles southeast of Jefferson City, 4.6 miles north of Dandridge.	3.65	1986-87	1-19-87	10.38	-
03476960	Indian Creek at Childress, TN	Lat 36°25'38", long 82°15'54", Sullivan County, Hydrologic Unit 06010102, at bridge on U.S. Highway 19, 3.3 miles south of Bluff City, and at mile 4.6.	6.79	1983-87	4-25-87	9.76	-

See footnotes at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued							
03478615	Evans Creek near Blountville, TN	Lat 36°31'19", long 82°18'12", Sullivan County, Hydrologic Unit 06010102, at State Highway 37 bridge, 1.5 miles southeast of Blountville. Datum of gage is 1500.00 ft above National Geodetic Vertical Datum of 1929.	2.50	1983-87	1-19-87	11.44	-
*03481600	Corn Creek at Mountain City, TN	Lat 36°29'23", long 81°48'52", Johnson County, Hydrologic Unit 06010103, at bridge on county road, 600 ft north of junction of county road and U.S. Highway 421, 1.0 mile northwest of Mountain City.	5.34	1959-61, 1963-87	1987	<2.14	<47
03487507	Horse Creek above Sullivan Gardens, TN	Lat 36°28'13", long 82°35'52", Sullivan County, Hydrologic Unit 06010102, at bridge on county road, 2.5 miles southwest of Vernon Heights, and at mile 7.3.	26.0	1983-87	1-19-87	13.31	-
03490522	Forgey Creek at Zion Hill, TN	Lat 36°29'12", long 82°53'08", Hawkins County, Hydrologic Unit 06010104, at culvert on county road (Carter Valley Road), 0.9 mile north of Zion Hill, 7.8 miles northeast of Rogersville.	0.86	1986-87	1987	<17.96	-
03491490	Dodson Creek tributary near Rogersville, TN	Lat 36°21'19", long 82°57'03", Hawkins County, Hydrologic Unit 06010104, at bridge on county road, 1.4 miles northwest of Enterprise, and at mile 0.5.	0.32	1983-87	1-19-87	4.62	-
03491540	Robertson Creek near Persia, TN	Lat 36°20'24", long 83°02'27", Hawkins County, Hydrologic Unit 06010104, at bridge on State Highway 113, 0.25 mile below Mooney Branch, and at mile 3.0.	14.6	1986-87	1-19-87	11.83	-
03494714	Dry Land Creek tributary near New Market, TN	Lat 36°03'33", long 83°34'13", Jefferson County, Hydrologic Unit 06010104, at culvert on county road (Rocky Valley Road), 3.0 miles south of New Market, 3.3 miles northwest of Piedmont.	0.20	1986-87	1-19-87	12.01	-
*03494990	Flat Creek at Luttrell, TN	Lat 36°11'45", long 83°44'44", Union County, Hydrologic Unit 06010104, at bridge on State Highway 61, 0.3 mile southwest of Luttrell, 3.5 miles northwest of Blaine.	22.4	1986-87	1-19-87	10.39	-
03519610	Baker Creek tributary near Binfield, TN	Lat 35°41'56", long 84°02'46", Blount County, Hydrologic Unit 06010204, at culvert under county road, 1.5 miles east of Binfield.	2.10	1966-77, 1979-87	1-19-87	3.78	88
03519640	Baker Creek near Greenback, TN	Lat 35°40'21", long 86°46'28", Blount County, Hydrologic Unit 06010204, at county road bridge, 1.0 mile upstream from Little Baker Creek, 3.4 miles east of Greenback, and at mile 15.0. Datum of gage is 845.01 ft above National Geodetic Vertical Datum of 1929.	16.0	1965-75†, 1976-87	1-19-87	6.69	472

See footnotes at end of the table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued							
*03527800	Big War Creek at Luther, TN	Lat 36°27'18", long 83°14'29", Hancock County, Hydrologic Unit 06010205, at bridge on county road, 0.4 mile south of Luther, 0.8 mile northwest of Yount Town, 6.0 miles southwest of Sneedville.	22.3	1986-87	1-19-87	6.96	-
*03528390	Crooked Creek near Maynardville, TN	Lat 36°15'56", long 83°50'25", Union County, Hydrologic Unit 06010205, at culvert on State Highway 170, 2.5 miles northwest of Maynardville, 5.5 miles northeast of Paulette.	2.23	1986-87	11- 9-86	3.12	-
03534000	Coal Creek at Lake City, TNb	Lat 36°13'14", long 84°09'27" Anderson County, Hydrologic Unit 06010207, at bridge on U.S. Highway 25-W, at Lake City. Datum of Gage is 842.76 ft above National Geodetic Vertical Datum of 1929.	24.5	1932-34†, 1955-87	11-26-86	3.84	1480
03535180	Willow Fork near Halls Crossroads, TN	Lat 36°05'59", long 83°54'27", Knox County, Hydrologic Unit 06010207, at culvert under Quarry Road, 1.7 miles northeast of Halls Crossroads. Datum of gage is 1,027.82 ft above National Geodetic Vertical Datum of 1929.	3.23	1967-87	1-19-87	5.96	158
03555900	Coker Creek near Ironsburg, TN	Lat 35°13'05", long 84°20'28", Monroe County, Hydrologic Unit 06020002, at bridge on State Highway 68, 4.2 miles southwest of Coker Creek.	22.4	1983-87	2-28-87	2.12	-
03566599	North Chickamauga Creek at Greens Mill, near Hixson, TN	Lat 35°10'30", long 85°13'40", Hamilton County, Hydrologic Unit 06020001, at bridge on Boy Scout Road, 2.3 miles north of Hixson.	99.5	1925,1944, 1953-56, 1980-87	11-26-86	31.95	-
03569168	Stringers Branch at Leawood Drive, at Red Bank, TN	Lat 35°07'00", long 85°17'28", Hamilton County, Hydrologic Unit 06020001, at bridge on Leawood Drive at Red Bank.	1.54	1980-87	4-15-87	25.70	-
03571500	Little Sequatchie River at Sequatchie, TN	Lat 35°07'47", long 85°35'10", Marion County, Hydrologic Unit 06020004, at Highway 27 bridge, 1.0 mile northeast of Sequatchie.	116	1925,1929, 1930, 1932-34†, 1944,1951-54, 1965,1979-87	11-26-86	8.89	-
03571730	Standifer Branch at Jasper, TN	Lat 35°04'22", long 85°36'56", Marion County, Hydrologic Unit 06020004, at bridge on U.S. Highways 41, 64, and 72, 0.6 mile east of courthouse, 0.8 mile above Town Creek, at Jasper.	15.3	1982-87	2-28-87	15.04	-
03571800	Battle Creek near Monteagle, TN	Lat 35°08'03", long 85°46'15", Marion County, Hydrologic Unit 06030001, at bridge on former U.S. Highways 41 and 64, 9.2 miles southeast of Monteagle. Datum of gage is 621.51 ft above National Geodetic Vertical Datum of 1929.	50.4	1955-87	11-26-86	7.91	3,460
03583200	Chicken Creek at McBurg, TN	Lat 35°11'03", long 86°48'47", Lincoln County, Hydrologic Unit 06030003, at bridge on county highway R7374 in McBurg.	7.66	1955-87	11-26-86	6.92	4,090

See footnotes at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Dis-charge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued							
03583300	Richland Creek near Cornersville, TN	Lat 35°19'10", long 86°52'20", Marshall County, Hydrologic Unit 06030004, at bridge on U.S. Highway 31-A, 3.4 miles southwest of Cornersville. Datum of gage is 754.28 ft above National Geodetic Vertical Datum of 1929.	47.5	1962-68†, 12- 9-86 1969-87		13.81	7,030
035944242	Owl Creek at Lexington, TN	Lat 35°38'26", long 88°22'13", Henderson County, Hydrologic Unit 06040001, on State Highway 20, 1.37 miles east of Lexington, and at mile 1.3.	2.50	1984-87	11- 8-86	13.58	-
03597300	Wartrace Creek above Bell Buckle, TN	Lat 35°37'45", long 86°21'22", Bedford County, Hydrologic Unit 06040002, at culvert under county road, 2.7 miles north of Bell Buckle.	4.99	1966-87	11- 9-86	8.37	1,410
03599200	East Rock Creek at Farmington, TN	Lat 35°30'05", long 86°42'50", Marshall County, Hydrologic Unit 06040002, at culvert, on old State Highway 64, 0.2 mile west of Farmington.	43.1	1954-87	2-28-87	10.88	4,200
035999716	Rutherford Creek tributary at Moores Lane near Kedron, TN	Lat 35°42'03", long 86°55'03", Maury County, Hydrologic Unit 06040003, at culvert under Moores Lane, 1.1 miles southwest of Kedron.	0.25	1987	11-26-86	25.62	-
03602170	West Piney River at Hwy 70 near Dickson, TN	Lat 36°05'21", long 87°28'12", Dickson County, Hydrologic Unit 06040003, at U.S. Highway 70 bridge, 4.0 miles west of Dickson.	2.16	1984-87	12- 9-86	26.64	880
03604070	Coon Creek tributary near Hohenwald, TN	Lat 35°34'07", long 87°40'02", Perry County, Hydrologic Unit 06040004, at culvert under State Highway 20, 7.0 miles northwest of Hohenwald.	0.51	1967-87	2-28-87	3.86	87
03604080	Hugh Hollow Branch near Hohenwald, TN	Lat 35°34'59", long 87°40'36", Perry County, Hydrologic Unit 06040004, at culvert under State Highway 20, 8.0 miles northwest of Hohenwald.	1.52	1967-87	2-28-87	2.77	90
03604090	Coon Creek above Chop Hollow, near Hohenwald, TN	Lat 35°35'19", long 87°41'09", Perry County, Hydrologic Unit 06040004, at bridge on State Highway 20, 9.0 miles northwest of Hohenwald.	6.02	1967-87	1987	<2.45	<47
03604580	Blue Creek near New Hope, TN	Lat 36°03'52", long 87°38'58", Humphreys County, Hydrologic Unit 06040003, at county road bridge, 1.8 miles northwest of New Hope, 3.1 miles southeast of McEwen, and at mile 3.9.	13.2	1984-87	11- 8-86	17.58	-
03604595	Little Blue Creek tributary near Gorman, TN	Lat 36°19'44", long 87°42'13", Humphreys County, Hydrologic Unit 06040003, at culvert under county road, 1.8 miles south of Gorman, 4.4 miles southwest of McEwen, and at mile 0.3.	0.62	1984-87	1987	<18.67	-

See footnotes at end of the table.

Annual maximum discharge at crest-stage partial-record stations during water year 1987--continued

					Annual Maximum		
Station No.	Station Name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (ft)	Dis-charge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued							
03605880	Cane Creek at Stewart, TN	Lat 36°19'09", long 87°50'21", Houston County, Hydrologic Unit 06040005, at bridge on county road, 200 ft north of intersection of county road and State Highway 147, and at mile 7.0.	4.12	1984-87	11- 8-86	17.18	-
OBION RIVER BASIN							
07024225	Neil Ditch near Henry, TN	Lat 36°10'19", long 88°23'33", Henry County, Hydrologic Unit 08010203, located on county road, 1.6 miles north of Henry-Carroll county line, 2.7 miles southeast of Henry.	4.07	1984-87	1987	<10.47	-
07024370	Little Reedy Creek near Huntingdon, TN	Lat 35°55'44", long 88°29'50", Carroll County, Hydrologic Unit 08010203, located on U.S. Highway 70, 0.6 mile southwest of Leach, 5.6 miles northeast of Cedar Grove.	0.91	1984-87	1987	<14.73	-
07029090	Lewis Creek near Dyersburg, TN	Lat 36°03'14", long 89°21'42", Dyer County, Hydrologic Unit 08010204, at bridge on U.S. Highway 51 (Business Route), 2.1 miles northeast of square in Dyersburg. Datum of gage is 276.52 ft above National Geodetic Vertical Datum of 1929.	25.5	1955-78, 1980-83, 1985-87	7-29-87	18.01	2,660

† Operated as a continuous-record gaging station.

a Operated as a flood hydrograph station.

* Also a low-flow partial-record station.

b Published as at Coal Creek prior to 1935.

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1987

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
CUMBERLAND RIVER BASIN						
03407990	New River near Huntsville, TN	Lat 36°24'18", long 84°29'45", Scott County, Hydrologic Unit 05130104, 0.3 mile above Flat Creek, 0.6 mile southwest of Huntsville.	300	1982, 1986-87	7-28-86 1-13-87 5-11-87 9- 9-87	22 158 230 8.6
03418935	Beaverdam Creek at Latana Road near Bellview, TN	Lat 35°44'07", long 85°11'43", Bledsoe County, Hydrologic Unit 05130108, 1.2 miles southwest of Bellview, 2.8 miles southwest of Winesap, 3.1 miles southeast of Herbert Domain.	17.0	1979-81, 1983-87	5-20-87 7-28-87	1.4 0
03418950	Bee Creek near Herbert Domain, TN	Lat 35°46'24", long 85°13'58", Cumberland County, Hydrologic Unit 05130108, at Old Rocky Ford, on county road, 100 feet below Little Cane Creek, 1.1 miles northeast of Herbert Domain.	59.6	1985-87	10- 9-86 5-20-87 7-28-87 8-19-87 9- 4-87	3.1 4.5 .90 9.5 .03
03420116	Rocky River at Rocky River Road at Riverview, TN	Lat 35°42'04", long 85°34'40", Van Buren County, Hydrologic Unit 05130108, on Rocky River Road, 3.0 miles south of Rocky River Road-State Highway 30 intersection.	72.0	1979-81, 1983-87	10- 9-86 5-20-87 7-29-87	4.0 12 3.0
03420720	Hickory Creek near Viola, TN	Lat 35°34'32", long 85°51'02", Warren County, Hydrologic Unit 05130107, at State Highway 108 bridge, 2.9 miles north of Viola.	58.2	1954, 1979-81, 1983-87	7-29-87	.84
03421150	Charles Creek at Daylight, TN	Lat 35°44'32", long 85°51'12", Warren County, Hydrologic Unit 05130107, at county road bridge, 2.5 miles north of Bethany, 0.3 mile southeast of Daylight.	13.8	1983-87	5-21-87 7-29-87	3.8 2.4
03432334	Harpeth River at Interstate Hwy 65 near Franklin, TN	Lat 35°53'32", long 86°49'46", Williamson County, Hydrologic Unit 05130204, at Interstate Highway 65 bridge, 3.2 miles southeast of Franklin, and at mile 92.3.	168	1975, 1986-87	4-28-87 8-17-87	57 2.9
*03432470	Murfrees Fork above Burwood, TN	Lat 35°48'58", long 86°57'20", Williamson County, Hydrologic Unit 05130204, at county road bridge, just downstream from Cayce Branch, 1.6 miles east of Burwood, and at mile 6.4.	7.43	1975, 1986-1987	10- 6-86 3-26-87 4-28-87 8-26-87	.21 3.6 2.6 0
03432474	West Prong Murfrees Fork near Burwood, TN	Lat 35°49'40", long 86°57'55", Williamson County, Hydrologic Unit 05130204, at county road bridge, 1.5 miles northeast of Burwood, and at mile 0.3.	4.93	1975, 1986-87	4-28-87 8-26-87	1.9 0
03432495	Murfrees Fork above Leipers Fork, TN	Lat 35°51'57", long 86°57'38", Williamson County, Hydrologic Unit 05130204, at bridge on Floyd Road, 3.0 miles southeast of Leipers Fork, and at mile 2.3.	26.3	1975, 1986-87	8-26-87	.12
*03432925	Little Harpeth River at Granny White Pike at Brentwood, TN	Lat 36°01'30", long 86°49'09", Williamson County, Hydrologic Unit 05130204, at bridge on Granny White Pike, 2.0 miles southwest of Brentwood, and at mile 1.1.	22.0	1978-87	5-18-87 6-29-87 8-17-87	3.1 2.3 .34

See footnotes at the end of the table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 1987--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
CUMBERLAND RIVER BASIN--Continued						
03433660	South Harpeth River at Fernvale, TN	Lat 35°57'15", long 87°04'43", Williamson County, Hydrologic Unit 05130204, at new county road bridge at Fernvale, 3.1 miles southeast of Fairview, and at mile 14.0.	27.6	1974-75, 1978-87	10-10-86 5-21-87 8-20-87	8.3 13 8.0
03433902	Big Turnbull Creek near Liberty Hill, TN	Lat 35°57'59", long 87°11'56", Williamson County, Hydrologic Unit 05130204, 250 ft below county road bridge, 1.5 miles southwest of Liberty Hill.	12.5	1981, 1983-87	10-10-86 5-21-87 8-20-87	2.5 5.7 4.1
03434620	Town Branch near Charlotte, TN	Lat 36°10'44", long 87°18'15", Dickson County, Hydrologic Unit 05130204, at bridge on Old Ashland City Road, 2.0 miles east of Charlotte, and at mile 1.5.	8.33	1974-76, 1978-87	10-10-86 5-19-87 8-26-87	.35 1.3 .05
*034351113	Honey Run Creek below Cross Plains, TN	Lat 36°32'31", long 86°42'14", Robertson County, Hydrologic Unit 05130206, at Empson bridge on county road, 0.4 miles above mouth of Empson Branch, 0.6 miles southwest of Cross Plains.	25.8	1985-87	10- 1-86 5-18-87 8-13-87	1.3 4.5 2.5
03435320	Red River at Adams, TN	Lat 36°35'37", long 87°03'33", Robertson County, Hydrologic Unit 05130206, at bridge on Keysburg Road, 0.9 mile north of Adams.	594	1937, 1983-87	10- 7-86 5-18-87	91 220
TENNESSEE RIVER BASIN						
03455050	Clear Creek at Parrottsville, TN	Lat 35°00'36", long 83°05'45", Cocke County, Hydrologic Unit 06010105, at bridge on U.S. 321, 6.5 miles northeast of Newport, 3.0 miles southwest of Salem, 0.5 mile southeast of Brookside Mill.	9.07	1986-87	1-14-87 5-13-87 9-28-87	2.3 7.0 2.0
034611996	Crying Creek above Cosby, TN	Lat 35°46'54", long 83°13'01", Cocke County, Hydrologic Unit 06010106, at culvert on road to Cosby Creek Campground in Great Smoky Mountain National Park, 2.4 miles southeast of Cosby, and 150 ft above mouth.	2.94	1983-87	1-15-87 5-14-87 9-28-87	1.9 3.2 .60
03461450	English Creek near Newport, TN	Lat 35°54'47", long 83°12'42", Cocke County, Hydrologic Unit 06010106, at bridge on State Highway 32, 0.9 mile downstream from Laurel Branch, 3.7 miles southwest of Newport, and at mile 3.5.	9.74	1983-87	1-15-87 5-14-87 9-28-87	2.9 6.9 1.6
03465603	Little Cherokee Creek at Garber, TN	Lat 36°12'56", long 82°28'03", Washington County, Hydrologic Unit 06010108, at culvert on State Highway 67, 2.5 miles north of Embreeville, 2.0 miles southwest of Little Cherokee, 0.5 mile southwest of Garber.	8.73	1986-87	5-13-87 9-29-87	11 2.3
03465620	Clark Creek at Graham Mill, TN	Lat 36°10'04", long 82°32'27", Washington County, Hydrologic Unit 06010108, at bridge on State Highway 107, 4.5 miles southwest of Embreeville, 3.0 miles northeast of Mt. Carmel, 0.7 miles southeast of Graham Mill.	11.5	1986-87	5-13-87 9-29-87	4.9 .12

See footnotes at the end of the table.

Discharge measurements made at low-flow partial-record stations during water year 1987--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued						
*03465780	Clear Fork near Fairview, TN	Lat 36°19'33", long 82°33'47", Washington County, Hydrologic Unit 06010108, at culvert on State Highway 81, 2.0 miles southwest of Sulphur Springs, and at mile 3.8.	10.5	1983-87	1-14-87 5-12-87 9-29-87	2.3 8.8 1.5
03465800	Muddy Fork at Fairview, TN	Lat 36°18'52", long 82°32'38", Washington County, Hydrologic Unit 06010108, at bridge on State Highway 81, 4.2 miles northwest of Jonesboro, 0.7 mile west of Fairview.	9.86	1955-73, 1987	1-14-87 5-12-87 9-29-87	2.3 9.8 1.6
03466256	College Creek at at Tusculum, TN	Lat 36°09'55", long 82°45'17", Greene County, Hydrologic Unit 06010108, at bridge on county road, 4.0 miles east of Greenville, 0.7 mile south of Tusculum.	3.48	1986-87	1-14-87 5-13-87 9-29-87	1.3 3.6 1.5
03466295	Camp Creek at Camp Creek, TN	Lat 36°05'39", long 82°45'37", Greene County, Hydrologic Unit 06010108, at bridge on county road at Camp Creek, 2.0 miles southeast of Jones Bridge, 6.2 miles northeast of Nolichucky Dam.	9.99	1961, 1983-87	1-14-87 5-13-87 9-29-87	16 28 7.8
*03467993	Cedar Creek near Valley Home, TN	Lat 36°08'03", long 83°18'47", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 2.2 miles northwest of White Pine, 1.9 miles south- east of Valley Home.	2.01	1986-87	1-15-87 5-14-87 9-29-87	1.0 1.3 .31
*03467998	Sinking Fork at White Pine, TN	Lat 36°07'21", long 83°17'44", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 2.7 miles north- east of Kimbrough Crossroads, 0.9 mile northwest of White Pine.	6.38	1986-87	1-15-87 5-14-87 9-29-87	1.3 2.6 .80
03469610	Cove Creek at Hatchertown, TN	Lat 35°43'47", long 83°37'43", Sevier County, Hydrologic Unit 06010107, at culvert on county road, 7.8 miles southwest of Pigeon Forge, and at mile 6.3.	2.64	1983-87	1-15-87 5-11-87 9-28-87	3.6 6.6 2.2
03472600	Beaverdam Creek at Shady Valley, TN	Lat 36°31'14", long 81°55'55", Johnson County, at bridge on U.S. Highway 421 at Shady Valley, 900 ft downstream of Green Mountain Branch.	14.3	1952-54 1957, 1959, 1987	1-14-87 5-12-87 9-29-87	13 16 3.3
03476515	Beidleman Creek near Caywood Ford, TN	Lat 36°31'28", long 82°07'53", Sullivan County, Hydrologic Unit 06010102, at second bridge upstream from mouth, 0.7 mile north of Caywood Ford, 2.4 miles west of South Holston Dam.	27.4	1975-81, 1983-87	1-14-87 5-12-87 9-28-87	15 38 7.3
*03481600	Corn Creek at Mountain City, TN	Lat 36°29'23", long 81°48'52", Johnson County, Hydrologic Unit 06010103, at bridge on county road, 600 ft north of junction of county road and U.S. Highway 421, 1.0 mile northwest of Mountain City.	5.34	1986-87	1-14-87 5-13-87 9-29-87	1.8 2.7 .42
03486313	Sinking Creek at Jonnnson City, TN	Lat 36°19'08", long 82°19'17", Washington County, Hydrologic Unit 06010103, at culvert on Dave Buck Road, 1.8 miles north- west of Cedar Grove, 0.5 mile east of Johnson City.	10.4	1986-87	1-14-87 5-13-87 9-29-87	5.2 12 3.6
03487509	Bear Creek at Sullivan Gardens, TN	Lat 36°28'23", long 82°35'50", Sullivan County, Hydrologic Unit 06010102, at culvert on State Highway 93, 1.0 mile northwest of Poplar Grove, 0.4 mile southwest of Sullivan Gardens.	3.39	1986-87	5-12-87 9-28-87	.42 .03

See footnotes at the end of the table.

Discharge measurements made at low-flow partial-record stations during water year 1987--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued						
03487545	Boozy Creek near Orebank, TN	Lat 36°34'24", long 82°24'44", Sullivan County, Hydrologic Unit 06010102, at culvert on U.S. Highway 11W, 2.9 miles northeast of Orebank.	10.8	1966, 1986-87	1-14-87 5-20-87 9-28-87	4.8 7.1 1.6
03490530	Forgey Creek near Surgoinville, TN	Lat 36°27'20", long 82°51'39", Hawkins County, Hydrologic Unit 06010104, at culvert on East Williams Road between Southern Railway and Old U.S. Highway 11W, 0.8 mile south of Surgoinville.	4.59	1962, 1986-87	5-12-87	3.2
*03494990	Flat Creek at Luttrell, TN	Lat 36°11'45", long 83°44'44", Union County, Hydrologic Unit 06010104, at bridge on State Highway 61, 3.5 miles northwest of Blaine, 0.3 mile southwest of Luttrell.	22.4	1986-87	1-15-87 5-12-87	6.1 8.5
03495400	Roseberry Creek at Shipetown, TN	Lat 36°04'43", long 83°46'14", Knox County, Hydrologic Unit 06010104, at bridge on Troutt Drive, 1.2 miles northeast of Sunrise, 1.2 miles northwest of Mascot, 0.5 mile northwest of Shipetown.	12.2	1986-87	1-15-87 5-11-87 9-29-87	3.6 5.7 .99
03495550	Love Creek at Knoxville, TN	Lat 36°00'30", long 83°50'20", Knox County, Hydrologic Unit 06010104, at culvert on Holston Drive, 0.7 mile east of Chilhowee School, 0.5 mile west of sewage disposal plant, and at mile 0.7.	8.28	1986-87	1-15-87 5-11-87 9-29-87	4.2 6.0 2.8
*03527800	Big War Creek at Luther, TN	Lat 36°27'18", long 83°14'29", Hancock County, Hydrologic Unit 06010205, at bridge on county road, 6.0 miles south- west of Sneedville, 0.8 mile northwest of Yount Town, 0.4 mile south of Luther.	22.3	1986-87	5-12-87 9-29-87	12 2.1
03528385	Fall Creek at Licksillet, TN	Lat 36°17'15", long 83°48'00", Union County, Hydrologic Unit 06010205, at culvert on State Highway 170, 7.0 mile northeast of Big Ridge State Park, 2.6 mile north of Maynardville.	3.78	1986-87	1-14-87 5-11-87 9-29-87	1.5 2.0 .87
*03528390	Crooked Creek near Maynardville, TN	Lat 36°15'36", long 83°50'25", Union County, Hydrologic Unit 06010205, at culvert on State Highway 170, 5.5 miles northeast of Paulette, 2.5 miles northwest of Maynardville.	2.23	1986-87	1-14-87 5-11-87	.87 1.3
03534927	Bullrun Creek near Luttrell, TN	Lat 36°14'18", long 83°44'43", Union County, Hydrologic Unit 06010207, at culvert on State Highway 61, 3.0 miles southeast of Maynardville, 2.5 miles north of Luttrell.	9.51	1986-87	1-14-87 5-11-87	2.4 3.6
03534975	North Fork Bullrun Creek below Maynardville, TN	Lat 36°13'47", long 83°49'18", Union County, Hydrologic Unit 06010207, south of State Highway 33, 1.5 miles south- west of high school in Maynardville, and at mile 3.2.	6.79	1986-87	1-14-87 5-11-87	2.1 3.5
03534990	Raccoon Creek at Paulette, TN	Lat 36°11'12", long 83°53'19", Union County, Hydrologic Unit 06010207, at culvert on county road, 6.8 miles southwest of Maynardville, 0.4 mile south- east of Paulette.	5.10	1986-87	1-14-87 5-11-87 9-28-87	1.7 3.0 1.2

See footnotes at the end of the table.

Discharge measurements made at low-flow partial-record stations during water year 1987--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued						
03555882	Barney Creek near Coker Creek, TN	Lat 35°14'29", long 84°19'04", Monroe County, Hydrologic Unit 06020002, at bridge on State Highway 68, 1.6 miles northeast of Ironsburg, and 75 ft above mouth.	4.29	1986-87	1-14-87 5-12-87 9-28-87	2.6 2.4 .39
03556610	Junebug Creek at Reliance, TN	Lat 35°11'24", long 84°30'22", Polk County, Hydrologic Unit 06020002, at culvert on State Highway 30, 2.4 miles southeast of Oswald Dome, 0.2 mile north- west of Reliance, and at mile 0.1.	2.20	1986-87	1-14-87 5-13-87 9-28-87	.74 .72 .11
03566111	Little South Mouse Creek near Charleston, TN	Lat 35°16'13", long 84°46'55", Bradley County, Hydrologic Unit 06020002, at bridge on Walker Valley Road, 2.0 miles southwest of Charleston, and at mile 0.6.	5.58	1967, 1986-87	1-14-87 5-13-87 9-28-87	3.8 3.4 .71
03566200	Brymer Creek near McDonald, TN	Lat 35°07'20", long 84°57'00", Bradley County, Hydrologic Unit 06020002, at bridge on U.S. Highways 11 and 64, 1.9 miles east of McDonald.	9.68	1983-87	10- 7-86 8-20-87	1.1 1.5
03566253	Greasy Creek at Hopewell, TN	Lat 35°12'17", long 84°53'11", Bradley County, Hydrologic Unit 06020002, at bridge on Eureka Road, 0.2 mile north of Hopewell, 3.9 miles north of Cleveland, and at mile 0.9.	3.12	1979-81, 1983-87	1-14-87 5-13-87 9-28-87	1.6 2.6 0
03566430	Little Wolftever Creek near Ooltewah, TN	Lat 35°04'42", long 85°03'36", Hamilton County, Hydrologic Unit 06020001, at bridge on Ooltewah-Ringgold Road, 0.4 mile north of Ooltewah.	10.58	1964-71, 1973, 1987	5-13-87	.96
03582205	Norris Creek below Howell, TN	Lat 35°13'33", long 86°33'56", Lincoln County, Hydrologic Unit 06030003, at bridge on U.S. Highway 231, 2.6 miles east of Howell, 5.1 miles north of Fayetteville, and at mile 8.4.	15.1	1952, 1975, 1978-81, 1983-87	10- 7-86 5-18-87 6-29-87 8-17-87	.31 2.0 .59 .19
03593115	Lick Creek near Michie, TN	Lat 35°04'30", long 88°25'47", McNairy County, Hydrologic Unit 06040001, at county road bridge, 1.7 miles north of Michie, and at mile 11.2.	9.93	1982-87	5-15-87 7-21-87	2.8 .31
03599960	Aenon Creek near Spring Hill, TN	Lat 35°43'39", long 86°54'20", Maury County, Hydrologic Unit 06040003, at bridge on John Lund Road, 2.1 miles southeast of Spring Hill.	14.2	1986-87	4-21-87 4-28-87 7-30-87 8-26-87	12 5.4 .11 .01
03599965	Rutherford Creek near Spring Hill, TN	Lat 35°42'57", long 86°55'02", Maury County, Hydrologic Unit 06040003, 2.5 miles southeast of Spring Hill, and at mile 19.6.	39.3	1986-87	4-21-87 4-28-87 8-26-86	32 16 0
03599970	McCutcheon Creek near Spring Hill, TN	Lat 35°43'39", long 86°55'27", Maury County, Hydrologic Unit 06040003, at bridge on John Lund Road, 1.6 miles southeast of Spring Hill.	10.2	1986-87	4-21-87 4-28-87 6- 3-87 8-26-87	8.6 3.4 1.1 <.01
03599980	Rutherford Creek near Neapolis, TN	Lat 35°41'36", long 86°57'06", Maury County, Hydrologic Unit 06040003, at bridge on Greens Mill Road, 0.4 mile west of Lanton Church, 1.7 miles southeast of Neapolis, and at mile 13.9.	58.2	1986-87	4-28-87 8-26-87	22 .01
03600085	Carters Creek at Petty Lane near Carters Creek, TN	Lat 35°43'39", long 86°59'19", Maury County, Hydrologic Unit 06040003, at bridge on Petty Lane, 0.8 mile north of Carters Creek, and at mile 4.7.	16.6	1986-87	10-17-86 1-21-87 4-14-87 6- 2-87 7-30-87 8-12-87	.53 41 18 1.9 .33 .16

Discharge measurements made at low-flow partial-record stations during water year 1987--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
TENNESSEE RIVER BASIN--Continued						
03600086	Carters Creek Tributary near Carters Creek, TN	Lat 35°43'34", long 86°59'19", Maury County, Hydrologic Unit 06040003, at culvert on Carters Creek Road, 0.7 mile north of Carters Creek.	2.94	1986-87	10-17-86 1-21-87 4-14-87 4-28-87 6- 2-87 8-12-87	.11 8.0 9.1 .74 .38 .02
03600093	Carters Creek near Darks Mill, TN	Lat 35°41'25", long 87°00'33", Maury County, Hydrologic Unit 06040003, at bridge on Harlan Road, 0.7 mile north of Darks Mill.	32.7	1960, 1986-87	4-28-87 8-26-87	13 .03
03600360	Snow Creek near Santa Fe, TN	Lat 35°43'31", long 87°07'36", Maury County, Hydrologic Unit 06040003, above Howard Woody Spring, at State Highway 7 bridge, 0.4 mile above Beech Creek, 0.65 mile south of Santa Fe.	11.1	1962-63, 1965, 1986-87	4-28-87 8-26-87	7.0 2.4
03600370	Snow Creek near Williamsport, TN	Lat 35°41'41", long 87°11'18", Maury County, Hydrologic Unit 06040003, 300 feet downstream from first bridge upstream from mouth, 2.0 miles east of Williamsport.	23.2	1944, 1953-54, 1986-87	4-28-87 8-26-87	15 0
03600380	Leipers Creek at Williamsport, TN	Lat 35°41'43", long 87°12'10", Maury County, Hydrologic Unit 06040003, 200 feet upstream from mouth, 1.0 mile east of Williamsport.	37.5	1944, 1953-54, 1986-87	4-28-87 8-26-87	29 3.1
03601100	Big Bigby Creek at Needmore, TN	Lat 35°32'43", long 87°14'05", Maury County, Hydrologic Unit 06040003, at county road at Needmore, 1.2 miles downstream from West Fork, 1.7 miles west of Mount Pleasant.	48.3	1934, 1969, 1972-73, 1978-81, 1983-87	10- 1-86 5-19-87 6-30-87 8-18-87	6.0 14 8.7 9.4
03602192	West Piney River near Dickson, TN	Lat 36°01'40", long 87°27'00", Dickson County, Hydrologic Unit 06040003, at State Highway 48 bridge, 2.3 miles northeast of Oak Grove, and at mile 1.2.	21.2	1950-52, 1962-63, 1965, 1979-81, 1983-87	10-15-86 5-20-87 8-25-87	8.0 14 7.4
03602194	West Piney River below State Highway 48 near Dickson, TN	Lat 36°00'43", long 87°26'33", Dickson County, Hydrologic Unit 06040003, at mouth, 5.4 miles southwest of Dickson.	25.7	1981, 1984-87	10-15-86 5-20-87 8-25-87 9-10-87	7.6 16 7.0 7.3
03602209	Piney River near Oak Grove, TN	Lat 36°00'36", long 87°26'38", Dickson County, Hydrologic Unit 06040003, 2.2 miles east of Oak Grove.	44.1	1984-87	10-15-86 5-20-87 8-25-87 9-10-87	11 24 9.1 9.8
03602230	Piney River above Pinewood, TN	Lat 35°57'11", long 87°27'53", Hickman County, Hydrologic Unit 06040003, at county road crossing, 0.7 miles below mouth of Plunders Creek, 2.8 miles north of Pinewood, and at mile 17.2.	77.5	1984-87	10-16-86 5-20-87 8-25-87	19 42 17
03602265	Piney River at Pinewood, TN	Lat 35°54'37", long 87°28'04", Hickman County, Hydrologic Unit 06040003, at county road crossing at Pinewood, 200 ft below mouth of Little Spring Creek, and at mile 13.5.	150	1984-87	10-15-86 5-20-87 8-25-87	44 86 39
03604750	Birdsong Creek at Holladay, TN	Lat 35°52'53", long 88°08'39", Benton County, Hydrologic Unit 06040005, at bridge on State Highway 69, 0.7 mile north of Holladay.	15.7	1975-78, 1980-87	5-13-87 7-22-87	7.4 .41

Discharge measurements made at low-flow partial-record stations during water year 1987--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
TENNESSEE RIVER BASIN--continued						
03606350	Big Sandy River at Westport, TN	Lat 35°53'34", long 88°18'32", Carroll County, Hydrologic Unit 06040005, at county road bridge, 0.3 mile southeast of Westport, and at mile 43.4.	110	1975-78, 1980-87	5-13-87 7-22-87	38 29
OBION RIVER BASIN						
07024310	Rock Creek near Huntingdon, TN	Lat 36°00'23", long 88°27'17", Carroll County, Hydrologic Unit 08010203, at bridge on U.S. Highway 70-A, 1.5 miles northwest of Huntingdon, and at mile 0.7.	4.51	1986-87	5-14-87 7-22-87	4.7 .01
07024760	Spring Creek near Greenfield, TN	Lat 36°11'24", long 88°45'53", Weakley County, Hydrologic Unit 08010203, at bridge on State Highway 54, 3.2 miles northeast of Greenfield, and at mile 2.3.	93.4	1955, 1975-78, 1980-87	5-14-87 7-23-87	25 22
07025190	Mud Creek near Sharon, TN	Lat 36°15'59", long 88°50'05", Weakley County, Hydrologic Unit 08010203, at bridge on U.S. Highway 45-E, 2.2 miles north of Sharon, and at mile 11.0.	45.6	1958, 1975-78, 1980-87	5-14-87 7-23-87	.61 .05
07025300	North Fork Obion River at Jones Mill, TN	Lat 36°26'46", long 88°27'57", Henry County, Hydrologic Unit 08010202, at county road bridge at Jones Mill, and at mile 42.8.	83.7	1958-61, 1964, 1975-78, 1980-87	5-14-87 7-23-87	26 35
07025305	Terrapin Creek at Midway, TN	Lat 36°29'54", long 88°29'24", Henry County, Hydrologic Unit 08010202, at bridge on State Highway 69, 0.75 mile northeast of Midway, and at mile 2.4.	44.2	1987	5-15-87 7-23-87	9.0 7.6
07026090	Cool Springs Branch near Trimble, TN	Lat 36°11'15", long 89°11'03", Dyer County, Hydrologic Unit 08010202, at bridge on State Highway 105, 1.1 miles south- east of Trimble, and at mile 2.5.	10.7	1986-87	5-14-87 7-23-87	.65 .31
07026100	Reeds Creek near Trimble, TN	Lat 36°10'48", long 89°15'15", Dyer County, Hydrologic Unit 08010202, at county road bridge, 0.4 mile north of Locust Grove, 4.0 miles southwest of Trimble, and at mile 1.6.	51.8	1975-78, 1980-87	5-14-87	3.9
07027270	Tar Creek at Oak Grove, TN	Lat 35°24'02", long 88°34'54", Chester County, Hydrologic Unit 08010205, at bridge on Finger Road, 0.3 mile south of Oak Grove.	16.4	1982-87	5-14-87 7-21-87	4.5 3.0
07027280	Jacks Creek at Jacks Creek, TN	Lat 35°28'16", long 88°31'21", Chester County, Hydrologic Unit 08010205, at bridge on State Highway 100, at town of Jacks Creek, and at mile 8.5.	17.9	1975-78, 1980-87	5-14-87 7-21-87	1.9 1.1
HATCHIE RIVER BASIN						
07029620	Pugh Creek at Toone, TN	Lat 35°20'57", long 88°57'08", Hardeman County, Hydrologic Unit 08010208, at bridge on State Highway 138, at Toone.	2.05	1987	12- 5-86 5-14-87 5-27-87 7-10-87 7-21-87 8-19-87	1.3 .94 1.6 1.1 .68 .82
07030160	Indian Creek at Gilt Edge, TN	Lat 35°33'09", long 89°49'20", Tipton County, Hydrologic Unit 08010208, at bridge on State Highway 59, at Gilt Edge.	65.9	1976-78, 1980-81, 1983-87	5-14-87	3.4

* Also crest-stage partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites

Measurements of streamflow at points other than gaging stations are given in the following table. Measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1987

