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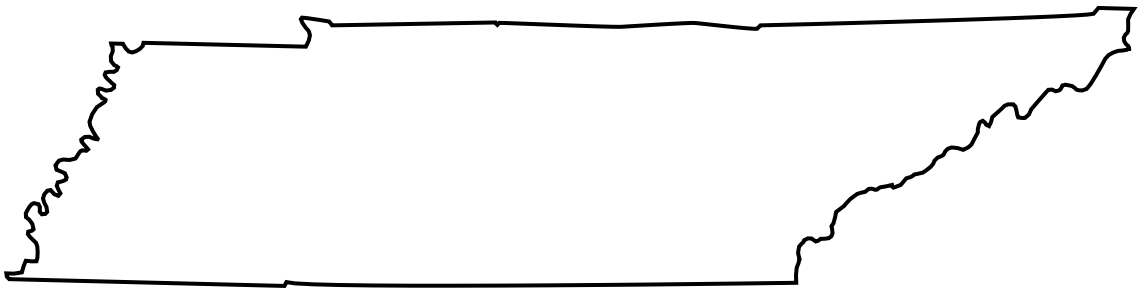
U.S. Geological Survey

Water Resources Data Tennessee Water Year 2004

By D.F. Flohr, J.W. Garrett, J.T. Hamilton, and T.D. Phillips

Water-Data Report TN-04-1



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

U.S. DEPARTMENT OF THE INTERIOR
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U.S. GEOLOGICAL SURVEY
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2005

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

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

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13. ABSTRACT *(Maximum 200 words)*

Water resources data for the 2004 water year for Tennessee consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report contains records for water discharge at 107 gaging stations; stage only for 1 gaging station, elevation and contents for 32 lakes reservoirs; water quality at 18 gaging stations and 17 wells; and water levels for 8 observation wells; and 1 precipitation station. Also included are data for 84 crest stage partial-record stations. Additional water data were collected at various stream sites not involved in the systematic data-collection program, and are published as miscellaneous measurements and analyses. These data represent the part of the National Water Data System operated by the US Geological Survey and cooperating State and Federal agencies in Tennessee.

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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Tennessee have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Red Boiling Spring at Red Boiling Springs (d)	03312250	USGS		1986
Salt Lick Creek at Red Boiling Springs (d)	03312255	USGS	12.6	1991-97
Crabapple Branch near La Follette (d)	03403718	USGS	1.07	1981-84
Indian Fork above Braytown (d)	03407804	USGS	4.32	1975-78
Green Branch near Hembree (d)	03407874	USGS	1.38	1976-78
Smoky Creek above Hembree (361240084245800) (d)	034078745	USGS	8.07	1982-83
Bills Branch near Hembree (d)	03407875	USGS	.67	1975-83
Shack Creek at Hembree (361341084253900) (d)	034078755	USGS	5.08	1982-84
Smoky Creek near Hembree (d)	03407876	USGS	17.2	1977-84
Bowling Branch above Smoky Junction (d)	03407877	USGS	2.19	1976-81
Anderson Branch near Montgomery (d)	03407881	USGS	.69	1976-80
Lowe Branch near Montgomery (d)	03407882	USGS	.92	1975-80
New River at Cordell (d)	03407908	USGS	198	10/75-77, 5/77-12/87
New River near New River (d)	03408000	USGS	314	1923-35
Long Branch near Grimsley (d)	03408600	USGS	1.11	1976-81
Crooked Creek tributary near Allardt (d)	03408810	USGS	.25	1976-79
Crooked Creek near Allardt (d)	03408815	USGS	3.62	1976-81
White Oak Creek at Sunbright (d)	03409000*	USGS	13.5	1932-33
White Oak Creek at Rugby (d)	03409400	USGS	98.0	1980-82
East Branch Bear Creek near Oneida (d)	03409700	USGS		1994-95
East Branch Bear Creek Tributary near Oneida (d)	03409710	FUSGS		1994-95
Pine Creek tributary at Oneida (d)	03410000	USGS	1.21	1932-33
South Fork Cumberland River at Leatherwood Ford (d)	03410210	USGS	806	1983-87
West Fork Obey River near Alpine (d)	03415000	USGS	115	1943-71, 1980-81
Obey River near Byrdstown (d)	03415500	USGS	445	1919-43
Obey River below Dale Hollow Dam (d)	03417000	USGS	936	1939-42, 1945-58
Roaring River near Hilham (d)	03418000	USGS	78.7	1932-75
Roaring River near Gainesboro (d)	03418188	USGS	276	1975
Cumberland River below Cordell Hull (d)	03418420	USGS	8,095	1980-97
Caney Fork at Clifty (d)	03418500	USGS	111	1931-49
Bee Creek at Herbert (d)	03419000	USGS	101	1931-37
Calfkiller River at Sparta (d)	03419500	USGS	157	1932-41
Calfkiller River below Sparta (d)	03420000	USGS	175	1940-71
Collins River at Beersheba Springs (d)	03420185	USGS	157	1994-95
Collins River near Tarlton (d)	03420200	USGS	174	1994-95
Barren Fork near Trousdale (d)	03420500	USGS	126	1932-57
Collins River near Rowland (d)	03421500	USGS	755	1916-24
Falling Water River near Cookeville (d)	03423000	USGS	67.0	1932-56
Falling Water River below Burgess Falls Dam (d)	03423152	USGS	124	1990-93
Taylor Creek near Cassville (d)	03423400	USGS	34.2	1989-93
Caney Fork below Center Hill Dam, near Lancaster (d)	03424500	USGS	2,183	1923-58
Spring Creek near Lebanon (d)	03425500	USGS	35.3	1955-61
Town Creek at Maple Street at Gallatin (d)	03425646	USGS	4.74	1984
Drakes Creek above Hendersonville (d)	03426000	USGS	19.2	1955-61
Cumberland River at Dam 3, near Old Hickory (d)	03426210	USGS	11,688	1931-42, 1947-53

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
East Fork Stones River at Woodbury (d)	03426800*	USGS	39.1	1932-33, 1950, 1954, 1962-89
Bradley Creek at Lascassas (d)	03427000	USGS	37.0	1955-61
Bushman Creek at Pitts Lane Ford near Compton (d)	03427690	USGS	9.67	1989-92
West Fork Stones River near Murfreesboro (d)	03428000	USGS	128	1932-69
Lytle Creek at Sanbyrn Drive at Murfreesboro (d)	03428043	USGS	17.6	1990-92
Fox Camp Spring at Mankinville (d)	03428047	USGS		1978-80
West Fork Stones River at Manson Pike, at Murfreesboro (d)	03428070	USGS	165	1973-81
Stones River near Smyrna (d)	03429000	USGS	571	1925-67
Stewart Creek near Smyrna (Smyrna Airport) (d)	03429500	USGS	69.7	1953-58
Stones River below J. Percy Priest Dam (d)	03430100	USGS	892	1939-67
Collins Creek at Bell Road, near Antioch (d)	03430800	USGS	3.61	1976-77
Mill Creek near Antioch (d)	03431000	USGS	64.0	1954-61, 1964-75
Browns Creek at State Fairgrounds, at Nashville (d)	03431300	USGS	11.8	1964-75
Cumberland River at Nashville (d)	03431500	USGS	12,856	1893-54
Cummings Branch at Lickton (d)	03431517	USGS	2.40	1976-90
Whites Creek at Tucker Road, near Bordeaux (d)	03431600	USGS	51.6	1965-75
Richland Creek at Charlotte Ave, at Nashville (d)	03431700	USGS	24.3	1964-90
West Harpeth River near Leipers Fork (d)	03432500	USGS	66.9	1955-61
Red River near Portland (d)	03435030	USGS	15.1	1967-75
Red River near Adams (d)	03435500	USGS	706	1920-69
Sulphur Fork Red River near Adams (d)	03436000	USGS	186	1938-91
Piney River at Ft. Campbell, KY-TN (d)	03436420	USGS	50.2	1993-96
Little West Fork near Ft. Campbell, KY-TN (d)	03436426	USGS	128	1993-96
Cumberland River at Clarksville (lock C) (d)	03436500	USGS	15,897	1925-44
Yellow Creek near Shiloh (d)	03436700*	USGS	124	1958-80
Cumberland River at Dover (gaging station) (d)	03437000	USGS	16,437	1938-65
French Broad River near Newport (d)	03455000	TVA	1,858	1900 1901 1902-05, 1907 1920-94
Pigeon River at Hartford (d)	03461000	USGS	547	1925-48
Cosby Creek above Cosby (d)	03461200	USGS	10.1	1967-87
Pigeon River at Newport (d)	03461500	USGS	666	1900-29, 1945-46, 1948-82,
		TVA		1982-83
North Indian Creek near Unicoi (d)	03465000	USGS	15.9	1944-57
Muddy Fork near Leesburg (d)	03465830	USGS	13.5	1994-95
Jockey Creek near Mount Bethel Church near Limestone (d)	03466098	USGS	18.5	1994-95
Sinking Creek at Afton (d)	03466228	USGS	13.7	1977-2000
Nolichucky River below Nolichucky Dam (d) (e)	03466500	USGS	1,184	1902-09, 1919-26, 1946-73
Lick Creek near Holland Mill (d)	03466825	USGS	53.0	1994-95
Lick Creek at Mohawk (d)	03467000	USGS	220	1946-71
Nolichucky River near Morristown (d)	03467500	USGS	1,679	1921-57
Long Creek near White Pine (d)	03468050	TVA	30.8	1964-81
French Broad River below Douglas Dam (d)	03469000	USGS	4,543	1919-74
Millican Creek near Douglas Dam (d)	03469010	TVA	4.22	1942-62
Roaring Fork Creek at Hwy 441, at Gatlinburg (d)	03469282	TVA	7.23	1977-82
Dudley Creek at Gatlinburg (d)	03469390	TVA	8.84	1977-82