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
GREEN RIVER BASIN						
03312293 White Oak Creek	Long Fork to Barren River to Green River	Lat 36°34'48", long 85°58'49", Macon County, Hydrologic Unit 05110002, at ford on secondary road, 1.1 miles northwest of Galen.	18.1		9-25-87	*5.8
CUMBERLAND RIVER BASIN						
03414415 Little Laurel Creek	Big Laurel Creek to East Fork Obey River to Cumberland River	Lat 36°16'36", long 85°06'13", Fentress County, Hydrologic Unit 05130105, at bridge on State Highway 85 at Davidson.	3.23		10-28-86 12- 9-86 1-13-87 2-24-87	*.72 48 2.3 16
03418000 Roaring River	Cumberland River	Lat 36°20'27", long 85°25'35", Overton County, Hydrologic Unit 05130106, on left bank 700 ft upstream from Cleek Branch, 0.2 mile downstream from bridge on State Highway 136, 1.4 miles upstream from Flat Creek, 2.7 miles west of Windle, 5.0 miles south of Hilham, and at mile 22.2	78.7	1932-75†, 1977	3-17-87 4-29-87 5- 5-87 5-18-87 7-20-87 8-10-87 8-27-87 9- 3-87 10- 1-87	76 51 36 20 39 195 *1.3 *.74 *3.9
03432856 Little Harpeth River	Harpeth River to Cumberland River	Lat 35°57'07", long 86°45'47", Williamson County, Hydrologic Unit 05130204, 1.9 miles north of Clovercroft, 2.7 miles southeast of intersection of Moores Lane and I-65.	0.27	1986	9-17-87 9-23-87	*.04 *.03
03432870 Little Harpeth River	Harpeth River to Cumberland River	Lat 35°57'21", long 86°46'09", Williamson County, Hydrologic Unit 05130204, 2.2 miles north of Clovercroft, 2.3 miles east of intersection of Moores Lane and I-65.	2.58	1986	9-23-87	*.08
03432872 Little Harpeth River	Harpeth River to Cumberland River	Lat 35°57'37", long 86°46'19", Williamson County, Hydrologic Unit 05130204, 2.0 miles east of intersection of Moores Lane and I-65, 2.5 miles north of Clovercroft.	2.67	1986	9-23-87	0
03581070 East Fork Mulberry Creek	Mulberry Creek to Elk River to Tennessee River	Lat 35°16'09", long 86°23'36", Moore County, Hydrologic Unit 06030003, above sewage treatment plant outfall, 0.4 mile below Price Branch, 1.3 miles southwest of Lynchburg.	--		9-16-87	5.9
03581115 East Fork Mulberry Creek	Mulberry Creek to Elk River to Tennessee River	Lat 35°15'31", long 86°23'20", Moore County, Hydrologic Unit 06030003, 600 ft above mouth of Pitts Branch, 1.8 miles southwest of Lynchburg.	--		9-16-87	6.7
TENNESSEE RIVER BASIN						
03599967 McCutcheon Creek	Duck River to Tennessee River	Lat 35°44'28", long 86°55'30", Maury County, Hydrologic unit 06040003, 3.1 miles northwest of Kedron, 3.5 miles northeast of Neapolis, and at mile 2.0.	4.32	1986	6- 3-87	*.43
03599968 McCutcheon Creek	Duck River to Tennessee River	Lat 35°44'37", long 86°56'21", Maury County, Hydrologic Unit 06040003, below State Highway 31 bridge at Spring Hill, 3.1 miles northeast of Neapolis, 3.6 miles northeast of Kedron, and at mile 0.9.	3.08	1986	4-22-87	*2.3

† Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1987--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Discharge (ft ³ /s) Date
TENNESSEE RIVER BASIN--continued					
035999682 McCutcheon Creek Tributary	McCutcheon Creek to Duck River to Tennessee River	Lat 35°44'27", long 85°55'32", Maury County, Hydrologic Unit 06040003, 60 ft above bridge on Kedron Road, 0.6 mile southeast of Spring Hill.	3.46		4-22-87 *2.3 6- 3-87 *.23
035999683 McCutcheon Creek Tributary	McCutcheon Creek to Duck River to Tennessee River	Lat 35°45'11", long 86°56'20", Maury County, Hydrologic Unit 06040003, at bridge on Beechcroft Street, 0.5 mile west of Spring Hill.	0.47		4-22-87 *.21
035999689 Unnamed Tributary to McCutcheon Creek	McCutcheon Creek to Duck River to Tennessee River	Lat 35°44'28", long 86°55'32", Maury County, Hydrologic Unit 06040003, 10 ft above mouth, above bridge on Kedron Road, 0.6 mile southeast of Spring Hill.	1.35		6- 3-87 *.37
035999697 McCutcheon Creek Tributary	McCutcheon Creek to Duck River to Tennessee River	Lat 35°43'47", long 86°55'29", Maury County, Hydrologic Unit 06040003, at bridge on Kedron road, 1.2 miles southeast of Spring Hill.	0.47		6- 3-87 *.01
03599971 McCutcheon Creek	Duck River to Tennessee River	Lat 35°42'56", long 86°55'16", Maury County, Hydrologic Unit 06040003, 400 ft above mouth, 1.6 miles northwest of Kedron, 2.5 miles south of Spring Hill, 3.0 miles east of Neapolis.	11.1	1986	6- 3-87 *1.4
03600084 Carters Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°44'16", long 86°59'20", Maury County, Hydrologic Unit 06040003, 1.5 miles north of Carters Creek, 2.1 miles northwest of Neapolis, 3.4 miles southwest of Spring Hill.	15.9		2-12-87 10
0360008454 Carters Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°44'01", long 86°59'24", Maury County, Hydrologic Unit 06040003, 1.2 miles north of Carters Creek, 1.9 miles northwest of Neapolis, 3.6 miles southwest of Spring Hill.	16.2		2-12-87 10
036000846 Carters Creek Tributary	Carters Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'01", long 86°59'26", Maury County, Hydrologic Unit 06040003, at mouth, at bridge on Petty Lane, 1.2 miles north of Carters Creek, 1.9 miles northwest of Neapolis, 3.6 miles southwest of Spring Hill.	.21	1986	2-12-87 *.02
0360008465 Carters Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°43'57", long 86°59'24", Maury County, Hydrologic Unit 06040003, 1.1 miles north of Carters Creek, 1.8 miles northwest of Neapolis, 3.6 miles southwest of Spring Hill.	16.4		2-12-87 10
036000847 Carters Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°43'52", long 86°59'22", Maury County, Hydrologic Unit 06040003, 1.0 mile north of Carters Creek, 1.8 miles northwest of Neapolis, 3.6 miles southwest of Spring Hill.	16.4		2-12-87 9.9
0360008475 Carters Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°43'48", long 86°59'22", Maury County, Hydrologic Unit 06040003, 0.9 mile north of Carters Creek, 1.7 miles northwest of Neapolis, 3.6 miles southwest of Spring Hill.	16.4		2-12-87 9.9

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1987--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Discharge (ft ³ /s) Date
OBION RIVER BASIN					
07025400 North Fork Obion River	Obion River	Lat 36°24'20", long 88°51'20", Weakley County, Hydrologic Unit 08010202, at bridge on U.S. Highway 45E, 4.0 miles north of Martin.	372	1939-49, 1953-87a	10-16-86 143 12- 5-86 193 1-14-87 191 2-18-87 430 4- 8-87 200 5-28-87 128 7- 7-87 216 8-18-87 133
07027800 South Fork Forked Deer River	Forked Deer River to Obion River	Lat 35°48'50", long 89°21'30", Lauderdale County, Hydrologic Unit 08010205, at bridge on State Highway 88, 3.9 miles southeast of Gates.	932	1954-68, 1969-87a	10-17-86 256 12- 2-86 1010 1-15-87 466 2-26-87 1880 4- 9-87 516 5-28-87 634 7- 9-87 354 8-19-87 257
07028100 South Fork Forked Deer River	Forked Deer River to Obion River	Lat 35°55'45", long 89°23'22", Lauderdale County, Hydrologic Unit 08010205, at bridge on Lauderdale County Road 217, 3.6 miles north of Halls, and at mile 11.3.	1019	1939-87a	12- 3-86 898 1-15-87 487 2-25-87 1810 4- 9-87 518 5-28-87 603 7- 9-87 402 8-19-87 225
07029100 North Fork Forked Deer River	Forked Deer River to Obion River	Lat 36°01'49", long 89°23'13", Dyer County, Hydrologic Unit 08010204, at bridge on business route of U.S. Highway 51, 0.2 mile south of county courthouse in Dyersburg, and at mile 7.2.	939	1939-87a	12- 3-86 338 1-13-87 276 2-25-87 1280 4- 9-87 265 5-29-87 198 7- 9-87 658 8-19-87 161
WOLF RIVER BASIN					
07031655 Wolf River	Mississippi River	Lat 35°07'11", long 89°49'43", Shelby County, Hydrologic Unit 08010210, at end of farm road on right bank, 1.6 mile downstream from German- town Road.	--	1987	11- 4-86 271
07031658 Wolf River	Mississippi River	Lat 35°07'31", long 89°50'50", Shelby County, Hydrologic Unit 08010210, at upstream side of Shelby County Landfill, 0.66 mile upstream from Walnut Grove Road.	--	1987	11- 4-86 265
07031663 Wolf River	Mississippi River	Lat 35°08'29", long 89°52'04", Shelby County, Hydrologic Unit 08010210, at end of farm road on right bank 0.90 mile downstream from Walnut Grove Road.	--	1987	11- 4-86 284

a Operated as a continuous-record station by the U.S. Army Corps of Engineers.

Springs

In 1931 a study of large springs in Tennessee was made and the results published in WSP 713. From 1950 to 1954 a more detailed study, including some of these springs, was made. Results of this study and all subsequent spring measurements were published annually in WSP's from 1950 to 1960. Since 1960 results of measurements have been published in annual State reports. Measurements made in the 1987 water year are given in the following table.

Discharge measurement of springs during water year 1987

Site number and name	Location	Tributary to	Date	Discharge (gpm)	Discharge (ft ³ /sec)
Hamilton County					
03566940 Standifer Spring	Lat 35°02'31", long 85°07'12", Hydrologic Unit 06020001, 2.25 miles southwest of Summit, 4.0 miles southwest of Ooltewah.	Mackey Branch to South Chickamauga Creek to Tennessee River	5-13	76	0.17
Macon County					
03312294 Goodwin Spring	Lat 36°35'18", long 85°59'15", Hydrologic Unit 05110002, 0.7 mile south of White Oak, 1.5 miles northwest of Galen.	White Oak Creek to Long Fork to Barren River to Green River	8- 9	49	0.11
03312410 Horace White Spring	Lat 36°35'01", long 86°02'38", Hydrologic Unit 05110002, 4.0 miles northeast of Lafayette, 4.6 miles west of Galen.	Spring Creek to Puncheon Creek to Barren River to Green River	8- 9 9-25	850 450	1.9 1.0
03312420 Adams Spring	Lat 36°37'20", long 85°58'35", Hydrologic Unit 05110002, 7.0 miles north of Lafayette, 3.1 miles northwest of Galen.	Unnamed tributary to Puncheon Creek to Barren River to Green River	8- 9 9-25	320 270	0.71 0.60
Putnam County					
03418025 Spring Creek Spring	Lat 36°12'17", long 85°21'25", Hydrologic Unit 05130106, 1.7 miles northeast of Brothernton.	Spring Creek to Roaring River to Cumberland River	12-16 3-17 4-29 5- 5 5-18 7-20 8- 4 8-10 8-27 9- 3 10- 1	4,890 4,260 1,880 1,170 450 490 250 850 220 180 380	10.9 9.5 4.2 2.6 1.0 1.1 0.56 1.9 0.48 0.40 .85
Williamson County					
03432850 Farrar Spring	Lat 35°56'51", long 86°45'24", Hydrologic Unit 05130204, 1.7 miles northeast of Clovercroft, 3.1 miles southeast of inter- section of Moores Lane and I-65.	Little Harpeth River to Harpeth River to Cumberland River	4-20	4	.01
03432860 Hackett Spring	Lat 35°57'10", long 86°45'57", Hydrologic Unit 05130204, 2.0 miles north of Clovercroft, 2.5 miles east of intersection of Moores Lane and I-65.	Little Harpeth River to Harpeth River to Cumberland River	4-20	290	0.64
03432868 Smith Spring	Lat 35°57'10", long 86°46'03", Hydrologic Unit 05130204, 2.0 miles north of Clovercroft, 2.4 miles east of intersection of Moores Lane and I-65.	Little Harpeth River to Harpeth River To Cumberland River	4-20	260	0.59
03432873 Kennon Spring	Lat 35°57'39", long 86°45'28", Hydrologic Unit 05130204, 2.6 miles north of Clovercroft, 2.8 miles east of intersection of Moores Lane and I-65.	Little Harpeth River Tributary to Little Harpeth River to Harpeth River to Cumberland River	4-20	150	0.33

Brentwood, TN (Williamson County), seepage investigations

A series of low-flow discharge measurements were made April 20, 1987, in the vicinity of Brentwood, TN (Williamson County), to define the losing and gaining reaches of streams draining the area at base flow conditions. In addition, measurements of water temperature and specific conductance were taken at each site. The area studied included the main stem of the Little Harpeth River and its tributaries from mile 13.9 to mile 16.0. The measurements were made during a period of constant base flow. Tributary flow was considered a contribution and not a gain. A previous seepage investigation of this reach was made in 1986.

Little Harpeth River Mile	Site number and stream	Location	Drainage Area (mi ²)	Meas. disch. (ft ³ /s)	Little Harpeth River gain or loss	Water temp. (°C)	Specific conductance (us/cm)
16.0	03432852 Little Harpeth River Tributary	Lat 35°56'59", long 86°45'21", Williamson County, Hydrologic Unit 05130204, at Splitlog Road, 1.9 miles northeast of Clovercroft, and at mile 0.1.	0.17	0.00	---	---	---
15.8	03432854 Little Harpeth River	Lat 35°56'60", long 86°45'43", Williamson County, Hydrologic Unit 05130204, at Splitlog Road, 1.8 miles north of Clovercroft.	0.71	0.55	+5.5	16.0	400
15.5	03432856 Little Harpeth River	Lat 35°57'07", long 86°45'47", Williamson County, Hydrologic Unit 05130204, 1.9 miles north of Clovercroft, 2.7 miles southeast of intersection of Moores Lane and I-65.	0.77	0.60	+0.5	16.0	385
15.5	03432857 Little Harpeth River Tributary	Lat 35°57'09", long 86°45'19", Williamson County, Hydrologic Unit 05130204, 2.1 miles northeast of Clovercroft, 3.1 miles east of intersection of Moores Lane and I-65, and at mile 0.5.	0.27	0.00	---	---	---
15.5	03432858 Little Harpeth River Tributary	Lat 35°57'08", long 86°45'47", Williamson County, Hydrologic Unit 05130204, at mouth, 2.0 miles north of Clovercroft, 2.7 miles east of intersection of Moores Lane and I-65.	0.43	0.08	---	16.5	430
15.3	03432861 Little Harpeth River	Lat 35°57'08", long 86°45'59", Williamson County, Hydrologic Unit 05130204, at Wilson Pike, 2.0 miles north of Clovercroft.	1.23	0.88	+2.0	15.5	420
15.3	03432863 Little Harpeth River Tributary	Lat 35°56'51", long 86°46'04", Williamson County, Hydrologic Unit 05130204, 1.6 miles north of Clovercroft, 2.6 miles southeast of intersection of Moores Lane and I-65, and at mile 0.4.	0.57	0.00	---	---	---
15.3	03432865 Unnamed Tributary to Little Harpeth River Tributary	Lat 35°56'50", long 86°46'06", Williamson County, Hydrologic Unit 05130204, 1.6 miles north of Clovercroft, 2.5 miles southeast of intersection of Moores Lane and I-65, and at mile 0.1.	0.24	0.29	---	22.0	450
15.3	03432867 Little Harpeth River Tributary	Lat 35°57'06", long 86°46'00", Williamson County, Hydrologic Unit 05130204, at mouth, 1.9 miles north of Clovercroft, 2.5 miles southeast of intersection of Moores Lane and I-65.	0.90	0.09	---	17.0	440
15.0	03432870 Little Harpeth River	Lat 35°57'21", long 86°46'09", Williamson County, Hydrologic Unit 05130204, 2.2 miles north of Clovercroft, 2.3 miles east of intersection of Moores Lane and I-65.	2.58	1.74	+7.7	14.5	440
14.8	03432871 Little Harpeth River	Lat 35°57'26", long 86°46'15", Williamson County, Hydrologic Unit 05130204, 2.3 miles north of Clovercroft, 2.1 miles east of intersection of Moores Lane and I-65.	2.60	1.92	+1.8	15.0	440
14.6	03432872 Little Harpeth River	Lat 35°57'37", long 86°46'19", Williamson County, Hydrologic Unit 05130204, 2.0 miles east of intersection of Moores Lane and I-65, 2.5 miles north of Clovercroft.	2.67	2.25	+3.3	17.5	430

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Brentwood, TN (Williamson County), seepage investigations--continued

Little Harpeth River Mile	Site number and stream	Location	Drainage Area (mi ²)	Meas. disch. (ft ³ /s)	Little Harpeth River gain or loss	Water temp. (°C)	Specific conductance (us/cm)
14.6	034328728 Little Harpeth River Tributary	Lat 35°57'39", long 86°46'20", Williamson County, Hydrologic Unit 05130204, at mouth, 2.0 miles east of intersection of Moores Lane and I-65, 2.5 miles north of Clovercroft.	1.44	1.10	---	19.5	455
14.6	03432874 Little Harpeth River Tributary	Lat 35°57'39", long 86°45'58", Williamson County, Hydrologic Unit 05130204, 2.3 miles east of intersection of Moores Lane and I-65, 2.5 miles north of Clovercroft, and at mile 0.3.	0.44	0.32	---	20.5	410
14.6	03432875 Little Harpeth River Tributary	Lat 35°57'38", long 86°46'17", Williamson County, Hydrologic Unit 05130204, at mouth, 2.0 miles east of intersection of Moores Lane and I-65, 2.5 miles north of Clovercroft.	0.53	0.41	---	18.5	460
14.4	03432877 Little Harpeth River Tributary	Lat 35°57'46", long 86°46'18", Williamson County, Hydrologic Unit 05130204, 400 feet above mouth, at Wilson Pike, 2.0 miles east of intersection of Moores Lane and I-65.	0.01	0.05	---	16.0	440
14.3	03432878 Little Harpeth River Tributary	Lat 35°57'51", long 86°46'19", Williamson County, Hydrologic Unit 05130204, 450 feet above mouth, at Wilson Pike, 2.0 miles east of intersection of Moores Lane and I-65, 2.7 miles north of Clovercroft.	0.29	0.00	---	---	---
14.0	03432880 Little Harpeth River Tributary	Lat 35°58'05", long 86°46'23", Williamson County, Hydrologic Unit 05130204, 700 ft above mouth, at Wilson Pike, 1.9 miles east of intersection of Moores Lane and I-65.	0.25	0.05	---	17.5	370
13.9	03432882 Little Harpeth River Tributary	Lat 35°58'07", long 86°46'38", Williamson County, Hydrologic Unit 05130204, at mouth, 1.7 miles east of intersection of Moores Lane and I-65, 3.2 miles north of Clovercroft.	0.55	0.51	---	18.0	460
13.9	03432883 Little Harpeth River	Lat 35°58'08", long 86°46'38", Williamson County, Hydrologic Unit 05130204, below Moores Lane, 1.7 miles east of intersection of Moores Lane and I-65, 3.2 miles north of Clovercroft.	5.99	4.46	+0.09	15.5	460

Sevier County, TN (Sevier County), seepage investigations

A series of low-flow discharge measurements were made April 23, 1987, in Sevier County, TN, to define the losing and gaining reaches of streams draining the area at base flow conditions. In addition, measurements of water temperature and specific conductance were taken at each site. The area studied was the Webb Creek basin from mile 2.6 to mile 6.2. The measurements were made during a period of constant base flow. Tributary flow was considered a contribution and not a gain.

Webb Creek Mile	Site number and stream	Location	Drainage Area (mi ²)	Meas. disch. (ft ³ /s)	Webb Creek gain or loss (-)	Water temp. (°C)	Specific conductance (us/cm)
6.2	034691035 Webb Creek	Lat 35°45'45", long 83°18'38", Sevier County, Hydrologic Unit 06010107, at State Highway 73 bridge, 5.1 miles southwest of Cosby, and 4.9 miles east of Pittman Center.	1.24	5.45	---	12.0	15
6.1	03469104 Webb Creek Tributary	Lat 35°45'48", long 83°18'39", Sevier County, Hydrologic Unit 06010107, at mouth, 5.1 miles southwest of Cosby, and 4.8 miles east of Pittman Center.	0.15	0.32	---	13.0	60
6.1	034691042 Webb Creek Tributary	Lat 35°45'52", long 83°18'42", Sevier County, Hydrologic Unit 06010107, at mouth, 5.0 miles southwest of Cosby and 4.8 miles east of Pittman Center.	0.20	1.14	---	12.5	38
6.0	034691044 Webb Creek	Lat 35°45'51", long 83°18'43", Sevier County, Hydrologic Unit 06010107, 200 ft upstream of Texas Creek, 5.1 miles south- west of Cosby, and 4.8 miles east of Pittman Center.	1.60	5.16	-1.75	12.5	22
6.0	034691047 Texas Creek	Lat 35°45'50", long 83°18'47", Sevier County, Hydrologic Unit 06010107, at mouth, 5.1 miles southwest of Cosby, and 4.7 miles east of Pittman Center.	1.91	6.93	---	13.0	21
6.0	03469105 Webb Creek	Lat 35°45'51", long 83°18'46", Sevier County, Hydrologic Unit 06010107, 75 ft downstream of Texas Creek, 5.1 miles south- west of Cosby, and 4.7 miles east of Pittman Center.	3.52	12.2	0.11	13.0	22
5.9	034691053 Webb Creek	Lat 35°45'52", long 83°18'54", Sevier County, Hydrologic Unit 06010107, 700 ft downstream of Texas Creek, 5.2 miles south- west of Cosby, and 4.6 miles east of Pittman Center.	3.62	13.7	1.50	13.0	25
5.8	034691055 Webb Creek	Lat 35°45'53", long 83°18'58", Sevier County, Hydrologic Unit 06010107, 900 ft downstream of Texas Creek, 5.3 miles south- west of Cosby, and 4.5 miles east of Pittman Center.	3.63	14.5	0.80	13.0	24
5.6	034691057 Webb Creek	Lat 35°45'50", long 83°19'09", Sevier County, Hydrologic Unit 06010107, 0.4 mile downstream of Texas Creek, 5.5 miles southwest of Cosby, and 4.4 miles east of Pittman Center.	3.69	12.3	-2.20	13.5	30
5.4	03469106 Webb Creek	Lat 35°45'47", long 83°19'19", Sevier County, Hydrologic Unit 06010107, 0.9 mile upstream of Noisy Creek, 5.6 miles southwest of Cosby, and 4.2 miles east of Pittman Center.	3.79	12.9	0.60	13.5	30
5.4	034691063 Webb Creek Tributary	Lat 35°45'46", long 83°19'21", Sevier County, Hydrologic Unit 06010107, at mouth, 0.8 mile upstream of Noisy Creek, 5.7 miles southwest of Cosby, and 4.2 miles east of Pittman Center.	0.27	0.99	---	14.0	22

Sevier County, TN (Sevier County), seepage investigations--Continued

Webb Creek Mile	Site number and stream	Location	Drainage Area (mi ²)	Meas. disch. (ft ³ /s)	Webb Creek gain or loss (-)	Water temp. (°C)	Specific conductance (us/cm)
5.1	034691065 Webb Creek	Lat 35°45'47", long 83°19'38", Sevier County, Hydrologic Unit 06010107, 0.6 mile upstream of Noisy Creek, 5.8 miles southwest of Cosby, and 3.9 miles east of Pittman Center.	4.10	12.9	-0.99	14.0	28
5.1	034691067 Webb Creek Tributary	Lat 35°45'47", long 83°19'39", Sevier County, Hydrologic Unit 06010107, at mouth, 0.6 mile upstream of Noisy Creek, 5.8 miles southwest of Cosby, and 3.9 miles east of Pittman Center.	0.36	0.52	---	14.5	60
4.9	03469107 Webb Creek Tributary	Lat 35°45'42", long 83°19'49", Sevier County, Hydrologic Unit 06010107, at mouth, 0.4 mile upstream of Noisy Creek, 5.9 miles southwest of Cosby, and 3.7 miles east of Pittman Center.	0.39	0.59	---	14.0	46
4.9	034691071 Webb Creek	Lat 35°45'43", long 83°19'49", Sevier County, Hydrologic Unit 06010107, 0.4 mile upstream of Noisy Creek, 5.9 miles southwest of Cosby, and 3.7 miles east of Pittman Center.	4.89	14.0	-0.01	14.0	30
4.8	034691073 Webb Creek	Lat 35°45'47", long 83°19'58", Sevier County, Hydrologic Unit 06010107, 0.3 mile upstream of Noisy Creek, 6.1 miles southwest of Cosby, and 3.6 miles east of Pittman Center.	4.90	16.1	2.10	14.0	33
4.6	034691075 Webb Creek Tributary	Lat 35°45'52", long 83°20'05", Sevier County, Hydrologic Unit 06010107, at mouth, 0.3 mile upstream of Noisy Creek, 6.1 miles southwest of Cosby, and 3.6 miles east of Pittman Center.	0.15	0.17	---	14.5	32
4.6	034691076 Webb Creek	Lat 35°45'51", long 83°20'06", Sevier County, Hydrologic Unit 06010107, 300 ft upstream of Noisy Creek, 6.2 miles south- west of Cosby, and 3.5 miles east of Pittman Center.	5.14	15.3	-0.97	14.0	33
4.6	034691078 Noisy Creek	Lat 35°45'48", long 83°20'07", Sevier County, Hydrologic Unit 06010107, at mouth, 6.2 miles southwest of Cosby, and 3.5 miles of Pittman Center.	1.68	5.63	---	13.0	17
4.4	03469108 Webb Creek	Lat 35°45'45", long 83°20'14", Sevier County, Hydrologic Unit 06010107, 700 ft downstream of Noisy Creek, 3.4 miles east of Pittman Center.	6.85	21.3	0.37	13.5	29
4.3	034691082 Webb Creek	Lat 35°45'40", long 83°20'21", Sevier County, Hydrologic Unit 06010107, 0.3 mile downstream of Noisy Creek, 3.3 miles east of Pittman Center.	6.90	21.8	0.50	13.5	29
4.0	034691085 Webb Creek	Lat 35°45'41", long 83°20'36", Sevier County, Hydrologic Unit 06010107, 300 ft upstream of Butler Branch, 3.0 miles east of Pittman Center.	7.08	20.0	-1.80	14.0	28
3.9	034691088 Butler Branch	Lat 35°45'46", long 83°20'44", Sevier County, Hydrologic Unit 06010107, at mouth, 2.9 miles east of Pittman Center.	0.77	0.72	---	15.0	64

Sevier County, TN (Sevier County), seepage investigations--Continued

Webb Creek Mile	Site number and stream	Location	Drainage Area (mi ²)	Meas. disch. (ft ³ /s)	Webb Creek gain or loss (-)	Water temp. (°C)	Specific conductance (us/cm)
3.9	03469109 Webb Creek	Lat 35°45'46", long 83°20'46", Sevier County, Hydrologic Unit 06010107, 50 ft downstream of Butler Branch, 2.9 miles east of Pittman Center.	7.87	23.4	2.68	14.0	28
3.8	034691093 Webb Creek	Lat 35°45'46", long 83°20'51", Sevier County, Hydrologic Unit 06010107, 0.1 mile downstream of Butler Branch, 2.8 miles east of Pittman Center.	7.90	24.5	1.10	14.0	29
3.7	034691096 Webb Creek	Lat 35°45'45", long 83°20'55", Sevier County, Hydrologic Unit 06010107, 400 ft upstream of Ramsey Creek, 2.7 miles east of Pittman Center.	7.97	24.6	0.10	14.0	29
3.6	034691102 Ramsey Creek	Lat 35°45'42", long 83°20'59", Sevier County, Hydrologic Unit 06010107, at mouth, 2.7 miles east of Pittman Center.	2.09	6.81	---	13.5	15
3.6	034691103 Webb Creek	Lat 35°45'43", long 83°20'58", Sevier County, Hydrologic Unit 06010107, 50 ft downstream of Ramsey Creek, 2.7 miles east of Pittman Center.	10.1	32.1	0.69	14.0	29
3.5	034691105 Webb Creek	Lat 35°45'44", long 83°21'08", Sevier County, Hydrologic Unit 06010107, 0.2 mile upstream of Warden Branch, 2.5 miles east of Pittman Center.	10.1	33.7	1.60	14.5	30
3.4	034691107 Webb Creek	Lat 35°45'41", long 83°21'12", Sevier County, Hydrologic Unit 06010107, 400 ft upstream of Warden Branch, 2.5 miles east of Pittman Center.	10.2	30.7	-3.00	14.5	30
3.3	034691112 Warden Branch	Lat 35°45'42", long 83°21'17", Sevier County, Hydrologic Unit 06010107, at mouth, 2.4 miles east of Pittman Center.	0.63	0.66	---	15.5	42
3.3	034691115 Webb Creek	Lat 35°45'40", long 83°21'19", Sevier County, Hydrologic Unit 06010107, 15 ft upstream of Darky Branch, 2.4 miles east of Pittman Center.	10.8	31.1	-0.26	14.5	30
3.3	034691118 Darky Branch	Lat 35°45'39", long 83°21'19", Sevier County, Hydrologic Unit 06010107, at mouth, 2.4 miles east of Pittman Center.	0.37	1.09	---	14.5	28
3.1	034691122 Webb Creek	Lat 35°45'36", long 83°21'23", Sevier County, Hydrologic Unit 06010107, 700 ft downstream of Darky Branch, 2.3 miles east of Pittman Center.	11.2	36.0	3.81	14.5	30
2.9	034691124 Webb Creek	Lat 35°45'34", long 83°21'28", Sevier County, Hydrologic Unit 06010107, 200 ft upstream of Mill Dam Branch, 2.2 miles east of Pittman Center.	11.3	36.4	0.40	14.5	31
2.9	034691126 Mill Dam Branch	Lat 35°45'36", long 83°21'29", Sevier County, Hydrologic Unit 06010107, at mouth, 2.2 miles east of Pittman Center.	0.69	0.59	---	14.5	39
2.7	034691128 Webb Creek	Lat 35°45'34", long 83°21'41", Sevier County, Hydrologic Unit 06010107, 0.3 mile upstream of Timothy Branch, 2.0 miles east of Pittman Center.	12.1	33.5	-3.49	14.5	32
2.6	03469113 Webb Creek	Lat 35°45'33", long 83°21'48", Sevier County, Hydrologic Unit 06010107, 0.2 mile upstream of Timothy Branch, 1.9 miles east of Pittman Center.	12.1	35.2	1.70	14.5	32

Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA), special study

A series of low-flow discharge measurements were made May 13, 1987, in the vicinity of Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA) to define potential ground-water resources in the area. In addition, measurements of water temperature and specific conductance were taken at each site. The measurements were made during a period of constant base flow.

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (C°)	Specific Cond. (us/cm)
03566406 Wolftever Creek	Tennessee River	Lat 35°02'09", long 84°59'49", Hamilton County, Hydrologic Unit 06020001, 1.8 miles northeast of Apison, 3.3 miles southeast of Collegedale.	1.58	0.55	16.0	230
03566407 Wolftever Creek	Tennessee River	Lat 35°02'58", long 84°59'56", Bradley County, Hydrologic Unit 06020001, 2.3 miles northeast of Apison, 2.9 miles east of Collegedale.	2.97	0.81	17.0	235
035664071 Phillips Branch	Wolftever Creek to Tennessee River	Lat 35°02'59", long 84°59'56", Bradley County, Hydrologic Unit 06020001, 2.4 miles northeast of Apison, 3.0 miles east of Collegedale.	0.81	<0.01	17.5	175
035664073 Wolftever Creek	Tennessee River	Lat 35°03'09", long 85°01'00", Hamilton County, Hydrologic Unit 06020001, 1.9 miles east of Collegedale, 2.1 miles north of Apison.	6.55	2.05	17.5	350
035664074 Wolftever Creek	Tennessee River	Lat 35°03'02", long 85°02'23", Hamilton County, Hydrologic Unit 06020001, 0.7 mile east of Collegedale, 1.9 miles north of Apison.	8.33	2.99	17.5	340
035664075 Chesnutt Creek	Wolftever Creek to Tennessee River	Lat 35°00'19", long 85°02'06", Hamilton County, Hydrologic Unit 06020001, 1.4 miles south of Apison, 3.6 miles east of West View.	0.97	0.07	20.0	178
035664077 Chesnutt Creek	Wolftever Creek to Tennessee River	Lat 35°01'17", long 85°02'04", Hamilton County, Hydrologic Unit 06020001, 0.6 mile west of Apison, 2.4 miles southeast of Collegedale.	2.55	0.71	19.5	275
035664078 Chesnutt Creek Tributary	Chesnutt Creek to Wolftever Creek to Tennessee River	Lat 35°01'24", long 85°02'01", Hamilton County, Hydrologic Unit 06020001, 0.6 mile west of Apison, 2.3 miles southeast of Collegedale.	1.19	0.32	21.5	440
035664083 Chesnutt Creek	Wolftever Creek to Tennessee River	Lat 35°03'01", long 85°02'23", Hamilton County, Hydrologic Unit 06020001, 0.7 mile east of Collegedale, 1.8 miles north of Apison.	5.60	1.43	18.5	400
035664085 Wolftever Creek	Tennessee River	Lat 35°03'15", long 85°02'59", Hamilton County, Hydrologic Unit 06020001, 0.05 miles north of Collegedale, at Tucker Road, 2.6 miles northwest of Apison.	15.0	5.36	18.5	380
03566409 Wilkerson Branch	Wolftever Creek to Tennessee River	Lat 35°01'53", long 85°03'01", Hamilton County, Hydrologic Unit 06020001, 1.5 miles west of Apison, 1.5 miles south of Collegedale.	1.83	0.01	19.0	180
035664099 Wilkerson Branch	Wolftever Creek to Tennessee River	Lat 35°03'14", long 85°03'00", Hamilton County, Hydrologic Unit 06020001, at intersection of Apison Pike and Tucker Road, 2.6 miles northwest of Apison.	3.38	0.75	19.5	225
03566422 Wolftever Creek Tributary	Wolftever Creek to Tennessee River	Lat 35°03'39", long 85°04'14", Hamilton County, Hydrologic Unit 06020001, 1.2 miles west of Collegedale, 1.3 miles south of Ooltewah.	1.61	0.02	21.0	285

Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA), special study--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (C°)	Specific Cond. (us/cm)
03566424 Unnamed Tributary	Wolftever Creek Tributary to Wolftever Creek to Tennessee River	Lat 35°03'39", long 85°04'14", Hamilton County, Hydrologic Unit 06020001, 1.2 miles south of Ooltewah, 1.3 miles west of Collegedale.	0.74	0.00	---	---
03566426 Wolftever Creek Tributary	Wolftever Creek to Tennessee River	Lat 35°03'48", Long 85°04'27", Hamilton County, Hydrologic Unit 06020001, 1.1 miles south of Ooltewah, 1.5 miles west of Collegedale.	2.00	0.04	22.0	205
03566428 Wolftever Creek	Tennessee River	Lat 35°04'44", long 85°04'06", Hamilton County, Hydrologic Unit 06020001, 0.4 mile west of Ooltewah, 2.0 miles northwest of Collegedale.	24.5	6.60	17.5	360
035664283 Little Wolftever Creek Tributary	Little Wolftever Creek to Wolftever Creek to Tennessee River	Lat 35°04'42", long 85°00'16", Hamilton County, Hydrologic Unit 06020001, 2.6 miles southwest of McDonald, 3.2 miles east of Ooltewah.	0.73	0.01	23.0	95
035664285 Little Wolftever Creek	Wolftever Creek to Tennessee River	Lat 35°04'56", long 85°00'34", Bradley County, Hydrologic Unit 06020001, 1.3 miles south of Mineral Park, 3.1 miles east of Ooltewah.	1.83	0.25	17.5	245
035664287 Little Ooltewah Creek	Little Wolftever Creek to Wolftever Creek to Tennessee River	Lat 35°07'35", long 85°00'35", Bradley County, Hydrologic Unit 06020001, 1.0 mile east of Green Gap, 4.6 miles north- east of Ooltewah.	1.51	0.13	18.5	150
03566429 Little Ooltewah Creek	Little Wolftever Creek to Wolftever Creek to Tennessee River	Lat 35°05'57", long 85°01'00", Hamilton County, Hydrologic Unit 06020001, 0.8 mile west of Mineral Park, 3.0 miles northeast of Ooltewah.	3.84	0.30	16.0	160
035664293 Little Ooltewah Creek	Little Wolftever Creek to Wolftever Creek to Tennessee River	Lat 35°05'13", long 85°01'01", Hamilton County, Hydrologic Unit 06020001, 1.2 miles southwest of Mineral Park, 2.7 miles northeast of Ooltewah.	4.19	0.08	20.0	115
035664296 Little Wolftever Creek	Wolftever Creek to Tennessee River	Lat 35°04'43", long 85°02'01", Hamilton County, Hydrologic Unit 06020001, 1.6 miles east of Ooltewah, 2.0 miles north of Collegedale.	8.44	1.27	18.5	225
03566430 Little Wolftever Creek	Wolftever Creek to Tennessee River	Lat 35°04'42", long 85°03'36", Hamilton County, Hydrologic Unit 06020001, at bridge on Ooltewah - Ringgold Road, 0.4 mile north of Ooltewah.	10.6	0.96	19.5	310
03566442 Wolftever Creek	Tennessee River	Lat 35°05'31", long 85°04'04", Hamilton County, Hydrologic Unit 06020001, 1.4 miles north of Ooltewah, 2.3 miles northeast of Summit.	37.4	7.70	18.5	338
03566443 Wolftever Creek	Tennessee River	Lat 35°06'25", long 85°04'25", Hamilton County, Hydrologic Unit 06020001, 2.5 miles north of Ooltewah.	38.5	8.44	14.5	360
035664435 Wolftever Creek	Tennessee River	Lat 35°07'18", long 85°04'15", Hamilton County, Hydrologic Unit 06020001, 0.6 miles south of Rock Ledge Estates, 3.5 miles north of Ooltewah.	39.1	8.73	18.0	340
03566444 Wolftever Creek Tributary	Wolftever Creek to Tennessee River	Lat 35°05'57", long 85°05'10", Hamilton County, Hydrologic Unit 06020001, 2.1 miles north of Summit, 2.3 miles northwest of Ooltewah.	1.95	0.00	---	---

Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA), special study--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (C°)	Specific Cond. (us/cm)
035664442 Unnamed Tributary	Wolftever Creek Tributary to Wolftever Creek to Tennessee River	Lat 35°06'08", long 85°05'10", Hamilton County, Hydrologic Unit 06020001, 2.4 miles north of Summit, 2.4 miles northwest of Ooltewah.	0.56	0.00	---	---
035664445 Unnamed Tributary	Wolftever Creek Tributary to Wolftever Creek to Tennessee River	Lat 35°07'12", long 85°05'04", Hamilton County, Hydrologic Unit 06020001, 0.8 mile south of Rock Ledge Estates, 3.6 miles northwest of Ooltewah.	0.55	0.00	---	---
035664448 Wolftever Creek Tributary	Wolftever Creek to Tennessee River	Lat 35°07'13", long 85°05'03", Hamilton County, Hydrologic Unit 06020001, 0.8 mile south of Rock Ledge Estates, 3.6 miles northwest of Ooltewah.	3.97	0.00	---	---
035664445 Unnamed Tributary	Wolftever Creek Tributary to Wolftever Creek to Tennessee River	Lat 35°07'21", long 85°05'09", Hamilton County, Hydrologic Unit 06020001, 0.7 mile south of Rock Ledge Estates, 3.7 miles northwest of Ooltewah.	0.53	0.00	---	---
035664452 Unnamed Tributary	Wolftever Creek Tributary to Wolftever Creek to Tennessee River	Lat 35°07'31", long 85°05'09", Hamilton County, Hydrologic Unit 06020001, 0.5 mile southwest of Rock Ledge Estates, 3.8 miles northwest of Ooltewah.	0.32	0.00	---	---
035664454 Wolftever Creek Tributary	Wolftever Creek to Tennessee River	Lat 35°07'33", long 85°05'06", Hamilton County, Hydrologic Unit 06020001, 0.4 mile southwest of Rock Ledge Estates, 3.8 miles northwest of Ooltewah.	4.91	0.16	14.0	55
035664456 Wolftever Creek Tributary	Wolftever Creek to Tennessee River	Lat 35°07'55", long 85°05'07", Hamilton County, Hydrologic Unit 06020001, 1.8 miles east of Camp Joy, 4.3 miles north of Ooltewah.	0.13	0.04	20.0	160
035664458 Unnamed Tributary	Wolftever Creek Tributary to Wolftever Creek to Tennessee River	Lat 35°07'55", long 85°05'02", Hamilton County, Hydrologic Unit 06020001, 1.9 miles east of Camp Joy, 4.2 miles north of Ooltewah.	0.31	0.00	---	---
035664465 Rogers Branch	Wolftever Creek to Tennessee River	Lat 35°05'39", long 85°03'29", Hamilton County, Hydrologic Unit 06020001, 0.3 mile east of Ooltewah High School, 1.5 miles north of Ooltewah.	0.65	0.02	20.0	375
03566447 Rogers Branch Tributary	Rogers Branch to Wolftever Creek to Tennessee River	Lat 35°05'48", long 85°03'23", Hamilton County, Hydrologic Unit 06020001, 0.5 miles north- east of Ooltewah High School, 1.7 miles north of Ooltewah.	0.50	0.00	---	---
035664475 Rogers Branch	Wolftever Creek to Tennessee River	Lat 35°06'58", long 85°03'31", Hamilton County, Hydrologic Unit 06020001, 1.0 mile northeast of Bell Mill, 3.1 miles north of Ooltewah.	1.96	0.22	21.5	450
03566448 Rogers Branch Tributary	Rogers Branch to Wolftever Creek to Tennessee River	Lat 35°06'58", long 85°03'30", Hamilton County, Hydrologic Unit 06020001, 1.0 mile northeast of Bell Mill, 3.0 miles north of Ooltewah.	1.61	0.09	28.0	360
035664485 Rogers Branch	Wolftever Creek to Tennessee River	Lat 35°08'26", long 85°03'58", Hamilton County, Hydrologic Unit 06020001, 1.1 mile northeast of Rock Ledge Estates, 2.9 miles south of Snow Hill.	5.11	0.22	23.0	350

Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA), special study--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (C°)	Specific Cond. (us/cm)
03566460 Varnell Creek	Savannah Creek to Wolftever Creek to Tennessee River	Lat 35°07'59", long 85°02'40", Hamilton County, Hydrologic Unit 06020001, 1.9 miles east of Rock Ledge Estates, 3.2 miles south of Snow Hill.	0.83	0.06	18.0	340
03566465 Varnell Creek Tributary	Varnell Creek to Savannah Creek to Wolftever Creek to Tennessee River	Lat 35°08'13", long 85°03'17", Hamilton County, Hydrologic Unit 06020001, 1.4 miles northeast of Rock Ledge Estates, 2.9 miles south of Snow Hill.	1.25	0.00	---	---
03566475 Harrison Bay Tributary	Tennessee River	Lat 35°08'06", long 85°07'01", Hamilton County, Hydrologic Unit 06020001, 0.4 mile east of Loret Villa Marina, 1.1 miles south of Wolftever Bridge.	0.62	0.00	---	---
03566480 Harrison Branch	Tennessee River	Lat 35°06'53", long 85°07'07", Hamilton County, Hydrologic Unit 06020001, 2.4 miles south of Wolftever Bridge, 4.4 miles northwest of Ooltewah.	0.90	0.05	14.0	48
03566485 Harrison Branch	Tennessee River	Lat 35°07'31", long 85°07'32", Hamilton County, Hydrologic Unit 06020001, 0.8 mile south of Camp Joy, 1.85 miles south- west of Wolftever Bridge.	2.18	0.40	16.0	155
03566720 Hurricane Creek	South Chickamauga Creek to Tennessee River	Lat 34°59'11", long 85°03'53", Catoosa County, Georgia, Hydrologic Unit 06020001, 400 feet south of Tennessee- Georgia state line, 5.8 miles north of Ringgold, Georgia.	1.63	0.95	18.5	265
03566725 Hurricane Creek Tributary	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 34°59'11", long 85°03'54", Catoosa County, Georgia, Hydrologic Unit 06020001, 500 feet south of Tennessee- Georgia state line, 5.7 miles north of Ringgold, Georgia.	1.85	0.00	---	---
03566728 Johnson Branch	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 34°59'46", long 85°03'31", Hamilton County, Hydrologic Unit 06020001, 0.6 mile north of Tennessee-Georgia state line, 2.8 miles southwest of Apison.	1.11	0.07	19.0	130
03566731 Johnson Branch Tributary	Johnson Branch to Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 34°59'44'00", long 85°03'28", Hamilton County, Hydrologic Unit 06020001, 0.6 mile north of Tennessee-Georgia state line, 2.8 miles southwest of Apison.	0.55	0.00	---	---
03566733 Johnson Branch Tributary	Johnson Branch to Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 34°59'27", long 85°03'40", Hamilton County, Hydrologic Unit 06020001, 0.3 mile north of Tennessee-Georgia state line, 3.3 miles southwest of Apison.	0.03	0.34	19.0	160
03566740 Johnson Branch	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 34°59'12", long 85°03'53", Hamilton County, Hydrologic Unit 06020001, 100 feet north of Tennessee-Georgia state line, 5.9 miles north of Ringgold, Georgia.	2.29	0.70	19.0	200
03566742 Hurricane Creek	South Chickamauga Creek to Tennessee River	Lat 34°59'17", long 85°03'50", Hamilton County, Hydrologic Unit 06020001, 0.1 mile north of Tennessee-Georgia state line, 3.6 miles southwest of Apison.	5.94	2.47	17.0	230
03566744 Hurricane Creek	South Chickamauga Creek to Tennessee River	Lat 34°59'28", long 85°04'32", Hamilton County, Hydrologic Unit 06020001, 0.3 mile north of Tennessee-Georgia state line, 3.8 miles southwest of Apison.	6.54	2.64	16.5	215

Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA), special study--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (C°)	Specific Cond. (us/cm)
03566747 Hurricane Creek Tributary	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 34°59'28", long 85°04'33", Hamilton County, Hydrologic Unit 06020001, 0.3 mile north of Tennessee-Georgia state line, 3.8 miles southwest of Apison.	0.41	0.00	---	---
03566750 Hurricane Creek	South Chickamauga Creek to Tennessee River	Lat 34°59'39", long 85°04'56", Hamilton County, Hydrologic Unit 06020001, 0.5 mile north of the Tennessee- Georgia state line, 2.6 miles southeast of Ryall Springs.	7.25	3.55	16.0	210
03566753 Hurricane Creek	South Chickamauga Creek to Tennessee River	Lat 34°59'27", long 85°05'49", Hamilton County, Hydrologic Unit 06020001, 0.3 mile north of the Tennessee- Georgia state line on State Route 151, 1.9 miles southeast of Ryall Springs.	7.87	3.26	18.5	220
03566758 Hurricane Creek Tributary	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 35°00'49", long 85°05'21", Hamilton County, Hydrologic Unit 06020001, 1.4 miles south- east of Standifer Gap, 3.5 miles southwest of Collegedale.	1.69	0.04	18.5	370
03566762 Unnamed Tributary	Hurricane Creek Tributary to Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 35°00'23", long 85°05'29", Hamilton County, Hydrologic Unit 06020001, 0.5 mile northeast of West View, 3.9 miles southwest of Collegedale.	0.74	0.08	19.5	235
03566766 Unnamed Tributary	Hurricane Creek Tributary to Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 35°01'04", long 85°05'43", Hamilton County, Hydrologic Unit 06020001, 1.0 mile south- east of Standifer Gap, 3.5 miles southwest of Collegedale.	0.80	0.00	---	---
03566768 Hurricane Creek Tributary	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 35°00'14", long 85°05'42", Hamilton County, Hydrologic Unit 06020001, 0.3 mile northeast of West View, 4.1 miles southwest of Collegedale.	4.00	0.82	16.0	365
03566773 Hurricane Creek Tributary	Hurricane Creek to South Chickamauga Creek to Tennessee River	Lat 35°00'00", long 85°05'45", Hamilton County, Hydrologic Unit 06020001, 0.2 mile west of Ryall Springs.	4.46	0.70	15.5	365
03566775 Hurricane Creek	South Chickamauga Creek to Tennessee River	Lat 34°59'16", long 85°06'20", Hamilton County, Hydrologic Unit 06020001, 0.1 mile north of the Tennessee- Georgia state line, 1.6 miles southeast of Ryall Springs.	13.9	4.49	19.5	235
03566939 Mackey Branch	South Chickamauga Creek to Tennessee River	Lat 35°02'32", long 85°07'09", Hamilton County, Hydrologic Unit 06020001, 2.2 miles southwest of Summit, 4.0 miles southwest of Ooltewah.	1.88	0.28	15.5	145
03566940 Standifer Spring	Chickamauga Creek to Tennessee River	Lat 35°02'31", long 85°07'12", Hamilton County, Hydrologic Unit 06020001, 2.25 miles southwest of Summit, 4.0 miles southwest of Ooltewah.	---	0.17	15.0	370
03566985 Mackey Branch	South Chickamauga Creek to Tennessee River	Lat 35°01'23", long 85°08'24", Hamilton County, Hydrologic Unit 06020001, 1.3 miles north of East Brainard, 2.4 miles south of Silverdale.	2.80	1.47	15.0	290

Eastside, TN (Hamilton and Bradley Counties, TN and Catoosa County, GA), special study--continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (C°)	Specific Cond. (us/cm)
03566986 Mackey Branch	South Chickamauga Creek to Tennessee River	Lat 35°00'26", long 85°09'12", Hamilton County, Hydrologic Unit 06020001, 1.25 miles west of Ryall Springs.	3.55	1.62	17.5	300
03566987 Ryall Spring Branch	Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'44", long 85°06'52", Hamilton County, Hydrologic Unit 06020001, 1.0 mile northeast of Ryall Spring, 1.1 miles northwest of West View.	0.70	0.04	16.5	113
035669875 Ryall Spring Branch	Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'10", long 85°07'53", Hamilton County, Hydrologic Unit 06020001, 500 feet upstream from Morris Hill Road, 1.1 miles east of East Brainerd.	1.49	0.08	15.5	230
03566988 Ryall Spring Branch Tributary	Ryall Spring Branch to Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'10", long 85°07'54", Hamilton County, Hydrologic Unit 06020001, 400 feet upstream from Morris Hill Road, 1.1 miles east of East Brainerd.	0.49	0.58	17.0	242
035669885 Ryall Spring Branch	Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'41", long 85°08'08", Hamilton County, Hydrologic Unit 06020001, 0.60 mile north of Ryall Springs, 0.9 mile northeast of East Brainerd.	2.18	0.85	17.5	260
03566989 Ryall Spring Branch Tributary	Ryall Spring Branch to Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'41", long 85°08'06", Hamilton County, Hydrologic Unit 06020001, 0.9 mile northeast of East Brainerd, 0.65 miles north of Ryall Springs.	1.49	0.38	17.0	380
03566990 Ryall Spring Branch	Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'26", long 85°09'10", Hamilton County, Hydrologic Unit 06020001, about 1000 feet above East Brainerd Road, 2.9 miles southeast of Chickamauga.	4.55	1.50	18.0	350
03566992 Ryall Spring Branch Tributary	Ryall Spring Branch to Mackey Branch to South Chickamauga Creek to Tennessee River	Lat 35°00'25", long 85°09'10", Hamilton County, Hydrologic Unit 06020001, about 500 feet above East Brainerd Road, 2.9 miles southeast of Chickamauga.	0.28	0.01	18.0	280
03567560 Friar Branch	South Chickamauga Creek to Tennessee River	Lat 35°04'10", long 85°07'18", Hamilton County, Hydrologic Unit 06020001, 1.4 miles west of Summit, 3.7 miles west of Ooltewah.	1.89	0.10	18.0	280
03567565 Friar Branch	South Chickamauga Creek to Tennessee River	Lat 35°03'06", long 85°09'21", Hamilton County, Hydrologic Unit 06020001, 0.8 mile south of Tyner, 1.3 miles southwest of Silverdale.	3.12	0.39	19.5	355
03567570 Friar Branch Tributary	Friar Branch to South Chickamauga Creek to Tennessee River	Lat 35°02'57", long 85°09'22", Hamilton County, Hydrologic Unit 06020001, 1.0 mile south of Tyner, 1.3 miles southwest of Silverdale.	1.73	0.68	19.0	430
03567580 Friar Branch Tributary	Friar Branch to South Chickamauga Creek to Tennessee River	Lat 35°02'54", long 85°09'55", Hamilton County, Hydrologic Unit 06020001, 1.1 miles south of Tyner on Hickory Valley Road, 1.8 miles southwest of Silverdale.	1.78	0.22	20.0	440

Spring Hill, TN (Maury and Williamson Counties), special study

A series of low-flow discharge measurements were made April 21, 1987, in the vicinity of Spring Hill, TN (Maury and Williamson Counties), to define areas of potential ground-water supplies. In addition, measurements of water temperature and specific conductance were taken at each site. The measurements were made during a period of constant base flow.

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (°C)	Specific Cond. (us/cm)
03599800 Rutherford Creek	Duck River to Tennessee River	Lat 35°43'32", long 86°51'59", Maury County, Hydrologic Unit 06040003, at bridge on Warren Road, 2.2 miles southwest of Duplex, and at mile 23.5.	17.1	17.3	18.5	350
03599950 Rutherford Creek	Duck River to Tennessee River	Lat 35°42'41", long 86°53'56", Maury County, Hydrologic Unit 06040003, at Port Royal Road bridge, 150 feet above Crooked Creek, 0.6 mile north of Kedron, and at mile 21.2.	19.5	18.3	16.5	350
03599951 Crooked Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°42'40", long 86°53'57", Maury County, Hydrologic Unit 06040003, at mouth, 0.6 mile north of Kedron.	3.04	1.54	16.0	390
03599952 Rutherford Creek Tributary	Rutherford Creek to Duck River to Tennessee River	Lat 35°42'19", long 86°54'06", Maury County, Hydrologic Unit 06040003, at culvert on Kedron Road, 0.3 mile above mouth, 0.3 mile northwest of Kedron.	0.78	0.72	21.5	395
03599953 Rutherford Creek	Duck River to Tennessee River	Lat 35°42'54", long 86°54'43", Maury County, Hydrologic Unit 06040003, 1.1 miles northwest of Kedron, 2.6 miles south of Spring Hill, 3.5 miles east of Neapolis, and at mile 20.0.	24.0	22.4	16.0	360
03599954 Aenon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°45'20", long 86°52'29", Williamson County, Hydrologic Unit 06040003, 50 feet upstream of West Fork Aenon Creek, and 4.6 miles west of Bethesda.	3.90	3.11	16.0	390
035999545 West Fork Aenon Creek	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'50", long 86°53'02", Williamson County, Hydrologic Unit 06040003, 3.2 miles northeast of Spring Hill, at bridge on county road, 2.1 miles southeast of Thompsons Station.	0.74	0.36	15.0	380
035999548 West Fork Aenon Creek	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'18", long 86°52'50", Williamson County, Hydrologic Unit 06040003, at bridge on Buckner Lane, 2.5 miles northeast of Spring Hill.	1.18	0.53	16.0	350
03599955 West Fork Aenon Creek Tributary	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'53", long 86°53'25", Williamson County, Hydrologic Unit 06040003, at county road bridge, 1.8 miles southeast of Thompsons Station.	0.47	0.03	15.0	415
03599955 West Fork Aenon Creek Tributary	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'10", long 86°52'52", Williamson County, Hydrologic Unit 06040003, at bridge on Buckner Lane, 2.7 miles north- east of Spring Hill.	0.83	0.04	19.0	375
03599956 West Fork Aenon Creek	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'20", long 86°52'30", Williamson County, Hydrologic Unit 06040003, 4.7 miles west of Bethesda.	2.75	1.73	14.0	385
035999563 Aenon Creek Tributary	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'33", long 86°52'27", Williamson County, Hydrologic Unit 06040003, 6.7 miles north of Rally Hill.	0.85	0.48	18.5	395
03599957 Aenon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°44'02", long 86°53'11", Maury County, Hydrologic Unit 06040003, at culvert on county road, 2.5 miles southeast of Spring Hill.	8.82	6.60	16.5	390

Spring Hill, TN (Maury and Williamson Counties), special study--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (°C)	Specific Cond. (us/cm)
035999573 Grassy Branch	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'07", long 86°54'10", Williamson County, Hydrologic Unit 06040003, 5 feet above confluence with Grassy Branch Tributary, 2.2 miles south of Thompsons Station.	0.71	0.09	14.0	455
035999576 Grassy Branch Tributary	Grassy Branch to Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'07", long 86°54'09", Williamson County, Hydrologic Unit 06040003, 10 feet above confluence with Grassy Branch, 2.2 miles south of Thompson Station.	0.31	0.21	14.5	440
03599958 Grassy Branch	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'29", long 86°53'35", Williamson County, Hydrologic Unit 06040003, 2.0 miles east of Spring Hill.	1.63	0.69	14.5	395
035999583 Grassy Branch Tributary	Grassy Branch to Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'30", long 86°53'34", Williamson County, Hydrologic Unit 06040003, 3.1 miles south of Thompsons Station.	0.57	0.09	13.5	360
035999586 Grassy Branch	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'10", long 86°53'37", Williamson County, Hydrologic Unit 06040003, at bridge on Beechcraft Road, 1.9 miles east of Spring Hill.	2.65	1.24	14.0	390
035999588 Grassy Branch	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'40", long 86°53'39", Maury County, Hydrologic Unit 06040003, at bridge on Port Royal Road, 2.0 miles east of Spring Hill.	2.94	1.87	21.5	360
03599959 Grassy Branch	Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'14", long 86°53'48", Maury County, Hydrologic Unit 06040003, 2.4 miles north of Kedron.	3.32	2.14	19.0	360
035999593 Grassy Branch Tributary	Grassy Branch to Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'42", long 86°54'19", Maury County, Hydrologic Unit 06040003, 1.3 miles east of Spring Hill.	0.54	0.30	18.0	325
035999596 Grassy Branch Tributary	Grassy Branch to Aenon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'15", long 86°54'00", Maury County, Hydrologic Unit 06040003, 2.4 miles north of Kedron.	0.80	0.74	23.0	360
03599960 Aenon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°43'39", long 86°54'21", Maury County, Hydrologic Unit 06040003, at bridge on John Lund Road, 2.1 miles southeast of Spring Hill, and at mile 1.6.	14.2	11.5	15.0	400
03599963 Aenon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°42'54", long 86°54'44", Maury County, Hydrologic Unit 06040003, at mouth, 1.1 miles northwest of Kedron, 2.6 miles south of Spring Hill, 3.5 miles east of Neapolis.	15.1	11.6	15.0	380
03599965 Rutherford Creek	Duck River to Tennessee River	Lat 35°42'57", long 86°55'02", Maury County, Hydrologic Unit 06040003, at county road bridge, 2.5 miles southeast of Spring Hill.	39.3	32.5	19.0	380
035999656 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°46'42", long 86°55'19", Williamson County, Hydrologic Unit 06040003, at culvert on Wilkes Lane, 1.7 miles south of Thompsons Station.	0.26	0.07	14.0	360
0359996565 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°46'42", long 86°55'17", Williamson County, Hydrologic Unit 06040003, at culvert on Wilkes Lane, 1.7 miles south of Thompsons Station.	0.27	0.05	14.0	410

Spring Hill, TN (Maury and Williamson Counties), special study--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (°C)	Specific Cond. (us/cm)
035999657 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°46'17", long 86°55'29", Williamson County, Hydrologic Unit 06040003, 10 feet above tributary, 2.2 miles south of Thompsons Station.	0.97	0.48	14.5	400
0359996575 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Ten- nessee River	Lat 35°46'17", long 86°55'31", Williamson County, Hydrologic Unit 06040003, 25 feet above mouth, 2.2 miles south of Thompsons Station.	0.48	0.02	15.0	365
035999658 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Ten- nessee River	Lat 35°46'40", long 86°55'06", Williamson County, Hydrologic Unit 06040003, at culvert on Wilkes Lane, 1.8 miles north of Spring Hill.	0.28	0.02	14.0	400
0359996585 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Ten- nessee River	Lat 35°46'12", long 86°55'28", Williamson County, Hydrologic Unit 06040003, 5 feet above mouth, 1.1 miles north of Spring Hill.	0.58	0.05	15.0	365
035999659 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°45'43", long 86°55'21", Williamson County, Hydrologic Unit 06040003, at bridge on county road, 0.7 mile north of Spring Hill.	2.52	1.15	15.0	395
03599966 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°45'29", long 86°55'24", Williamson County, Hydrologic Unit 06040003, at State Hwy 31 bridge, 0.7 mile northeast of Spring Hill, and at mile 3.4.	3.10	1.38	16.5	405
035999665 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'10", long 86°55'19", Maury County, Hydrologic Unit 06040003, at county road, 0.3 mile east of Spring Hill.	0.52	0.24	18.0	350
03599967 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°44'28", long 86°55'29", Maury County, Hydrologic Unit 06040003, at Spring Hill, 3.1 miles northwest of Kedron, 3.5 miles northeast of Neapolis, and at mile 2.0.	4.32	2.36	20.5	390
035999675 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'11", long 86°56'56", Maury County, Hydrologic Unit 06040003, at bridge on Beechcraft Street, 1.1 miles west of Spring Hill, at McCormack Crossing.	2.42	1.96	15.5	255
03599968 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°44'37", long 86°56'21", Maury County, Hydrologic Unit 06040003, below State Hwy 31 bridge at Spring Hill, 3.1 miles northeast of Neapolis, 3.6 miles northwest of Kedron, and at mile 0.9.	3.08	2.28	18.0	275
035999683 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°45'11", long 86°56'20", Maury County, Hydrologic Unit 06040003, at bridge on Beechcraft Street, 0.5 mile west of Spring Hill.	0.47	0.29	12.5	410
035999682 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'27", long 85°55'32", Maury County, Hydrologic Unit 06040003, 60 feet above bridge on Kedron Road, 0.6 miles southeast of Spring Hill.	3.46	2.51	24.0	255
035999685 Unnamed Tributary	McCutcheon Creek Tributary to McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'50", long 86°56'05", Maury County, Hydrologic Unit 06040003, at bridge on U.S. Highway 31, 0.2 miles southwest of Spring Hill.	1.00	0.28	19.0	390

Spring Hill, TN (Maury and Williamson Counties), special study--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measurements Discharge (ft ³ /s)	Water Temp. (°C)	Specific Cond. (us/cm)
035999689 Unnamed Tributary	McCutcheon Creek Tributary to McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°44'28", long 86°55'32", Maury County, Hydrologic Unit 06040003, 10 feet above mouth, above bridge on Kedron Road, 0.6 miles southeast of Spring Hill.	1.35	0.93	25.0	370
035999697 McCutcheon Creek Tributary	McCutcheon Creek to Rutherford Creek to Duck River to Tennessee River	Lat 35°43'47", long 86°55'29", Maury County, Hydrologic Unit 06040003, at bridge on Kedron Road, 1.2 miles southeast of Spring Hill.	0.47	0.04	13.5	310
03599970 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°43'40", long 86°55'28", Maury County, Hydrologic Unit 06040003, at bridge on John Lund Road, 1.6 miles southeast of Spring Hill, 2.3 miles north- west of Kedron, and at mile 1.0.	10.2	8.60	15.5	355
03599971 McCutcheon Creek	Rutherford Creek to Duck River to Tennessee River	Lat 35°42'56", long 86°55'16", Maury County, Hydrologic Unit 06040003, 400 feet above mouth, 1.6 miles northwest of Kedron, 2.5 miles south of Spring Hill, 3.0 miles east of Neapolis.	11.1	7.52	20.0	350
035999712 Rutherford Creek	Duck River to Tennessee River	Lat 35°42'53", long 86°55'13", Maury County, Hydrologic Unit 06040003, at bridge on Kedron road, 2.2 miles southeast of Spring Hill, and 1.5 miles northwest of Kedron.	50.5	44.7	17.5	385

Water-quality partial-record stations are particular sites where chemical-quality, biological and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. These data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

OBION RIVER BASIN

07025400 NORTH FORK OBION RIVER NEAR MARTIN, TN (CE)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 16...	1600	143	50	14.0	20	7.7
DEC 05...	1115	193	51	7.0	17	8.9
JAN 14...	1645	191	62	9.5	6	3.1
15...	1040	197	70	9.0	9	4.8
FEB 18...	1200	430	--	5.0	49	57
26...	2045	747	--	--	1290	2600
27...	1000	2580	--	--	725	5050
APR 08...	0900	200	55	11.0	28	15
MAY 28...	1500	128	50	24.0	58	20
JUL 07...	1500	216	63	28.0	84	49
AUG 18...	1000	133	53	21.5	60	22

07027800 SOUTH FORK FORKED DEER RIVER NEAR GATES, TN

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 17...	1700	256	70	16.5	54	37
27...	1445	478	--	--	119	154
DEC 02...	1430	1010	80	11.5	118	322
JAN 15...	1300	466	110	9.0	26	33
FEB 26...	1600	1880	--	--	208	1060
27...	1425	3680	--	--	1030	10200
MAR 26...	1245	512	--	--	136	188
APR 09...	1415	516	85	16.0	102	142
MAY 28...	1400	634	--	--	293	502
JUL 09...	1115	354	75	25.0	169	162
AUG 19...	1125	257	80	26.0	99	69

07028100 SOUTH FORK FORKED DEER RIVER NEAR HALLS, TN (CE)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 17...	1445	283	85	16.0	53	40
DEC 03...	1600	893	90	11.0	87	211
JAN 15...	1030	487	120	8.5	29	38
FEB 25...	1620	1810	--	--	248	1210
27...	1340	3530	--	--	975	9290
APR 09...	1100	518	100	14.0	66	92
MAY 28...	1525	603	60	26.0	388	632
JUL 09...	1305	402	90	26.0	428	465
AUG 19...	1345	225	100	28.0	92	56

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

OBION RIVER BASIN--Continued

07029100 NORTH FORK FORKED DEER RIVER AT DYERSBURG TN (CE)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT						
17...	1130	167	70	15.0	41	18
28...	0845	372	--	--	70	70
NOV						
17...	1145	2370	--	--	146	934
DEC						
03...	1110	338	105	10.0	32	29
JAN						
13...	1520	276	180	5.5	27	20
FEB						
25...	1300	1280	--	--	259	895
27...	1245	3370	--	--	1330	12100
MAR						
25...	1700	548	--	--	137	203
APR						
09...	1000	265	110	14.0	35	25
MAY						
29...	1125	198	100	27.0	116	62
JUL						
09...	1450	658	90	27.0	282	501
AUG						
19...	1500	161	90	29.0	114	50

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
CUMBERLAND RIVER BASIN									
03407908 - NEW RIVER AT CORDELL, TN									
OCT 07...	1130	24	--	19.5	JUL 27...	1050	24	--	27.0
DEC 23...	1210	299	--	4.0	SEP 08...	1047	6.0	--	23.0
MAR 06...	1500	377	--	8.0	09...	1043	6.0	--	22.0
APR 08...	1200	1120	--	12.0					
03407990 - NEW RIVER NEAR HUNTSVILLE, TN									
JAN 13...	1130	158	--	2.5	SEP 09...	1215	8.6	--	22.0
MAY 11...	1025	230	192	15.0					
03408500 - NEW RIVER AT NEW RIVER, TN									
OCT 03...	1125	62	327	24.0	JUL 27...	1345	36	--	27.0
MAY 22...	1125	1010	--	20.0	SEP 09...	1500	13	--	22.0
03409500 - CLEAR FORK NEAR ROBBINS, TN									
OCT 01...	1325	22	104	25.0	MAY 22...	1430	124	--	22.5
DEC 23...	1430	289	--	4.0	JUL 28...	1525	8.3	--	31.0
APR 29...	1200	295	--	13.0	SEP 10...	1500	16	--	27.0
03410210 - SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN									
OCT 02...	1225	95	180	17.0	MAY 21...	1110	368	--	25.0
DEC 29...	1530	1150	--	4.0	JUL 28...	1255	60	--	29.0
MAR 06...	1235	1730	--	7.5	SEP 10...	1155	39	--	24.0
APR 09...	1450	2130	--	11.0					
03414415 - LITTLE LAUREL CREEK AT DAVIDSON, TN									
OCT 28...	1240	0.72	1540	15.5	JAN 13...	1530	2.3	1210	7.0
DEC 09...	0915	48	453	11.5	FEB 24...	1545	16	850	9.0
03414500 - EAST FORK OBEY RIVER NEAR JAMESTOWN, TN									
OCT 08...	1405	14	--	18.0	FEB 24...	1300	1280	--	1.5
NOV 04...	1310	39	--	15.0	APR 07...	1525	343	--	9.0
DEC 10...	1130	2950	--	14.0	MAY 19...	1410	46	--	21.0
JAN 13...	1325	115	--	7.0	AUG 18...	1250	23	--	23.5
03416000 - WOLF RIVER NEAR BYRDSTOWN, TN									
OCT 08...	1040	14	--	19.0	APR 07...	1100	175	--	10.5
NOV 04...	0945	14	--	15.5	MAY 19...	0935	45	--	22.0
DEC 10...	1600	935	--	13.0	JUN 29...	1340	65	--	24.0
JAN 13...	1010	54	--	5.0	AUG 18...	1020	16	--	24.0
MAR 04...	1045	274	--	7.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
CUMBERLAND RIVER BASIN--Continued									
03417500 - CUMBERLAND RIVER AT CELINA, TN									
APR 30...	1145	11200	--	13.5	APR 30...	1415	11200	--	13.5
03418000 - ROARING RIVER NEAR HILHAM, TENN.									
MAR 17...	1305	76	220	15.5	JUL 20...	1300	39	--	21.5
APR 29...	1135	51	255	16.5	AUG 10...	1100	195	135	20.0
MAY 05...	1300	36	260	19.5	27...	1000	1.3	315	24.5
18...	1450	20	310	23.5	SEP 03...	1055	0.74	330	19.5
03418025 - SPRING CREEK SPRING NEAR BROTHERTON, TN									
DEC 16...	1030	11	180	12.0	JUL 20...	1115	1.1	--	15.0
MAR 17...	0915	9.5	185	13.0	AUG 04...	0950	0.56	210	16.0
APR 29...	1935	4.2	138	18.5	10...	1215	1.9	--	15.5
MAY 05...	1000	2.6	210	13.5	27...	1200	0.48	285	17.5
18...	1610	1.0	230	14.0	SEP 03...	1320	0.40	250	17.5
03418070 - ROARING RIVER ABOVE GAINESBORO, TN									
DEC 11...	1000	972	--	11.0	APR 04...	1600	103	--	11.0
JAN 14...	1425	28	--	5.0	JUN 29...	1030	8.7	--	22.5
FEB 26...	0920	558	--	3.0					
03418935 - BEAVERDAM CREEK AT LANTANA ROAD NEAR BELLVIEW, TN									
MAY 20...	1040	1.4	60	19.0					
03418950 - BEE CREEK NEAR HERBERT DOMAIN, TN									
OCT 09...	0925	3.1	59	15.0	AUG 19...	1150	9.5	58	24.0
MAY 20...	0940	4.5	45	21.5	SEP 04...	1135	0.03	78	21.5
JUL 28...	1340	0.90	83	28.0					
03420116 - ROCKY RIVER AT ROCKY RIVER ROAD AT RIVERVIEW, TN									
OCT 09...	1525	4.0	301	19.0	JUL 29...	0750	3.0	348	19.0
MAY 20...	1500	12	245	15.5					
03420720 - HICKORY CREEK NEAR VIOLA, TN									
JUL 29...	0750	0.84	255	20.5					
03421000 - COLLINS RIVER NEAR MCMINNVILLE, TN									
OCT 10...	0920	112	--	19.0	APR 08...	1215	1100	--	10.5
NOV 06...	0900	284	--	15.5	MAY 20...	1430	200	--	23.0
DEC 12...	1030	5030	--	9.0	JUN 30...	1410	176	--	25.0
JAN 15...	1125	577	--	6.0	AUG 20...	1025	91	--	21.0
MAR 03...	1315	3540	--	7.5					
03421150 - CHARLES CREEK AT DAYLIGHT, TN									
MAY 21...	1045	3.8	212	16.5	JUL 29...	1100	2.4	210	20.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
CUMBERLAND RIVER BASIN--Continued									
03422500 - CANEY FORK NEAR ROCK ISLAND, TN									
OCT					SEP				
09...	1250	53	--	19.0	30...	1110	33	--	15.0
JUL									
23...	1405	50	--	24.5					
24...	0900	52	--	24.5					
03426800 - EAST FORK STONES RIVER AT WOODBURY, TN									
OCT					APR				
10...	1225	5.0	--	20.0	08...	1010	33	--	13.0
NOV					MAY				
06...	1140	11	--	17.5	21...	1200	13	--	22.0
DEC					JUN				
17...	1130	47	--	12.0	29...	1230	9.0	--	22.0
JAN					AUG				
22...	1035	91	--	10.0	21...	0940	4.9	--	23.0
MAR									
02...	1100	171	--	13.5					
03431517 - CUMMINGS BRANCH AT LICKTON, TN									
OCT					APR				
15...	1345	0.10	--	14.0	01...	1030	1.7	--	10.5
NOV					27...	1245	1.3	--	18.5
03...	0906	0.13	--	14.0	MAY				
12...	1322	4.8	--	15.0	27...	1305	0.28	--	20.5
DEC					JUN				
17...	0935	2.3	--	12.5	11...	1220	0.09	--	22.0
JAN					22...	1110	1.2	--	18.5
05...	1305	1.3	--	11.0	JUL				
FEB					20...	1200	0.12	--	23.0
04...	1230	2.0	--	11.0	AUG				
MAR					24...	1100	0.01	--	22.0
03...	1330	9.8	--	12.0	SEP				
					30...	0900	0.29	--	15.0
03431700 - RICHLAND CREEK AT CHARLOTTE AVENUE , AT NASHVILLE, TN									
OCT					APR				
01...	1400	1.8	--	26.5	01...	1240	37	--	12.0
NOV					27...	1010	8.6	--	16.0
03...	1200	3.1	--	15.5	MAY				
DEC					27...	1115	2.3	--	25.0
16...	1335	23	--	12.0	JUN				
JAN					09...	1220	1.7	--	25.0
05...	1040	12	--	5.0	JUL				
FEB					21...	0945	2.0	--	24.5
04...	1015	16	--	8.0	AUG				
MAR					24...	1310	2.4	--	25.5
03...	1030	97	--	10.0	SEP				
					30...	1115	4.3	--	18.5
03431800 - SYCAMORE CREEK NEAR ASHLAND CITY, TN									
OCT					APR				
06...	1000	27	--	19.0	13...	1050	55	--	14.5
NOV					MAY				
03...	0950	22	--	14.0	18...	0930	28	--	22.0
DEC					JUN				
12...	1400	207	--	7.5	16...	1225	30	--	25.0
JAN					AUG				
14...	0815	43	--	5.0	27...	1055	8.1	--	26.5
MAR									
03...	1450	281	--	10.0					
03432334 - HARPETH RIVER AT INTERSTATE 65 NEAR FRANKLIN, TN									
APR					AUG				
28...	0845	57	380	17.0	17...	0910	2.9	350	26.0
03432350 - HARPETH RIVER AT FRANKLIN, TN									
OCT					MAY				
15...	1045	62	--	14.5	22...	1430	20	--	24.5
31...	1210	33	--	15.0	JUL				
DEC					07...	0900	25	--	24.0
08...	1250	331	--	9.5	AUG				
JAN					17...	0930	1.0	--	25.0
13...	0915	77	--	4.5					
APR									
06...	1100	103	--	8.5					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
CUMBERLAND RIVER BASIN--Continued									
03432470 - MURFREES FORK ABOVE BURWOOD, TN									
OCT 06...	0910	0.21	390	15.5	APR 28...	0915	2.6	310	15.5
MAR 26...	1155	3.6	320	15.0					
03432474 - WEST PRONG MURFREES FORK NEAR BURWOOD, TN									
APR 28...	0935	1.9	350	15.0					
03432495 - MURFREES FORK ABOVE LEIPERS FORK, TN									
AUG 26...	1515	0.12	420	27.0					
03432850 - FARRAR SPRING NEAR CLOVERCROFT, TN									
APR 20...	1155	0.01	460	14.5					
03432856 - LITTLE HARPETH RIVER BELOW CLOVERCROFT, TN									
APR 20...	1015	0.60	385	16.0	SEP 17...	0810	0.04	415	20.5
					23...	0850	0.03	430	15.0
03432870 - LITTLE HARPETH RIVER NEAR FRANKLIN, TN									
APR 20...	0855	1.7	440	14.5	SEP 23...	0950	0.08	420	16.5
03432925 - LITTLE HARPETH RIVER AT GRANNY WHITE PIKE AT BRENTWOOD, TN									
MAY 18...	0825	3.1	450	21.0	AUG 17...	0725	0.34	500	24.5
JUN 29...	0900	2.3	420	22.0					
03433500 - HARPETH RIVER AT BELLEVUE, TN									
OCT 10...	1045	33	--	16.5	APR 10...	1200	204	--	14.0
30...	0820	85	--	14.0	MAY 19...	1120	57	--	25.0
DEC 08...	1030	584	--	9.5	JUL 07...	1400	120	--	25.0
JAN 12...	1330	215	--	5.5	AUG 21...	1010	32	--	25.0
MAR 02...	1330	2670	--	9.0					
03433660 - SOUTH HARPETH RIVER AT FERNVALE, TN									
OCT 10...	0915	8.3	280	17.5	AUG 20...	1315	8.0	260	25.5
MAY 21...	1315	13	270	19.5					
03433902 - BIG TURNBULL CREEK NEAR LIBERTY HILL, TN									
OCT 10...	0840	2.5	265	14.5	AUG 20...	1150	4.1	240	24.0
MAY 21...	1212	5.7	250	21.5					
03434500 - HARPETH RIVER NEAR KINGSTON SPRINGS, TN									
OCT 30...	1045	160	--	14.5	MAY 18...	1340	210	--	24.5
DEC 29...	1200	1210	--	5.5	27...	0840	207	--	24.0
JAN 22...	1115	1270	--	6.5	27...	0950	207	--	24.0
FEB 27...	0920	6350	--	8.5	JUL 07...	1050	246	--	23.0
MAR 16...	1210	491	--	12.5	AUG 21...	0800	114	--	25.0
APR 10...	0930	361	--	12.0	27...	0730	44	--	26.0
					28...	0850	65	--	24.5

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
CUMBERLAND RIVER BASIN--Continued									
03434620 - TOWN BRANCH NEAR CHARLOTTE, TN									
OCT 10...	1010	0.35	380	18.0	AUG 26...	0710	0.05	360	21.5
MAY 19...	0850	1.3	340	18.5					
03435000 - CUMBERLAND RIVER BELOW CHEATHAM DAM, TN									
DEC 10...	1415	85900	--	10.0	MAR 03...	1000	33900	--	9.5
03435113- HONEY RUN CREEK BELOW CROSS PLAINS, TN									
OCT 01...	0935	1.3	410	23.0	AUG 13...	1300	2.5	295	25.5
MAY 18...	1000	4.5	13	21.0					
03435320 - RED RIVER AT ADAMS, TN									
OCT 07...	1305	91	440	16.0	MAY 18...	1350	220	320	22.5
03435770 - SULPHUR FORK RED RIVER ABOVE SPRINGFIELD, TN									
OCT 01...	1115	4.5	--	23.0	APR 10...	1200	44	--	13.5
30...	1050	5.8	--	13.0	MAY 18...	1200	16	--	22.0
DEC 08...	1440	64	--	9.5	JUN 29...	1145	7.6	--	23.0
JAN 12...	1115	31	--	4.0	AUG 17...	1230	4.4	--	25.0
FEB 25...	0830	149	--	7.5					
03436000 - SULPHUR FORK RED RIVER NEAR ADAMS, TN									
OCT 07...	1525	22	--	17.0	APR 10...	1430	100	--	15.5
30...	1355	22	--	15.0	MAY 19...	0930	47	--	23.0
DEC 09...	1430	2930	--	12.0	JUN 23...	1300	45	--	25.5
JAN 13...	0935	81	--	3.5	AUG 18...	1135	19	--	25.5
FEB 25...	1125	398	--	9.5					
03436100 - RED RIVER AT PORT ROYAL, TN									
OCT 07...	0845	158	--	16.0	APR 13...	1515	501	--	16.0
31...	1115	105	--	14.0	MAY 19...	1310	356	--	24.0
DEC 09...	1030	1740	--	11.5	AUG 18...	1430	150	--	27.0
JAN 13...	1240	524	--	5.5					
FEB 25...	1530	2020	--	9.5					
03436690 - YELLOW CREEK AT ELLIS MILLS, TN									
OCT 08...	1245	29	--	19.0	APR 09...	1100	102	--	11.5
NOV 04...	0955	23	--	14.0	20...	1330	252	--	13.0
DEC 11...	0935	404	--	9.5	MAY 19...	1020	50	--	20.5
JAN 15...	0845	59	--	9.5	JUN 25...	1330	32	--	25.0
FEB 24...	1335	354	--	9.5	AUG 19...	1445	17	--	28.5
TENNESSEE RIVER BASIN									
03455000 - FRENCH BROAD RIVER NEAR NEWPORT, TN									
JAN 07...	1300	2080	--	4.0	MAY 14...	0855	2190	--	20.0
MAR 13...	1125	3490	--	7.0	JUL 22...	0930	1140	--	26.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03455050 - CLEAR CREEK AT PARROTTSVILLE, TN									
JAN 14...	1400	2.3	500	8.0	SEP 28...	1440	2.0	460	19.0
MAY 13...	1515	7.0	480	19.0					
03461199 - CRYING CREEK ABOVE COSBY, TN									
JAN 15...	1025	1.9	18	6.5	SEP 28...	1155	0.60	19	14.5
MAY 14...	1125	3.2	16	14.0					
03461200 - COSBY CREEK ABOVE COSBY, TN									
OCT 02...	1405	5.6	--	19.0	MAY 14...	1205	13	--	14.0
NOV 19...	0920	7.9	--	9.0	JUL 22...	1350	7.1	--	15.0
JAN 07...	1430	8.9	--	7.0	AUG 26...	1255	2.2	--	19.0
MAR 17...	1020	21	--	8.0	SEP 30...	1450	6.6	--	16.0
03461450 - ENGLISH CREEK NEAR NEWPORT, TN									
JAN 15...	0930	2.9	375	10.0	SEP 28...	1345	1.6	370	17.5
MAY 14...	1030	6.9	350	15.5					
03465500 - NOLICHUCKY RIVER AT EMBREEVILLE, TN									
OCT 02...	1440	259	--	24.0	JAN 07...	1635	729	--	4.0
NOV 19...	1400	482	--	10.5	AUG 27...	1055	208	--	24.0
DEC 08...	1500	840	--	5.0	SEP 19...	0945	480	--	21.0
03465603 - LITTLE CHEROKEE CREEK AT GARBER, TN									
MAY 13...	1035	11	380	16.0	SEP 29...	1440	2.3	405	14.0
03465620 - CLARK CREEK AT GRAHAM MILL, TN									
MAY 13...	1125	4.9	60	16.5	SEP 29...	1555	0.12	110	15.0
03465780 - CLEAR FORK NEAR FAIRVIEW, TN									
JAN 14...	0940	2.3	500	4.5	SEP 29...	0950	1.5	460	17.0
MAY 12...	1435	8.8	450	20.0					
03465800 - MUDDY FORK AT FAIRVIEW, TN									
JAN 14...	1030	2.3	525	4.5	SEP 29...	0910	1.6	490	17.0
MAY 12...	1500	9.8	460	18.0					
03466228 - SINKING CREEK AT AFTON, TN									
OCT 01...	1315	2.0	--	21.0	APR 07...	1145	48	--	10.0
NOV 18...	0950	2.1	--	10.0	MAY 13...	1355	11	--	19.0
JAN 06...	1035	2.5	--	4.0	JUN 17...	1100	7.1	--	20.0
FEB 12...	1045	7.1	--	9.0	AUG 25...	1100	2.6	--	19.0
MAR 13...	1410	16	--	11.0	SEP 29...	1415	2.2	--	17.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03466256 - COLLEGE CREEK AT TUSCULUM, TN									
JAN 14...	1200	1.3	460	8.5	SEP 29...	1125	1.5	440	17.0
MAY 13...	1250	3.6	440	19.0					
03466295 - CAMP CREEK AT CAMP CREEK, TN									
JAN 14...	1250	16	162	11.0	SEP 29...	1305	7.8	195	17.5
MAY 13...	1215	28	148	15.5					
03467993 - CEDAR CREEK NEAR VALLEY HOME, TN									
JAN 15...	1230	1.0	445	10.5	SEP 29...	0915	0.31	475	16.0
MAY 14...	1600	1.3	450	20.0					
03467998 - SINKING FORK AT WHITE PINE, TN									
JAN 15...	1340	1.3	580	10.0	SEP 29...	1030	0.80	575	18.0
MAY 14...	1455	2.6	530	20.0					
03469610 - COVE CREEK AT HATCHERTOWN, TN									
JAN 15...	1240	3.6	230	12.5	SEP 28...	1040	2.2	240	15.5
MAY 11...	1240	6.6	215	19.0					
03470500 - FRENCH BROAD RIVER NEAR KNOXVILLE, TN									
OCT 10...	1035	1400	--	22.0	MAY 29...	1100	1630	--	16.0
DEC 16...	1130	1550	--	9.5	JUL 28...	1250	1700	--	22.0
MAR 24...	1100	1500	--	10.0					
03472600 - BEAVERDAM CREEK AT SHADY VALLEY, TN									
JAN 14...	1335	13	50	5.5	SEP 29...	1215	3.3	83	14.5
MAY 12...	1020	16	46	14.5					
03476515 - BEIDLEMAN CREEK NEAR CAYWOOD FORD, TN									
JAN 14...	1120	15	400	5.0	SEP 28...	1700	7.3	320	18.5
MAY 12...	1120	38	400	17.0					
03481600 - CORN CREEK AT MOUNTAIN CITY, TN									
JAN 14...	1410	1.8	50	5.0	SEP 29...	1035	0.42	102	12.0
MAY 13...	1335	2.7	43	20.0					
03486313 - SINKING CREEK AT JOHNSON CITY, TN									
JAN 14...	1635	5.2	310	12.0	SEP 29...	0830	3.6	350	14.0
MAY 13...	0920	12	350	15.0					
03487509 - BEAR CREEK AT SULLIVAN GARDENS, TN									
MAY 12...	1340	0.42	500	20.5	SEP 28...	1230	0.03	410	19.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS
 WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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TENNESSEE RIVER BASIN--Continued									
03487545 - BOOZY CREEK NEAR OREBANK, TN									
JAN 14...	0945	4.8	350	4.5	SEP 28...	1430	1.6	400	20.0
MAY 20...	1210	7.1	375	18.5					
03487550 - REEDY CREEK AT OREBANK, TN									
OCT 01...	1915	8.0	--	22.0	MAR 09...	1240	56	--	11.0
NOV 18...	1805	12	--	11.0	MAY 12...	1610	30	--	19.0
JAN 07...	0845	21	--	5.0	JUN 11...	0935	12	--	19.0
FEB 12...	1300	31	--	9.0					
03490500 - HOLSTON RIVER AT SURGOINSVILLE, TN									
OCT 01...	1615	2040	--	25.0	MAR 10...	1730	8500	--	9.0
DEC 08...	1245	1180	--	10.0	MAY 13...	1705	8660	--	9.0
					MAY 15...	1025	4520	--	15.0
03490530 - FORGEY CREEK NEAR SURGOINSVILLE, TN									
MAY 12...	1345	3.2	400	19.5					
03491000 - BIG CREEK NEAR ROGERSVILLE, TN									
OCT 01...	1145	5.8	--	22.0	MAY 14...	1210	22	--	19.0
NOV 18...	1130	12	--	11.0	JUN 10...	1450	8.5	--	23.0
FEB 03...	0930	94	--	8.0	AUG 24...	1520	3.2	--	22.0
MAR 14...	0905	42	--	7.0					
03491300 - BEECH CREEK AT KEPLER, TN									
OCT 01...	1000	3.8	--	22.0	APR 11...	0955	120	--	11.0
NOV 18...	1000	7.4	--	11.0	MAY 14...	0950	17	--	18.0
JAN 06...	1000	14	--	2.0	JUN 10...	1310	5.8	--	23.0
FEB 19...	1305	1890	--	8.0	AUG 12...	1005	1.7	--	23.5
MAR 02...	1630	79	--	6.5	SEP 24...	1305	0.97	--	22.0
MAR 09...	1640	45	--	11.0	SEP 16...	1140	2.8	--	21.0
03494990 - FLAT CREEK AT LUTTRELL, TN									
JAN 15...	0930	6.1	415	6.0	MAY 12...	0835	8.5	390	16.0
03495400 - ROSEBERRY CREEK AT SHIPETOWN, TN									
JAN 15...	1020	3.6	390	8.0	SEP 29...	1015	0.99	415	16.0
MAY 11...	1345	5.7	360	18.0					
03495550 - LOVE CREEK AT KNOXVILLE, TN									
JAN 15...	1100	4.2	485	10.0	SEP 29...	1100	2.8	525	17.5
MAY 11...	1440	6.0	500	18.0					
03498500 - LITTLE RIVER NEAR MARYVILLE, TN									
OCT 03...	0850	55	--	23.0	FEB 17...	1145	637	--	8.0
NOV 19...	1355	144	--	12.0	JUN 08...	1410	235	--	23.0
JAN 08...	1215	167	--	7.0	SEP 30...	1030	44	--	19.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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TENNESSEE RIVER BASIN--Continued									
03498850 - LITTLE RIVER NEAR ALCOA, TN									
NOV					JUN				
06...	1120	95	--	16.0	08...	1150	225	--	21.0
12...	1110	394	--	14.0	AUG				
MAR					14...	1050	91	--	25.0
30...	1500	326	--	17.0	14...	1100	89	--	25.0
MAY					SEP				
04...	1150	320	--	18.0	30...	0915	36	--	20.0
03527800 - BIG WAR CREEK AT LUTHER, TN									
MAY					SEP				
12...	1100	12	320	17.0	29...	1255	2.1	360	19.0
03528000 - CLINCH RIVER ABOVE TAZEWEILL, TN									
NOV					MAY				
20...	1030	850	--	10.5	06...	1345	2000	--	19.0
FEB					AUG				
02...	1240	5270	--	7.0	19...	1500	198	--	29.0
03528385 - FALL CREEK AT LICKSKILLET, TN									
JAN					SEP				
14...	1315	1.5	390	6.5	29...	1500	0.87	415	20.0
MAY									
11...	1350	2.0	350	19.0					
03528390 - CROOKED CREEK NEAR MAYNARDVILLE, TN									
JAN					MAY				
14...	1150	0.87	95	5.5	11...	1245	1.3	340	18.0
03534927 - BULLRUN CREEK NEAR LUTTRELL, TN									
JAN					MAY				
14...	1440	2.4	290	6.0	11...	1450	3.6	325	19.0
03534975 - NORTH FORK BULLRUN CREEK BELOW MAYNARDVILLE, TN									
JAN					MAY				
14...	1025	2.1	290	5.0	11...	1125	3.5	350	17.0
03534990 - RACCOON CREEK AT PAULETTE, TN									
JAN					SEP				
14...	0915	1.7	380	4.0	28...	1050	1.2	440	16.0
MAY									
11...	1020	3.0	350	15.0					
03535000 - BULLRUN CREEK NEAR HALLS CROSSROADS, TN									
OCT					JAN				
09...	1200	5.1	--	17.0	12...	1200	22	--	4.0
NOV									
07...	1200	13	--	15.0					
03536320 - WHITEOAK CREEK NEAR MELTON HILL, TN									
APR					MAY				
10...	1135	0.84	166	12.0	28...	1015	0.09	345	23.0
15...	1000	3.5	200	13.0					
03536380 - WHITEOAK CREEK NEAR WHEAT, TN									
DEC					FEB				
04...	1310	3.6	--	17.0	17...	1125	7.2	--	12.5
JAN					27...	1130	46	160	9.5
27...	1030	9.5	--	10.0	AUG				
					19...	1010	2.4	240	24.0
03536440 - NORTHWEST TRIBUTARY NEAR OAK RIDGE, TN									
APR					MAY				
10...	1300	0.98	290	15.5	28...	1140	0.62	270	22.0
15...	1055	2.9	265	13.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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TENNESSEE RIVER BASIN--Continued									
03536450 - FIRST CREEK NEAR OAK RIDGE, TN									
FEB					MAY				
06...	1100	0.68	--	11.5	28...	1225	0.27	320	21.0
12...	1300	0.51	--	14.5					
17...	0945	1.2	--	11.5					
27...	1010	9.6	160	10.0					
27...	1245	5.0	210	11.0					
03537100 - MELTON BRANCH NEAR MELTON HILL NR OAK RIDGE, TN									
NOV					FEB				
10...	1145	0.17	--	12.5	27...	1605	8.8	125	8.5
JAN									
27...	1140	1.1	--	3.0					
03538225 - POPLAR CREEK NEAR OAK RIDGE, TN									
OCT					JUN				
15...	1110	51	--	14.5	04...	1030	26	--	22.0
NOV					18...	1140	24	--	23.0
21...	1045	69	--	13.0	18...	1220	24	--	23.0
MAR					AUG				
07...	1300	140	--	9.0	10...	1100	13	--	24.0
APR					SEP				
25...	1230	155	--	14.0	01...	1410	4.4	--	21.0
03538250 - EAST FORK POPLAR CREEK NEAR OAK RIDGE, TN									
OCT					APR				
15...	1310	25	--	16.0	25...	0945	32	--	14.0
NOV					JUN				
21...	1330	32	--	13.0	04...	1255	25	--	21.0
DEC					JUL				
31...	1320	26	--	9.0	10...	1150	23	--	22.0
JAN					AUG				
27...	1415	75	--	7.0	10...	1325	28	--	24.0
MAR					SEP				
07...	0920	45	--	11.0	15...	1325	21	--	21.0
035382672 - BEAR CREEK TRIB ABOVE BEAR CREEK ROAD NEAR WHEAT, TN									
OCT					JAN				
17...	0930	0.02	--	9.0	19...	1200	7.5	--	9.5
29...	1125	0.03	--	11.0					
DEC									
10...	1125	2.6	--	10.5					
03538267 - BEAR CREEK NEAR WHEAT, TN									
OCT					JAN				
10...	1105	0.19	--	16.0	19...	1240	71	--	9.5
14...	1145	3.4	--	17.0	MAY				
17...	1240	0.47	--	11.5	06...	1535	1.5	360	18.0
DEC					AUG				
10...	1220	23	--	11.5	18...	1335	0.10	435	22.0
035382677- BEAR CREEK TRIBUTARY NEAR WHEAT, TN									
OCT					DEC				
14...	1405	0.01	--	16.5	10...	1025	1.5	--	11.5
17...	1005	<.01	--	9.0	JAN				
29...	1245	0.01	--	12.0	19...	1050	4.1	--	10.0
03538270 - BEAR CREEK AT STATE HIGHWAY 95 NEAR OAK RIDGE, TN									
FEB					FEB				
17...	1330	12	--	8.5	27...	1450	66	155	9.0
03538272 - BEAR CREEK TRIBUTARY AT HIGHWAY 95 NEAR WHEAT, TN									
OCT					FEB				
14...	1335	0.01	--	15.5	17...	1415	0.31	--	7.5
DEC									
10...	0940	1.2	--	11.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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TENNESSEE RIVER BASIN--Continued									
03538273 - BEAR CREEK AT PINE RIDGE, NEAR WHEAT, TN									
OCT					JAN				
10...	1235	0.31	--	16.0	08...	1355	1.7	--	8.5
14...	1305	4.7	--	16.5	FEB				
17...	1130	0.69	--	11.0	17...	1510	13	--	8.5
DEC					AUG				
10...	1340	37	--	11.5	18...	1030	0.31	310	17.5
03539800 - OBED RIVER NEAR LANCING, TN									
OCT					JUL				
06...	1125	12	--	23.0	30...	1345	18	--	30.0
APR					SEP				
10...	1330	692	--	11.0	11...	1235	19	--	24.0
JUN									
26...	1240	164	--	25.0					
03540500 - EMORY RIVER AT OAKDALE, TN									
OCT					JUN				
08...	1230	16	--	22.0	29...	1400	133	--	27.0
30...	1115	429	--	13.5	JUL				
MAR					29...	1250	32	--	30.0
28...	1110	641	--	13.0	SEP				
APR					01...	1150	56	--	24.0
28...	1225	727	--	16.0					
MAY									
28...	1230	573	--	23.0					
03543500 - SEWEE CREEK NEAR DECATUR, TN									
OCT					APR				
16...	1205	31	--	13.0	30...	1535	79	--	18.0
DEC					JUN				
04...	1205	148	--	9.0	19...	1125	30	--	22.0
JAN					JUL				
09...	1210	70	--	7.0	29...	1350	25	--	24.0
FEB					SEP				
12...	1145	120	--	10.0	23...	1115	16	--	17.0
03555882 - BARNEY CREEK NEAR COKER CREEK, TN									
JAN					SEP				
14...	1340	2.6	34	6.5	28...	1400	0.39	52	18.0
MAY									
12...	1100	2.4	35	16.0					
03556610 - JUNEBUG CREEK AT RELIANCE, TN									
JAN					SEP				
14...	1205	0.74	35	4.5	28...	1230	0.11	55	18.0
MAY									
13...	1325	0.72	38	20.0					
03560500 - DAVIS MILL CREEK AT COPPERHILL, TN									
OCT					APR				
01...	1430	105	--	26.5	01...	1310	87	--	17.0
27...	1150	65	--	16.0	MAY				
27...	1155	65	--	16.0	01...	1120	110	--	22.0
27...	1640	63	--	21.0	12...	1255	101	--	23.0
27...	1730	65	--	15.0	JUN				
28...	0845	52	--	18.0	17...	1150	104	--	21.0
28...	1200	26	--	18.0	JUL				
NOV					01...	1200	103	--	26.0
18...	1305	101	--	21.0	AUG				
DEC					03...	1300	107	--	26.0
17...	1125	91	--	20.0	SEP				
FEB					02...	1125	124	--	26.0
02...	1205	135	--	14.0					
MAR									
03...	1345	100	--	14.0					
03563000 - OCOEE RIVER AT EMF, TN									
APR					JUN				
10...	1255	1050	--	12.0	17...	1510	1050	--	19.5
MAY					AUG				
12...	1515	1090	--	17.5	03...	1530	1360	--	21.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03564500 - OCOEE RIVER AT PARKSVILLE, TN									
OCT 02...	0930	119	--	24.0	SEP 09...	0930	86	--	25.0
03565500 - OOSTANAULA CREEK NEAR SANFORD, TN									
OCT 02...	1330	17	--	22.5	MAY 13...	1200	49	--	18.0
NOV 19...	1150	29	--	12.0	JUN 18...	1100	35	--	21.0
JAN 08...	1045	64	--	9.0	AUG 04...	1055	23	--	22.0
MAR 10...	1135	132	--	10.5	SEP 10...	1325	19	--	21.0
APR 09...	1200	78	--	12.5					
03566111 - LITTLE SOUTH MOUSE CREEK NEAR CHARLESTON, TN									
JAN 14...	1110	3.8	300	9.5	SEP 28...	1135	0.71	335	18.0
MAY 13...	0935	3.4	305	18.0					
03566200 - BRYMER CREEK NEAR MCDONALD, TN									
OCT 07...	1345	1.1	500	16.5	AUG 20...	1000	1.5	435	21.0
03566253 - GREASY CREEK AT HOPEWELL, TN									
JAN 14...	1035	1.6	200	5.5	MAY 13...	0845	2.6	250	17.0
03566420 - WOLFTEVER CREEK NEAR OOLTEWAH, TN									
OCT 07...	1555	1.4	--	20.0	APR 17...	1110	28	--	10.5
NOV 05...	1030	4.4	--	16.5	MAY 12...	1300	5.7	--	20.5
DEC 10...	1150	219	--	12.0	JUL 02...	1015	4.7	--	20.5
JAN 13...	1315	10	--	7.5	AUG 18...	1500	3.7	--	29.0
FEB 24...	1015	59	--	7.5					
03567500 - SOUTH CHICKAMAUGA CREEK NEAR CHICKAMAUGA, TN									
OCT 07...	1755	74	--	21.0	APR 17...	1600	704	--	11.5
NOV 05...	1300	174	--	17.0	MAY 14...	0845	183	--	20.0
DEC 10...	1545	3320	--	12.5	JUL 07...	1000	138	--	25.5
JAN 13...	1615	253	--	7.5	AUG 19...	1115	152	--	24.5
FEB 24...	1600	1160	--	9.0					
03568000 - TENNESSEE RIVER AT CHATTANOOGA, TN									
MAR 11...	1100	53000	--	9.5	MAR 11...	1123	54100	--	9.5
03571000 - SEQUATCHIE RIVER NEAR WHITWELL, TN									
OCT 06...	1425	61	--	22.0	MAY 14...	0830	198	--	20.0
NOV 04...	1500	236	--	16.5	JUL 01...	1215	102	--	24.0
JAN 12...	1615	311	--	7.5	AUG 03...	1330	56	--	27.0
FEB 25...	1300	1690	--	9.5	20...	1245	116	--	24.0
MAR 09...	1500	980	--	12.0	SEP 02...	1000	48	--	21.0
APR 06...	1845	772	--	10.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03571850 - TENNESSEE RIVER AT SOUTH PITTSBURG, TN									
MAR 10...	1100	77800	--	11.0	MAR 10...	1130	76200	--	11.0
03578000 - ELK RIVER NEAR PELHAM, TN									
OCT 08...	1105	10	--	15.0	APR 09...	1100	102	--	10.0
NOV 06...	1000	42	--	15.0	MAY 14...	1130	16	--	21.0
DEC 08...	1050	91	--	11.5	JUL 07...	1300	6.0	--	24.0
JAN 14...	1430	44	--	9.5	AUG 21...	1045	2.0	--	23.5
FEB 26...	1030	182	--	9.5					
03581070 - EAST FORK MULBERRY CREEK BELOW LYNCHBURG, TN									
SEP 16...	1450	5.9	280	23.0					
03581115 - EAST FORK MULBERRY CREEK NEAR BOONEVILLE, TN									
SEP 16...	1600	6.7	370	25.0					
03582205 - NORRIS CREEK BELOW HOWELL, TN									
OCT 07...	0720	0.31	455	14.5	JUN 29...	1715	0.59	360	23.5
MAY 18...	1350	2.0	340	21.5	AUG 17...	1600	0.19	370	26.0
03584500 - ELK RIVER NEAR PROSPECT, TN									
OCT 07...	1030	575	--	18.5	APR 07...	1000	1620	--	9.5
NOV 04...	1320	840	--	15.0	JUN 30...	0900	259	--	25.0
JAN 14...	1030	1210	--	6.5	AUG 18...	0845	205	--	26.5
FEB 24...	1050	8640	--	9.0					
03588000 - SHOAL CREEK AT LAWRENCEBURG, TN									
OCT 07...	1505	22	--	16.0	APR 09...	0930	54	--	11.5
NOV 06...	0855	17	--	15.0	MAY 20...	0830	27	--	15.0
DEC 11...	1455	174	--	10.5	JUL 01...	0815	31	--	20.0
JAN 22...	1530	81	--	5.5	AUG 19...	0850	17	--	21.0
FEB 25...	0930	152	--	8.5					
03588400 - CHISHOLM CREEK AT WESTPOINT, TN									
OCT 08...	0850	12	--	14.5	APR 08...	1045	46	--	11.0
NOV 05...	0850	22	--	15.0	MAY 20...	1035	30	--	17.0
DEC 11...	1200	246	--	9.5	JUL 01...	1020	18	--	23.0
JAN 23...	0915	64	--	3.5	AUG 19...	1100	13	--	24.0
FEB 25...	1130	158	--	8.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03588500 - SHOAL CREEK AT IRON CITY, TN									
OCT 02...	1135	106	--	17.0	APR 08...	1430	370	--	12.5
NOV 05...	1120	150	--	16.0	MAY 20...	1315	219	--	20.0
DEC 10...	1130	6030	--	10.5	JUL 01...	1255	175	--	25.0
JAN 23...	1013	633	--	5.0	AUG 19...	1445	133	--	26.0
FEB 25...	1400	1250	--	9.5					
03596000 - DUCK RIVER BELOW MANCHESTER, TN									
OCT 08...	1405	24	--	17.5	APR 09...	1430	79	--	13.5
NOV 06...	1350	46	--	16.5	MAY 14...	0940	39	--	21.5
DEC 08...	1510	215	--	9.5	JUL 08...	1135	21	--	25.5
JAN 15...	1000	80	--	7.5	AUG 21...	1345	18	--	25.0
FEB 26...	1350	222	--	9.5					
03598000 - DUCK RIVER NEAR SHELBYVILLE, TN									
OCT 06...	1430	167	--	20.5	MAY 18...	1240	193	--	21.5
NOV 04...	1045	218	--	15.0	JUN 29...	1505	179	--	25.0
JAN 13...	1225	268	--	5.5	AUG 17...	1450	139	--	25.5
APR 06...	1430	351	--	14.5					
03599960 - AENON CREEK NEAR SPRING HILL, TN									
APR 21...	1030	12	400	15.5	AUG 26...	0850	0.01	410	23.0
NOV 28...	1005	5.4	380	15.0					
JUL 30...	0915	0.11	370	23.0					
03599965 - RUTHERFORD CREEK NEAR SPRING HILL, TN									
APR 21...	1330	32	380	19.0	APR 28...	1120	16	380	17.0
03599967 - MCCUTCHEON CREEK AT SPRING HILL, TN									
APR 21...	1300	2.4	390	20.5	JUN 03...	1000	0.43	420	22.0
03599968 - MCCUTCHEON CREEK TRIBUTARY BELOW HIGHWAY 31 AT SPRING HILL, TN									
APR 21...	1145	2.6	235	20.0	APR 22...	1015	2.3	275	18.0
035999682 - MCCUTCHEON CREEK TRIBUTARY BELOW SPRING HILL, TN									
APR 21...	1345	2.5	255	24.0	JUN 03...	0930	0.23	318	24.0
APR 22...	1200	2.3	260	21.0					
035999683 - MCCUTCHEON CREEK TRIBUTARY AT BEEHCROFT STREET AT SPRING HILL, TN									
APR 21...	0815	0.29	410	12.5	APR 22...	0900	0.21	410	15.0
035999689 - UNNAMED TRIBUTARY TO MCCUTCHEON CREEK TRIBUTARY AT SPRING HILL, TN									
APR 21...	1345	0.93	370	25.0	JUN 03...	0910	0.37	380	23.0
035999697 - MCCUTCHEON CREEK TRIBUTARY AT KEDRON ROAD AT SPRING HILL, TN									
APR 21...	0815	0.04	310	13.5	JUN 03...	1035	0.01	360	22.5

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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TENNESSEE RIVER BASIN--Continued									
03599970 - MCCUTCHEON CREEK NEAR SPRING HILL, TN									
APR 21...	0915	8.6	355	15.5	AUG 26...	0815	<.01	400	24.0
28...	0950	3.4	360	15.0					
JUN 03...	1110	1.1	410	23.0					
03599971 - MCCUTCHEON CREEK NEAR KEDRON, TN									
APR 21...	1220	7.5	350	20.0	JUN 03...	1150	1.4	390	24.0
03599980 - RUTHERFORD CREEK NEAR NEAPOLIS, TN									
APR 28...	1040	22	410	17.0	AUG 26...	1010	0.01	385	24.0
0360008454 - CARTERS CREEK NEAR KLEBURNE, TN									
FEB 12...	0945	10	--	10.0					
036000846 - CARTERS CREEK TRIBUTARY NEAR SPRING HILL, TN									
FEB 12...	0955	0.02	--	9.5					
0360008465 - CARTERS CREEK AT MILE 5.0 AT CARTERS CREEK, TN									
FEB 12...	1045	10	--	9.0					
036000847 - CARTERS CREEK BELOW KLEBURNE, TN									
FEB 12...	1140	9.9	--	10.0					
0360008475 - CARTERS CREEK AT MILE 4.9 NEAR CARTERS CREEK, TN									
FEB 12...	1235	9.9	--	11.0					
03600093 - CARTERS CREEK NEAR DARKS MILL, TN									
APR 28...	1135	13	405	18.0					
03600360 - SNOW CREEK NEAR SANTA FE, TN									
APR 28...	1000	7.0	270	16.0	AUG 26...	1300	2.4	375	24.0
03600370 - SNOW CREEK NEAR WILLIAMSPORT, TN									
APR 28...	1205	15	315	17.5					
03600380 - LEIPERS CREEK AT WILLIAMSPORT, TN									
APR 28...	1320	29	275	17.0	AUG 26...	1145	3.1	295	25.0
03600500 - BIG BIGBY CREEK AT SANDY HOOK, TN									
OCT 08...	1435	2.7	--	19.0	APR 07...	1330	18	--	12.0
NOV 06...	1300	4.8	--	16.5	MAY 19...	1145	7.5	--	24.0
DEC 16...	0930	16	--	7.5	29...	0930	6.5	--	21.0
JAN 14...	1350	8.2	--	8.5	29...	1150	6.3	--	21.0
FEB 24...	1445	67	--	8.5	AUG 18...	1410	4.7	--	28.5
03601100 - BIG BIGBY CREEK AT NEEDMORE, TN									
OCT 01...	0945	6.0	470	17.5	JUN 30...	1508	8.7	330	26.0
MAY 19...	1230	14	300	22.0	AUG 18...	1230	9.4	320	26.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03602192 - WEST PINEY RIVER NEAR DICKSON, TN									
OCT 15...	0935	8.0	240	12.0	AUG 25...	0900	7.4	245	18.0
MAY 20...	1005	14	230	17.0					
03602194 - WEST PINEY RIVER BELOW STATE HIGHWAY 48, NEAR DICKSON, TN									
OCT 15...	1120	7.6	240	12.0	AUG 25...	1000	7.0	250	20.0
MAY 20...	0950	16	222	18.0	SEP 10...	1115	7.3	255	19.5
03602209 - PINEY RIVER NEAR OAK GROVE, TN									
OCT 15...	1120	11	290	14.0	AUG 25...	1045	9.1	360	21.0
MAY 20...	1030	24	260	19.5	SEP 10...	1130	9.8	350	22.5
03602230 - PINEY RIVER ABOVE PINWOOD, TN									
OCT 16...	0940	19	290	12.0	AUG 25...	1240	17	275	23.0
MAY 20...	1230	42	270	21.0					
03602265 - PINEY RIVER AT PINWOOD, TN									
OCT 15...	1215	44	270	15.0	AUG 25...	1415	39	290	25.5
MAY 20...	1145	86	248	21.0					
03602500 - PINEY RIVER AT VERNON, TN									
OCT 16...	1200	68	--	13.0	APR 07...	1205	183	--	11.0
NOV 14...	1430	209	--	8.0	MAY 20...	1450	127	--	22.0
DEC 15...	1125	270	--	8.0	JUN 30...	1300	80	--	23.0
JAN 16...	0935	123	--	9.0	AUG 21...	1000	63	--	22.0
MAR 02...	1230	1220	--	10.5					
03603000 - DUCK RIVER ABOVE HURRICANE MILLS, TN									
OCT 09...	1600	516	--	19.0	APR 08...	1040	1970	--	11.5
NOV 17...	1015	4330	--	12.0	MAY 21...	0720	958	--	23.0
JAN 20...	1630	8110	--	6.5	JUL 01...	0730	894	--	26.0
MAR 02...	1700	44000	--	10.5	AUG 26...	1645	472	--	26.0
03604500 - BUFFALO RIVER NEAR LOBELVILLE, TN									
OCT 29...	1130	396	--	14.5	APR 07...	1320	756	--	10.5
NOV 24...	1000	669	--	9.0	MAY 20...	1600	407	--	24.0
JAN 20...	1000	796	--	7.5	JUN 30...	1500	382	--	25.0
FEB 27...	0900	3480	--	10.0	AUG 26...	1315	219	--	25.5
03605555 - TRACE CREEK ABOVE DENVER, TN									
OCT 09...	1415	11	--	17.0	JAN 21...	0830	20	--	5.5
NOV 13...	1210	84	--	11.0	JUL 01...	1245	14	--	24.0
DEC 11...	1330	113	--	10.0	AUG 20...	0910	5.8	--	22.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS AND FIELD DETERMINATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)
TENNESSEE RIVER BASIN--Continued									
03606500 - BIG SANDY RIVER AT BRUCETON, TN									
NOV					APR				
13...	1415	333	--	12.0	08...	1530	111	--	12.0
14...	1015	222	--	10.0	JUL				
DEC					01...	1420	60	--	23.5
11...	1640	827	--	10.5	AUG				
JAN					20...	1400	41	--	24.0
21...	1225	123	--	4.5					
FEB									
26...	1110	210	--	9.5					

GROUND-WATER LEVELS

CARTER COUNTY

361738082132900. Local number, Ct:H-1.

LOCATION.--Lat 36°17'38", long 82°13'29", Hydrologic Unit 06010103, 3.5 mi south of Elizabethton, 0.8 mi north of Gap Creek.
Owner: Gap Creek community.

AQUIFER.--Honaker dolomite of middle Cambrian age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 24 in., depth 31 ft, casing information not available.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of concrete tile, 2.50 ft above land-surface datum.

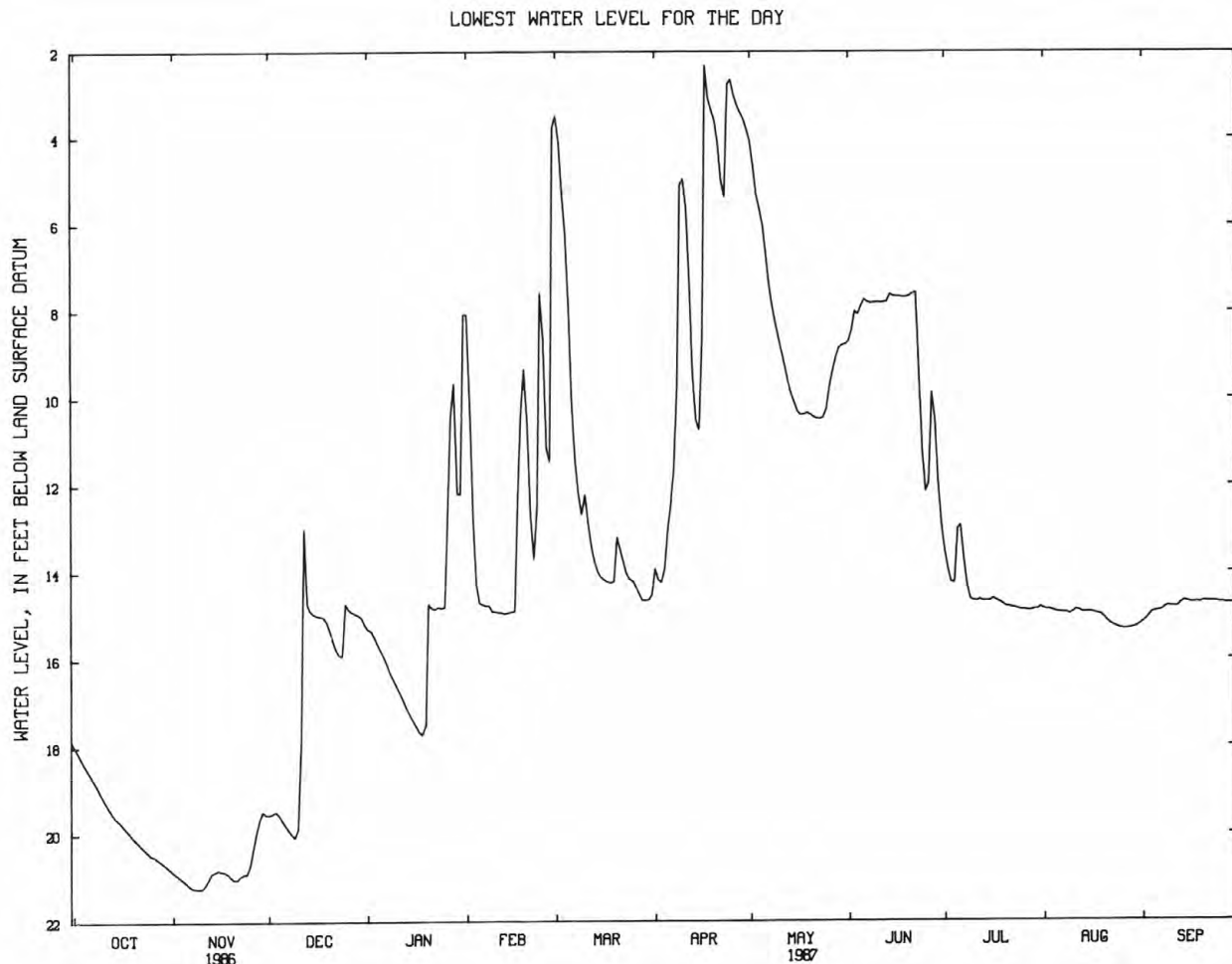
REMARKS.--Highest water level readings may be influenced for short periods by surface inflow. No missing record.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.17 ft below land-surface datum, Apr. 23, 1987; lowest, 26.01 ft below land-surface datum Dec. 22, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.51	21.10	19.68	15.80	14.72	7.88	13.08	6.02	7.88	13.01	14.93	14.92
10	19.16	21.23	19.87	16.63	14.92	12.23	4.96	8.64	7.80	14.67	14.94	14.81
15	19.69	20.81	14.96	17.41	14.92	14.14	10.74	10.12	7.66	14.68	14.94	14.70
20	20.11	21.03	15.33	14.73	10.58	13.21	3.60	10.39	7.66	14.80	15.07	14.69
25	20.47	20.71	14.72	14.81	8.63	14.22	2.65	10.27	12.16	14.88	15.32	14.72
EOM	20.80	19.55	15.20	8.07	3.77	14.54	3.80	8.77	12.90	14.82	15.23	14.72
WTR YEAR 1987	HIGHEST 0.17			APR 23, 1987			LOWEST 21.24			NOV 9, 1986		



GROUND-WATER LEVELS

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DAVIDSON COUNTY

360835086441100. Local number, Dv:L-10.

LOCATION.--Lat 36°08'35", long 86°44'11", Hydrologic Unit 05130202, 220 ft south of Elm Hill Pike, 0.3 mi west of Louisville and Nashville Railroad crossing, 0.4 mi east of Fesslers Lane in Nashville.
Owner: U.S. Geological Survey.

AQUIFER.--Carters and Lebanon Limestones of middle Ordovician age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 262 ft, cased to 40 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 515 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing 2.5 ft above land-surface datum.

REMARKS.--No record Feb. 27 to Mar. 5. Records good.

PERIOD OF RECORD.--June 1985 to current year.

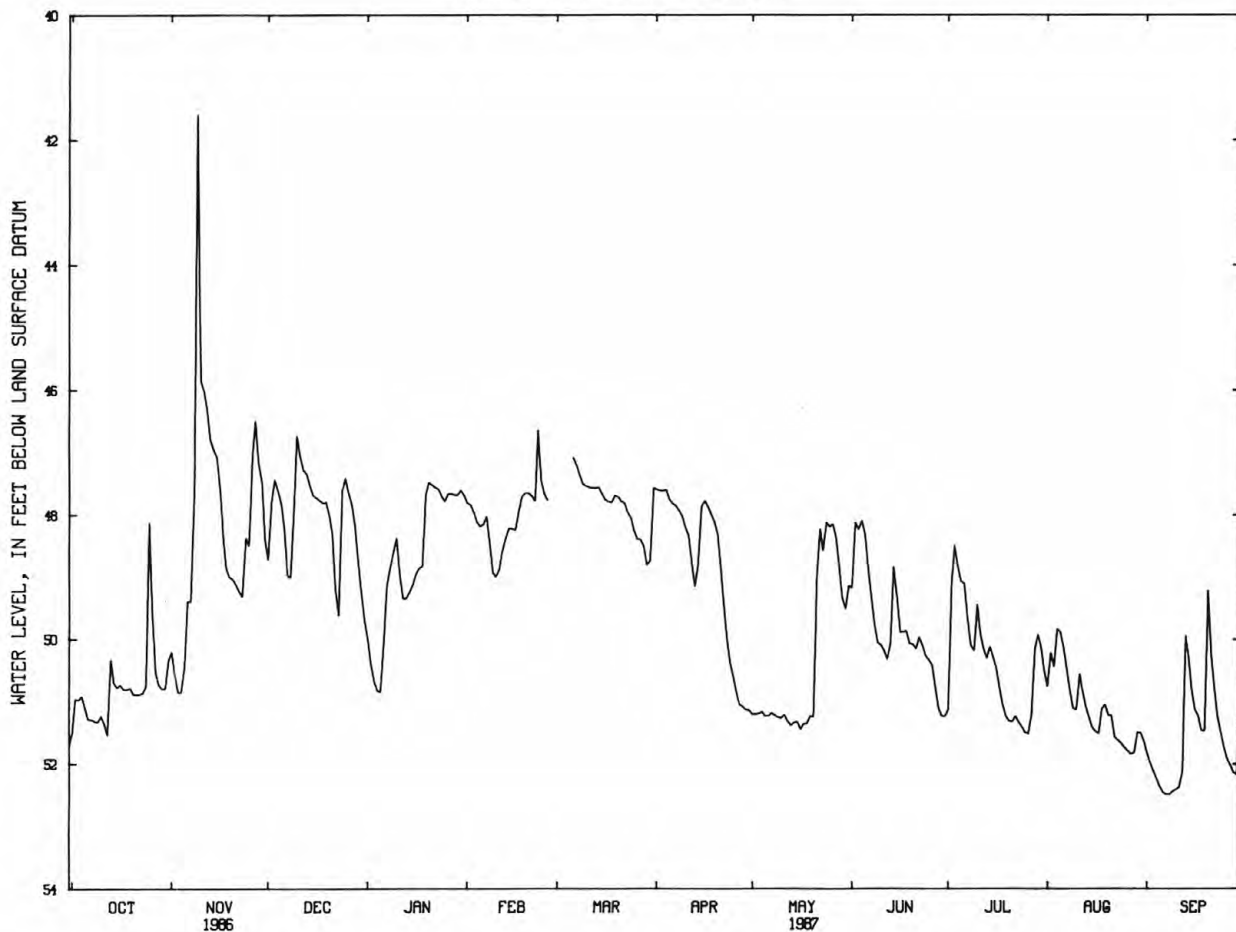
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.85 ft below land-surface datum, Nov. 9, 1986; lowest water level 52.84 ft below land-surface datum, many days July and Aug., 1985, Jan. 27, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.11	50.46	47.82	50.85	48.18	---	47.75	51.23	48.31	49.07	49.88	52.37
10	51.24	45.86	46.73	48.37	48.99	47.54	48.20	51.26	50.09	49.45	51.13	52.41
15	50.78	47.07	47.69	49.12	48.22	47.67	47.87	51.32	49.31	50.29	51.41	50.81
20	50.89	49.03	48.00	47.48	47.65	47.71	48.30	51.24	50.08	51.31	51.22	49.22
25	48.13	48.49	47.42	47.78	47.67	48.25	50.62	48.19	50.33	51.50	51.74	51.72
EOM	50.34	48.40	49.69	47.69	---	47.57	51.14	49.14	51.24	50.51	51.64	50.05

WTR YR 1987 HIGHEST 39.85 NOV 9, 1986 LOWEST 52.49 SEP 7, 8, 1987

LOWEST WATER LEVEL FOR THE DAY



GROUND-WATER LEVELS

DICKSON COUNTY

360429087233602. Local number, Di:F-19.

LOCATION.--Lat 36°04'29", long 87°23'36", Hydrologic Unit 06040003, on north side of State Highway 48, 0.4 mi northeast of State Highway 48 bridge over East Piney River at Dickson.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 387 ft, cased to 22 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 755 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of instrument shelf, 1.26 ft above land-surface datum.