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
West Prong Little Pigeon River near Pigeon Forge (d)	03469500	USGS	76.2	1946-49
		TVA		1967-69
Little Pigeon River at Sevierville (d)	03470000	USGS	353	1921-82
South Fork Holston River below South Holston Dam (d)	03476500	USGS	703	1951-74
South Fork Holston River at Bluff City (d)	03477000	USGS	813	1900-53
Beaver Creek at Bristol (d)	03478500	USGS	44.8	1932-34
Beaver Creek at Buffalo School, near Bluff City (d)	03478620	TVA	108	1934-38
Watauga River at North Carolina-Tennessee State Line (d)	03479500	USGS	152	1943-55
Watauga River at Stump Knob (d)	03480000	USGS	171	1928-31,
				1934-45
Roan Creek near Neva (d)	03482000	USGS	102	1942-55
Roan Creek at Butler (d)	03482500	USGS	166	1901-02,
				1934-48
Watauga River at Butler (d)	03483000	USGS	427	1900-02,
				1921-48
Watauga River below Wilbur Dam (d)	03484000	USGS	471	1903-09,
				1948-82
Watauga River at Siam (d)	03484110	TVA	480	1946
Doe River at Old Hopson School (d)	03484490	TVA	59.3	1967-69
Doe River at Blevins (d)	03484500	USGS	60.8	1912-15
Laurel Fork above Braemar (d)	03484900	TVA	23.0	1945-51
Laurel Fork above Hampton (d)	03484910	TVA	25.3	1948-52
Doe River at Elizabethton (d)	03485500	USGS	137	1912-16,
				1921-82
Watauga River at Elizabethton (d)	03486000	USGS	692	1926-49,
				1953-82
Buffalo Creek at Milligan College (d)	03486200	TVA	28.1	1965-81
Brush Creek at Johnson City (Tennessee Street) (d)	03486490	TVA	6.78	1969-73
Brush Creek at Johnson City (Elm Street) (d)	03486495	TVA	9.58	1969-72
Brush Creek at Johnson City (d)	03486500	USGS	10.3	1932-34
Fall Creek near Fort Patrick Henry Dam (d)	03486900	TVA	13.1	1953-56
South Fork Holston River at Kingsport (d)	03487500	USGS	1,935	1926-77
South Fork Holston River at Kingsport (auxiliary channel) (d)	03487501	USGS	1.0	1953-77
Reedy Creek at Orebank (d)	03487550*	USGS	36.3	1963-89
South Fork Holston River near Ridgefields Bridge, at Kingsport (d)	03487640	TVA	2,047	1968-69
Holston River at Surgoinsville (d)	03490500	USGS	2,874	1941-88
Beech Creek at Kepler (d)	03491300	USGS	47.0	1965-87
Holston River near Rogersville (d)	03491500	USGS	3,035	1901-42
Poor Valley Creek near Mooresburg (near Spruce Pine School) (d)	03491800	USGS	32.3	1958-61
Poor Valley Creek near Mooresburg (d)	03491820	TVA	43.3	1959-60
Holston River near Morristown (d)	03492000	USGS	3,244	1937-42
Mossy Spring near Jefferson City (d)	03492500	USGS		1950-59
Mossy Creek at Jefferson City (d)	03493000	USGS	30.8	1932-34
Holston River near Jefferson City (d)	03494000	USGS	3,429	1937-74
Mill Spring near Jefferson City (d)	03494500	TVA		1941-48
		USGS		1951-59
Holston River near Knoxville (d)	03495500	USGS	3,747	1930-76
				1978-93
First Creek at Mineral Springs Avenue, at Knoxville (d)	03496000	USGS	15.7	1945-63
First Creek above Powers Avenue, at Knoxville (d)	03496200	USGS	17.2	1964-70
First Creek at Fifth Avenue, at Knoxville (d)	03496500	USGS	21.1	1932-34,
				1945-59
Tennessee River at Knoxville (Gay Street Bridge) (d)	03497000	USGS	8,934	1900-82
Fourth Creek at Knoxville (d)	03497110	TVA	9.65	1942-43

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Little River at Walland (d)	03497500	USGS	175	1925-31
Little River near Walland (d)	03498000	USGS	192	1931-52
Pistol Creek at Maryville (d)	03499000	USGS	13.5	1932-33
Little River below Rockford Dam, at Rockford (d)	03499100	TVA	346	1940-44
Little River near Rockford (d)	03499110	TVA	352	1936-37
Ten Mile Creek near Ebenezer (d)	03499200	TVA	13.2	1941-45
Muddy Creek near Fort Loudon Dam (d)	03499600	TVA	10.7	1941-59
Little Tennessee River at Calderwood (d)	03518000	USGS	1,862	1912-19, 1921-57
Little Tennessee River below Chilhowee Dam (d)	03518300	USGS	1,987	1958-79
North Fork Citico Creek near Tellico Plains (d)	03518400	TVA	7.04	1960-71
Tellico River at Tellico Plains (d)	03518500	USGS	118	1925-82
Little Tennessee River at McGhee (d)	03519500	USGS	2,443	1905-69
Baker Creek near Greenback (d)	03519640*	USGS	16.0	1966-75
Tennessee River at Loudon (d)	03520000	USGS	12,220	1923-55
Sweetwater Creek below Sweetwater (d)	03520045	TVA	26.4	1970-81
Sweetwater Creek near Sweetwater (d)	03520050	TVA	28.2	1964-70
Big Sycamore Creek near Sneedville (d)	03528100	TVA	5.49	1935-45
Big Barren Creek near New Tazewell (d)	03528300	TVA	22.5	1935-45
White Creek near Sharps Chapel (d)	03528400	TVA	2.68	1935-72
Powell River near Arthur (d)	03532000	USGS	685	1920-82
Davis Creek near Speedwell (d)	03532100	TVA	31.2	1936-37
Big Creek near La Follette (d)	03532220	TVA	26.2	1936-38
Clinch River below Norris Dam (d)	03533000	USGS	2,913	1904-74
Clear Creek near Norris (d)	03533100	TVA	2.83	1934-38
Coal Creek at Lake City (d)	03534000*	USGS	24.5	1932-34
Buffalo Creek at Norris (d)	03534500	USGS	9.92	1947-51
Bullrun Creek near Halls Crossroads (d)	03535000	USGS	68.5	1957-86
Scarboro Creek Tributary near Haw Ridge near Oak Ridge (d)	03535102	USGS	0.41	1989-91
Scarboro Creek Tributary near Oak Ridge (d)	03535103	USGS	0.41	1989-91
Whiteoak Creek near Melton Hill (d)	03536320	USGS	1.31	1987-95
Whiteoak Creek near Wheat (d)	03536380	USGS	2.10	1986-95
Northwest Tributary near Oak Ridge (d)	03536440	USGS	0.67	1987-95
First Creek near Oak Ridge (d)	03536450	USGS	0.33	1987-96
Whiteoak Creek at ORNL, near Oak Ridge (d)	03536500	USGS	2.08	1950-55
Whiteoak Creek below Melton Valley Drive near Oak Ridge (d)	03536550	USGS	3.28	1987-96
Whiteoak Creek below ORNL, near Oak Ridge (d)	03537000	USGS	3.62	1950-53, 1955-64
Melton Branch tributary (East Seven) near Oak Ridge (d)	03537050	USGS	.24	1987-91, 1992-93
Melton Branch near Melton Hill, near Oak Ridge (d)	03537100	USGS	0.52	1985-95
Melton Branch tributary (Center Seven) near Oak Ridge (d)	03537200	USGS	.07	1987-91, 1992-93
Melton Branch tributary (West Seven) near Oak Ridge (d)	03537300	USGS	.15	1987-89, 1992-93
Melton Branch near Oak Ridge (d)	03537500	USGS	1.48	1955-64
Whiteoak Creek at Whiteoak Dam, near Oak Ridge (d)	03538000	USGS	6.01	1953-55, 1960-64
Clinch River near Oak Ridge (d)	03538150	USGS	3,385	1937-64, 1968
Poplar Creek near Oak Ridge (d)	03538225	USGS	82.5	1960-89
East Fork Poplar Creek at Y-12 at Oak Ridge (d)	03538231	USGS	0.81	1992-96
East Fork Poplar Creek near Oak Ridge (d)	03538250	USGS	19.5	1960-88
Bear Creek at Bear Creek Road near Oak Ridge (d)	03538256	USGS	0.42	1993-96