REMARKS.--Records fair.

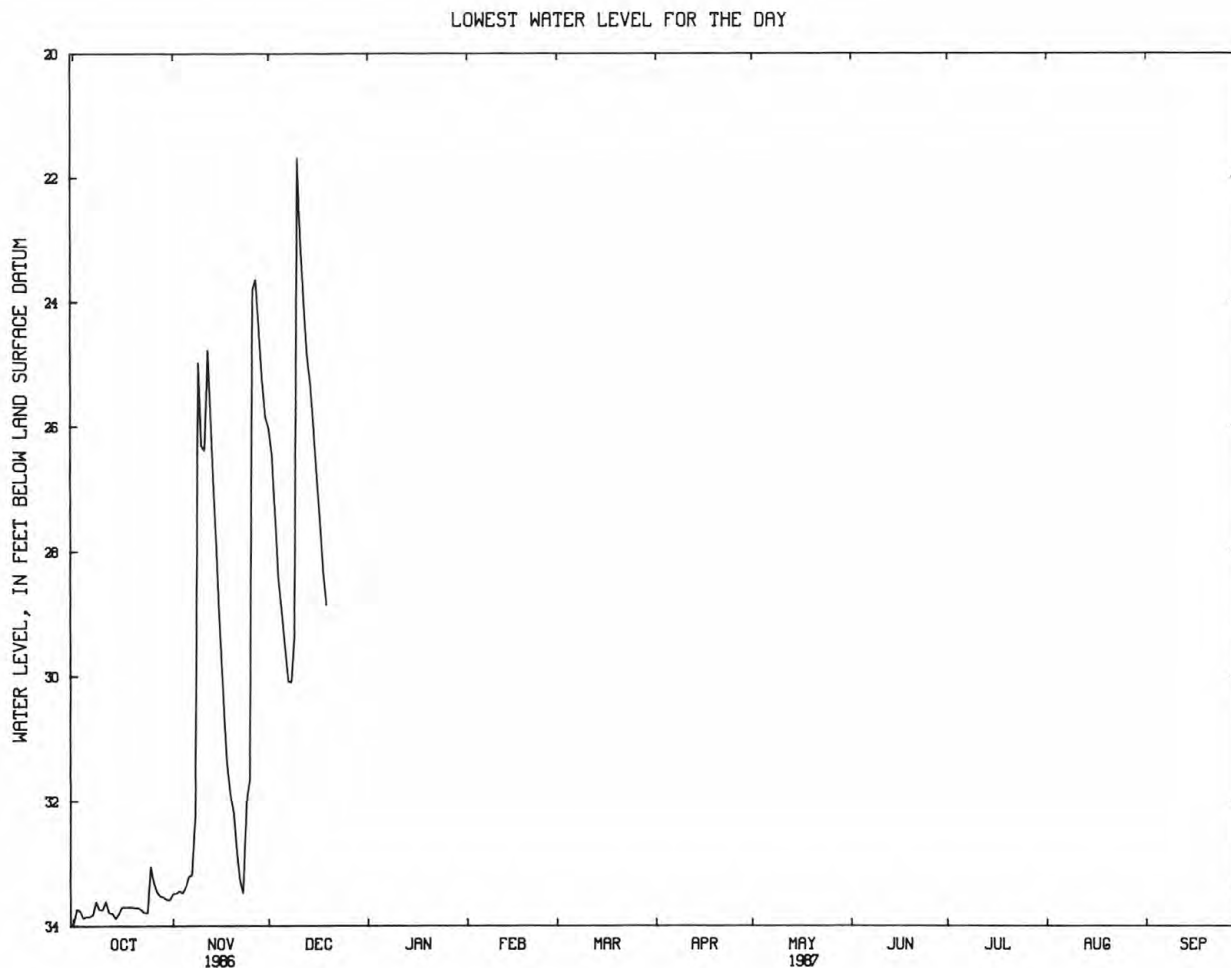
PERIOD OF RECORD.--July 1960 to December 18, 1987 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.52 ft below land-surface datum, Mar. 12, 13, 1975; lowest 34.13 ft below land-surface datum, Oct. 16, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO DECEMBER 1986
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.85	33.38	28.93	---	---	---	---	---	---	---	---	---
10	33.74	26.31	21.69	---	---	---	---	---	---	---	---	---
15	33.81	28.35	26.01	---	---	---	---	---	---	---	---	---
20	33.71	32.19	---	---	---	---	---	---	---	---	---	---
25	33.05	31.66	---	---	---	---	---	---	---	---	---	---
EOM	33.58	25.86	---	---	---	---	---	---	---	---	---	---

WTR YR 1987 HIGHEST 19.40 DEC 9, 1986 LOWEST 33.96 OCT 1, 1986



HAMILTON COUNTY

350234085181200. Local number, Hm:G-36.

LOCATION.--Lat 35°02'34", long 85°18'12", Hydrologic Unit 06020001, in Tennessee Valley Authority parking lot, Douglas Street in Chattanooga.
Owner: Tennessee Valley Authority.

AQUIFER.--Knox Dolomite of Cambrian and Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian test well, diameter 16 in. to 120 ft, 6 in. to 250 ft, cased to 27 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 670.3 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 1.5 ft above land-surface datum.

REMARKS.--No record Oct. 27 to Nov. 4. Records good. The well has been pumped at rates up to 1,200 gal/min over a 68 hour period indicating a specific capacity of 20.4 [(gal/min)/ft].

PERIOD OF RECORD.--April 1981 to current year.

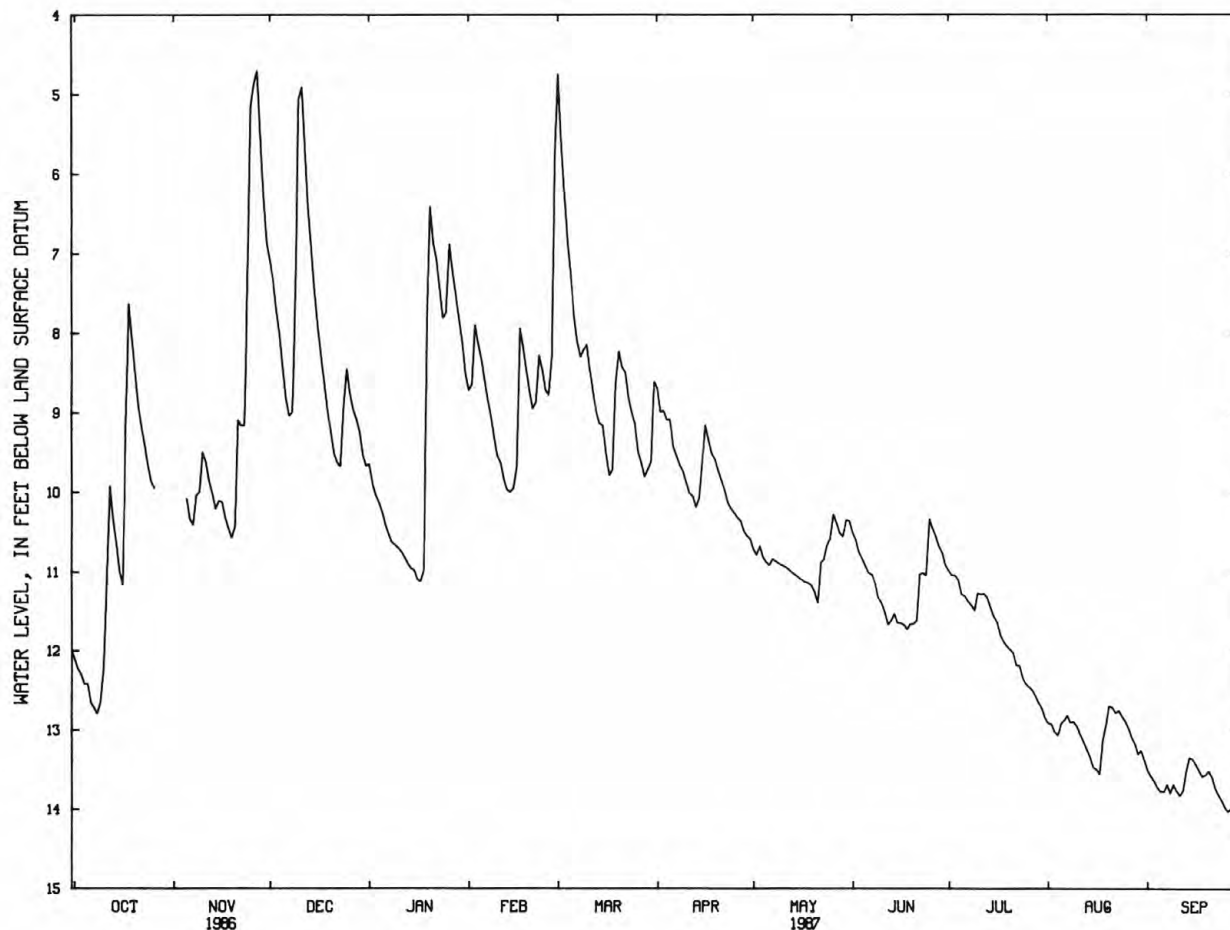
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.35 ft below land-surface datum, Dec. 1, 1982; lowest, 14.71 ft below land-surface datum, Oct. 8, 1984, Aug. 26, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987 LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.42	10.09	8.42	10.25	8.33	7.28	9.09	10.88	10.93	11.29	12.92	13.78
10	12.24	9.50	5.05	10.70	9.55	8.15	9.88	10.92	11.39	11.27	12.96	13.77
15	10.99	10.11	7.49	10.98	9.95	9.16	9.65	11.07	11.66	11.58	13.48	13.37
20	8.54	10.44	9.25	6.41	8.73	8.23	9.74	11.25	11.67	11.99	12.70	13.52
25	9.88	5.14	8.45	7.75	8.72	9.13	10.26	10.59	10.34	12.42	12.89	13.98
EOM	---	6.86	9.67	8.52	5.82	8.61	10.59	10.36	10.92	12.85	13.39	13.44

WTR YR 1987 HIGHEST 3.46 NOV 26, 1986 LOWEST 14.17 SEP 29, 1987

LOWEST WATER LEVEL FOR THE DAY



HAMILTON COUNTY--Continued

351428085003600. Local number, Hm:0-15.

LOCATION.--Lat 35°14'28", long 85°00'36", Hydrologic Unit 06020001, at Smith Road and State Highway 58, near Snow Hill.

Owner: Savannah Valley Utility District.

AQUIFER.--Knox Dolomite of Cambrian and Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian test well, diameter 10 in., depth 262 ft, cased to 50 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 735 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of back shelter panel, 8.00 ft above land-surface datum.

REMARKS.--Well previously published as "at Savannah Valley". Water level affected intermittently by pumping from municipal supply well 300 ft south. Negative values indicate water levels above land-surface.

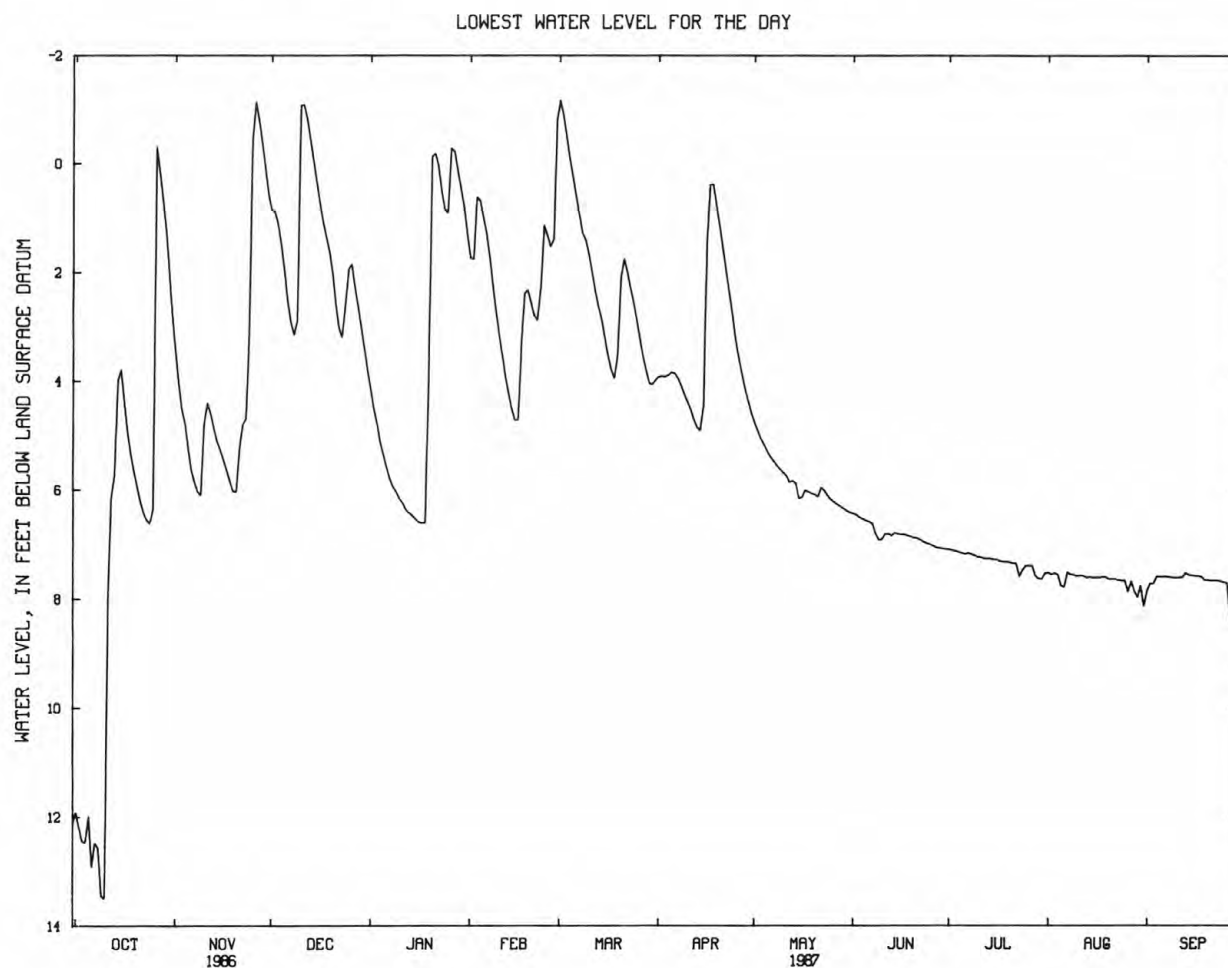
PERIOD OF RECORD.--May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.40 ft above land-surface datum, May 31, 1979; lowest, 18.88 ft below land-surface datum, Aug. 31, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.99	5.27	1.98	5.35	.99	.25	3.84	5.29	6.57	7.16	7.76	7.59
10	13.50	4.78	-1.09	6.17	3.11	1.67	4.38	5.68	6.91	7.23	7.58	7.61
15	3.80	5.26	.32	6.54	4.72	3.19	4.45	6.16	6.81	7.28	7.61	7.57
20	5.92	6.04	2.01	-1.14	2.56	2.08	1.16	6.09	6.88	7.33	7.64	7.66
25	6.35	-4.49	1.93	.90	1.31	2.88	3.22	6.18	7.00	7.39	7.67	7.70
EOM	2.78	.55	3.80	1.30	-.82	3.98	4.59	6.42	7.09	7.53	8.14	7.64

WTR YR 1987 HIGHEST -2.10 MAR 1, 1987 LOWEST 13.50 OCT 10, 1986



GROUND-WATER LEVELS

341

HUMPHREYS COUNTY

360020087573300. Local number, Hs:H-1.

LOCATION.--Lat 36°00'20", long 87°57'33", Hydrologic Unit 06040005, 100 ft north of Woodland Drive, at New Johnsonville.
Owner: A. M. Powers.

AQUIFER.--Camden Chert of early Devonian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 187 ft, cased to 72 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1962 to current year.

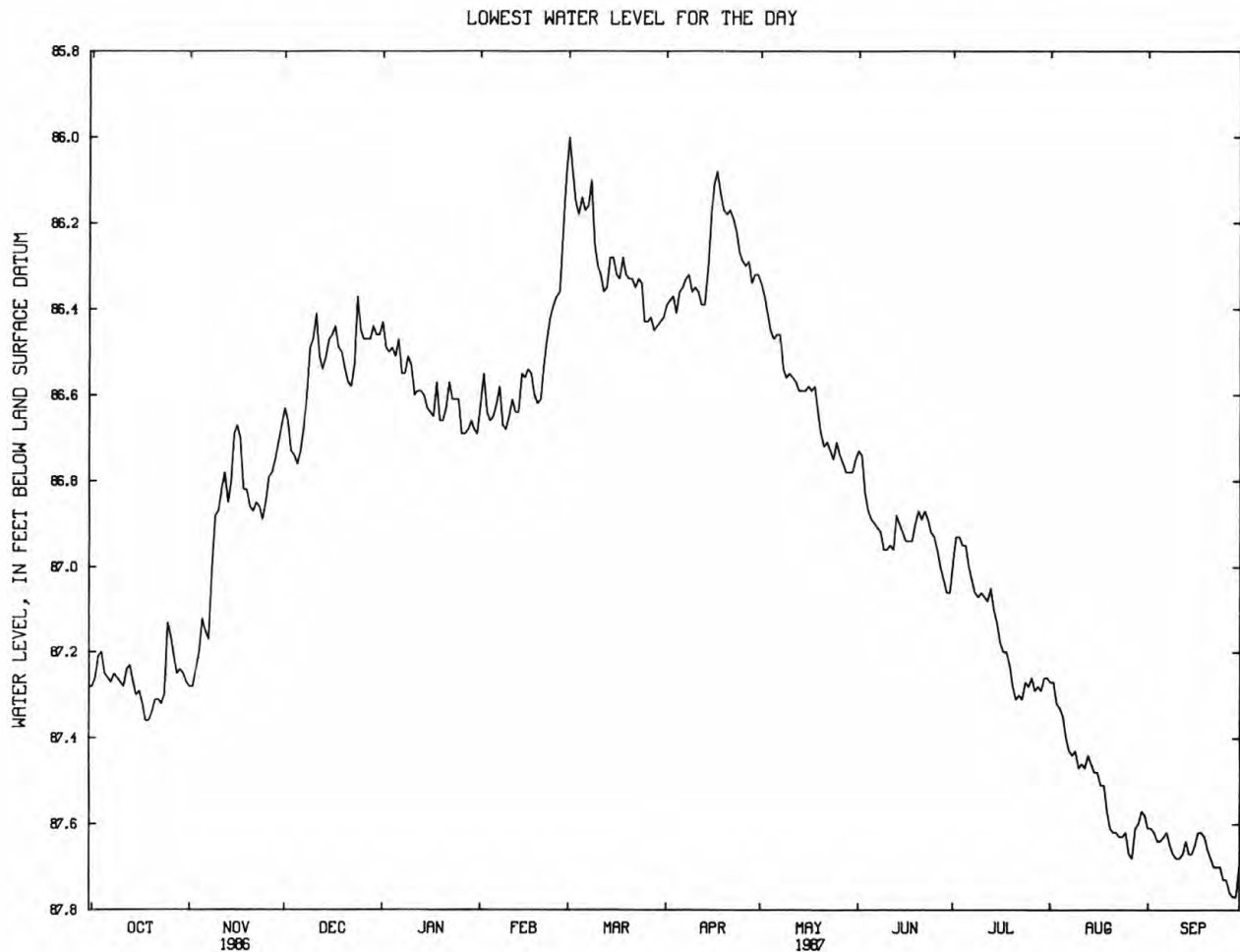
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.31 ft below land-surface datum, May 25, 1983; lowest, 90.20 ft below land-surface datum, Nov. 25, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	87.25	87.12	86.76	86.51	86.65	86.14	86.36	86.47	86.89	86.95	87.35	87.64
10	87.27	86.87	86.47	86.53	86.65	86.30	86.35	86.55	86.96	87.06	87.47	87.68
15	87.30	86.69	86.47	86.63	86.56	86.28	86.18	86.59	86.92	87.13	87.48	87.67
20	87.34	86.86	86.54	86.66	86.61	86.33	86.18	86.69	86.87	87.28	87.61	87.66
25	87.13	86.85	86.45	86.61	86.37	86.43	86.29	86.71	86.93	87.28	87.62	87.73
EOM	87.27	86.67	86.46	86.69	86.09	86.42	86.32	86.75	87.06	87.26	87.58	87.70

WTR YR 1987 HIGHEST 85.84 FEB 28, MAR 1, 1987

LOWEST 87.77 SEP 28, 29, 1987



GROUND-WATER LEVELS

LAUDERDALE COUNTY

353839089493500. Local number, Ld:F-4.

LOCATION.--Lat 35°38'39", long 89°49'35", Hydrologic Unit 08010208, 1.1 mi north of State Highway 87, at Fort Pillow State Park.

Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 to 6 to 3 in., depth 879 ft, cased to 869 ft, screened 869 to 879 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 437.05 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 2.80 ft above land-surface datum.

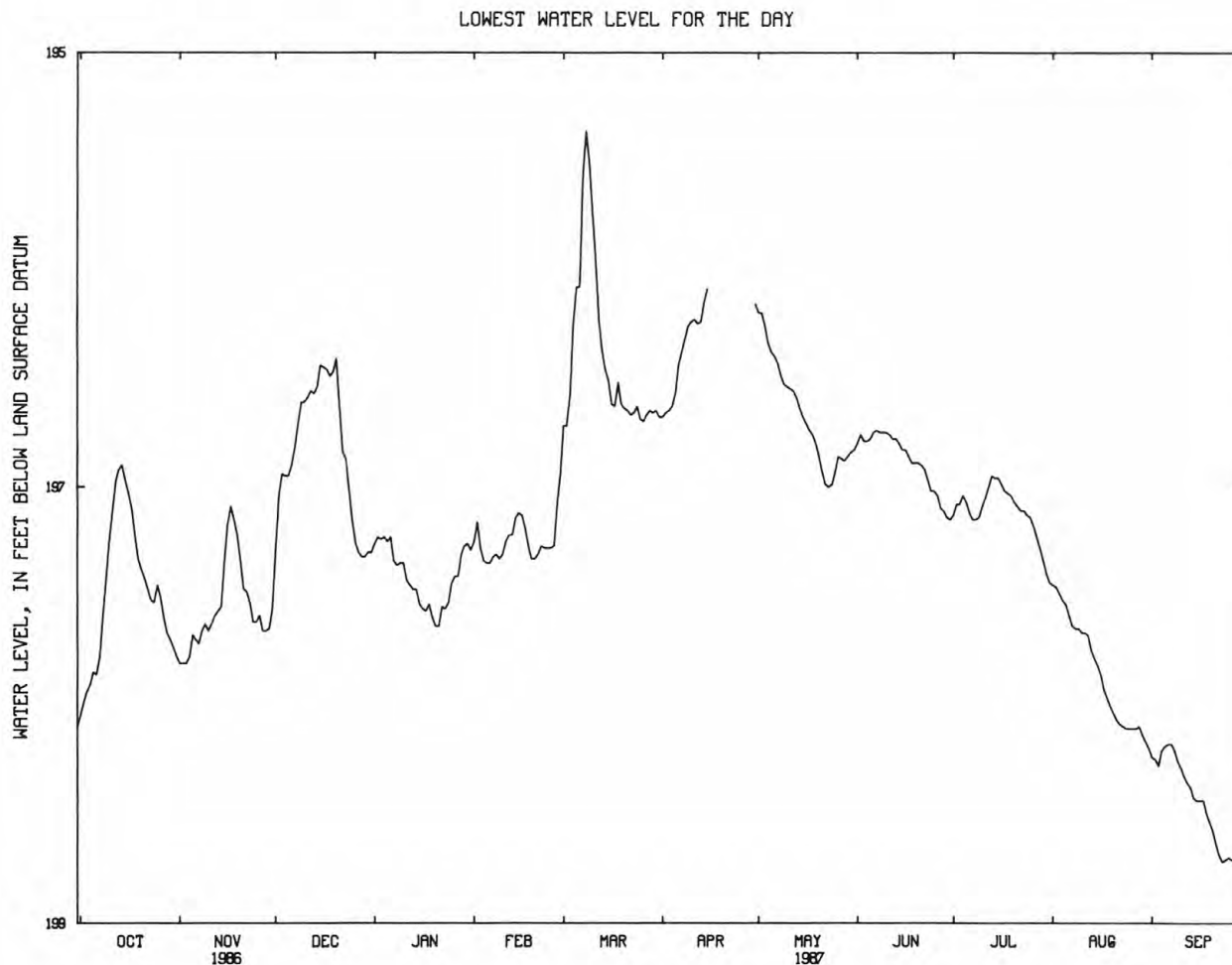
REMARKS.--No record Apr. 16-29. Records good.

PERIOD OF RECORD.--April 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 187.76 ft below land-surface datum, Apr. 7, 1975; lowest, 198.74 ft below land-surface datum, September 28, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	197.85	197.68	196.95	197.25	197.35	196.08	196.57	196.38	196.78	197.07	197.54	198.19
10	197.24	197.66	196.61	197.35	197.31	195.75	196.24	196.54	196.75	197.09	197.67	198.29
15	196.97	197.34	196.44	197.54	197.12	196.51	196.09	196.68	196.83	196.96	197.82	198.44
20	197.38	197.34	196.41	197.64	197.33	196.64	---	196.86	196.89	197.07	198.04	198.58
25	197.45	197.62	197.16	197.44	197.28	196.69	---	196.93	197.02	197.14	198.11	198.70
EOM	197.78	197.56	197.30	197.29	196.94	196.68	196.16	196.83	197.15	197.44	198.20	198.72
WTR YEAR 1987	HIGHEST 195.27 MAR 8, 1987			LOWEST 198.74 SEP 28, 1987								



LAUDERDALE COUNTY--Continued

354158089384300. Local number, Ld:G-12.

LOCATION.--Lat 35°41'58", long 89°38'43", Hydrologic Unit 08010208, 130 ft west of Glimp-Ripley Road, 0.1 mi northeast of State Highway 87 at Glimp.

Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 440 ft, cased to 420 ft, screened 420 to 440 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 360 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 2.70 ft above land-surface datum.

REMARKS.--No record October 1-7. Records good.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 101.02 ft below land-surface datum, May 29, 1983; lowest, 107.13 ft below land-surface datum, Sept. 28, 29, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	106.10	105.76	105.18	105.40	105.00	104.92	104.80	105.33	105.67	105.99	106.80
10	106.44	106.12	105.49	105.13	105.43	104.74	104.85	104.89	105.40	105.76	106.17	106.85
15	106.42	105.94	105.34	105.24	105.25	104.67	104.73	105.01	105.42	105.78	106.29	106.95
20	106.42	105.79	105.05	105.34	105.41	104.65	104.79	105.09	105.50	105.93	106.47	106.98
25	106.09	105.72	105.01	105.37	105.37	104.77	104.83	105.17	105.61	105.82	106.60	107.07
EOM	106.26	105.63	105.10	105.44	105.11	104.86	104.68	105.25	105.77	105.87	106.68	107.09

WTR YEAR 1987 HIGHEST 104.65 MAY 1, 2, 3, 1987 LOWEST 107.13 SEP 28, 29, 1987

LOWEST WATER LEVEL FOR THE DAY



GROUND-WATER LEVELS

LAUDERDALE COUNTY--Continued

354357089271701. Local number, Ld:J-5.

LOCATION.--Lat 35°43'57", long 89°27'17", Hydrologic Unit 08010208, 50 ft southeast of Conner Church Road, 1.7 mi north of State Highway 19 and 2.5 mi northwest of Nutbush.

Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Cockfield Formation of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 277 ft, cased to 257 ft, screened 257 to 277 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 469 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 2.80 ft above land-surface datum.

REMARKS.--No record October 29 to December 4. Records good.

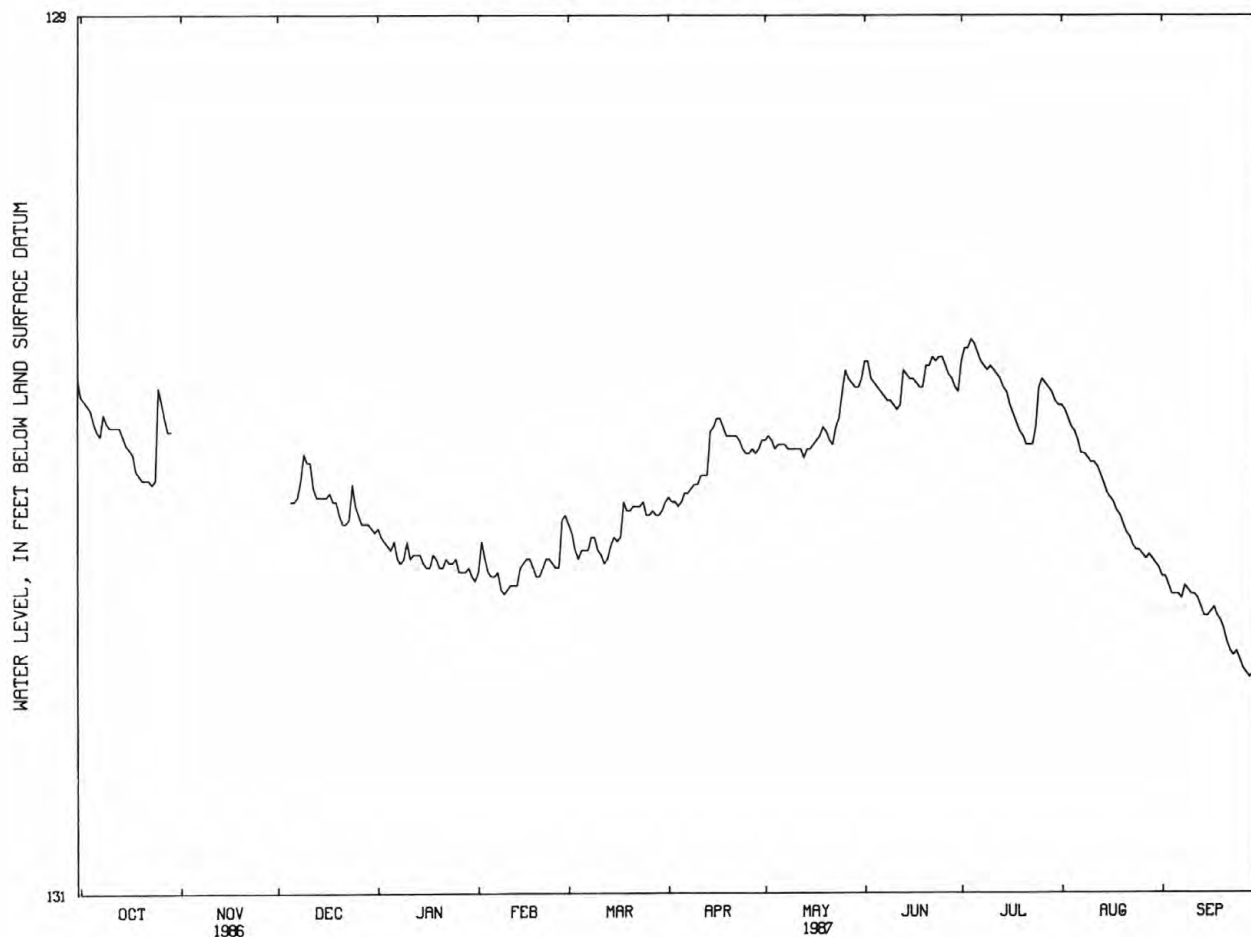
PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 127.14 ft below land-surface datum, July 6, 1985; lowest, 130.89 ft below land-surface datum, Nov. 15, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	129.93	---	---	130.22	130.28	130.22	130.11	129.98	129.85	129.75	129.95	130.32
10	129.94	---	130.02	130.20	130.31	130.22	130.07	129.99	129.89	129.80	130.02	130.32
15	129.98	---	130.10	130.25	130.25	130.19	129.94	129.99	129.83	129.86	130.09	130.37
20	130.06	---	130.14	130.26	130.28	130.13	129.96	129.95	129.80	129.96	130.16	130.40
25	129.85	---	130.12	130.24	130.26	130.14	130.00	129.86	129.78	129.85	130.22	130.47
EOM	---	---	130.18	130.29	130.14	130.11	129.97	129.83	129.86	129.89	130.26	130.47
WTR YEAR 1987	HIGHEST 129.73 JUL 3, 4, 5, 1987			LOWEST 130.51 SEP 28, 1987								

LOWEST WATER LEVEL FOR THE DAY



LAUDERDALE COUNTY--Continued

354552089455900. Local number, Ld:L-2.

LOCATION.--Lat 35°45'52", long 89°45'59", Hydrologic Unit 08010100, 70 ft south of State Highway 19, 1.2 mi east of Ashport.

Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Cockfield Formation of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 245 ft, cased to 225 ft, screened 225 to 245 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 239 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 2.00 ft above land-surface datum.

REMARKS.--No record September 28-30. Records good.

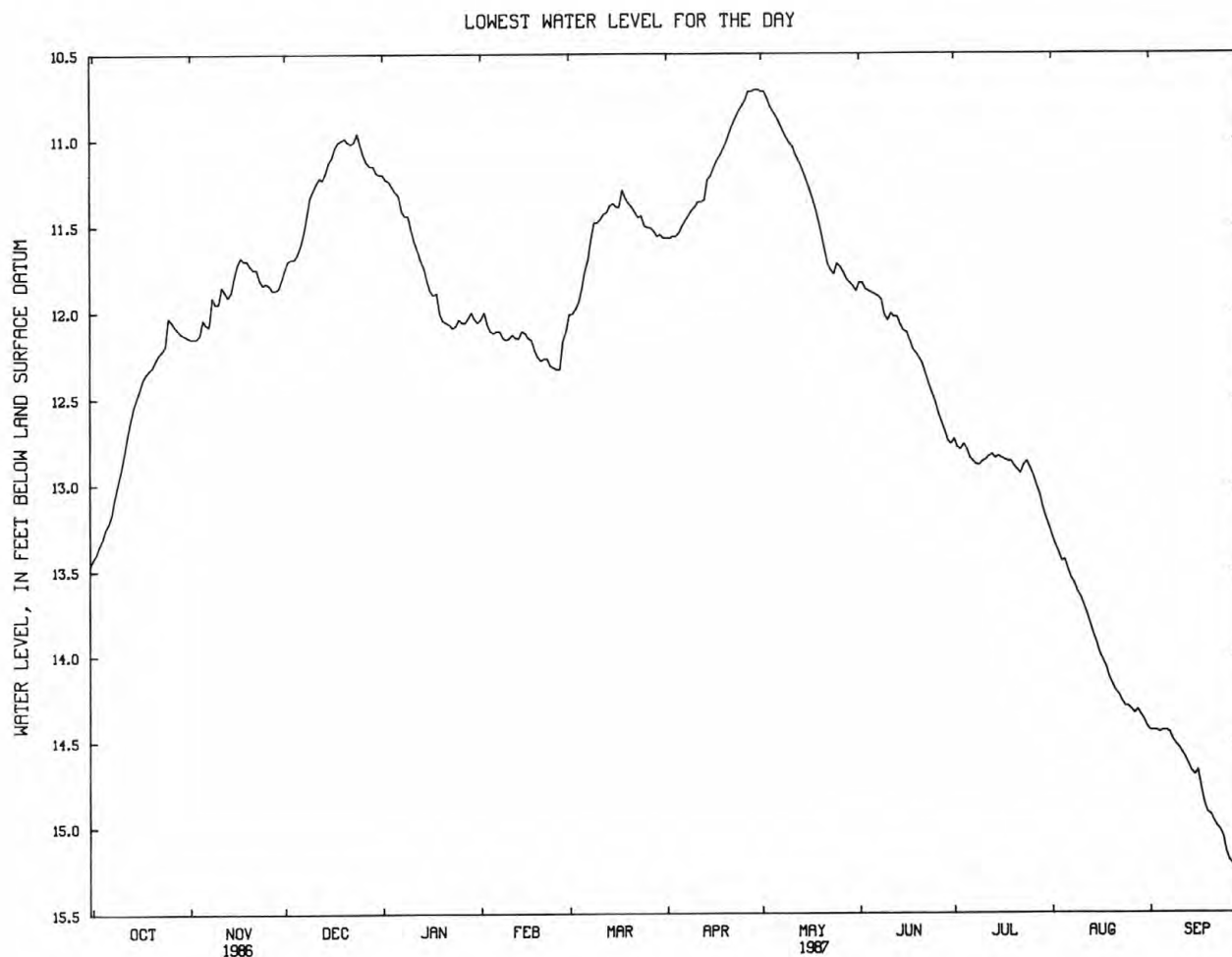
PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.02 ft below land-surface datum, May 12, 1983; lowest, 15.82 ft below land-surface datum, Jan. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.25	12.04	11.66	11.30	12.12	11.86	11.54	10.84	11.89	12.80	13.44	14.44
10	12.91	11.95	11.29	11.52	12.15	11.48	11.39	11.02	12.05	12.87	13.66	14.54
15	12.49	11.79	11.13	11.82	12.12	11.37	11.21	11.22	12.11	12.84	13.93	14.70
20	12.31	11.73	10.99	12.05	12.28	11.37	11.01	11.54	12.27	12.90	14.17	14.93
25	12.03	11.83	11.03	12.04	12.33	11.50	10.80	11.72	12.52	12.91	14.30	15.15
EOM	12.14	11.81	11.20	12.06	12.11	11.57	10.71	11.88	12.77	13.25	14.42	---

WTR YEAR 1987 HIGHEST 10.68 APR 27, 1987 LOWEST 15.22 SEP 27, 1987



GROUND-WATER LEVELS

LAUDERDALE COUNTY--Continued

355251089350500. Local number, Ld:S-2.

LOCATION.--Lat 35°52'51", long 89°35'05", Hydrologic Unit 08010100, about 0.7 mi east of Old Bed Forked Deer River, 3 mi west of Knob Creek.

Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Alluvial sand and gravel of Holocene and Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 100 ft, cased to 80 ft, screened 80 to 100 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 254 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 3.20 ft above land-surface datum.

REMARKS.--Records good.

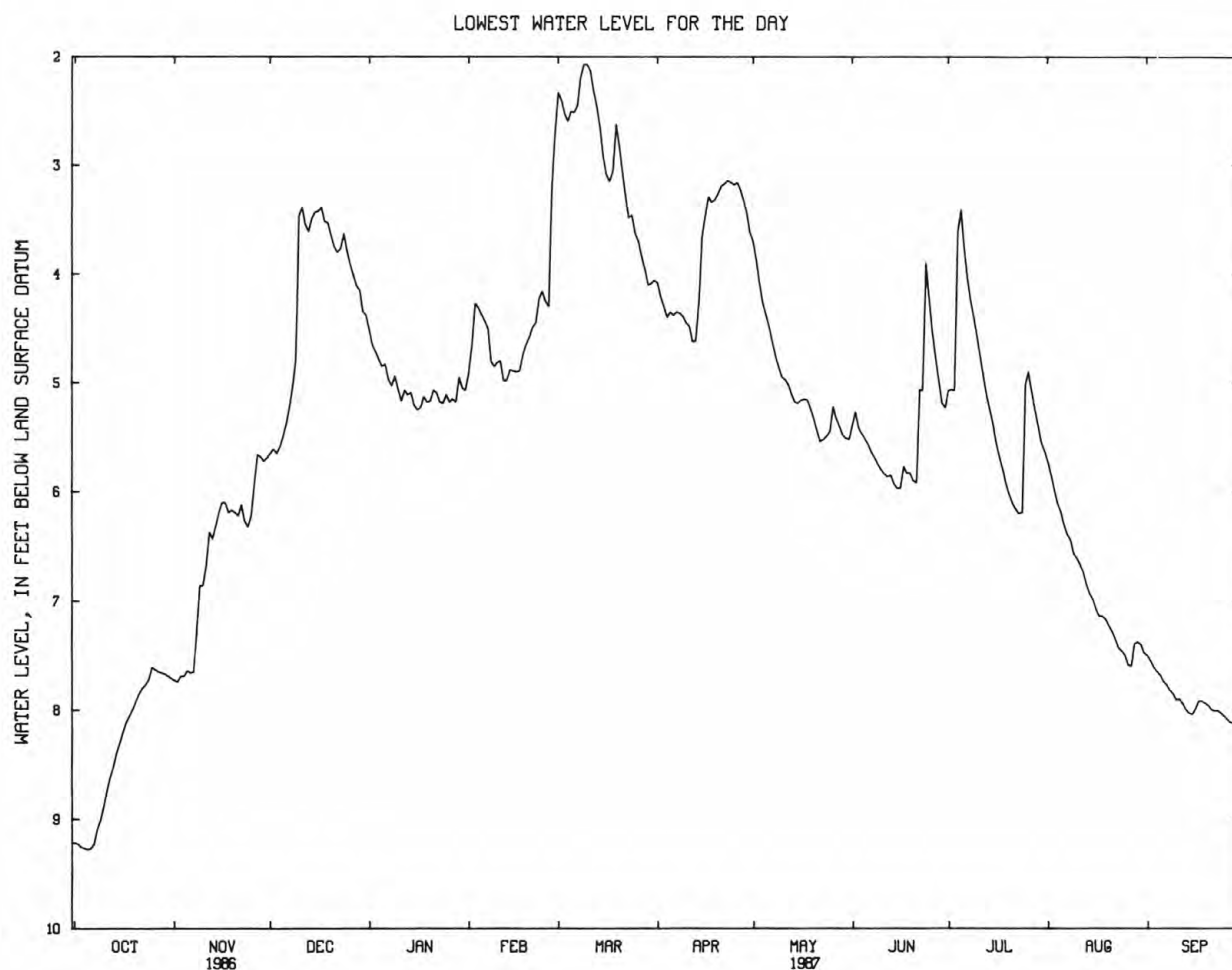
PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft above land-surface datum, Dec. 11, 1982 and Mar. 6, 1985; lowest, 9.45 ft below land-surface datum, Oct. 16, 17, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.28	7.64	5.49	4.85	4.37	2.50	4.35	4.38	5.52	3.41	6.18	7.68
10	8.88	6.86	3.46	5.06	4.81	2.07	4.45	4.95	5.80	4.58	6.61	7.91
15	8.30	6.19	3.43	5.21	4.89	2.92	3.66	5.19	5.97	5.39	6.99	8.04
20	7.92	6.19	3.65	5.17	4.58	2.83	3.26	5.33	5.90	6.03	7.23	7.96
25	7.61	6.22	3.79	5.11	4.25	3.63	3.18	5.45	4.22	5.02	7.50	8.06
EOM	7.71	5.69	4.38	5.07	2.70	4.06	3.62	5.52	5.23	5.63	7.48	8.11

WTR YEAR 1987 HIGHEST 1.92 FEB 28, 1987 LOWEST 9.28 OCT 5, 1986



GROUND-WATER LEVELS

347

LAWRENCE COUNTY

352610087182401. Local number, LN:R-014.

LOCATION.--Lat 35°26'10", long 87°18'24", Hydrologic Unit 06040004, 0.1 mile north of U.S. Post Office, at Summertown.

Owner: Summertown Utility District.

AQUIFER.--Fort Payne Formation of Early Mississippian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 147 ft, cased to 135 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,014.9 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of instrument shelf, 1.0 ft above land-surface datum.

REMARKS.--. Missing record Aug. 27 to Sept. 6. Records good. Water levels are affected by pumping from Municipal Supply well.

PERIOD OF RECORD.--July 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.37 ft below land-surface datum, Feb. 28, 1987; lowest, 57.10 ft below land-surface datum, Oct. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.68	53.04	44.49	42.31	41.43	38.00	41.58	44.35	46.80	49.19	50.82	---
10	55.90	50.07	42.42	43.36	41.57	38.72	42.42	45.80	48.80	49.16	51.25	54.32
15	55.03	48.90	42.44	42.96	41.39	39.53	42.17	45.52	48.39	48.33	53.27	53.10
20	55.77	47.72	43.32	42.63	40.46	40.32	42.68	46.23	48.12	50.45	53.36	52.86
25	55.39	44.81	41.79	41.11	39.42	40.72	42.67	46.64	48.35	50.71	53.24	53.04
EOM	53.67	44.35	41.51	41.61	37.14	41.02	46.44	46.58	49.62	51.19	---	52.81

WTR YR 1987 HIGHEST 33.37 FEB 28, 1987 LOWEST 57.10 OCT 11, 1986

LOWEST WATER LEVEL FOR THE DAY



GROUND-WATER LEVELS

MADISON COUNTY

354223088380200. Local number, Md:N-1.

LOCATION.--Lat 35°42'23", long 88°38'02", Hydrologic Unit 08010205, about 0.4 mi east of Claybrook.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--McNairy Sand of late Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in., depth 659 ft, cased to 639 ft, screened 639 to 659 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 562.70 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 2.80 ft above land-surface datum.

REMARKS.--No record September 4-30. Records good.

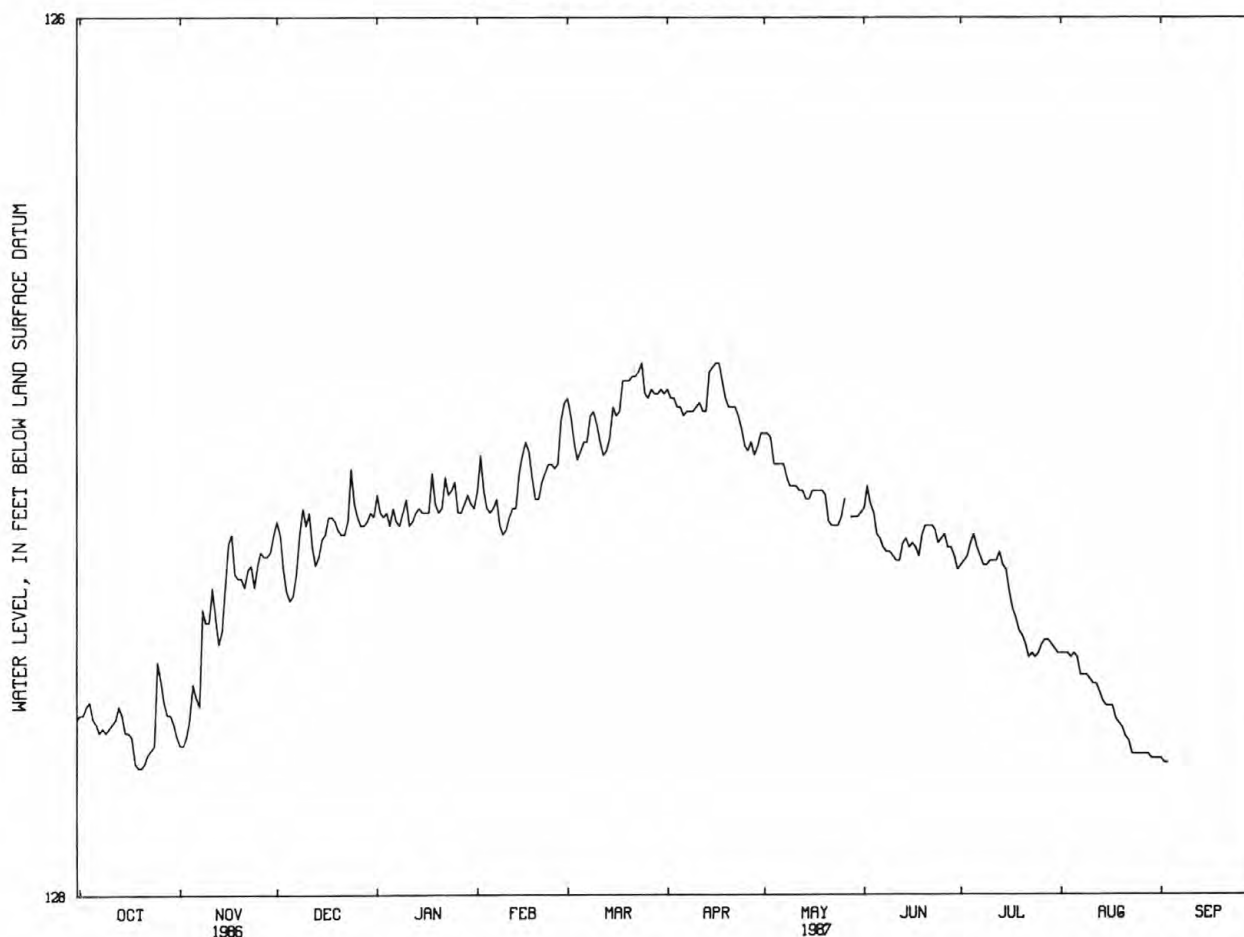
PERIOD OF RECORD.--June 1949 to current year. Analog record June 1949 to February 1971, periodic tape measurements or monthly maximum-minimum recorder March 1971 to April 1986.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 124.50 ft below land-surface datum, Mar. 10, 1952; lowest recorded, 129.13 ft below land-surface datum, Nov. 15, 1963; highest water level measured, 124.98 ft below land-surface datum, Apr. 8, 1980; lowest measured, 131.17 ft below land-surface datum, June 20, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	127.60	127.52	127.33	127.16	127.13	126.99	126.89	127.02	127.18	127.18	127.45	---
10	127.62	127.38	127.16	127.10	127.17	126.93	126.89	127.07	127.23	127.24	127.51	---
15	127.63	127.30	127.19	127.13	127.00	126.89	126.80	127.10	127.21	127.26	127.57	---
20	127.71	127.28	127.17	127.13	127.10	126.83	126.89	127.09	127.16	127.41	127.62	---
25	127.47	127.25	127.11	127.06	127.03	126.86	126.98	127.14	127.19	127.45	127.68	---
EOM	127.64	127.18	127.14	127.12	126.88	126.86	126.95	127.13	127.26	127.45	127.69	---
WTR YEAR 1987	HIGHEST 126.67 FEB 28, 1987					LOWEST 127.71 OCT 19, 20, 1986						

LOWEST WATER LEVEL FOR THE DAY



MORGAN COUNTY

360543084343101.--Local number, Mg:F-5.

LOCATION.--Lat 36°05'43", long 84°34'31", Hydrologic Unit 06010208, 1.0 mi southeast of Wartburg.
Owner: Plateau Utility District.

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 394 ft, cased to 20 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,265 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of recorder shelter, 2.40 ft above land surface datum.

REMARKS.--Highest water level readings may be influenced for short periods by surface inflow. No missing record.

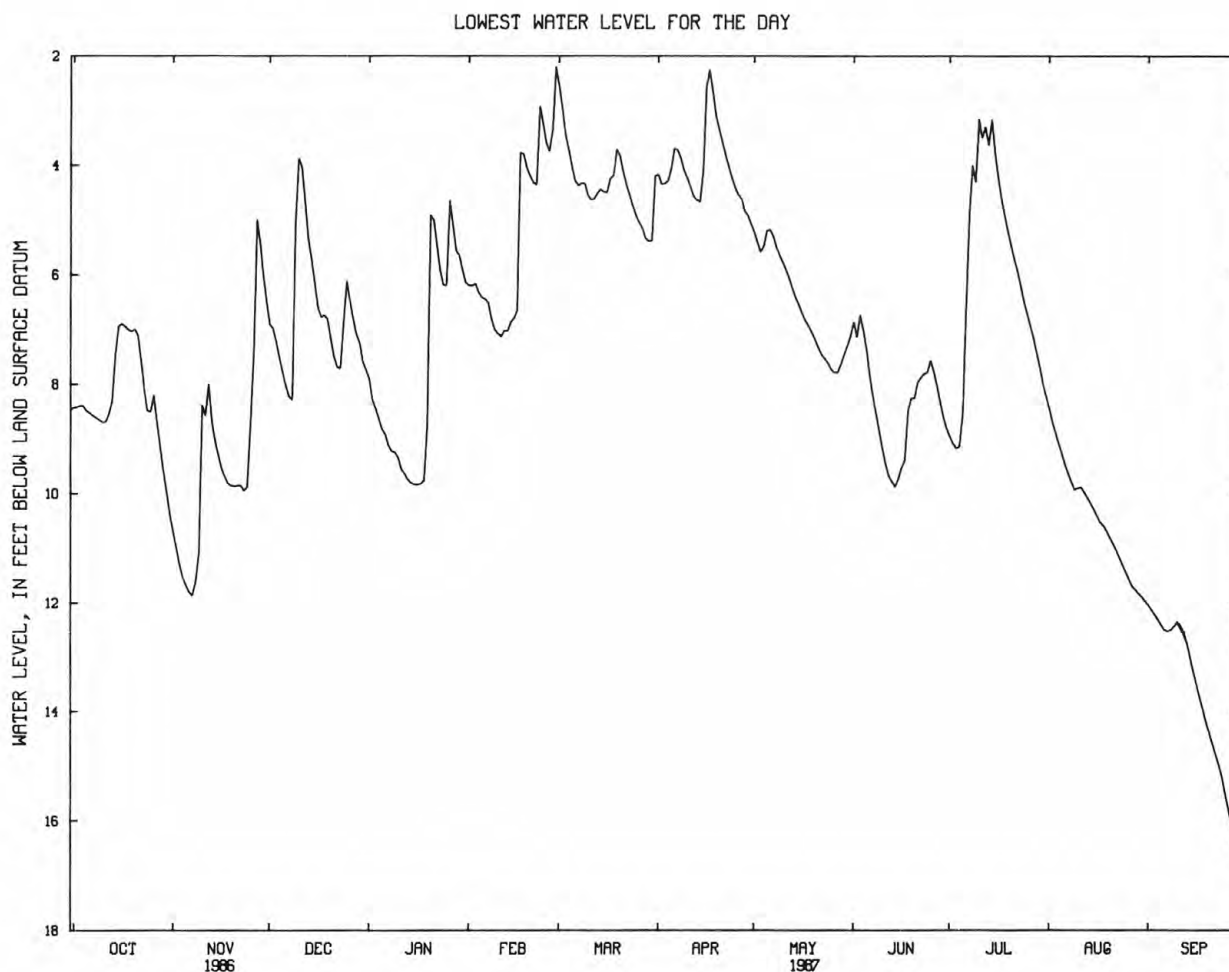
PERIOD OF RECORD.--November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.89 ft below land-surface datum, Feb. 28, 1987; lowest, 19.61 ft below land-surface datum, Aug. 17, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.49	11.68	7.78	8.83	6.42	4.03	4.06	5.19	7.36	8.55	9.27	12.42
10	8.70	8.39	3.88	9.35	7.08	4.56	4.23	5.79	9.18	3.16	9.90	12.37
15	6.94	9.28	6.15	9.84	6.80	4.49	4.12	6.57	9.74	3.80	10.29	13.25
20	7.00	9.87	7.17	4.91	4.20	3.83	3.35	7.19	8.26	5.46	10.81	14.37
25	8.51	8.73	6.12	6.20	3.60	4.91	4.42	7.73	7.57	6.71	11.44	15.48
EOM	10.39	6.53	7.74	6.15	2.20	4.19	5.08	7.13	8.81	8.20	11.97	16.84

WTR YR 1987 HIGHEST 1.89 FEB 28, 1987 LOWEST 16.84 SEPT 30, 1987



GROUND-WATER LEVELS

PUTNAM COUNTY

360521085432600. Local number, Pm:C-1.

LOCATION.--Lat 36°05'21", long 85°43'26", Hydrologic Unit 05130108, at Interstate 40 and State Highway 56, at Silver Point.

Owner: Tennessee Department of Transportation.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in., depth 175 ft, cased to 60 ft, open end.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,030 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of instrument shelf, 2.88 ft above land surface datum.

REMARKS.--Records good.

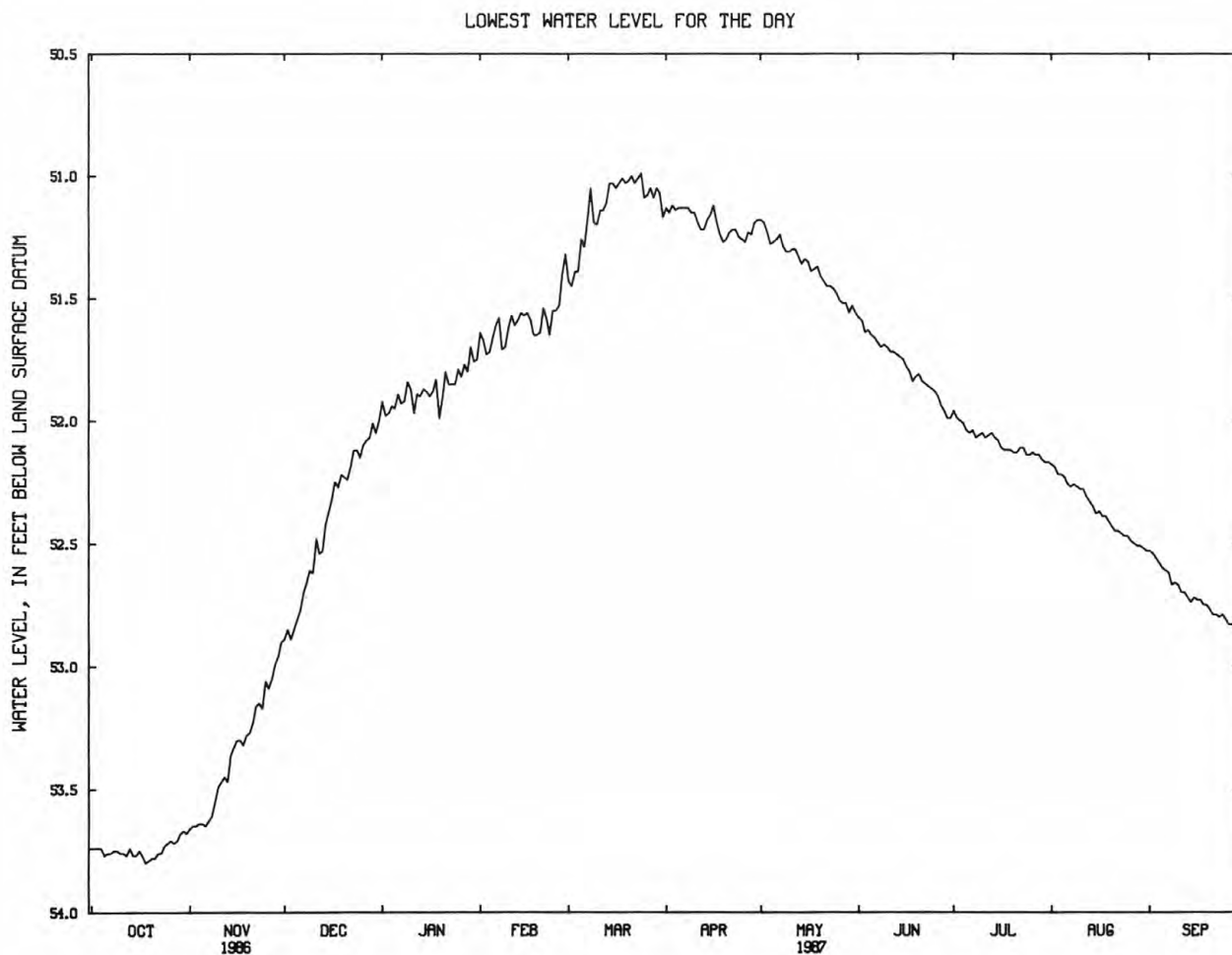
PERIOD OF RECORD.--March 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.30 ft below land-surface datum, May 2, 1984; lowest, 53.80 ft below land-surface datum, Oct. 18, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.77	53.64	52.81	51.95	51.66	51.26	51.13	51.27	51.65	52.04	52.23	52.60
10	53.76	53.49	52.62	51.87	51.62	51.20	51.15	51.31	51.70	52.05	52.28	52.67
15	53.77	53.33	52.37	51.88	51.57	51.03	51.16	51.34	51.75	52.08	52.38	52.72
20	53.78	53.27	52.23	51.91	51.64	51.02	51.26	51.41	51.81	52.13	52.43	52.77
25	53.72	53.06	52.15	51.79	51.55	51.09	51.26	51.48	51.88	52.14	52.47	52.81
EOM	53.68	52.90	52.00	51.75	51.32	51.17	51.18	51.56	51.99	52.17	52.53	52.81

WTR YR 1987 HIGHEST 50.88 MAR 23, 1987 LOWEST 53.80 OCT 18, 1986



SEVIER COUNTY

353922083345600. Local number, Sv:E-2.

LOCATION.--Lat 35°39'22", long 83°34'56", Hydrologic Unit 06010201, 3.3 mi southwest of Great Smoky Mountains National Park Headquarters, near Gatlinburg.

AQUIFER.--Elkmont Sandstone of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water-table well in phyllite, sandstone, diameter 6 in., depth 220 ft, cased to 27 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 2,150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of recorder shelter 1.50 ft above land surface datum.

REMARKS.--Highest water level readings may be influenced for short periods by surface inflow. No missing record.

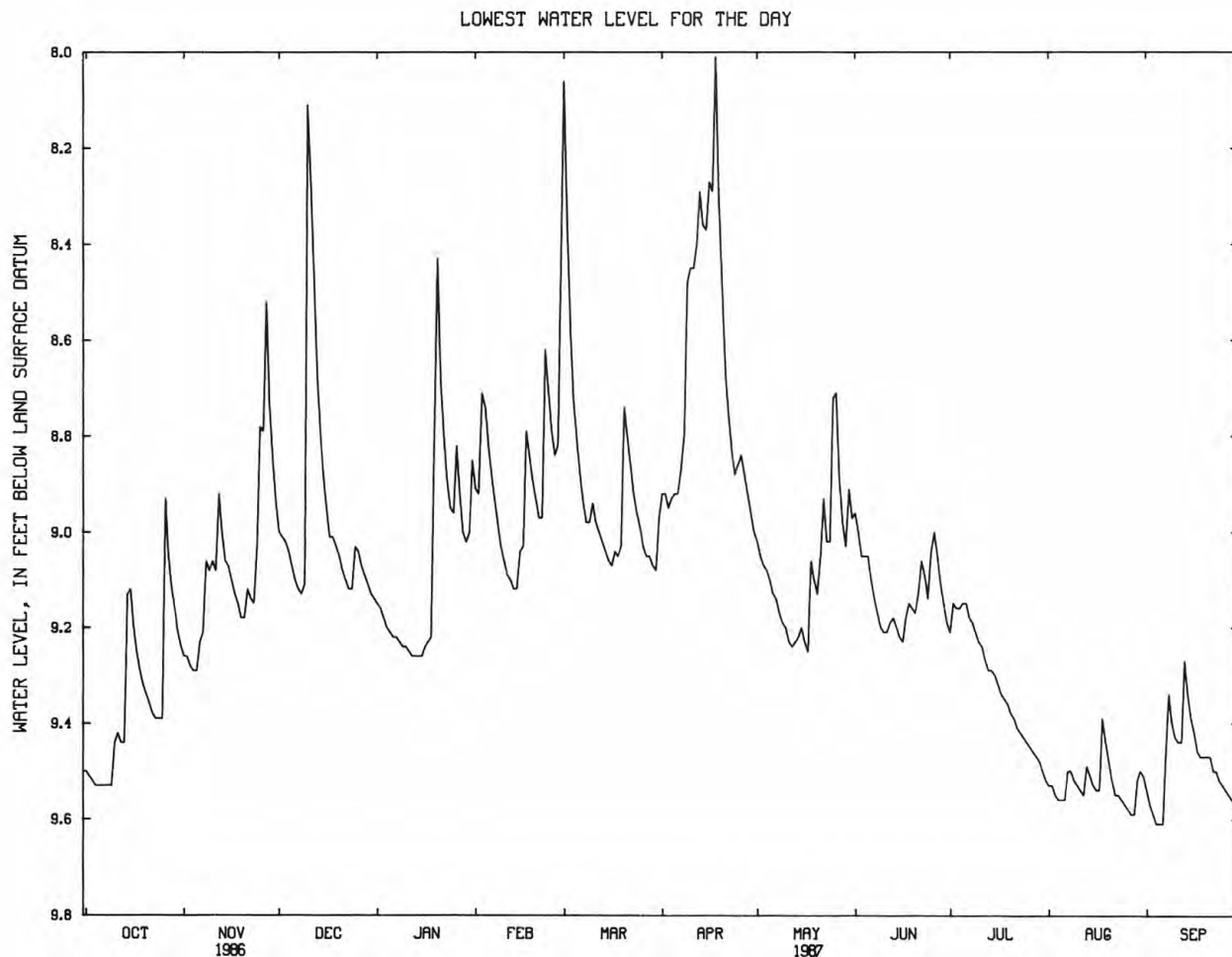
PERIOD OF RECORD.--May 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.58 ft below land-surface datum, Feb. 1, 1985; lowest, 9.68 ft below land surface datum, Aug. 10, Sept. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.53	9.29	9.07	9.21	8.82	8.81	8.92	9.10	9.05	9.15	9.56	9.61
10	9.44	9.06	8.11	9.24	9.06	8.94	8.45	9.20	9.21	9.23	9.53	9.43
15	9.12	9.07	8.88	9.26	9.04	9.06	8.37	9.20	9.22	9.30	9.53	9.39
20	9.34	9.18	9.05	8.43	8.93	8.74	8.49	9.13	9.17	9.38	9.48	9.47
25	9.39	8.78	9.03	8.96	8.79	8.99	8.86	8.72	9.04	9.44	9.57	9.53
EOM	9.24	8.94	9.14	8.85	8.44	8.97	9.00	8.97	9.19	9.52	9.51	9.57

WTR YEAR 1987 HIGHEST 7.62 APR 17, 1987 LOWEST 9.61 SEPT 4, 5, 6, 1987



GROUND-WATER LEVELS

SHELBY COUNTY

350514089553700. Local number, Sh:K-75.

LOCATION.--Lat 35°05'14", long 89°55'37", Hydrologic Unit 08010211, at Willowview Ave. and Getwell Road, at Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Fluvial sand and gravel of Pleistocene age and possibly sand of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 91 ft, cased to 81 ft, screened 81 to 91 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 260 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.20 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply. Records good.

PERIOD OF RECORD.--August 1948 to current year.

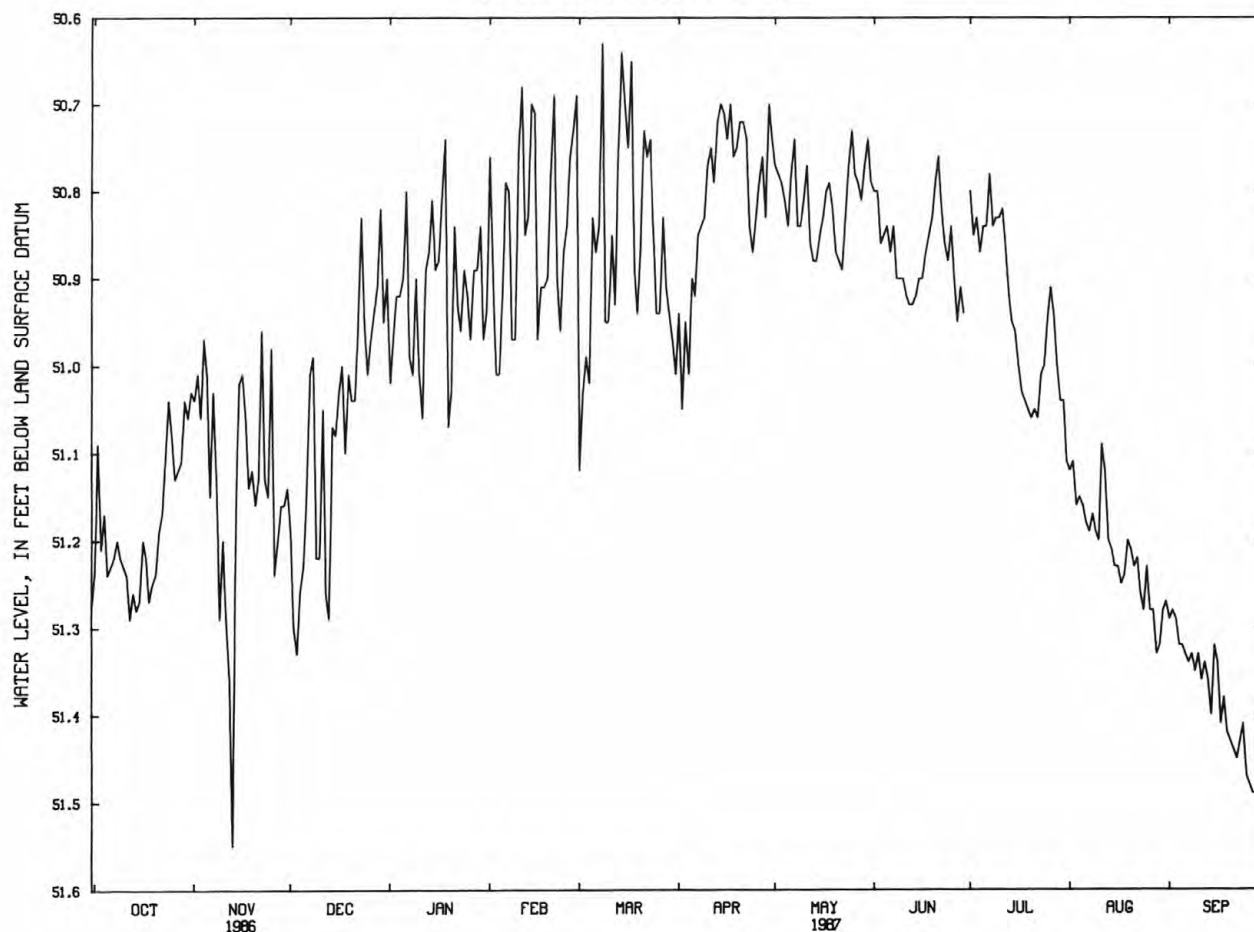
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.28 ft below land-surface datum, April 2, 1950; lowest, 51.55 ft below land-surface datum, November 13, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.24	51.01	51.23	50.90	50.92	50.83	50.90	50.84	50.84	50.84	51.16	51.32
10	51.23	51.20	51.22	51.01	50.75	50.95	50.77	50.81	50.90	50.83	51.20	51.33
15	51.27	51.02	51.08	50.89	50.71	50.70	50.71	50.85	50.90	50.96	51.23	51.32
20	51.24	51.16	51.04	51.03	50.78	50.86	50.72	50.87	50.79	51.06	51.21	51.43
25	51.08	50.98	51.01	50.92	50.84	50.94	50.83	50.73	50.84	50.95	51.23	51.47
EOM	51.03	51.14	50.90	50.94	50.69	51.01	50.74	50.79	50.95	51.11	51.27	51.44

WTR YEAR 1987 HIGHEST 50.44 FEB 28, APR 13, 1987 LOWEST 51.55 NOV 13, 1986

LOWEST WATER LEVEL FOR THE DAY



GROUND-WATER LEVELS
SHELBY COUNTY--Continued

353

351435090005200. Local number, Sh:0-1.

LOCATION.--Lat 35°14'35", long 90°00'52", Hydrologic Unit 08010209, west side of O.K. Robertson Road, 0.4 mi north of U.S. Highway 51, at Memphis.
Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 434 ft, cased to 424 ft, screened 424 to 434 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 228.70 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 4.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply. Records good.

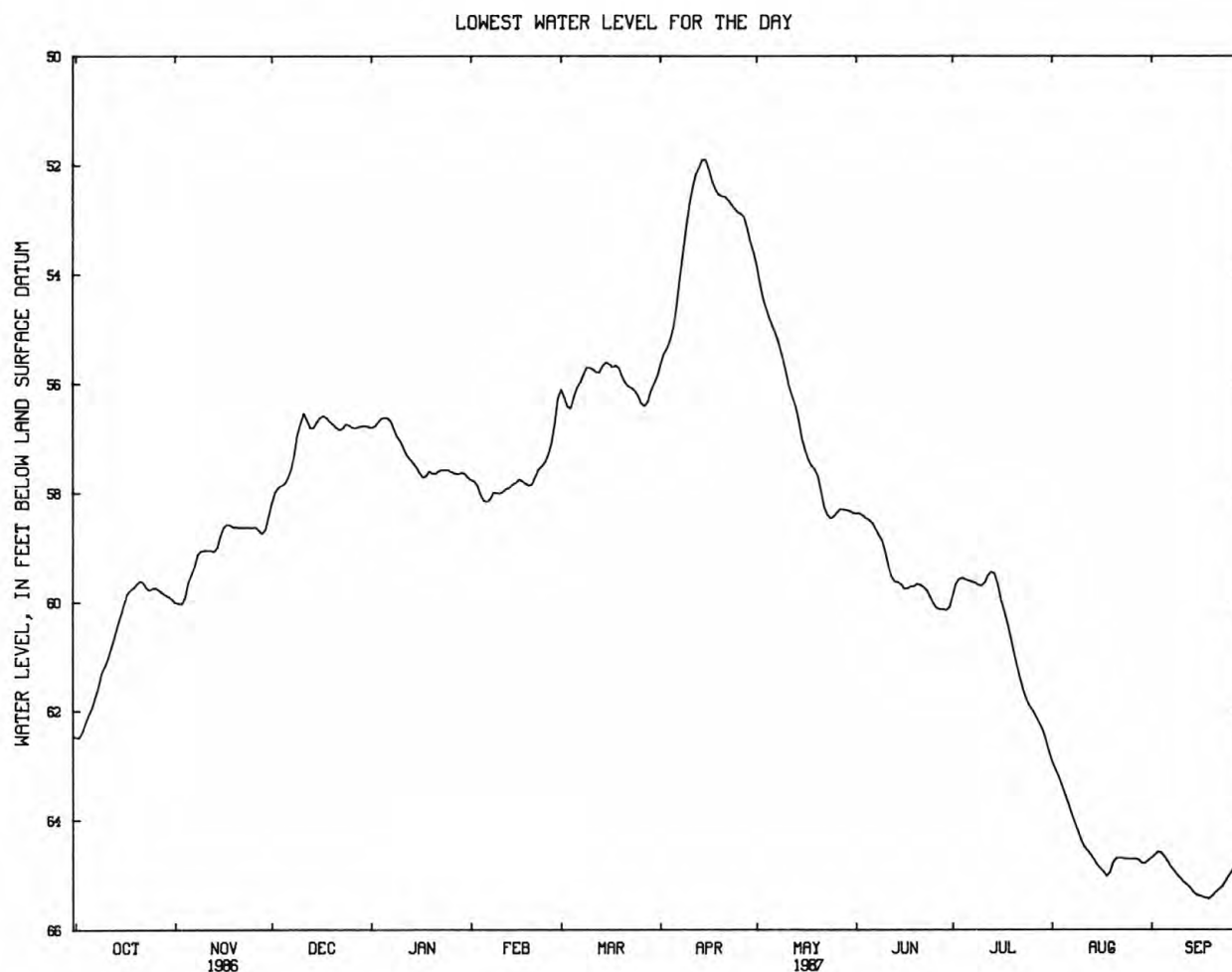
PERIOD OF RECORD.--September 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.65 ft below land-surface datum, September 3, 1940; lowest, 65.43 ft below land-surface datum, September 18, 19, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	62.11	59.75	57.84	56.62	58.16	56.36	55.10	54.90	58.51	59.59	63.60	64.70
10	61.22	59.05	56.79	57.10	58.01	55.72	52.91	55.90	59.23	59.69	64.42	65.09
15	60.33	58.89	56.76	57.58	57.82	55.62	51.95	57.11	59.71	59.81	64.85	65.37
20	59.69	58.63	56.76	57.65	57.86	55.94	52.58	57.81	59.66	61.05	64.85	65.41
25	59.75	58.63	56.79	57.59	57.37	56.29	52.88	58.46	60.07	61.95	64.70	65.05
EOM	59.99	58.55	56.80	57.74	56.60	55.92	53.69	58.37	60.15	62.85	64.76	64.75

WTR YEAR 1987 HIGHEST 51.89 APR 14, 15, 1987 LOWEST 65.43 SEP 18, 19, 1987



GROUND-WATER LEVELS

SHELBY COUNTY--Continued

350735089593300. Local number, Sh:P-76.

LOCATION.--Lat 35°07'35", long 89°59'33", Hydrologic Unit 08010210, at Central Avenue and Tanglewood Street, at Memphis.

Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 12 in., depth 488 ft, cased to 428 ft, screened 428 to 488 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 286.70 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 1.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply. Records good.

PERIOD OF RECORD.--October 1928 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.65 ft below land-surface datum, Apr. 3, 1933; lowest, 145.20 ft below land-surface datum, August 2, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	142.51	137.43	134.76	132.41	134.66	133.61	134.28	135.82	138.94	138.57	141.19	142.03
10	141.24	137.53	133.59	132.55	134.28	134.09	134.32	136.38	140.34	138.63	142.13	142.78
15	140.33	137.10	133.83	133.25	134.25	133.97	132.83	136.83	139.15	139.17	142.32	141.74
20	139.57	136.57	133.79	133.45	133.94	134.27	133.03	137.19	138.79	140.14	141.97	141.08
25	139.44	136.14	133.23	133.51	133.45	135.15	134.41	138.25	138.87	140.66	142.17	141.40
EOM	138.16	134.72	132.23	134.34	133.37	134.21	135.10	138.71	139.39	141.40	141.52	141.87

WTR YEAR 1987 HIGHEST 131.81 DEC 29, 1986 LOWEST 143.08 OCT 1, 2, 1986

LOWEST WATER LEVEL FOR THE DAY



GROUND-WATER LEVELS

355

SHELBY COUNTY--Continued

350900089482300. Local number, Sh:Q-1.

LOCATION.--Lat 35°09'00", long 89°48'23", Hydrologic Unit 08010210, south of Macon Road, 0.6 mi west of Germantown Road, near Memphis.

Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 384 ft, cased to 375 ft, screened 375 to 384 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 330.40 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply. No record Oct. 28-30. Records good.

PERIOD OF RECORD.--October 1940 to current year.