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

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Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Bear Creek at County Line near Oak Ridge (d)	03538260	USGS	1.57	1993-96
Bear Creek tributary above Bear Creek Road near Wheat (d)	035382672	USGS	.30	1986-91
Bear Creek near Wheat (d)	035382673	USGS	3.20	1986-91
Bear Creek tributary near Wheat (d)	035382677	USGS	.14	1986-89, 1992-93
Bear Creek at State Hwy 95 near Oak Ridge (d)	03538270	USGS	4.34	1985-2000
Bear Creek tributary at Hwy 95 near Wheat (d)	03538272	USGS	.14	1986-89
Bear Creek at Pine Ridge near Wheat (d)	03538273	USGS	5.0	1986-91
Bear Creek near Oak Ridge (d)	03538275	USGS	7.15	1960-64
Emory River near Wartburg (d)	03538500	USGS	83.2	1934-57, 1966-68
Obed River at Crossville (d)	03538600	USGS	12.0	1950-51, 1955-85, 1991-95
Daddys Creek near Grassy Cove (d)	03539000	USGS	51.2	1925-30
Daddys Creek near Crab Orchard (d)	03539500	USGS	93.5	1931-58
Daddys Creek near Hebbertsburg (d)	03539600	USGS	139	1957-68
Clear Creek near Lancing (d)	03539750	USGS	153	1966-68
Obed River near Lancing (d)	03539800	USGS	518	1956-68, 1973-88
Crooked Fork near Wartburg (d)	03539860	USGS	50.3	1966-68
Emory River at Deermont (d)	03540000	USGS	704	1920-28
Crab Orchard Creek near Deermont (d)	03540100	USGS	33.7	1966-68
Bitter Creek near Oakdale (d)	03541300	USGS	12.6	1967-75
Kingston Creek at Kingston (d)	03541400	TVA	.74	1940-41
Whites Creek near Glen Alice (d)	03541500	USGS	108	1934-55
Whites Creek at Glen Alice (d)	03542000	USGS	120	1931-34
Piney River at Spring City (d)	03542500	USGS	95.9	1927-31
Sewee Creek near Decatur (d)	03543500	USGS	117	1934-94
Tennessee River at Breedenton (d)	03544000	USGS	17,440	1934-40
Richland Creek near Dayton (d)	03544500	USGS	50.2	1927-31, 1934-55, 1979-82
Turtletown Creek at Turtletown (d)	03556000	USGS	26.9	1934-71
Hiwassee River near McFarland (d)	03556500	USGS	1,136	1943-81
Hiwassee River near Reliance (d)	03557000	USGS	1,233	1900-14, 1918-48
Ocoee River at Copperhill (d)	03559500	USGS	352	1903-14, 1943-70
North Potato Creek tributary, Copper Basin area 6, near Ducktown (d)	03560700	TVA	.01	1940-51
Burra-burra Creek tributary, Copper Basin area 5, near Ducktown (d)	03560800	TVA	.02	1940-51
North Potato Creek near Ducktown (d)	03561000	USGS	13.0	1934-70
North Potato Creek tributary No. 2, Copper Basin area 1-W, near Ducktown (d)	03561200	TVA	.01	1942-52
North Potato Creek tributary No. 3, Copper Basin area 1-E, near Ducktown (d)	03561300	TVA	.01	1942-52
Ocoee River at McHarg (d)	03561500	USGS	447	1917-43
Walkertown Branch tributary, Copper Basin area 4, near Ducktown (d)	03561700	TVA	.01	1940-45
Ocoee River tributary, Copper Basin area 3, near Ducktown (d)	03561800	TVA	.01	1940-51
Brush Creek near Ducktown (d)	03562000	USGS	14.4	1934-42
Hiwassee River above Charleston (d)	03565000	USGS	2,001	1954-76
Chestuee Creek above Englewood (d)	03565040	TVA	14.8	1944-57

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
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Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Little Chestuee Creek below Wilson Station (d)	03565080	TVA	8.54	1947-57
Chestuee Creek at Zion Hill (d)	03565120	TVA	37.8	1944-62
Middle Creek below Hwy 39 near Englewood (d)	03565160	TVA	32.7	1944-62
Chestuee Creek near Athens (d)	03565200	TVA	77.9	1944-54
Chestuee Creek at Dentville (d)	03565250	USGS	114	1944-62
South Chestuee Creek near Benton (d)	03565300	USGS	31.8	1957-86
Oostanaula Creek near Sanford (d)	03565500	USGS	57.0	1954-89
Oostanaula Creek near Calhoun (d)	03565700	TVA	67.0	1940-44
Wolftever Creek near Ooltewah (d)	03566420*	USGS	18.8	1964-89
Long Savannah Creek near Snow Hill (d)	03566450	TVA	28.3	1939-44
North Chickamauga Creek at Upper Mill, near Hixson (d)	03566600	TVA	99.5	1937-43
North Chickamauga Creek near Hixson (d)	03566630	TVA	114	1937-43
South Chickamauga Creek near Chickamauga (d)	03567500	TVA	428	1928-78 1980-94
South Chickamauga Creek near McCarty (d)	03567600	TVA	458	1937-45
Sequatchie River near College Station (d)	03570650	USGS	154	1966-68
Sequatchie River near Whitwell (d)	03571000	TVA	402	1920-94
Little Sequatchie River at Sequatchie (d)	03571500*	USGS	116	1932-34
Tennessee River at South Pittsburg (d)	03571850	USGS	22,640	1930-87
Elk River near Pelham (d)	03578000	USGS	65.6	1952-88
Bradley Creek Tributary at AEDC near Manchedster	03578455	USGS		1993-96
Bradley Creek near Prairie Plains (d)	03578500	USGS	41.3	1952-60
Brumalow Creek at AEDC near Manchester (d)	03578600	USGS		1993-96
Rowland Creek at AEDC near Manchester (d)	03578970	USGS		1994-96
Elk River near Estill Springs (d)	03579100	USGS	275	1921-81
Rock Creek at Tullahoma (d)	03579620	USGS	12.3	1991-96
Boiling Fork Creek south of Cowan (d)	03580000	USGS	20.2	1932
Boiling Fork Creek above Winchester (d)	03580300	USGS	55.9	1962-70
Boiling Fork Creek at Winchester (d)	03580500	USGS	77.1	1932-34
Elk River below Tims Ford Dam (d)	03580750	USGS	534	1966-76
Jack Daniel Spring at Lynchburg (d)	03580990	USGS		1970-78
East Fork Mulberry Creek below Jack Daniel Distillery at Lynchburg (d)	03580995	USGS	23.4	1987-94
East Fork Mulberry Creek at Lynchburg (d)	03581000	USGS	23.1	1932
East Fork Mulberry Creek near Lynchburg (d)	03581100	TVA	29.5	1967-69
East Fork Mulberry Creek near Mulberry (d)	03581200	TVA	49.4	1967-69
West Fork Mulberry Creek near Booneville at Mt. Herman (d)	03581400	TVA	17.4	1967-69
West Fork Mulberry Creek at Mulberry (d)	03581500	USGS	41.2	1954-62, 1966-68
Elk River above Fayetteville (d)	03582000	USGS	827	1934-82
Union Branch below Belleville (d)	03582140	USGS	2.37	1977
Elk River near Fayetteville (d)	03582500	USGS	897	1926-34
Bradshaw Creek at Frankewing (d)	03583000	USGS	36.5	1955-61, 1966-68
Richland Creek near Cornersville (d)	03583300*	USGS	47.5	1961-68
Factory Creek (head of Big Creek) near Campbellsville (d)	03583330	USGS	38.2	1966-68
Yokley Creek near Campbellsville (d)	03583360	USGS	20.2	1966-68
Weakley Creek near Bodenham (d)	03583500	USGS	24.4	1955-61, 1966-68
Richland Creek near Pulaski (d)	03584000	USGS	366	1934-75
Elk River at Prospect (d)	03584600	USGS	1805	1904-08, 1919-94