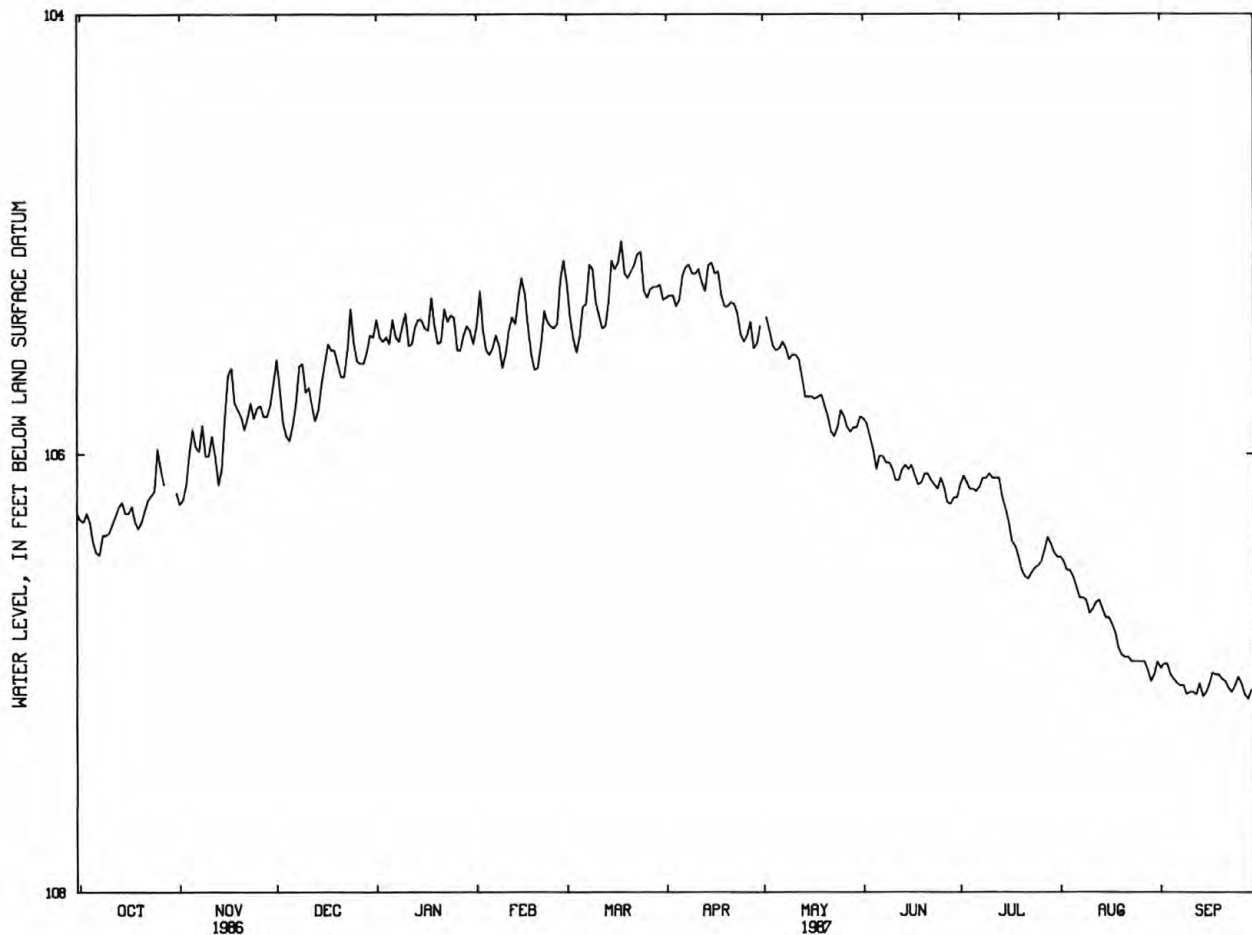
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.08 ft below land-surface datum, December 27, 1940; lowest 107.12 ft below land-surface datum, September 28, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	106.40	105.89	105.94	105.50	105.55	105.47	105.30	105.53	106.07	106.16	106.56	107.03
10	106.36	106.01	105.72	105.36	105.55	105.31	105.18	105.55	106.07	106.09	106.73	107.09
15	106.27	105.83	105.68	105.39	105.20	105.12	105.13	105.74	106.07	106.25	106.75	107.09
20	106.31	105.83	105.59	105.50	105.61	105.20	105.33	105.78	106.09	106.53	106.92	107.03
25	105.98	105.79	105.50	105.38	105.43	105.26	105.49	105.80	106.11	106.51	106.95	107.02
EOM	106.18	105.68	105.47	105.50	105.12	105.30	105.42	105.83	106.20	106.47	106.95	107.08

WTR YEAR 1987 HIGHEST 104.86 FEB 28, 1987 LOWEST 107.12 SEP 28, 1987

LOWEST WATER LEVEL FOR THE DAY



GROUND-WATER LEVELS
CRITTENDEN COUNTY, AR

350958090173800. Local number, Ar:C-1.

LOCATION.--Lat 35°09'58", long 90°17'38", Hydrologic Unit 08020203, 450 ft west of Highway 147, 1.3 mi north of Lehi.

Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 622 ft, cased to 602 ft, screened 602 to 622 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 209 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

REMARKS.--Records good.

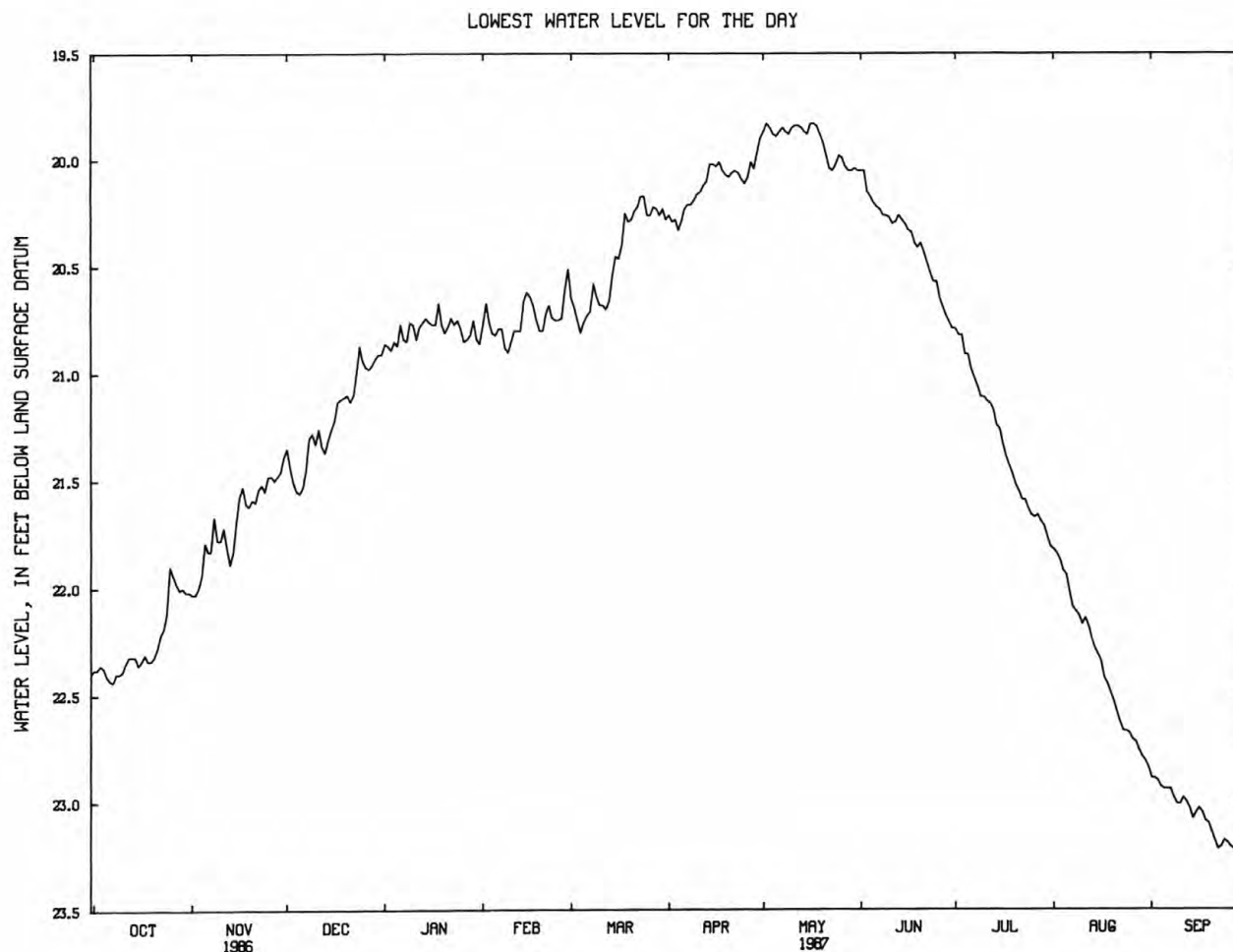
PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.29 ft below land-surface datum, June 11, 12, 13, 1983; lowest, 23.24 ft below land-surface datum, September 28, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.41	21.79	21.56	20.87	20.82	20.76	20.29	19.89	20.20	20.91	21.94	22.94
10	22.39	21.78	21.33	20.77	20.85	20.68	20.16	19.85	20.27	21.11	22.17	23.01
15	22.36	21.69	21.26	20.76	20.62	20.45	20.02	19.88	20.30	21.26	22.31	23.05
20	22.32	21.59	21.10	20.81	20.80	20.28	20.08	19.92	20.39	21.52	22.53	23.14
25	21.90	21.48	20.94	20.79	20.75	20.26	20.11	19.98	20.57	21.66	22.68	23.19
EOM	22.02	21.39	20.91	20.86	20.51	20.28	19.90	20.05	20.79	21.81	22.84	23.23

WTR YEAR 1987 HIGHEST 19.76 MAY 12, 1987 LOWEST 23.24 SEP 28, 1987



CRITTENDEN COUNTY, AR--Continued

350344090130000. Local number, Ar:H-2.

LOCATION.--Lat 35°03'44", long 90°13'00", Hydrologic Unit 08020203, 0.7 mi east of Millers.

Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 502 ft, cased to 482 ft, screened 482 to 502 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 211 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

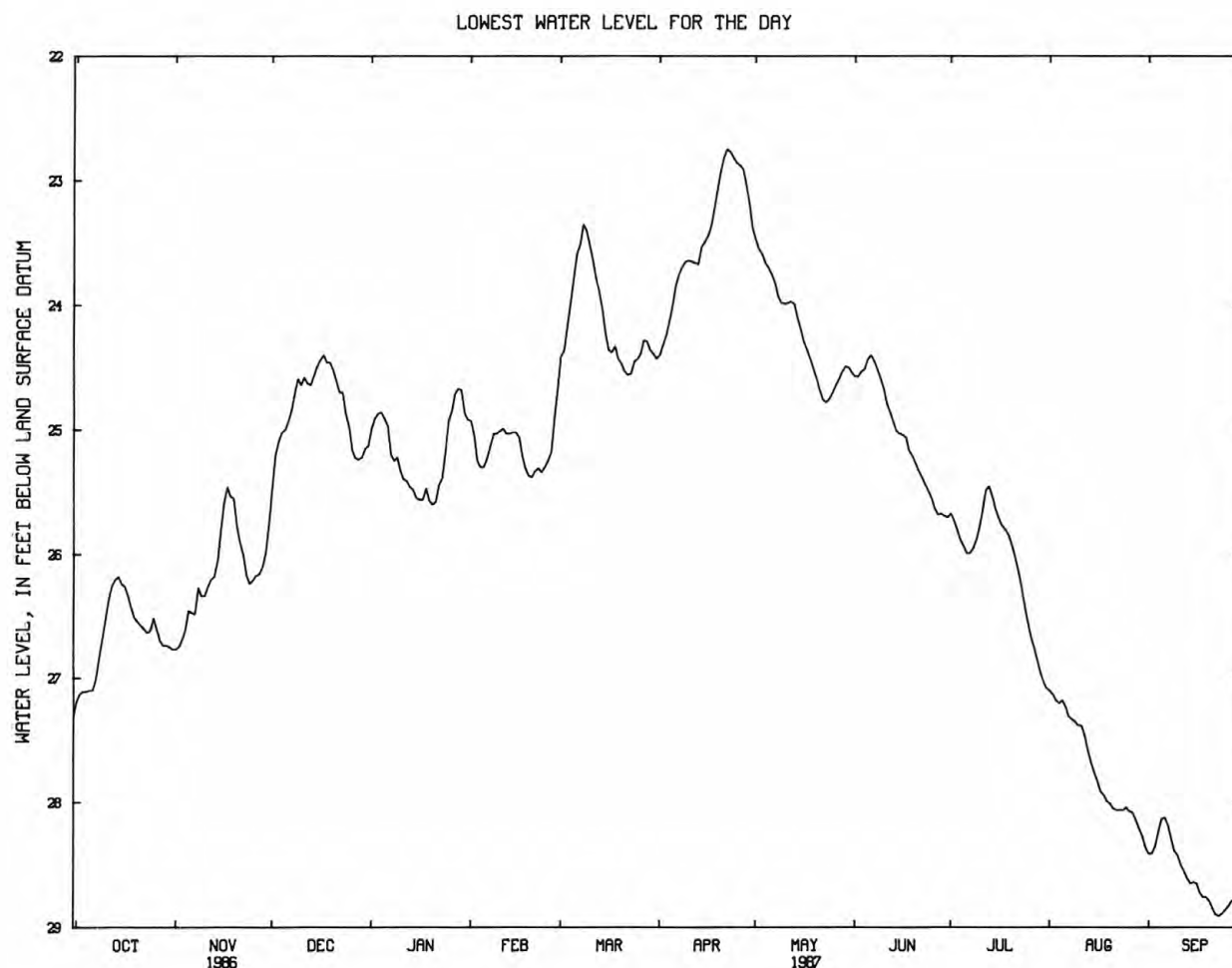
REMARKS.--No record Jan. 27-28. Records good.

PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.28 ft below land-surface datum, May 30, 31, 1983; lowest, 28.91 ft below land-surface datum, September 23, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.10	26.46	25.00	24.91	25.30	23.78	23.99	23.70	24.43	25.93	27.18	28.13
10	26.53	26.34	24.64	25.33	25.01	23.52	23.64	23.99	24.67	25.77	27.38	28.42
15	26.24	25.80	24.49	25.55	25.02	24.23	23.49	24.19	25.03	25.64	27.76	28.64
20	26.55	25.77	24.52	25.60	25.38	24.47	22.93	24.59	25.27	25.92	28.01	28.79
25	26.52	26.21	24.98	24.93	25.25	24.43	22.86	24.70	25.55	26.54	28.04	28.86
EOM	26.77	25.76	25.13	24.92	24.68	24.43	23.38	24.54	25.70	27.08	28.36	28.87
WTR YEAR 1987	HIGHEST	22.70	APR 23, 1987	LOWEST	28.91	SEP 23, 1987						



CRITTENDEN COUNTY, AR--Continued

351349090062800. Local number, Ar:O-1.

LOCATION.--Lat 35°13'49", long 90°06'28", Hydrologic Unit 08020203, 0.3 mi east of blacktop road, 0.8 mi north of St. Claire.

Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 497 ft, cased to 477 ft, screened 477 to 497 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 217 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 3.60 ft above land-surface datum.

REMARKS.--Records good.

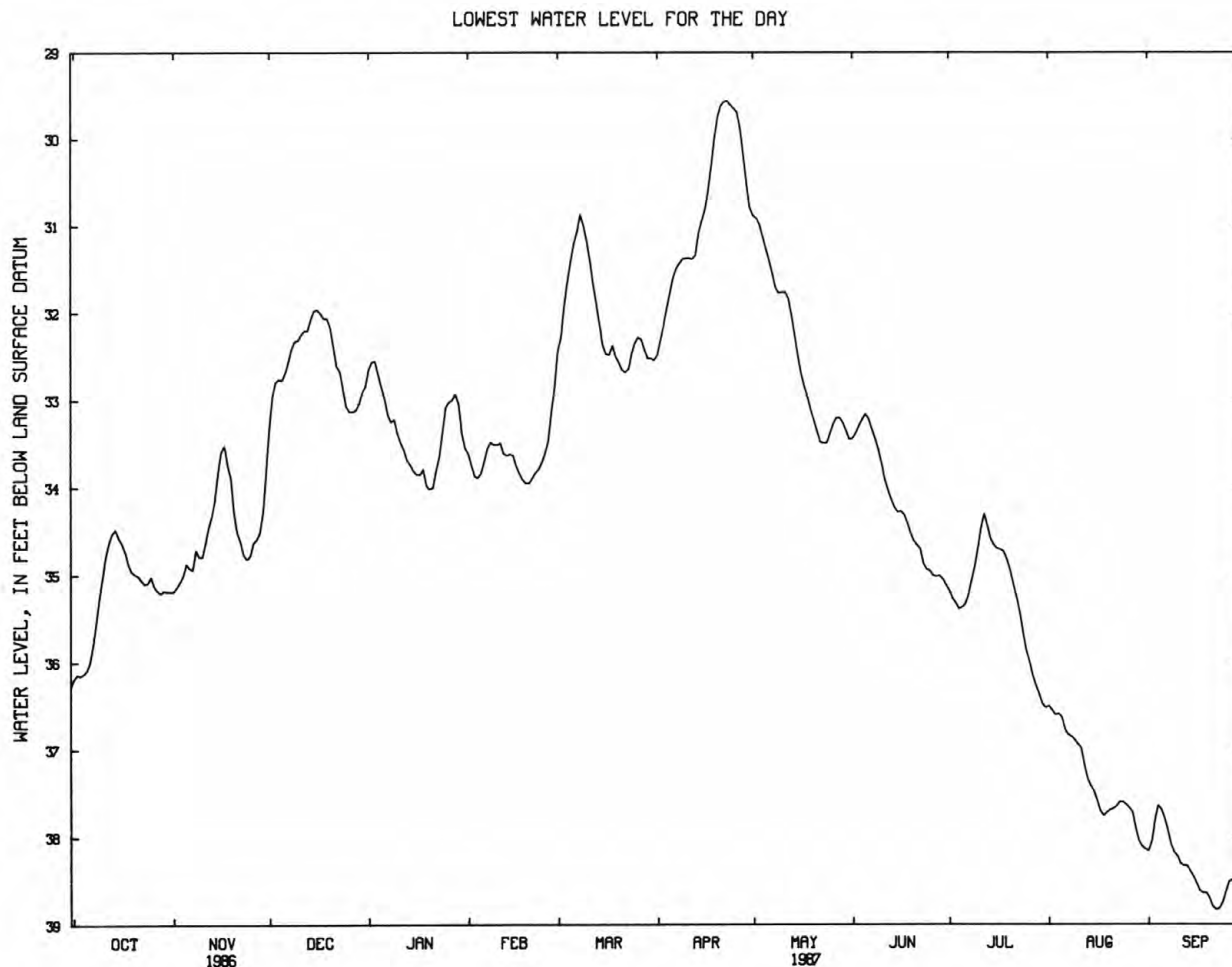
PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.42 ft below land surface datum, May 29, 30, 31, 1983; lowest, 38.83 ft below land-surface datum, Sept. 22, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.09	34.87	32.77	32.85	33.84	31.41	31.78	31.26	33.16	35.37	36.63	37.69
10	35.02	34.79	32.31	33.38	33.51	31.17	31.37	31.76	33.72	34.70	36.94	38.22
15	34.58	33.83	31.97	33.81	33.63	32.37	30.94	32.49	34.28	34.66	37.48	38.46
20	34.99	34.28	32.16	34.02	33.95	32.57	29.75	33.23	34.61	34.95	37.69	38.70
25	35.02	34.78	33.07	33.08	33.61	32.34	29.65	33.38	34.95	35.87	37.63	38.63
EOM	35.19	33.84	32.84	33.55	32.86	32.54	30.79	33.45	35.12	36.52	38.14	38.77

WTR YEAR 1987 HIGHEST 29.50 APR 23, 1987 LOWEST 38.83 SEP 22, 1987



PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

359

BRADLEY COUNTY

350503084505000. Local number, Br:E-1.

LOCATION.--Lat 35°05'03", long 84°50'50", Hydrologic Unit 03150101, on Trewhitt Road, 0.5 mi north of Goodwill Road, Cleveland.
Owner: F. G. Trewhitt.

AQUIFER.--Shale of Conasauga Group of middle and late Cambrian age.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 36 in., depth 25 ft, casing information not available.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 850 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of concrete casing at land-surface datum.

PERIOD OF RECORD.--February 1950 to November 1955, April 1964 to current year. Analog record February 1950 to November 1955, April 1964 to February 1971, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.38 ft below land-surface datum, Dec. 19, 1967; lowest recorded, 24.97 ft below land-surface datum, Dec. 7, 8, 1954; highest water level measured, 8.22 ft below land-surface datum, Apr. 5, 1977; lowest measured, 23.20 ft below land-surface datum, Dec. 12, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	21.84	DEC 11	17.53	APR 8	8.84	JUL 1	17.65

CANNON COUNTY

354823086104400. Local number, Cn:D-1.

LOCATION.--Lat 35°48'23", long 86°10'44", Hydrologic Unit 05130203, on county road on Cannon County and Rutherford County lines, 1.5 mi south of Readyville.
Owner: Ray Barker.

AQUIFER.--Lebanon Limestone of middle Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter, 6 in., depth 30 ft, cased with steel to unknown depth, open end.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 715 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1967 to current year. Analog record April 1967 to February 1971, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.91 ft below land-surface datum, Mar. 11, 1968; lowest recorded, 19.38 ft below land-surface datum, Dec. 9, 10, 1968; highest water level measured, 12.14 ft below land-surface datum, Jan. 8, 1974; lowest measured, 18.57 ft below land-surface datum, July 10, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	15.71	DEC 17	13.36	MAY 21	16.11	JUL 10	18.57

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

361

FAYETTE COUNTY

352226089330101. Local number, Fa:R-1.

LOCATION.--Lat 35°22'26", long 89°33'01", Hydrologic Unit 08010209, 80 ft south of State Highway 59, 1.2 mi southeast of U.S. Highway 70, near Braden.
 Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Fort Pillow Sand of Wilcox Group of early Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in., depth 1,025 ft, cased to 1,008 ft, screened 1,008 to 1,025 ft.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 317.50 ft above National Geodetic Vertical Datum of 1929.
 Measuring point: Top of casing, 3.70 ft above land-surface datum.

PERIOD OF RECORD.--August 1949 to current year. Analog record August 1949 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 64.89 ft below land-surface datum, Aug. 31, 1949; lowest recorded, 76.26 ft below land-surface datum, Dec. 5, 1970; highest water level measured, 73.61 ft below land-surface datum, Apr. 28, 1976; lowest measured, 80.87 ft below land-surface datum, Sept. 2, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17	79.43	DEC 4	79.60	JAN 6	79.44	JAN 29	79.45	MAR 4	79.84	APR 6	79.73
MAY 5	79.78	JUN 3	79.87	JUL 2	80.06	JUL 29	80.28	SEP 2	80.87		

352226089330102. Local number, Fa:R-2.

LOCATION.--Lat 35°22'26", long 89°33'01", Hydrologic Unit 08010209, 80 ft south of State Highway 59, 1.1 mi southeast of U.S. Highway 70, near Braden.
 Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in., depth 365 ft, cased to 345 ft, screened 345 to 365 ft.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 317.20 ft above National Geodetic Vertical Datum of 1929.
 Measuring point: Top of casing, 4.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1949 to current year. Analog record October 1949 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 37.25 ft below land-surface datum, Mar. 10, 1952; lowest recorded, 42.12 ft below land-surface datum, Nov. 30, 1967; highest water level measured, 39.38 ft below land-surface datum, May 2, 1980; lowest measured, 41.67 ft below land-surface datum, December 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17	41.07	DEC 4	41.33	JAN 6	41.03	JAN 29	41.00	MAR 4	41.08	APR 6	40.83
MAY 5	40.93	JUN 3	40.91	JUL 2	41.07	JUL 29	41.18	SEP 2	41.46		

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

SHELBY COUNTY

352112089571200. Local number, Sh:U-1.

LOCATION.--Lat 35°21'12", long 89°57'12", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville.
Owner: Mrs. T. S. Welch

AQUIFER.--Fort Pillow Sand of Wilcox Group of early Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 to 16 in., depth 1,558 ft, cased to 1,497 ft, screened 1,497 to 1,558 ft.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 264.20 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 0.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage at Millington and Memphis.

PERIOD OF RECORD.--August 1946 to current year. Analog record March 1948 to January 1971, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 35.5 ft below land-surface datum, Apr. 11, 1948; lowest recorded, 60.42 ft below land-surface datum, Dec. 20, 1970; highest water level measured, 33.20 ft, Apr. 21, 1947; lowest measured, 70.68 ft below land-surface datum, Sept. 1, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 11	65.95	DEC 2	66.89	JAN 6	67.14	JAN 28	67.97	MAR 3	67.30	MAR 31	66.97
MAY 1	66.68	JUN 1	68.07	JUN 29	68.76	JUL 29	69.20	SEP 1	70.68		

352112089571300. Local number, Sh:U-2.

LOCATION.--Lat 35°21'12", long 89°57'13", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville.
Owner: Mrs. F. E. Byrd

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 to 12 in., depth 440 ft, cased to 360 ft, screened 360 to 440 ft.

INSTRUMENTATION.--Periodic measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 268.76 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 1.60 ft above land-surface datum.

REMARKS.--Water levels affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--June 1953 to current year. Analog record June 1953 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.59 ft below land-surface datum, June 29, 1953; lowest, 62.19 ft below land-surface datum, Sept. 1, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 11	60.10	DEC 2	59.68	JAN 6	58.98	JAN 28	59.22	MAR 3	58.84	MAR 31	58.42
MAY 1	57.24	JUN 1	58.97	JUN 29	59.80	JUL 29	60.48	SEP 1	62.19		

355505086541100. Local number, Wm:M-1.

Owner: Tennessee Division of Geology and U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.-Highest water level recorded, 84.21 ft below land-surface datum, Mar. 10, 1952; lowest recorded 87.11 ft below land-surface datum, Sept. 10, 1970; highest water level measured, 85.43 ft below land-surface datum, Feb. 19, 1974; lowest measured, 114.81 ft below land-surface datum, Jan. 31, 1950.

[illegible]

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY

360007084150501 - BOB MONDAY NO. 2 (AN:D-3)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
JAN 22...	9.70	650	11.0	100	--
MAR 06...	9.70	700	11.0	1.3	0.4

360006084150401 - BOB MONDAY NO. 4 (AN:D-4)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 21...	4.90	450	9.0	1.0

360005084150401 - BOB MONDAY NO. 5 (AN:D-5)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 21...	6.10	230	9.0	0.70
MAR 06...	6.10	340	10.0	--

360004084150401 - BOB MONDAY NO. 6 (AN:D-6)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 21...	3.80	160	7.0	0.10

360006084145701 - BOB MONDAY NO. 7 (AN:E-2)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
JAN 20...	6.40	450	10.5	--	--
MAR 06...	6.40	375	11.0	1.1	0.3

360038084155401 - CIVIC CENTER NO. 1 (AN:D-13)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
DEC 11...	13.10	800	17.0	<0.10
MAR 07...	13.10	750	13.0	--

QUALITY OF GROUND WATER

365

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

360045084154901 - CIVIC CENTER NO. 2 (AN:D-12)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
DEC 11...	4.60	440	15.0	<0.10

360001084144201 - DARNELL NO. 1 (AN:E-1)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
DEC 12-12	13.40	420	17.0	0.30

355938084140201 - GW-167

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 23...	490	6.80	15.0	<5	250	2	91	5.1	7.7	6	0.2
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 23...	2.6	246	73	8.4	19	<0.10	9.2	300	290	0.820	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 23...	<1	<100	<20	20	<5	<10	50	<0.1	160	1.0	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

355938084140101 - GW-168

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 23...	540	7.30	16.0	<5	310	9	82	25	8.7	6	0.2
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 23...	2.6	300	29	7.4	13	0.10	12	330	330	0.540	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 23...	<1	200	90	300	<5	<10	<10	<0.1	620	0.5	

355946084134301 - GW-170

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 30...	430	7.80	15.0	<5	210	1	45	23	14	13	0.4
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 30...	2.2	207	6.3	15	13	0.20	9.8	244	250	0.690	0.010
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 30...	<1	<100	70	50	<5	20	<10	<0.1	540	1.0	

QUALITY OF GROUND WATER

367

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

360001084131401 - GW-171

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 29...	440	6.90	14.5	<5	200	0	55	14	10	10	0.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 29...	3.4	206	50	4.2	17	<0.10	8.3	234	240	0.090	0.860
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 29...	<1	<100	30	330	<5	<10	2900	0.1	90	2.8	

360000084131501 - GW-172

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 30...	625	7.30	15.0	<5	320	21	86	25	14	9	0.4
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 30...	2.3	297	29	1.2	42	0.10	12	373	360	<0.020	0.360
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 30...	<1	300	30	190	<5	<10	740	0.2	150	3.1	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

355956084143202 - GW-206

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
MAY 01...	525	7.40	15.0	5	250	0	58	25	13	10	0.4
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
MAY 01...	7.6	251	21	11	17	0.20	17	300	310	0.020	1.10
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
MAY 01...	<1	500	30	270	<5	<10	1600	<0.1	220	3.0	

355956084143201 - GW-207

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 24...	580	7.40	16.0	<5	310	77	80	27	16	10	0.4
APR 24...	580	--	16.0	<5	320	36	60	40	10	6	0.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 24...	3.6	236	22	100	2.0	0.30	25	425	430	<0.020	0.020
APR 24...	3.1	279	--	49	2.6	0.10	26	359	360	<0.020	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 24...	<1	<100	220	370	<5	40	20	<0.1	1500	0.8	
APR 24...	<1	<100	90	210	<5	40	10	<0.1	560	0.8	

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

355956084143301 - GW-208

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 24...	500	7.70	16.0	<5	270	17	43	40	10	7	0.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 24...	3.0	256	9.2	52	2.0	0.20	26	360	320	<0.020	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 24...	<1	100	90	220	<5	40	10	<0.1	560	0.2	

360000084131502 - GW-230

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 29...	890	7.20	16.0	5	430	67	120	31	20	9	0.4
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 29...	3.2	361	44	2.4	91	0.10	17	536	500	<0.020	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 29...	<1	300	60	50	6	20	100	<0.1	800	4.5	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

355938084140202 - GW-239

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
MAY 01...	2250	9.60	15.5	<5	11	0	3.2	0.70	520	98	71
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
MAY 01...	11	485	0.2	44	430	2.4	3.2	1310	1300	<0.020	0.030
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
MAY 01...	<1	<100	1400	30	<5	410	30	EO.4	350	3.1	

360009084150501 - RAY CARDEN NO. 1 (AN:D-1)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 22...	4.90	470	7.5	1.0

360008084150501 - RAY CARDEN NO. 2 (AN:D-2)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 22...	8.20	690	10.0	0.50

360004084172101 - WAYNE CLARK NO. 5 (AN:D-11)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 16...	8.40	250	11.0	0.20

360009084171901 - WAYNE CLARK NO. 1 (AN:D-7)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 19...	8.00	540	11.0	0.20

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ANDERSON COUNTY--Continued

360008084172001 - WAYNE CLARK NO. 2 (AN:D-8)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
JAN 20...	8.40	620	10.5	1.5
MAR 08...	8.40	520	10.5	--

360007084172001 - WAYNE CLARK NO. 3 (AN:D-9)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
JAN 20...	7.00	1080	10.0	25	--
MAR 04...	7.00	1100	10.5	0.50	0.4

360006084172001 - WAYNE CLARK NO. 4 (AN:D-10)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
JAN 16...	9.30	1050	13.0	36	--
MAR 04...	9.30	1100	10.5	0.70	2.0

360033084163101 - YWCA NO. 1 (AN:D-14)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
DEC 15...	11.20	925	16.5	<0.10

CHEATHAM COUNTY

361547087040101 - CH:H-008

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
FEB 02...	1800.00	2200	7.70	16.0	120	0	28	13	380	85	15
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
FEB 02...	15	13	200	330	8.2	11	1200	1200	20	20	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAVIDSON COUNTY

361108086500901 - DV:K-007

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
JAN 21...	1491.00	2000	19.5	270	33	59	30	290	68	8

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 21...	16	160	400	4.4	10	1130	1100	50	<10

HAMILTON COUNTY

350719085050902 - HM:J-016 EASTSIDE

DATE	FLOW RATE (GPM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 05...	420	7.80	130	6	33	12	0.70	1	0.0	0.50

DATE	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC 05...	122	3.9	1.4	1.2	8.6	130	130	16	6

KNOX COUNTY

355403084042301 - ED POWELL (KN:G-1)

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
DEC 08...	13.90	470	16.5	<0.10

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

LAKE COUNTY

362709089241501 - LK:G- 30

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
FEB 25...	28.70	750	6.60	17.5	440	0	120	35	6.7	3

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
FEB 25...	0.1	2.4	467	233	1.2	4.5	0.30	30	475

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
FEB 25...	490	<0.100	0.800	0.060	0.050	0.050	0.15	14	4700

362842089211701 - LK:H- 5 REELFOOT 53A

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
FEB 26...	26.90	430	6.60	16.0	220	0	57	18	6.4	6

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
FEB 26...	0.2	2.8	228	108	7.2	2.0	0.50	26	247

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
FEB 26...	250	<0.100	0.110	0.270	0.270	0.270	0.83	4	3

362842089211702 - LK:H- 6

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3
FEB 26...	59.00	430	6.70	16.0	240

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
LAKE COUNTY--Continued
362842089211703 - LK:H- 7

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
FEB 26...	95.00	425	6.70	16.0	230	0	59	19	6.0	5

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
FEB 26...	0.2	1.9	232	95	11	1.7	0.30	37	260

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOSPHATE, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
FEB 26...	280	<0.100	0.200	0.960	0.160	0.040	0.12	6

MAURY COUNTY

354330086590201 - MY:N-025 SATURN

DATE	DEPTH OF WELL, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	FLOW RATE (GPM)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
OCT 06...	160.00	115	70	360	7.30	15.0	210	25	52	20	3.7	4

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 06...	0.1	1.7	187	18	29	2.9	11	226	230	9	54

QUALITY OF GROUND WATER

375

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY

355636084203801 - GW-209

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 22...	38	5.70	14.0	<5	5	0	1.4	0.40	3.0	41	0.6
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	
APR 22...	3.2	14	6.3	<0.1	1.0	<0.10	19	33	0.080	0.020	
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 22...	<1	<100	<20	10	<5	<10	30	<0.1	10	1.0	

355636084203802 - GW-210

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 21...	310	9.40	16.0	<5	190	24	32	27	7.0	7	0.2
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 21...	4.4	167	0.1	33	1.0	0.20	18	219	220	0.090	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 21...	<1	<100	50	10	<5	30	<10	<0.1	310	0.5	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355637084203801 - GW-211

DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CaCO3)	HARDNESS NONCARB WH WAT TOT FLD (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
APR 23...	1480	7.80	16.0	40	870	750	260	52	19	5	0.3
DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
APR 23...	6.1	118	4.0	770	2.6	0.30	21	1310	1200	<0.020	0.030
DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 23...	<1	<100	300	4200	<5	40	70	0.2	3500	0.5	

355421084231701 - GW-212

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 20...	320	6.80	15.0	<5	240	45	51	27	1.5	1	0.0
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 20...	0.70	194	55	6.4	3.4	0.10	11	243	210	0.080	0.020
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 20...	<1	<100	<20	<10	<5	<10	220	<0.1	50	0.8	

QUALITY OF GROUND WATER

377

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355421084231702 - GW-214

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
MAY 01...	3120	10.00	16.0	<5	7	0	1.8	0.60	730	99	120
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
MAY 01...	9.0	698	0.1	44	610	3.8	1.5	1820	1800	<0.020	0.080
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
MAY 01...	<1	<100	900	<10	<5	350	<10	0.3	220	4.0	

355435084232801 - GW-215

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 23...	335	7.90	14.0	<5	160	0	56	5.0	11	13	0.4
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 23...	2.8	164	4.0	18	2.6	0.30	16	209	210	0.020	0.030
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 23...	2	<100	<20	<10	<5	<10	<10	<0.1	230	1.0	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355421084231801 - GW-238

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
APR 21...	430	8.10	<5	230	12	57	22	3.7	3	0.1	3.4
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	
APR 21...	221	3.5	16	7.0	0.20	9.0	255	260	0.630	0.030	
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	
APR 21...	<1	100	20	<10	<5	10	10	<0.1	250	0.9	

355447084184301 - RN:M-5-440 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 24...	36.30	450	0	140	24	23	10	0.5	2.3	26
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 24...	32	<0.10	14	550	3.00	60	65	270	3.9	
DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 24...	140.00	42	0	10	3.9	12	33	0.8	8.3	
DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	
AUG 24...		6.0	24	0.10	3.0	120	0.370	<10	<5	400

QUALITY OF GROUND WATER

379

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355446084184301 - RN:M-5-460 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 24...	100.00	540	0	120	54	13	5	0.3	7.0	<1.0

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
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AUG 24...	260	<0.10	24	980	0.090	2000	76	1200	3.4
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355445084184102 - RN:M-5-461 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
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AUG 27...	202.00	4	0	0.94	0.40	360	98	81	9.1
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DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
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AUG 27...	29	4.0	8.0	1.5	800	0.110	<10	<5	85
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355445084184103 - RN:M-5-462 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
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AUG 26...	151.00	5	0	1.5	0.38	240	98	47	2.3	11
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DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
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AUG 26...	2.0	3.4	2.8	560	0.020	<10	<5	47	7.5
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QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355445084184201 - RN:M-5-463 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 26...	100.00	3	0	1.1	0.12	140	98	35	1.6	11

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 26...	1.0	0.80	14	340	0.050	<10	<5	36	8.1

355445084184202 - RN:M-5-464 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 27...	11.00	120	0	39	5.8	5.5	9	0.2	0.68	<1.0

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 27...	13	<0.10	9.1	190	<0.010	2000	100	110	5.2

355456084184601 - RN:M-5-471 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 25...	99.00	140	0	25	19	15	18	0.6	7.8	12

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 25...	4.0	<0.10	13	200	0.040	10	<5	1200	8.2

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355456084184501 - RN:M-5-472 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
AUG 27...	20.00	460	0	150	22	43	17	0.9	2.1

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
AUG 27...	1.0	23	0.70	30	600	0.090	30000	280	340

355421084193201 - RN:M-6-108 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 26...	126.00	180	0	57	8.5	4.5	5	0.2	0.92	13

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 26...	3.0	0.10	19	230	0.200	260	29	200	1.8

355420034193301 - RN:M-6-109 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 25...	126.00	280	0	61	31	12	8	0.3	3.6	16

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 26...	14	0.10	20	520	0.050	40	29	1900	8.6

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355343084201501 - RN:M-UAI ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 16...	52.00	130	0	29	13	19	24	0.8	3.5	16

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 16...	24	<0.10	2.2	190	<0.010	3500	140	240	1.1

355406084195701 - RN:M-UB1 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 16...	35.50	98	0	28	7.1	8.0	15	0.4	1.5	10

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 16...	6.0	<0.10	1.9	130	<0.010	<10	110	97	1.3

355405084195801 - RN:M-UB2 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 16...	126.10	3	0	0.91	0.07	110	97	31	4.4	12

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 16...	20	0.70	3.0	290	0.010	80	<5	7	1.0

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355457084184001 - RN:M-UE1 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 18...	76.70	270	0	84	15	6.8	5	0.2	2.2	13

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 18...	8.0	<0.10	11	300	0.010	3500	210	140	1.0

355444084184101 - RN:M-UF1 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 16...	23.50	190	0	60	11	10	10	0.3	3.6	9.0

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 16...	4.0	<0.10	12	240	0.050	<10	110	840	0.6

355517084171701 - RN:M-UG1 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 17...	32.00	120	0	34	9.7	11	16	0.4	2.8	16

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 17...	27	0.10	5.7	180	<0.010	<10	40	83	2.3

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

ROANE COUNTY--Continued

355515084172401 - RN:M-UH1 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 17...	26.00	150	0	48	7.9	11	13	0.4	1.4	16

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 17...	6.0	0.10	11	200	<0.010	960	180	98	0.9

355505084174201 - RN:M-UI1 ORNL

DATE	DEPTH OF WELL, TOTAL (FEET)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP 17...	25.00	100	0	21	12	70	59	3	4.2	14

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
SEP 17...	3.0	0.80	14	300	<0.010	20	18	1100	0.8

SHELBY COUNTY

350114090071701 - SH:J-146 MLGW-DAVIS

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCTI- VANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 24...	446.00	150	6.30	17.5	2	60	0	13	6.6	8.1	22

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	CARBON DIOXIDE SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	ARSENIC DIS- SOLVED (UG/L AS AS)
AUG 24...	0.5	0.90	72	71	3.3	3.1	0.10	15	87	94	<1

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
AUG 24...	38	<1	<3	<10	310	<5	6	<0.1	5

QUALITY OF GROUND WATER

385

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350446090013500 - SH:J-154 MLGW-ALLEN

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 24...	370.00	140	6.40	17.0	3	52	0	12	5.3	8.8	26
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	ARSENIC DIS- SOLVED (UG/L AS AS)
AUG 24...	0.5	1.2	65	54	2.7	3.3	0.10	13	81	89	<1

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
AUG 24...	61	<1	<3	<10	760	<5	24	<0.1	21

350203090034901 - SH:J-155 WILLILA JOHNSON

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)
APR 17...	52.00	410	16.0	2.80	<1	64	<1	<1	<1	<5	<0.1	2
DATE	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	XYLENE WATER TOT REC (UG/L)	CYANIDE DIS- SOLVED (MG/L AS CN)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	
APR 17...	48	<3.0	<0.01	0.3	<0.10	0.030	<0.1	<0.010	<0.010	0.040	<0.010	
DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	
APR 17...	0.040	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1	<3.0	<3.0	
DATE	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	
APR 17...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	

1,2-

WATER QUALITY DATA. WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350203090034901 - SH:J-155 WILLILA JOHNSON--Continued

[illegible]

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
SHELBY COUNTY--Continued
350508090015001 - SH:J-171--Continued

[illegible]

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350704089555501 - SH:K-137--Continued

DATE	METHYL- ENE- CHLO- RIDE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANSDI- CHLORO- ETHYL- ENE TOTAL (UG/L)
FEB 05...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	1,3-DI- CHLORO- PROPANE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,2- DIBROMO- ETHYL- ENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)
FEB 05...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

350218089511701 - SH:L-36

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
AUG 25...	85	6.30	18.0	1	35	0	8.6	3.2	3.8	19	0.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	ARSENIC DIS- SOLVED (UG/L AS AS)	
AUG 25...	0.50	38	38	3.4	1.4	0.10	10	50	55	<1	
DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)		
AUG 25...	12	<1	<3	<10	170	<5	4	0.2	12		

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350852089514100 - SH:0-116 SHELBY COUNTY PENAL FARM

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)
MAR 05...	23.80	125	18.0	0.460	<1	34	<1	5	1	<5
DATE	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	XYLENE WATER WHOLE TOT REC (UG/L)	CYANIDE DIS- SOLVED (MG/L AS CN)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)
MAR 05...	<0.1	6	32	<3.0	<0.01	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)
MAR 05...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANS DI CHLORO- ETHYL- ENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE TOTAL (UG/L)
MAR 05...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,2- DIBROMO ETHYL- ENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)
MAR 05...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

350908090014601 - SH:0-169 MLGW-MALLORY

DATE	DEPTH OF WELL, TOTAL (FEET)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
OCT 20...	2656.00	7.82	19.0	<1	7	0	1.9	0.40	400	99
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT 20...	72	2.2	892	26	0.9	7.1	4.9	13	1010	970

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350908090014601 - SH:0-169 MLGW-MALLORY--Continued

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350916090014901 - SH:O-244--Continued

[illegible]

QUALITY OF GROUND WATER

395

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351112089585100 - SH:P-121

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 20...	25.00	2170	6.10	22.5	0	<0.1	<0.10	<0.010	0.1	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 20...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351103089585300 - SH:P-122 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 18...	19.00	1080	6.70	20.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 18...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351115089583300 - SH:P-123 USGS-MEM HWDUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 21...	30.00	580	6.40	20.0	0	<1.0	<1.0	<0.10	<1.0	<0.10	<0.10
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 21...	<0.10	<0.10	<0.10	<0.10	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0

351106089581500 - SH:P-127 TVA(F)-MEMPHIS

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 18...	25.00	600	6.50	19.0	0	<0.1	<0.10	<0.010	0.1	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 18...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351440089572301 - SH:P-134 MORTON WELL FIELD

DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CaCO3)	HARDNESS NONCARB WH WAT POT FLD (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
AUG 26...	125	6.30	18.0	1	47	0	11	4.8	5.5	20	0.4
DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	ARSENIC DIS-SOLVED (UG/L AS AS)	
AUG 26...	1.3	55	56	4.4	1.8	0.10	11	73	76	<1	
DATE	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COBALT, DIS-SOLVED (UG/L AS Co)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MERCURY DIS-SOLVED (UG/L AS Hg)	ZINC, DIS-SOLVED (UG/L AS Zn)	
AUG 26...	72	<1	<10	20	<10	1400	<5	28	<0.1	8	

351456089564701 - SH:P-134 MR GROTEWIEL

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351456089564701 - SH:P-134 MR GROTEWIEL--Continued

DATE	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANSDI CHLORO- ETHYL- ENE TOTAL (UG/L)
APR 23...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	1,3-DI- CHLORO- PROPANE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,2- DIBROMO ETHYL- ENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)
APR 23...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

351111089585101 - SH:P-135 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 20...	40.00	1910	6.40	23.0	0	<0.1	<0.10	<0.010	0.1	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 20...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351103089585301 - SH:P-136 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 18...	49.00	510	6.50	19.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 18...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351116089583701 - SH:P-137 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 21...	30.00	6.40	18.5	0	<1.0	<1.0	0.24	11	<0.10	<0.10	<0.10
DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 21...	<0.10	<0.10	<0.10	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351111089582401 - SH:P-138 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 21...	29.00	500	6.30	20.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010

DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 21...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351101089582001 - SH:P-140 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 18...	40.00	470	6.70	20.5	0	<0.1	<0.10	<0.010	0.4	<0.010	<0.010

DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 18...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	0.030	<0.010	<0.01	<0.01	<0.1

351040089582800 - SH:P-144 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 22...	75.00	490	6.40	19.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010

DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 22...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351051089581102 - SH:P-154 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 17...	610	6.40	18.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 17...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

QUALITY OF GROUND WATER

399

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351051089581103 - SH:P-155 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 17...	600	6.40	18.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 17...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351052089582802 - SH:P-157 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 17...	380	6.40	18.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 17...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351052089582803 - SH:P-158 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 17...	430	6.50	19.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 17...	<0.010	<0.010	<0.010	<1	<0.010	0.010	<0.010	<0.01	<0.01	<0.1

351050089584002 - SH:P-160 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 22...	450	6.20	17.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 22...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351050089584003 - SH:P-161 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 22...	470	6.30	17.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 22...	0.14	<0.010	<0.010	<1	<0.010	0.020	<0.010	<0.01	<0.01	<0.1

351109089583402 - SH:P-163 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 17...	470	6.40	18.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 17...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351103089582101 - SH:P-164 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 15...	550	6.40	18.5	0	<0.1	<0.10	0.010	0.1	0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 15...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351103089582102 - SH:P-165 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 15...	670	6.40	19.0	0	0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 15...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

QUALITY OF GROUND WATER

401

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351103089582103 - SH:P-166 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 22...	29.00	1620	6.40	19.0	0	<2.0	<2.0	4.2	<2.0	<0.20	<0.20
DATE	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 22...	<0.20	<0.20	<0.20	<0.20	<20	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0

351107089581901 - SH:P-167 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
OCT 16...	1000	19.5	<0.1	<0.10	0.020	<0.1	<0.010	<0.010	<0.010	<0.010
DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 16...	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1	

351107089581902 - SH:P-168 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
OCT 16...	1180	19.5	<1.0	<1.1	<0.10	2.0	<0.10	<0.10	<0.10	<0.10
DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 16...	<0.10	<0.10	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	

351109089582701 - SH:P-170 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 16...	1130	6.50	19.0	0	<1.1	<1.1	<0.10	<1.0	<0.10	<0.10	<0.10
DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 16...	<0.10	<0.10	<0.10	<10	0.030	<0.10	<0.10	<0.10	<0.10	<1.0	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351113089582401 - SH:P-172 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 16...	570	6.30	20.0	0	<10	<10	<1.0	<10	<1.1	<1.0	<1.0

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 16...	<1.0	<1.1	<1.0	<100	<1.0	<1.0	<1.00	<1.1	<1.0	<10

351108089584301 - SH:P-174 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 16...	620	6.30	19.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 16...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351108089584302 - SH:P-175 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 16...	470	6.50	19.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 16...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351110089585001 - SH:P-177 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 20...	1430	6.40	22.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 20...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351113089583401 - SH:P-179 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 17...	490	6.30	19.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 17...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351108089581301 - SH:P-181 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 18...	540	6.50	18.0	0	<0.1	<0.10	<0.010	0.2	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 18...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351108089581302 - SH:P-182 HOLLYWOOD DUMP

DATE	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	PER- THANE TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 18...	400	6.40	18.5	0	<0.1	<0.10	<0.010	0.1	<0.010	<0.010	<0.010

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 18...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351114089582001 - SH:P-183 HOLLYWOOD DUMP

DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	PER-THANE TOTAL (UG/L)	NAPHTHALENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	
OCT 18...	1410	6.60	19.0	0	<0.1	<0.10	<0.010	0.3	<0.010	<0.010	
DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	APHENE, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 18...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.01	<0.1	
351115089584201 - SH:P-184 HOLLYWOOD DUMP											
DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	PER-THANE TOTAL (UG/L)	NAPHTHALENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 20...	1500	6.40	19.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	APHENE, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 20...	0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1	
351115089584202 - SH:P-185 HOLLYWOOD DUMP											
DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	PER-THANE TOTAL (UG/L)	NAPHTHALENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 20...	1770	6.40	19.5	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010
DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	APHENE, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 20...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1	
351123089584001 - SH:P-186 HOLLYWOOD DUMP											
DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	PER-THANE TOTAL (UG/L)	NAPHTHALENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 21...	660	7.60	18.0	0	<1.0	<1.0	<0.10	<1.0	<0.10	<0.10	<0.10
DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	APHENE, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXY-CHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	
OCT 21...	<0.10	<0.10	<0.10	<10	<0.10	<0.10	<0.10	<0.10	<0.10	<1.0	

QUALITY OF GROUND WATER

405

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351123089584002 - SH:P-187 HOLLYWOOD DUMP

DATE	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	PERTHANE TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 21...	600	6.90	21.0	0	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010

DATE	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 21...	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351111089585201 - SH:P-188 HOLLYWOOD DUMP

DATE	DEPTH OF WELL, TOTAL (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	PERTHANE TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)
OCT 22...	29.00	1300	6.20	25.0	0	<0.1	<0.10	<0.010	0.1	<0.010	<0.010

DATE	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PCB, TOTAL (UG/L)
OCT 22...	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1

351430089573201 - SH:P-197

DATE	DEPTH OF WELL, TOTAL (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS NONCARBON WH WAT TOT FLD (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	ALKALINITY LAB (MG/L AS CaCO3)
JAN 22...	80.00	360	6.70	16.0	130	0	28	15	28	1	157

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM, DIS-SOLVED (UG/L AS CD)
JAN 22...	61	14	10	0.30	41	0.800	0.020	0.06	<1	64	<1

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY, DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	CYANIDE, DIS-SOLVED (MG/L AS CN)	DI-CHLOROBROMOMETHANE TOTAL (UG/L)	CARBON-TETRACHLORIDE TOTAL (UG/L)
JAN 22...	<1	3	10	<5	64	<0.1	2	94	<0.01	<3.0	<3.0

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351430089573201 - SH:P-197--Continued

DATE	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)
JAN 22...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,2- TRANS- DI- CHLORO- ETHYL- ENE TOTAL (UG/L)
JAN 22...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
DATE	1,3-DI- CHLORO- PROPANE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,2- DIBROMO ETHYL- ENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)
JAN 22...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

350757089502701 - SH:Q- 55 SH CO PENAL FRM

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RAIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 18...	66.00	320	6.60	18.0	120	0	28	13	13	18	0.5	4.2
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 18...	125	62	20	12	0.10	12	177	180	<0.100	<0.010	<1	29
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 18...	<1	<10	<10	360	<10	2800	<1	<1	120	14	1.5	

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350737089485600 - SH:Q- 89 AGRICENTER

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CAC03)
JUL 16...	80	5.70	18.0	25	0	6.3	2.3	5.0	30	0.4	0.40	32
DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	
JUL 16...	108	2.4	2.3	<0.10	12	43	48	<0.100	<0.010	<1	17	
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
JUL 16...	16	<10	<10	36	<10	8	<1	1	16	8	0.2	

350749089505802 - SH:Q- 92 SHELBY CO LANDFILL MS-2

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL 07...	180.00	100	6.50	20.0	41	0	11	3.4	5.5	22	0.4	1.0
10...	180.00	100	6.30	20.0	38	2	9.5	3.4	3.5	16	0.3	0.90
DATE	ALKA- LITY LAB (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
JUL 07...	46	31	5.8	2.5	<0.10	11	75	71	<0.100	0.090	0.100	1
10...	38	35	5.1	2.5	<0.10	10	61	57	--	--	--	1
DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUL 07...	28	<1	<10	<10	310	<10	29	<1	<1	5	55	0.3
10...	18	<1	<10	<10	450	<10	14	<1	<1	33	85	--

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351111089512501 - SH:Q- 94

[illegible]

QUALITY OF GROUND WATER

409

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350749089505805 - SH:Q- 95 SHELBY CO LANDFILL 1

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL 16...	35.80	150	5.70	18.0	23	0	5.9	2.1	9.8	45	0.9	1.9
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
JUL 16...	28	135	9.4	3.3	0.10	12	72	66	<0.100	0.010	2	61
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
JUL 16...	1	<10	<10	4	<10	1	<1	<1	40	31	13	

350749089505806 - SH:Q- 96 SHELBY CO LANDFILL 2

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL 16...	48.30	100	5.60	17.5	20	0	6.8	0.82	4.2	29	0.4	1.2
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
JUL 16...	25	131	3.2	2.7	<0.10	11	47	51	<0.100	0.010	19	41
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
JUL 16...	2	20	<10	4600	<10	340	<1	<1	30	11	2.1	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350739089501701 - SH:Q- 98 SHELBY CO LANDFILL 4A

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 18...	51.80	240	6.00	17.5	37	0	10	3.0	3.5	15	0.3	3.7
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 18...	42	130	40	4.2	<0.10	22	110	160	<0.100	<0.010	<1	83
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 18...	3	<10	<10	31000	<10	1300	<1	<1	46	16	2.7	

350741089490901 - SH:Q-101 SHELBY CO LANDFILL 7

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 17...	37.70	485	6.20	17.5	160	93	38	16	34	31	1	1.4
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 17...	69	83	140	8.8	<0.10	17	314	300	0.680	<0.010	<1	70
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 17...	<1	<10	<10	38	<10	15	2	<1	99	15	1.5	

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350803089495901 - SH:Q-102 SHELBY CO LANDFILL 8A

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 18...	53.70	500	6.30	18.0	130	31	32	12	48	44	2	1.7
DATE	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 18...	102	96	64	43	<0.10	21	296	280	1.50	<0.010	<1	180
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 18...		1	<10	<10	16	<10	380	5	<1	91	15	1.1

350822089504001 - SH:Q-105 SHELBY CO LANDFILL 12

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 17...	43.70	440	6.20	17.5	150	76	35	14	32	32	1	1.6
DATE	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 17...	66	84	130	9.2	<0.10	17	291	280	1.90	<0.010	1	120
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 17...		<1	<10	<10	1100	<10	1400	9	<1	30	28	5.4

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350845089512101 - SH:Q-109 SHELBY CO LANDFILL 16

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 17...	44.70	570	6.00	17.5	140	63	33	15	54	45	2	1.3
DATE	ALKA- LITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 17...	83	159	30	85	0.10	38	354	310	7.90	0.020	<1	210
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 17...	1	<10	<10	31	<10	5	2	<1	210	22	1.7	

350807089511101 - SH:Q-112 SHELBY CO LANDFILL 19

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 19...	44.40	170	6.00	16.0	43	0	9.7	4.4	5.6	21	0.4	1.8
DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	
NOV 19...	116	2.2	3.9	0.20	13	86	83	<0.100	0.020	1	130	
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 19...	<1	<10	<10	5500	<10	220	<1	<1	86	12	3.2	

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SHELBY COUNTY--Continued

350812089505901 - SH:Q-113 SHELBY CO LANDFILL 20

DATE	DEPTH OF WELL, TOTAL (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CaCO3	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)
NOV 18...	43.20	265	5.80	17.5	88	54	22	8.1	12	23	0.6	1.2
DATE	ALKALINITY LAB (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
NOV 18...	27	104	79	4.2	<0.10	17	170	170	<0.100	<0.010	<1	81
DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, DIS-SOLVED (UG/L AS MN)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 18...	2	10	<10	3900	<10	190	<1	<1	62	24	2.0	

350804089504101 - SH:Q-119 SHELBY CO LANDFILL 26

[illegible]

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350804089503501 - SH:Q-120 SHELBY CO LANDFILL 27

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 19...	65.20	1700	6.40	19.0	510	0	140	39	82	24	2	46
DATE	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 19...	728	712	7.6	91	0.30	14	932	1100	<0.100	<0.010	1	610
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
NOV 19...	8	<10	<10	83000	20	2500	<1	<1	980	<3	18	

350817089503501 - SH:Q-125 SHELBY CO LANDFILL

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
JUL 15...	100.00	240	6.40	78	10	21	6.2	20	36	1	0.80
DATE	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	
JUL 15...	67	52	23	17	0.40	15	146	140	<1	46	
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	
JUL 15...	<1	<10	<10	3	<10	9	2	1	40	74	

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350817089503502 - SH:Q-126 SHELBY CO LANDFILL

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)
JUL 13...	97.70	220	7.10	84	0	24	5.7	11	22	0.5	1.0	89
JUL 13...	97.70	--	6.80	65	0	20	3.7	8.6	22	0.5	1.4	79
DATE	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	
JUL 13...	14	15	4.1	0.20	13	123	130	<0.100	0.020	<1	66	
JUL 13...	21	4.1	3.3	0.10	14	100	98	--	--	<1	47	
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
JUL 13...	1	20	<10	10	<10	81	<1	<1	75	640	1.0	
JUL 13...	<1	<10	<10	<3	<10	44	<1	<1	42	700	0.4	

350817089503504 - SH:Q-128 SHELBY CO LANDFIL

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	
JUL 17...	38.70	420	6.80	91	0	20	9.8	70	63	3	0.80	
DATE	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	
JUL 17...	203	61	79	7.5	0.30	28	340	1.30	0.040	2	170	
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
JUL 17...	3	<10	<10	4	<10	3200	9	<1	160	45	99	

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

350810089503501 - SH:Q-129 SHELBY CO LANDFILL

[illegible]

417

SHELBY COUNTY--Continued

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
7...	125	6.20	17.0	3	42	0	9.5	4.4	8.6	30	0.6

AUG										
27...	1.1	47	61	8.5	5.3	0.10	12	77	81	<1

AUG										
27...	60	<1	<10	20	<10	1300	<5	25	<0.1	11

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- M- IUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)
APR 20...	70.00	140	18.0	3.60	<1	31	<1	<1	12	<5	<0.1	3

APR											
20...	26	<3.0	<0.01	<0.1	<0.10	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010

APR											
20...	<0.010	<0.010	<1	<0.010	<0.010	<0.010	<0.01	<0.01	<0.1	<3.0	<3.0

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351124089520001 - SH:Q-79 BILL GORDON--Continued

[illegible]

SHELBY COUNTY--Continued

351703089575301 - SH:U- 20 GRACE CHEMICAL

[illegible]

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

SHELBY COUNTY--Continued

351525089512102 - SH:V- 21--Continued

DATE	1,3-DI- CHLORO- PROPANE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,2- DIBROMO ETHYL- ENE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)
APR 16...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

STEWART COUNTY

363336087462500 - ST:M-063 N. STEWART

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 10...	160	15.0	91	0	30	3.8	3.0	7	0.1	1.9	10	3.4
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (MG/L AS AS)	BARIUM, DIS- SOLVED (MG/L AS BA)	CADMIUM DIS- SOLVED (MG/L AS CD)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR)	COBALT, DIS- SOLVED (MG/L AS CO)	COPPER, DIS- SOLVED (MG/L AS CU)	IRON, DIS- SOLVED (MG/L AS FE)	LEAD, DIS- SOLVED (MG/L AS PB)	MANGA- NESE, DIS- SOLVED (MG/L AS MN)	ZINC, DIS- SOLVED (MG/L AS ZN)
DEC 10...	120	1.50	<1	45	1	<10	<3	<10	10	<5	2	15

363336087463300 - ST:M-065 N. STEWART

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	HARD- NESS (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 09...	142.00	210	100	0	33	4.4	3.3	7	0.1	1.6	10	6.0
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	ARSENIC DIS- SOLVED (MG/L AS AS)	BARIUM, DIS- SOLVED (MG/L AS BA)	CADMIUM DIS- SOLVED (MG/L AS CD)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR)	COBALT, DIS- SOLVED (MG/L AS CO)	COPPER, DIS- SOLVED (MG/L AS CU)	IRON, DIS- SOLVED (MG/L AS FE)	LEAD, DIS- SOLVED (MG/L AS PB)	MANGA- NESE, DIS- SOLVED (MG/L AS MN)	ZINC, DIS- SOLVED (MG/L AS ZN)
DEC 09...	128	1.10	<1	39	2	<10	<3	<10	<3	9	8	11

WILLIAMSON COUNTY

355307086535501 - WM:M- 21 METRO READY MIX

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
MAY 27...	1100.00	1750	7.80	170	0	33	21	280	77	10	13
DATE	ALKAL- INITY LAB (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
MAY 27...	243	8.1	360	140	5.4	8.8	1020	1000	50	20	

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

WILLIAMSON COUNTY--Continued

355720086460602 - WM:N-043A

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 28...	102.00	1280	7.70	17.0	<5	230	0	37	31	190	64
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY 28...	6	8.3	265	13	300	29	3.1	8.8	806	820	0.020
DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAY 28...	0.690	<1	<100	520	20	<5	300	<10	<0.1	10000	1.0

355718036461001 - WM:N-044

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
OCT 17...	34.10	380	7.50	15.0	10	220	0	66	13	4.3	4	0.1
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	
OCT 17...	1.1	14	24	4.4	0.60	9.0	228	260	<0.020	0.120	0.370	
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
OCT 17...	<10	200	20	760	<5	10	140	<1	1500	20	4.0	

QUALITY OF GROUND WATER
WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

WILLIAMSON COUNTY--Continued

355715086462101 - WM:N-052

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 02...	35.00	840	7.30	16.0	5	410	98	120	24	36	16
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 02...	0.8	2.3	307	30	140	10	1.3	9.3	551	530	0.340
DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 02...	0.030	<1	<100	100	<10	<5	10	30	<0.1	6000	3.0

355715086462102 - WM:N-052A

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 28...	132.00	1820	7.70	15.5	5	200	0	39	24	350	78
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY 28...	11	10	350	14	530	51	3.9	11	1220	1200	0.020
DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAY 28...	0.770	<1	<100	870	170	<5	540	20	0.1	3600	1.0

QUALITY OF GROUND WATER

423

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

WILLIAMSON COUNTY--Continued

355714086454501 - WM:N-055

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 05...	30.00	2200	7.40	17.0	5	770	570	190	70	18	5
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 05...	0.3	1.6	196	16	580	8.8	1.4	12	1120	1000	0.060
DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 05...	0.130	1	<100	190	140	<5	20	70	<0.1	4900	1.3

355714086454502 - WM:N-055A

DATE	DEPTH OF WELL, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 05...	177.00	1600	7.60	16.0	5	400	150	72	50	220	55
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
JUN 05...	5	10	248	12	580	31	3.1	8.8	1150	1100	<0.020
DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 05...	1.20	<1	<100	590	60	<5	340	<10	<0.1	8200	0.5

CHEMICAL QUALITY OF PRECIPITATION

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN
(NATIONAL TRENDS NETWORK)

LOCATION.--Lat 35°28'08", long 89°10'14", Haywood County, Hydrologic Unit 08010208, at Hatchie National Wildlife Refuge, 0.9 mi north of Hillville, 12 mi southeast of Brownsville.

PERIOD OF RECORD.--October 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 on-site precipitation records.

REMARKS.--These data are part of the data for this site verified by the National Atmospheric Deposition Program/ National Trends Network (NADP/NTN) Coordinator. Additional data are available from the NADP/NTN Coordinator, Natural Resource Ecology Laboratory, Fort Collins, Co. 80523. 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. Data for the 1987 water year will be published in "Water Resources Data for Tennessee, Water Year 1988."

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	PRECIP- ITATION TOTAL INCHES/ WEEK	ATM DEP WET TOTAL FOR PERIOD (IN)	COL- LECTOR EFFI- CIENCY WET DEPOS. PERCENT	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 02-09	1720	1.44	1.44	0.95	10	4.75	0	0	0.03	0.02
OCT 09-16	1530	0.51	0.51	0.94	21	4.39	1	0	0.13	0.07
OCT 16-23	1545	4.11	4.11	0.95	--	4.78	0	0	0.04	0.02
OCT 23-30	1555	0.12	0.12	0.90	--	--	--	--	--	--
OCT 30- NOV 06	1702	1.29	1.29	0.98	6	4.96	0	0	0.02	0.01
NOV 06-13	1415	2.02	2.02	0.98	--	--	--	--	--	--
NOV 13-20	1440	2.60	2.60	0.98	--	4.37	0	0	0.07	0.03
NOV 20-27	1419	1.15	1.15	0.98	--	4.80	0	0	0.05	0.04
NOV 27- DEC 04	2243	0.09	0.09	0.66	25	4.70	3	0	0.87	0.27
DEC 04-11	1622	0.44	0.44	1.0	20	4.36	0	0	0.06	0.02
DEC 11-18	1642	0.05	0.05	0.54	--	--	4	0	0.86	0.46
DEC 18-26	1704	2.35	2.35	0.91	14	4.70	0	0	0.02	0.01
DEC 26 1984- JAN 02 1985	1620	0.73	18.54	0.85	9	4.92	0	0	0.03	0.04
JAN 02-08	1703	0.67	0.67	0.93	11	4.71	0	0	0.08	0.04
JAN 08-15	1540	0.29	0.29	0.98	21	4.43	1	0	0.16	0.04
JAN 15-22	1528	0.81	0.81	0.91	11	4.70	0	0	0.07	0.03
JAN 22-29	2018	0.63	0.63	0.88	9	4.78	0	0	0.04	0.02
JAN 29- FEB 05	1445	1.49	1.49	0.58	2	4.46	0	0	0.05	0.01
FEB 05-12	1506	1.24	--	--	26	4.30	0	0	0.05	0.02

CHEMICAL QUALITY OF PRECIPITATION

425

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN--Continued

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	PRECIP- ITATION TOTAL INCHES/ WEEK	ATM DEP WET TOTAL FOR PERIOD (IN)	COL- LECTOR EFFI- CIENCY WET DEPOS. PERCENT	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CAC03)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CAC03	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB 12-19	1620	0.0	--	--	--	--	--	--	--	--
FEB 19-26	2218	1.23	1.23	0.98	4	5.12	0	0	0.02	0.01
FEB 26- MAR 05	1515	0.32	0.32	0.97	--	--	--	--	--	--
MAR 05-12	1552	0.59	0.59	0.90	15	4.89	1	0	0.18	0.04
MAR 12-19	2204	0.30	0.30	0.93	37	4.24	0	0	0.09	0.03
MAR 19-26	1859	0.88	0.88	0.88	18	4.34	0	0	0.14	0.02
MAR 26- APR 02	2145	1.89	1.89	0.95	10	5.01	0	0	0.07	0.04
APR 02-09	1526	0.23	0.23	0.88	--	--	--	--	--	--
APR 09-16	2126	0.52	0.52	0.98	11	4.65	0	0	0.07	0.05
APR 16-23	2101	0.70	0.70	0.96	12	4.55	0	0	0.04	0.02
APR 23-30	2114	2.21	2.21	0.99	7	4.58	0	0	0.04	0.01
APR 30- MAY 07	2028	1.07	1.07	0.91	29	4.30	0	0	0.10	0.02
MAY 07-14	2042	0.69	0.69	0.79	34	4.17	1	0	0.15	0.03
MAY 14-21	2100	0.04	0.04	0.28	--	--	--	--	--	--
MAY 21-29	2013	3.01	3.01	0.96	19	4.29	0	0	0.06	0.01
MAY 29- JUN 04	1905	0.0	0.0	--	--	--	--	--	--	--
JUN 04-11	2112	0.76	0.76	0.98	--	--	--	--	--	--
JUN 11-18	1535	3.06	3.06	0.97	13	4.34	0	0	0.08	0.02
JUN 18-25	2214	0.46	0.46	0.90	14	4.66	1	0	0.22	0.07
JUN 25- JUL 02	1505	0.29	0.29	--	--	--	--	--	--	--
JUL 02-09	1304	1.57	1.57	0.98	7	4.64	0	0	0.08	0.02
JUL 09-16	1233	0.19	0.19	0.73	26	4.35	2	0	0.75	0.09
JUL 16-23	1349	0.0	0.0	--	--	--	--	--	--	--
JUL 23-30	1350	1.63	1.63	0.96	16	4.56	1	0	0.14	0.03
JUL 30- AUG 06	1325	0.32	0.32	0.94	20	4.41	0	0	0.11	0.03
AUG 06-13	1309	1.04	1.04	0.97	16	4.42	0	0	0.09	0.02
AUG 13-20	1418	1.92	1.92	0.95	9	4.57	0	0	0.03	0.02
AUG 20-27	1317	1.82	1.82	0.95	21	4.30	1	0	0.17	0.02
AUG 27- SEP 03	1928	0.0	0.0	--	--	--	--	--	--	--
SEP 03-10	1342	0.62	0.62	0.93	13	4.63	1	0	0.16	0.06
SEP 10-17	1253	0.0	0.0	--	--	--	--	--	--	--
SEP 17-24	2040	0.41	0.41	0.99	11	4.61	0	0	0.05	0.02
SEP 24- OCT 01	1340	2.85	2.85	1.0	--	--	--	--	--	--

CHEMICAL QUALITY OF PRECIPITATION

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN--Continued

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
OCT 02-09	0.07	51	0.1	0.01	0	0.7	0.10	0.58	0.10	0.00
OCT 09-16	0.26	47	0.2	0.04	0	2.0	0.37	1.7	0.18	0.00
OCT 16-23	0.14	60	0.1	0.02	0	0.8	0.21	0.65	0.16	0.01
OCT 23-30	--	--	--	--	--	--	--	--	--	--
OCT 30- NOV 06	0.04	41	0.1	0.02	0	0.8	0.07	0.37	<0.02	0.00
NOV 06-13	--	--	--	--	--	--	--	--	--	--
NOV 13-20	0.20	56	0.2	0.02	0	1.3	0.37	0.65	0.11	0.00
NOV 20-27	0.24	63	0.2	0.02	0	1.3	0.39	0.48	0.21	0.00
NOV 27- DEC 04	0.67	29	0.2	0.25	0	2.4	0.59	4.0	0.68	0.01
DEC 04-11	0.03	24	0.0	0.01	0	2.0	0.07	0.60	0.07	0.00
DEC 11-18	2.2	53	0.5	0.20	--	4.3	2.9	3.5	<0.02	0.01
DEC 18-26	0.09	62	0.1	0.01	0	1.2	0.13	0.61	0.18	0.00
DEC 26 1984- JAN 02 1985	0.28	70	0.3	0.02	0	0.6	0.44	0.49	0.07	0.0
JAN 02-08	0.08	32	0.1	0.01	0	0.8	0.07	0.93	0.07	0.00
JAN 08-15	0.11	29	0.1	0.02	0	1.7	0.12	1.3	0.09	0.00
JAN 15-22	0.08	35	0.1	0.01	0	0.7	0.03	0.74	<0.02	0.00
JAN 22-29	0.05	35	0.0	0.01	0	0.7	0.04	0.51	0.11	0.00
JAN 29- FEB 05	0.07	44	0.1	0.01	0	1.3	0.12	0.92	0.15	0.00
FEB 05-12	0.08	43	0.1	0.02	0	2.0	0.19	1.3	0.25	0.01
FEB 12-19	--	--	--	--	--	--	--	--	--	--
FEB 19-26	0.08	62	0.1	0.01	0	0.2	0.12	0.22	0.03	0.00
FEB 26- MAR 05	--	--	--	--	--	--	--	--	--	--
MAR 05-12	0.22	41	0.1	0.05	0	1.9	0.28	1.3	0.65	0.01
MAR 12-19	0.03	17	0.0	0.02	0	2.2	0.12	2.3	0.21	0.00
MAR 19-26	0.05	19	0.0	0.02	0	1.6	0.11	1.0	0.22	0.01
MAR 26- APR 02	0.26	57	0.2	0.08	0	1.1	0.41	0.62	0.44	0.01
APR 02-09	--	--	--	--	--	--	--	--	--	--
APR 09-16	0.05	21	0.0	0.02	0	0.9	0.09	0.53	0.09	0.00
APR 16-23	0.15	60	0.2	0.02	0	0.7	0.31	0.56	0.14	0.00
APR 23-30	0.09	52	0.1	0.02	0	0.6	0.13	0.53	0.13	0.00
APR 30- MAY 07	0.07	27	0.0	0.04	0	1.7	0.17	1.6	0.51	0.00
MAY 07-14	0.08	25	0.0	0.03	0	3.2	0.21	1.7	0.20	0.01
MAY 14-21	--	--	--	--	--	--	--	--	--	--
MAY 21-29	0.04	27	0.0	0.02	0	1.7	0.08	1.1	0.30	0.01
MAY 29- JUN 04	--	--	--	--	--	--	--	--	--	--
JUN 04-11	--	--	--	--	--	--	--	--	--	--
JUN 11-18	0.07	33	0.1	0.02	0	1	0.13	0.93	0.18	0.01
JUN 18-25	0.39	49	0.2	0.04	0	1.1	0.72	1.0	0.14	0.01

CHEMICAL QUALITY OF PRECIPITATION

427

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN--Continued

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
JUN 25- JUL 02	--	--	--	--	--	--	--	--	--	--
JUL 02-09	0.04	21	0.0	0.01	0	0.5	0.06	0.56	0.04	0.01
JUL 09-16	0.12	10	0.0	0.06	0	2.5	0.20	2.8	0.36	0.01
JUL 16-23	--	--	--	--	--	--	--	--	--	--
JUL 23-30	0.10	32	0.1	0.02	0	1.5	0.23	1.2	<0.02	0.01
JUL 30- AUG 06	0.13	40	0.1	0.01	0	1.7	0.26	1.2	0.07	0.01
AUG 06-13	0.04	19	0.0	0.02	0	1.3	0.08	1.2	0.17	0.01
AUG 13-20	0.09	55	0.1	0.01	0	0.6	0.19	0.38	<0.02	0.01
AUG 20-27	0.06	20	0.0	0.04	0	2.0	0.09	1.5	0.22	0.01
AUG 27- SEP 03	--	--	--	--	--	--	--	--	--	--
SEP 03-10	0.28	47	0.2	0.03	0	1.2	0.51	0.61	<0.02	0.01
SEP 10-17	--	--	--	--	--	--	--	--	--	--
SEP 17-24	0.04	30	0.0	0.01	0	0.9	0.07	0.59	0.11	0.01
SEP 24- OCT 01	--	--	--	--	--	--	--	--	--	--

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	PRECIP- ITATION TOTAL INCHES/ WEEK	ATM DEP WET TOTAL FOR PERIOD (IN)	COL- LECTOR EFFI- CIENCY WET DEPOS. PERCENT	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CaCO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 01-08	1422	0.0	0.0	--	--	--	--	--	--	--
OCT 08-15	1504	0.30	0.30	--	4	4.99	0	0	0.07	0.02
OCT 15-22	1335	1.15	1.15	0.94	16	4.44	0	0	0.03	0.02
OCT 22-29	1410	1.15	1.15	0.94	9	4.63	0	0	0.05	0.02
OCT 29- NOV 05	1740	1.35	1.35	0.88	--	--	--	--	--	--
NOV 05-12	1457	0.06	0.06	0.75	41	4.11	2	0	0.38	0.13
NOV 12-19	1458	1.47	1.47	0.95	10	4.64	0	0	0.03	0.02
NOV 19-26	1440	0.30	0.30	0.95	--	--	--	--	--	--
NOV 26- DEC 03	1549	3.18	3.18	0.88	--	4.72	0	0	0.05	0.02
DEC 03-10	1545	0.0	0.0	--	--	--	2	0	0.44	0.18
DEC 10-17	1824	1.10	1.10	0.87	24	4.30	0	0	0.10	0.05
DEC 17-24	2120	0.07	0.07	0.24	--	--	--	--	--	--
DEC 24-31	1913	0.12	0.12	1.1	--	--	--	--	--	--
DEC 31 1985- JAN 07 1986	2329	0.0	0.0	--	--	--	--	--	--	--
JAN 07-14	1310	0.0	0.0	--	--	--	--	--	--	--
JAN 14-21	1310	1.03	1.03	0.94	21	4.17	0	0	0.03	0.02
JAN 21-28	1602	0.02	0.02	0.31	--	--	2	0	0.48	0.21
JAN 28- FEB 04	1321	0.23	0.23	1.0	13	4.41	1	0	0.09	0.06
FEB 04-11	1336	0.11	--	--	22	4.24	0	0	0.07	0.02

CHEMICAL QUALITY OF PRECIPITATION

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN--Continued

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	PRECIP- ITATION TOTAL INCHES/ WEEK	ATM DEP WET TOTAL FOR PERIOD (IN)	COL- LECTOR EFFI- CIENCY WET DEPOS. PERCENT	SPE- CIFIC CON- DUCTI- ANCE (US/CM)	PH (STAND- ARD UNITS)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB 11-18	1846	1.27	1.27	1.0	20	4.41	0	0	0.11	0.02
FEB 18-25	1343	0.02	0.02	0.24	--	--	--	--	<0.16	0.09
FEB 25- MAR 04	1547	0.02	0.02	0.54	--	--	2	0	0.50	0.17
MAR 04-11	1512	0.01	0.01	0.36	--	--	8	0	2.8	0.24
MAR 11-18	1527	1.87	1.87	0.90	8	4.90	1	0	0.14	0.03
MAR 18-25	2216	0.80	0.80	0.94	5	5.08	0	0	0.09	0.02
MAR 25- APR 01	1440	0.0	0.0	--	--	--	--	--	--	--
APR 01-08	1533	1.70	1.70	0.95	9	4.93	0	0	0.13	0.03
APR 08-15	1520	0.16	0.16	0.79	18	4.73	2	0	0.56	0.07
APR 15-22	1558	0.71	0.71	0.89	17	4.47	0	0	0.08	0.02
APR 22-29	1530	0.08	0.08	0.69	10	4.78	1	0	0.14	0.06
APR 29- MAY 06	1359	1.20	1.20	0.99	8	4.82	0	0	0.02	0.01
MAY 06-13	1544	1.17	1.17	0.91	14	4.53	0	0	0.08	0.02
MAY 13-20	1425	0.56	0.56	0.89	17	4.56	0	0	0.12	0.03
MAY 20-27	1936	2.57	2.57	0.99	18	4.49	0	0	0.14	0.02
MAY 27- JUN 04	1529	0.04	0.04	1.3	12	4.69	1	0	0.24	0.06
JUN 04-11	--	2.04	2.04	1.0	15	4.50	0	0	0.05	0.02
JUN 11-17	0001	0.08	0.08	1.0	25	4.34	1	0	0.16	0.09
JUN 17-24	1447	0.0	0.0	--	--	--	--	--	--	--
JUN 24- JUL 01	1514	0.24	0.24	0.92	20	4.40	0	0	0.08	0.03
JUL 01-08	1455	0.19	0.19	0.96	21	4.37	0	0	0.07	0.02
JUL 08-15	1432	2.29	2.29	1.0	14	4.65	1	0	0.17	0.04
JUL 15-22	1616	0.0	0.0	--	--	--	--	--	--	--
JUL 22-29	1415	1.66	1.66	0.98	20	4.43	0	0	0.07	0.02
JUL 29- AUG 05	1503	0.06	0.06	1.1	22	4.35	1	0	0.20	0.03
AUG 05-12	1440	0.58	0.58	1.0	22	4.36	0	0	0.13	0.03
AUG 12-19	1421	1.16	1.16	0.97	25	4.34	0	0	0.07	0.01
AUG 19-26	2332	0.51	0.51	0.95	17	4.46	0	0	0.08	0.01
AUG 26- SEP 02	1319	0.07	0.07	1.0	50	3.98	1	0	0.41	0.05
SEP 02-09	1755	0.10	0.10	1.0	17	4.51	0	0	0.09	0.04
SEP 09-16	1428	0.18	0.18	0.98	14	4.73	1	0	0.35	0.07
SEP 16-23	1555	1.13	1.13	1.0	--	4.51	0	0	0.06	0.02
SEP 23-30	1648	0.0	0.0	--	--	--	--	--	--	--
SEP 30- OCT 07	1655	0.96	0.96	0.97	11	4.85	1	0	0.18	0.06

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PRECIPITATION QUALITY, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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CHEMICAL QUALITY OF PRECIPITATION

00441400 HATCHIE NATIONAL WILDLIFE REFUGE RAIN GAGE AT HILLVILLE, TN--Continued

PRECIPITATION QUALITY, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
JUN 24- JUL 01	0.05	24	0.0	0.02	0	1.3	0.13	1.6	<0.02	0.01
JUL 01-08	0.04	22	0.0	0.03	0	1.9	0.11	1.4	0.28	0.01
JUL 08-15	0.21	40	0.1	0.06	0	1.2	<0.34	<0.03	<0.02	0.01
JUL 15-22	--	--	--	--	--	--	--	--	--	--
JUL 22-29	0.03	19	0.0	0.02	0	1.9	0.05	1.1	<0.02	0.01
JUL 29- AUG 05	0.08	21	0.0	0.02	0	1.3	0.34	2.1	0.08	0.01
AUG 05-12	0.11	33	0.1	0.03	0	1.8	0.21	1.6	0.13	0.01
AUG 12-19	0.05	30	0.0	0.02	0	2.0	0.14	1.6	0.27	0.01
AUG 19-26	0.08	41	0.1	0.01	0	1.3	0.08	1.1	<0.02	0.01
AUG 26- SEP 02	0.07	11	0.0	0.02	0	4.5	0.37	3.5	0.87	0.01
SEP 02-09	0.04	18	0.0	0.02	0	1.1	0.23	1.3	0.12	0.01
SEP 09-16	0.19	25	0.1	0.06	0	1.0	0.46	1.4	0.05	0.01
SEP 16-23	0.10	45	0.1	0.03	0	1.4	0.13	1.1	0.15	0.01
SEP 23-30	--	--	--	--	--	--	--	--	--	--
SEP 30- OCT 07	0.34	50	0.2	0.04	0	1.1	0.57	0.86	0.10	0.01

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**GAGING STATION TENNESSEE RIVER AT CHATTANOOGA,
period of record 1874 to present.**

1

1986

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
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1987

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11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28
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