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

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Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Shoal Creek at Lawrenceburg (d)	03588000	USGS	55.4	1932-34, 1967-91
Chisholm Creek at Westpoint (d)	03588400	USGS	43.0	1962-88
Shoal Creek at Iron City (d)	03588500	USGS	348	1925-94
Snake Creek near Adamsville (d)	03593300	TVA	49.4	1940-59
Holland Creek near Lowryville (d)	03593700	TVA	14.9	1965-78
Horse Creek near Savannah (d)	03594000	USGS	114	1929-34
Turkey Creek near Savannah (d)	03594040	TVA	53.7	1940-59
White Oak Creek near Milledgeville (d)	03594058	TVA	46.1	1940-59
White Oak Creek at Milledgeville (d)	03594110	TVA	49.2	1961-65
Middleton Creek near Milledgeville (d)	03594120	TVA	45.5	1940-59
Indian Creek near Cerro Gordo (d)	03594160	TVA	201	1940-59
Banjo Branch near Waynesboro (d)	03594164	USGS	2.14	1988-89
Beech River near Lexington (d)	03594415	TVA	15.9	1953-63
Wolf Creek at Graper Springs (d)	03594420	TVA	11.7	1953-55
Pine Tree Branch near Lexington (d)	03594425	TVA	.14	1941-78
Harmon Creek near Lexington (d)	03594430	TVA	6.87	1953-73
Piney Creek at Hwy 104 near Lexington (d)	03594435	TVA	19.2	1953-55, 1957-73
Cane Creek near Shady Hill (d)	03594437	TVA	20.7	1966-73
Haley Creek near Chesterfield (d)	03594441	TVA	8.30	1953-55
Beech River near Chesterfield (old channel before channelization) (d)	03594445	TVA	11.5	1940-54, 1960-65
Browns Creek near Chesterfield (d)	03594450	TVA	202	1953-63
Cane Creek near Shady Hill (d)	03594455	TVA	16.8	1953-64
Cane Creek near Chesterfield (old channel before channelization) (d)	03594460	TVA	222	1940-54
Beech River near Darden (old channel before channelization) (d)	03594465	TVA	165	1954-60
Flat Creek near Middleburg (d)	03594470	TVA	13.8	1953-55
Big Creek near Darden (d)	03594475	TVA	10.6	1953-55, 1966-73
Turkey Creek near Decaturville (d)	03594480	TVA	8.40	1953-63
Turkey Creek at Middleburg Road, near Decaturville (d)	03594482	TVA	11.5	1964-73
Rushing Creek near Decaturville (d)	03594485	TVA	17.0	1953-55
Tennessee River at Perryville (d)	03594500	USGS	34,550	1931-32
Duck River near Manchester (d)	03595000	USGS	55.2	1932-34
Little Duck River at Manchester (d)	03595500	USGS	40.4	1932-34
Duck River below Manchester (d)	03596000	USGS	107	1934-88
Duck River at Normandy (d)	03596500	USGS	208	1920-31, 1972-75
Garrison Fork at Fairfield (d)	03597000	USGS	66.3	1953-58, 1966-68
Wartrace Creek at Bell Buckle (d)	03597500	USGS	16.3	1953-61, 1966-75
Wartrace Creek at Wartrace (d)	03597600	USGS	36.4	1966-68
Fall Creek near Deason (d)	03598173	USGS	16.4	1994-95
Fall Creek near Halls Mill (d)	03598179	USGS	39.0	1994-95
North Fork Creek near Poplins Crossroad (d)	03598250	USGS	71.9	1994-95
Big Rock Creek at Lewisburg (d)	03599000	USGS	24.9	1953-61, 1966-68, 1995-2000
Fountain Creek near Culleoka (d)	03599430	USGS	26.9	1966-68
Fountain Creek near Fountain Heights (d)	03599450	USGS	74.0	1966-68
Rutherford Creek near Carters Creek (d)	03600000	USGS	68.8	1953-58
Rutherford Creek (No. 4) near Columbia (d)	03600100	TVA	112	1948-53

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
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Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Rutherford Creek (No. 3) near Columbia (d)	03600200	TVA	116	1948-49
Little Bigby Creek at Experiment Lane at Columbia (d)	03600258	USGS	42.6	1990-92
Big Bigby Creek at Sandy Hook (d)	03600500	USGS	17.5	1953-87, 1988-89
Big Bigby Creek near Mount Pleasant (d)	03601000	USGS	25.8	1953-57
Big Bigby Creek at Cross Bridges (d)	03601500	USGS	112	1938-39
Duck River at Centerville (d)	03602000	USGS	2,048	1919-55
Piney River at Vernon (d)	03602500	USGS	193	1925-93
Duck River above Hurricane Mills (d)	03603000	USGS	2,557	1925-94
Hurricane Creek at Hurricane Mills (d)	03603500	USGS	75.1	1932-33
Coon Creek near Hohenwald (d)	03604100	USGS	10.0	1967-74
Buffalo River below Lobelville (d)	03604400	USGS	702	1927-89, 1989-94
Buffalo River near Lobelville (d)	03604500	USGS	707	1987-89
Blue Creek at State Hwy 13 near Waverly (d)	03604600	TVA	24.8	1964-71
Birdsong Creek near Holladay (d)	03604800	TVA	44.9	1940-68
Trace Creek at Waverly (d)	03605500	USGS	20.1	1932-33
Cotton Creek near Camden (d)	03606400	TVA	.43	1941-45
Big Sandy River at Big Sandy (d)	03607000	USGS	379	1935-44
Clifty Creek at Clifty Creek Road near Paris (d)	03607198	USGS	8.06	1994-95
Holly Fork Creek at Nobles (d)	03607225	USGS	26.8	1994-95
Beaverdam Creek at Sulphur Well Road near Nobles (d)	03607232	USGS	6.69	1994-95
Tennessee River near Buchanan (d)	03607500	USGS	39,730	1930-43
Crooked Creek at Highway 22 near Huntingdon (d)	07024200	USGS	89.8	1994-95
Beaver Creek at Huntingdon (d)	07024300*	USGS	55.5	1946, 1948, 1952-54, 1958-88
Beaver Creek at Hwy 22 Bypass near Huntingdon (d)	07024305	USGS	58.6	1994-96
South Fork Obion River near Greenfield (d)	07024500*	USGS	383	1929-89
Rutherford Fork Obion River near Bradford (d)	07025000	USGS	201	1929-57
North Fork Obion River near Union City (d)	07025500	USGS	480	1929-71, 1989-93
Obion River at U.S. Highway 51 near Obion (d)	07026040	USGS	1,875	1929-1958, 1966-1995
North Reelfoot Creek at State Hwy 22 near Clayton (d)	07026370	USGS	56.3	1980-83, 1984-89
South Reelfoot Creek near Clayton (d)	07026400	USGS	36.6	1984-89
Reelfoot Creek near Samburg (d)	07026500	USGS	110	1951-73
Reelfoot Lake near Phillippy (e)	07026690	USGS	240	1984-88
Indian Creek near Samburg (d)	07026795	USGS	8.01	1982-86
South Fork Forked Deer River at Jackson (d)	07027500	USGS	495	1929-73, 1988-91
South Fork Forked Deer River at Chestnut Bluff (d)	07028000	USGS	1,003	1929-57
North Fork Forked Deer River at Trenton (d)	07028500	USGS	73.5	1950-71
Middle Fork Forked Deer River near Alamo (d)	07029000	USGS	369	1929-73
Hatchie River near Stanton (d)	07030000	USGS	1,975	1929-58
Cane Creek at Three Point (d)	07030137	USGS	79.8	1985-87
Kelly Branch near Clopton (d)	07030245	USGS	7.79	1975-76
Beaver Creek near Arlington (d)	07030250	USGS	148	1994-95
Loosahatchie River tributary at New Allen Road at Memphis (d)	07030295	USGS	1.26	1977-83
Wolf River at Rossville (d)	07030500	USGS	503	1929-72
Marys Creek at Pisgah Road, near Fisherville (d)	07031500	USGS	13.6	1955-57
Fletcher Creek near Cordova (d)	07031680	USGS	1.45	1974-83
Fletcher Creek at Whitten Road at Memphis (d)	07031683	USGS	21.4	1978-82

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only);
Agency designations: USGS, U.S. Geological Survey; TVA, Tennessee Valley Authority]

Station name	Station number	Agency	Drainage area (mi^2)	Period of record
Unnamed tributary at Charles Bryan Road, near Cordova (d)	07031685	USGS	3.18	1975-77
Lick Creek at Dickinson Street, at Memphis (d)	07031777	USGS	2.96	1975-83
Nonconnah Creek near Germantown (d)	07032200	USGS	68.2	1969-1985 1985-1995
Johns Creek tributary at Holmes Road, near Memphis (d)	07032222	USGS	5.83	1975-85
Johns Creek at Raines Road, at Memphis (d)	07032224	USGS	19.4	1975-82, 1985
Black Bayou at Southern Avenue, at Memphis (d)	07032241	USGS	.59	1975-83
Cane Creek at East Person Avenue, at Memphis (d)	07032248	USGS	4.98	1975-85
Cypress Creek at Neely Road, at Memphis (d)	07032260	USGS	3.18	1975-85

DISCONTINUED SURFACE-WATER QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1991 water year. 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 3 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 name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
Crabapple Branch near La Follette	03403718	USGS	1.07	C,T	1981-84
Indian Fork above Braytown	03407804	USGS	4.32	C	1975-81
New River at Stainville	03407850	USGS	66.0	C,S	1975-77, 1979-81
Green Branch near Hembree	03407874	USGS	1.38	C,S	1975-81
Smoky Creek above Hembree (361240084245800)	034078745	USGS	8.07	S	1982-83
Bills Branch near Hembree	03407875	USGS	.67	C,S	1975-83
		USGS		C,S,T	1980-83
Shack Creek at Hembree (361341084253900)	034078755	USGS	5.08	C,S,T	1982-84
Smoky Creek at Hembree	03407876	USGS	17.2	S	1978-84
		USGS		C,T	1980-84
Bowling Branch above Smoky Junction	03407877	USGS	2.19	C,S	1975-83
Smoky Creek at Smoky Junction	03407879	USGS	32.8	C,S	1975-77, 1979-81
Anderson Branch near Montgomery	03407881	USGS	.69	C	1975-81
Lowe Branch near Montgomery	03407882	USGS	.92	C	1975-81
New River at Cordell	03407908	USGS	198	C,S	1976-77, 1979-82
New River at New River	03408500	USGS	382	C,T	1977-86
		USGS		C,S	1965-67, 1975-77, 1979-81
Clear Fork near Robbins	03409500	USGS	272	T	1982-86
		USGS		C	1982, 1984-86
		USGS		C,S	1964-65, 1976-77, 1979-82, 1984
South Fork Cumberland River at Leatherwood Ford	03410210	USGS	806	C,S,T	1986
		USGS		C,S	1979-80, 1984-85
Cumberland River at Celina	03417500	USGS	7,307	C,T	1991-97
Roaring River near Hilham	03418000	USGS	78.7	T	1969-71
Roaring River above Gainesboro	03418070	USGS	210	C,S	1980-83
Cumberland River below Cordell Hull Dam	03418420	USGS	8,095	CT	1980-97
Collins River near McMinnville	03421000	USGS	640	C,S	1964-67,1979-82
Cumberland River at Carthage	03425000	USGS	10,690	C,T	1975-81
East Fork Stones River near Lascassas	03427500	USGS	262	C,T	1975-1990
West Fork Stones River near Murfreesboro	03428000	USGS	128	C	1964-68
West Fork Stones River at Manson Pike, at Murfreesboro	03428070	USGS	165	C,T	1973-82
West Fork Stones River near Smyrna	03428500	USGS	237	T	1974-1990
Richland Creek at Charlotte Avenue, at Nashville	03431700	USGS	24.3	C,S	1901, 1979-83
Harpeth River near Kingston Springs	03434500	USGS	681	C,S	1979-83
Cumberland River below Cheatham Dam	03435000	USGS	14,163	C,T	1993-97
Sulphur Fork Red River near Greenbrier	03435637	USGS	34.9	T	1976-78
Sulphur Fork Red River above Beaverdam Creek, near Springfield	03435700	USGS	49.1	T	1975-77
Sulphur Fork Red River above Springfield	03435770	USGS	65.6	C,S	1976-83
Sulphur Fork Red River near Adams	03436000	USGS	186	C,S	1964, 1979-83
Red River at Port Royal	03436100	USGS	935	C,S	1979-83
Boiling Springs at Ft. Campbell, KY-TN	03436421	USGS		C,T	1994-96
Yellow Creek near Shiloh	03436700	USGS	124	C,S	1964-65, 1979-81
French Broad River below Hot Springs, NC	03454757	USGS	1,712	C	1970-73

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
French Broad River near Newport	03455000	TVA	1,858	C	1946-47, 1960-61, 1969-70, 1974-75, 1979-80
Muddy Fork near Leesburg	03465830	USGS	13.5	C,S,T	1993-95
Nolichucky River at Embreeville	03465500	USGS	805	C,S	1979-82
Jockey Creek near Mount Bethel Church near Limestone	03466098	USGS	18.5	C,S,T	1993-95
Big Limestone Creek near Limestone	03466208	USGS	79.0	T	1996-2000
Nolichucky River below Nolichucky Dam	03466500	TVA	1,184	C	1974-79
		TVA		T	1962
Lick Creek near Holland Mill	03466825	USGS	53.0	C,S,T	1993-95
Nolichucky River near Lowland	03467609	USGS	1,687	T	1998-2000
French Broad River at Douglas Dam (tailwater)	03468510	TVA	4,541	C	1975-80
Little Pigeon River at Sevierville	03470000	TVA	353	C	1967-68, 1970
		TVA		T	1969-74
		USGS		C,S	1979-82
French Broad River near Knoxville	03470500	USGS	5,101	C,T	1975-82
		USGS		B,C,S,T	1975-86
South Fork Holston River at South Holston Dam	03476010	TVA	703	C	1975-80
Watauga River at Stump Knob	03480000	TVA	171	T	1962
Elk River at Elk Mills	03481450	TVA	74.0	C	1975-76
Roan Creek near Doeville	03482100	TVA	110	T	1962, 1971-74
		TVA		C	1975-76
Watauga River below Watauga Dam	03483950	TVA	468	C	1973, 1975-80
Doe River at Hampton	03484800	TVA	100	T	1968-73
Doe River at Elizabethton	03485500	TVA	137	C	1967-68, 1971
		TVA		T	1954-63
		USGS		C,S	1979-82
South Fork Holston River at Boone Dam (tailwater)	03486810	TVA	1,840	C	1975-78
South Fork Holston River at Ft. Patrick Henry Dam	03487010	TVA	1,903	C	1975-80
Reedy Creek at Orebank	03487550	TVA	36.3	T	1964-66
		TVA		C	1964-67
		USGS		C,S	1979-82
Holston River near Church Hill	03490350	TVA	2,819	C	1974-78
Holston River at Surgoinsville	03490500	USGS	2,874	T	1975-82
		TVA		C	1974-80
Big Creek near Rogersville	03491000	USGS	47.3	T	1972-75, 1977-79
Beech Creek at Kepler	03491300	TVA	47.0	T	1966-68
Holston River near Rogersville	03491500	TVA	3,035	T	1966-75
Holston River at Cherokee Dam (tailwater)	03493510	TVA	3,428	C	1975-80
Holston River near Knoxville	03495500	USGS	3,747	C,B,S	1977-93
First Creek above Powers Avenue, at Knoxville	03496200	USGS	17.2	T	1969-71
Tennessee River below Knoxville	03497100	TVA	8,963	T	1970-80
Little River above Townsend	03497300	USGS	106	T	1964-82
		USGS		C	1982
Little River near Maryville	03498500	TVA	269	C	1967-68
		USGS		C,S	1979-82
Tennessee River at Fort Loudon Dam (tailwater)	03499510	TVA	9,550	C	1975-80
Little Tennessee River at Calderwood Dam	03518210	TVA	1,977	C	1977-80
Little Tennessee River below Chilhowee Dam	03518300	TVA	1,987	T	1964-78
Tellico River at Tellico Plains	03518500	TVA	118	T	1964-78
		TVA		C	1969-70, 1973-76
		USGS		C,S	1979-82
Little Tennessee River at McGhee	03519500	TVA	2,443	T	1963
Little Tennessee River near Centersville	03519740	TVA		T	1976-79
Clinch River above Tazewell	03528000	TVA	1,474	T	1962-66, 1971-75
		TVA		C	1971-80

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
Powell River near Arthur	03532000	TVA	685	C,S	1965, 1969-72, 1974-82
		TVA		T	1963-66, 1971-75
Ollis Creek at Ivydell	03532190	TVA	13.3	C	1974-78
Clinch River below Norris Dam	03533000	TVA	2,913	C	1968-70, 1972-80
Clinch River at Coal Creek	03533500	TVA	2,921	T	1976-79
Clinch River near Clinton	03534100	TVA	2,980	C	1971-74, 1977
Clinch River at Edgemoor	03534900	TVA	3,089	C	1969-78
Bullrun Creek near Halls Crossroads	03535000	USGS	68.5	T	1967-74
Clinch River near Eaton Crossroads	03535915	TVA	3,346	T	1963-79
Poplar Creek near Oak Ridge	03538225	USGS	82.5	C,S	1961-65, 1979-81
		USGS		T	1962-65
East Fork Poplar Creek near Oak Ridge	03538250	USGS	19.5	T	1962-68
Bear Creek near Oak Ridge	03538275	USGS	7.15	T	1962-63
Emory River near Wartburg	03538500	TVA	83.2	C	1965-68, 1975-76
Obed River near Lancing	03539800	TVA	518	T	1965-66
		TVA		C	1965-68
Crooked Fork near Wartburg	03539860	TVA	50.3	C	1965-68
		USGS		C,S	1979-81
Crab Orchard Creek near Deermont	03540100	TVA	33.7	C	1966-68
		TVA		T	1967-68
		USGS		C,S	1979-81
Emory River at Oakdale	03540500	TVA	764	C,S	1965-67, 1974-81
Tennessee River at Watts Bar Dam (tailwater)	03543005	USGS	17,310	B,C,S,T	1975-86
		USGS		T,C	1976-81
Richland Creek near Dayton	03544500	TVA	50.2	C	1966-67
		USGS		C,S	1979-82
Hiwassee River near Wetmore	03557050	TVA	1,233	C	1973-74, 1976
Hiwassee River at Patty	03557400	TVA	1,358	T	1976-78
Hiwassee River near Benton	03557405	TVA	1,362	C	1978-80
Ocoee River at Parksville	03564500	TVA	595	C	1971-72, 1976-80
Oostanaula Creek near Sweetwater	03565428	USGS		C,S,T	1993-95
Oostanaula Creek below Johnson Branch near Athens	03565430	USGS		C,S,T	1993-95
Oostanaula Creek near Sanford	03565500	USGS	57.0	C,S	1979-82
Tennessee River at Sequoyah Nuclear Plant	03566404	TVA	20,630	C	1975-78
Tennessee River near Harrison Bay State Park	03566405	TVA	20,650	C	1969-73
Tennessee River at Chickamauga Dam (tailwater)	03566510	TVA	20,790	C	1975-80
Tennessee River at Nickajack Dam (tailwater gage)	03570525	TVA	21,849	C	1975-78
Sequatchie River near Dunlap	03570835	TVA	292	C	1975-78
Sequatchie River near Whitwell	03571000	TVA	402	T	1962-71
		TVA		C	1965, 1970, 1974-75
		USGS		C,S	1979-82
Sequatchie River at Whitwell Waterworks near Whitwell	03571200	TVA	410	C	1975-79
Tennessee River at South Pittsburg	03571850	USGS	22,640	T	1975-82
		USGS		C	1975-79, 1981
		USGS		B,C,S,T	1974-86
Bradley Creek Tributary at AEDC near Manchester	03578455	USGS		T	1993-95
Brumalow Creek at AEDC near Manchester	03578600	USGS		T	1993-95
Rowland Creek at AEDC near Manchester	03578970	USGS		T	1993-95
Elk River near Estill Springs	03579100	TVA	275	C	1974-78
		TVA		T	1971-77

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

Station name	Station number	Agency	Drainage area (mi^2)	Type of record	Period of record (water years)
Boiling Fork Creek near Decherd	03580110	TVA	37.7	T	1975-77
Elk River below Tims Ford Dam	03580750	TVA	534	T	1971-79
		TVA		C	1966-67, 1973
					1975-80
Elk River above Fayetteville	03582000	TVA	827	C	1974, 1977-80
		USGS		T	1961-64
Elk River at Fayetteville	03582400	TVA	895	T	1976-78
Cane Creek near Fayetteville	03582600	TVA	106	T	1969-73
Richland Creek near Pulaski	03584000	TVA	366	T	1965-73
Elk River near Prospect	03584500	TVA	1,784	T	1961-64
Shoal Creek at Iron City	03588500	TVA	348	C,S	1974-80
		USGS		C,S	1980-83
Tennessee River at Pickwick Landing Dam	03593005	USGS	32,820	C,T	1976-82
Beech River near Chesterfield	03594439	TVA	121	C	1969-71, 1976
Duck River below Manchester	03596000	TVA	107	C	1967-68, 1970-71
		TVA		T	1976-80
		USGS		C,S	1975, 1979-83
Duck River at Normandy	03596500	TVA	208	T	1969-75
Duck River at Shelbyville Waterworks	03597850	TVA	425	C	1975-80
Duck River near Shelbyville	03598000	TVA	481	T	1961-64, 1976-78
Duck River near Columbia	03599460	TVA	1,176	T	1974-82
Duck River at Columbia Waterworks	03599482	TVA	1,195	C	1975-80
Piney River at Vernon	03602500	TVA	193	T	1964-67
Duck River above Hurricane Mills	03603000	TVA	2,557	C	1966-67, 1974-80
		TVA		T	1961-64
Buffalo River near Flat Woods	03604000	TVA	447	T	1964-68
Buffalo River near Lobelville	03604500	TVA	707	T	1961-64
		TVA		C	1967-68, 1973-76
Trace Creek above Denver	03605555	USGS	31.9	C	1979-83
Big Sandy River at Bruceton	03606500	TVA	205	T	1971-78
		TVA		C	1968, 1970-72
		USGS		C,S	1976, 1979-83
North Reelfoot Creek at Clayton	07026360	USGS	54.7	C,S	1982-84
North Reelfoot Creek at State Hwy 22 near Clayton	07026370	USGS	56.3	C,S	1983-89
Obion River at Hwy 51 near Obion	07026040	USGS	1,875	C,S,T	1975-95
South Reelfoot Creek near Clayton	07026400	USGS	38.6	C,S	1984-89
Bayou Du Chien near Walnut Log	07026695	USGS	27.8	C,T	1986-88
Indian Creek near Samburg	07026795	USGS	8.01	C,S	1982-84
Reelfoot Lake Spillway near Tiptonville	07027002	USGS	240	C,T	1975-76, 1986-88
Mosses Creek near Pocahontas	07029410	USGS	47.6	C,S	1961, 1963, 1977-78
Hatchie River near Lacy	07029425	USGS	1,033	C,S	1977-78
Big Muddy Creek at Stanton	07030010	USGS	84.4	C,S	1977-78
Cane Creek at Ripley	07030100	USGS	33.9	S	1985-87
Cane Creek at Three Point	07030137	USGS	79.8	S	1985-87
Loosahatchie River near Arlington	07030240	USGS	262	C,S	1979-82
Wolf River at Rossville	07030500	USGS	503	C	1961, 1963-68
Nonconnah Creek near Germantown	07032200	USGS	68.2	C,S	1979-82

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), 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 USGS, 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 107 gaging stations; stage only at 1 gaging station; stage and contents at 32 lakes and reservoirs; water quality for 18 stations, and 17 wells; and water levels at 8 observation wells. Also included are data for 84 crest-stage partial-record stations. Locations of these sites are shown on figures 4 through 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 Water 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 the Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225.

Publications similar to this report are published annually by the USGS 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-04-1." For archiving and general distribution, the reports for the 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, 5285 Port Royal Road, 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) 837-4700.

COOPERATION

The USGS 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:

Athens Utility District
Tennessee Department of Environment and Conservation
Tennessee Department of Transportation
Tennessee Wildlife Resources Agency
Duck River Development Agency
Harpeth Valley Utility District
Hixson Utility District
Savannah Valley Utility District
Cities, Towns, or Counties;
Alcoa
Blount County
Camden
Dickson
Franklin
Germantown
Harriman
Jackson
Knox County
Lewisburg
Lincoln County
Maryville
Memphis
Metropolitan Government of Nashville and Davidson County
Murfreesboro
Rogersville
Sevierville
Shelby County
Springfield
Wartrace

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, Memphis and Nashville District, the Tennessee Valley Authority, and by the U.S. Department of Energy. All data are published in this report.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

The State of Tennessee derives many benefits from an abundance of water found in many streams, rivers, and lakes throughout the area. Excluding the Mississippi River, which flows south along Tennessee.s western border, the largest rivers in the State are the Tennessee and Cumberland Rivers. Other large rivers in Tennessee include the Caney Fork, Holston, Nolichucky, French Broad, Little Tennessee, Hiwassee, Ocoee, Sequatchie, Elk, Duck, Buffalo, Obion, Forked Deer, and Hatchie Rivers. Tennessee shares many of the benefits of these rivers with neighboring states. The quantity and quality of water in Tennessee.s river systems are dependent upon rainfall, runoff, and wise use and management by Federal, State, and local government authorities. The streamflow, groundwater, and water-quality information contained in this report can be used by engineers, scientists, and others as part of their efforts to ensure the continued wise use and management of the rivers, streams, and water resources of Tennessee.

Rainfall amounts measured by the National Weather Service (NWS) in Tennessee during calendar year 2004 are comparable with calendar year 2003 across the State. The long-term rainfall average for Tennessee is about 52 inches per year. The 2004 statewide rainfall average for Tennessee was about 56 inches, about the same as for 2003, and about 4 inches above the long-term average. Rainfall amounts in selected cities across the state for calendar year 2004 include 48 inches (+6 inches above normal) in the Tri-Cities; 56 inches (+8 inches above normal) in Knoxville; 60 inches (+6 inches above normal) in Chattanooga; 59 inches (+11 inches above normal) in Nashville; and 54 inches (+2 inches above normal) in Memphis.

Streamflow amounts, in inches on the watershed, are used to compare average streamflows for 2004 with 2003 and the long-term average. In general, streamflows for 2004 were significantly less than 2003 across the State, with the exception of the mountains of east Tennessee which were about the same. Runoff from the Mississippi River to the eastern Highland Rim decreased to slightly less than long-term average, while runoff from the Cumberland Plateau eastward remained several inches above the long-term average. For example, the Hatchie River at Bolivar was 13 inches above normal for 2003 and even with the long-term average in 2004; the Buffalo River at Flat Woods was 10 inches above normal in 2003 and 6 inches below normal in 2004; the Red River at Port Royal was 8 inches above normal in 2003 and even with the long-term average in 2004; the Collins River at McMinnville was 11 inches above normal in 2003 and 4 inches above normal in 2004; and the Nolichucky River at Embreeville was 6 inches above normal in both 2003 and 2004.

There were several noteworthy floods occurring in Tennessee during 2004. A general rainstorm on February 4-6, 2004 produced minor flooding in streams and rivers throughout the State. Streamflow recurrence intervals produced by this widespread rainfall were generally less than 5 years. For example, Richland Creek at Pulaski was measured at approximately a 5-year recurrence interval discharge on February 6, 2004. The remnants of two September hurricanes produced significant localized flooding along streams in the eastern part of the State. The remnants of Hurricane Francis passed across the Smoky Mountains on September 8, 2004. A 25-year recurrence interval discharge was measured at the Nolichucky River at Embreeville on September 8, 2004. The remnants of Hurricane Ivan crossed the eastern parts of Tennessee on September 17, 2004 and produced significant flooding along creeks and rivers. Flood peaks having a 25-year recurrence interval were recorded at New River near New River, Obed River near Lancing, and the Nolichucky River at Embreeville on September 17, 2004. A 10-year recurrence interval discharge was recorded at the French Broad River at Newport on September 17, 2004.

Ground Water

Ground-water levels at key aquifers throughout Tennessee were affected by rainfall during the 2004 water year. Ground-water levels are recorded continuously at a series of observation wells across the State (fig. 1). Water levels at well Hm:O-15 (Hamilton County) are representative of conditions in East Tennessee and show a downward trend since the 2003 water year with generally lower water levels. Water levels recorded from wells throughout Middle and East Tennessee generally respond faster with larger fluctuations than wells drilled into the sand and gravel aquifers of West Tennessee. Observation wells in Shelby County show that ground-water levels are strongly affected by ground-water withdrawals by the City of Memphis and surrounding communities. At well Sh:Q-1 (fig. 2), near downtown Memphis, water levels declined steadily since 1972. Ground-water levels in Sh:Q-1 have shown a general upward trend since about 2001. The decline in ground-water levels in the Memphis area are not indicative of a reduction in the available ground-water supplies, but the response of the aquifer to additional withdrawals. Hydrographs showing lowest monthly water levels for each of the continuous recording observation wells are included in the body of this report.

Ground-water levels in the observation wells in Middle (Lincoln County) and East Tennessee (Hamilton and Sevier Counties) were generally slightly lower for 2004 than water levels in 2003. The water levels show a downward trend during 2004 as compared to 2003 for wells Hm:0-19, and Li:G-1. The ground-water levels in West Tennessee (Shelby and Lauderdale Counties) in 2004 were generally similar to 2003 or were at slightly higher levels. Several observations wells in the shallow aquifers in Shelby County had ground-water levels that were near or above the record high water levels.

Water Quality

Water-quality data were collected at 8 surface-water sites during the 2004 water year. Some of these sites were sampled as part of the U.S. Geological Survey's National Water-Quality Assessment (NAWQA) Program. Other water-quality activities included:

o Operation of four 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.

o Operation of a continuous monitor to measure temperature, dissolved oxygen, pH, and specific conductance in the West Fork Stones River in support of a water-resources program in cooperation with the City of Murfreesboro, Tennessee.

o Operation of a continuous monitor to measure temperature and dissolved oxygen in the Duck River in cooperation with the Duck River Development Agency.

o Operation of two continuous monitors in the Cumberland River, one in the Stones River, and one in Mill Creek, to measure temperature, dissolved oxygen, pH, and specific conductance in the Cumberland River at Nashville in cooperation with the Davidson County Metropolitan area, Tennessee.

o Operation of two continuous monitors to measure specific conductance, temperature, and pH in the Ocoee River in cooperation with the Tennesseess Department of Environment and Conservation.

o Quarterly samples at three sites for the determination of water quality in Carter's Creek in Maury County, Tennessee.

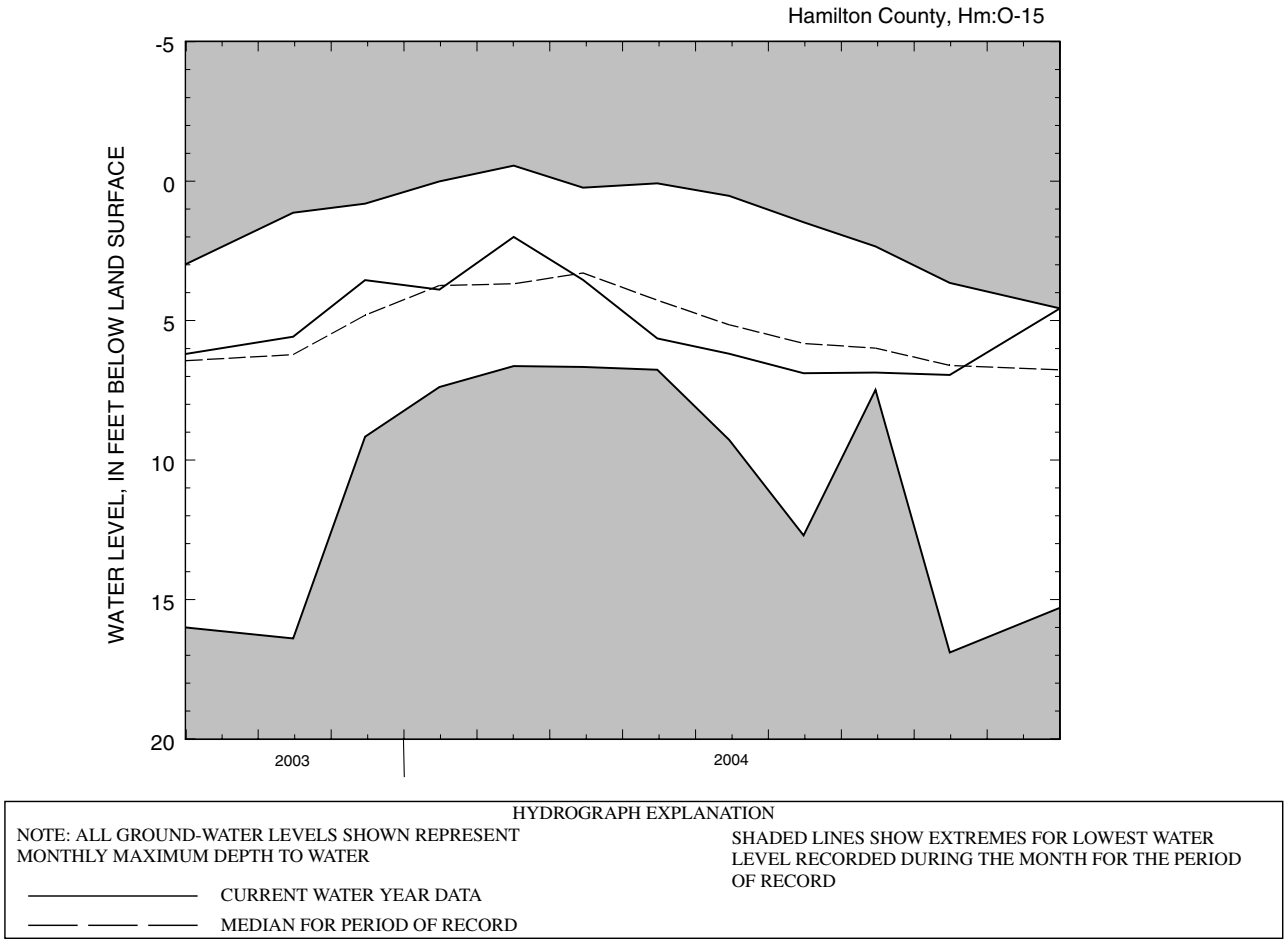

Figure 1. Ground-water levels for the 2004 water year compared to the maximum, minimum, and median water levels for the period of record.

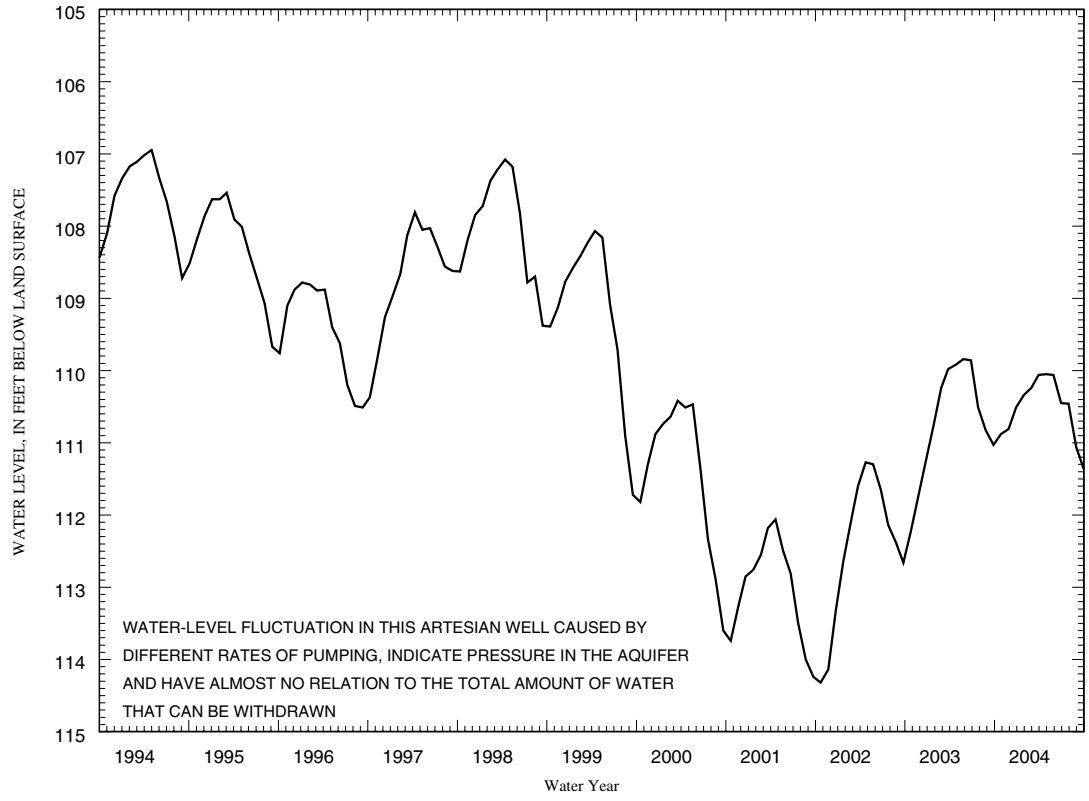

Figure 2. Hydrograph of Shelby County showing long-term decline in the water-level.

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 3). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

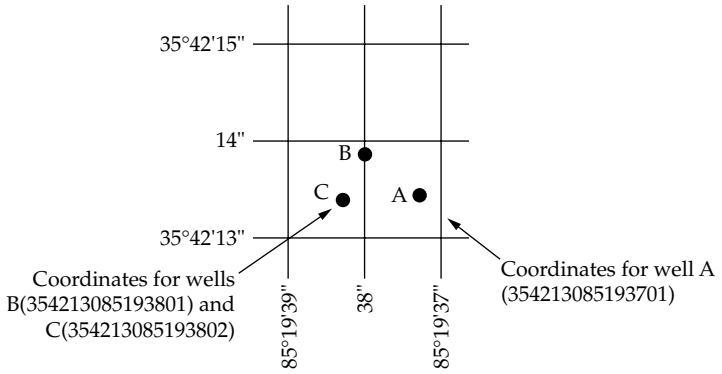

Figure 3.--System for numbering wells (latitude and longitude).

SPECIAL NETWORK AND PROGRAMS

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

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from *http://water.usgs.gov/nasqan/*.

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

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

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a

wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from *http://water.usgs.gov/nawqa/*.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from *http://water.usgs.gov/nsip/*.

EXPLANATION OF STAGE- AND WATER DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 4) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from *http://water.usgs.gov/pubs/twri/*. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

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

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

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

At some stations, stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

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

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

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

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

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

Station Manuscript

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

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that its flow reasonably can be considered equivalent to flow at the present station.

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

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

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

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

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

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

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of data is always accompanied by revision of the corresponding data in computer storage.

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

Peak Discharge Greater than Base Discharge

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

Data Table of Daily Mean Values

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

Statistics of Monthly Mean Data

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

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being

reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of Field Data and Computed Results

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

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

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

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

Other Data Records Available

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

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

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

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

Data Presentation

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

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

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

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

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

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

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

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

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

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

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*.

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

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

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

Classification of Records

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

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 6.

Accuracy of the Records

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

Rating classifications for continuous water-quality records

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

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

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

Water Temperature

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

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

Sediment

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

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

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

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

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of “daily values” of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

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

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

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

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

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

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

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

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

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

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

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

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

Water-Quality Control Data

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

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

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

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

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank

sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

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

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

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

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

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

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

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

Reference Samples

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

Replicate Samples

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

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

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

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

Spike Samples

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

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

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

Site Identification Numbers

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

Data Collection and Computation

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

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A6. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

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

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figures 6*;* each well is identified on the map by its local well or county well number.

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

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

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

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

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

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

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

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

Water-Level Tables

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

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

Hydrographs

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

GROUND-WATER-QUALITY DATA

Data Collection and Computation

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

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

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; and Book 5, Chapters A1, A3, and A4, which may be accessed from *http://water.usgs.gov/pubs/twri/*.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

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

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

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

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

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass" and "Dry mass")

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

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

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

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

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

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

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

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

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

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

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

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

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

Bottom material (See "Bed material")

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

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

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

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

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

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

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per

sample volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

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

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

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

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

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

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

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

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

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

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

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

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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

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

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

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

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

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical

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

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

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

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

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

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

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

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

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

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

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

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

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

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

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

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

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

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

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

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

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

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually

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

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA Web site: http://www.csc.noaa.gov/text/glossary.html*

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

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

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

Horizontal datum (See "Datum")

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

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

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time

period were distributed uniformly on it. (See also "Annual runoff")

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

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

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

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

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

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

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

$$I = I_o e^{-\lambda L},$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

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

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

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

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

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

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

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

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

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

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

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

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

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

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for

elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

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

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

Nonfilterable refers to the portion of the total residue retained by a filter.

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

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

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

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

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

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

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

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

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

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

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

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

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

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

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

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

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

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

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Bed material")

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

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

Return period (See "Recurrence interval")

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

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

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

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

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

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

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

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

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

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

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

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

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

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

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

Stage (See "Gage height")

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

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

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or

covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

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

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

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

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

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Suspended")

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

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

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

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

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

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification

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

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

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

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

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

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

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

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

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

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

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

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

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than

95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

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

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

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

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30 15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dis-

solved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

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

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

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

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

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

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

Watershed (See "Drainage basin")

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

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

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

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

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

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

Map number	Station number and name	Page
1	03312259 SALT LICK CREEK BELOW RED BOILING SPRING	48
2	03408500 NEW RIVER AT NEW RIVER, TN	50
3	03409500 CLEAR FORK NEAR ROBBINS, TN	52
4	03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD	54
5	03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN	56
6	03415000 WEST FORK OBEY RIVER NEAR ALPINE	60
7	03418070 ROARING RIVER ABOVER GAINESBORO	70
8	03421000 COLLINS RIVER NEAR MCMINNVILLE	80
9	03424730 SMITH FORK AT TEMPERANCE HALL	82
10	03426310 CUMBERLAND RIVER AT OLD HICKORY DAM	84
11	03426385 MANSKER CREEK ABOVE GOODLETTSVILLE	94
12	03426470 DRY CREEK NEAR EDENWOLD	98
13	03427500 EAST FORK RIVER NEAR LASCASSAS	100
14	03428200 WEST FORK STONES RIVER AT MURFREESBORO	102
15	03430147 STONERS CREEK NEAR HERMITAGE	112
16	03430550 MILL CREEK NEAR NOLENSVILLE	122
17	03431060 MILL CREEK AT THOMPSON LANE NEAR WOODBINE	124
18	03431300 BROWNS CR AT STATE FAIRGROUND AT NASHVILLE	142
19	034315005 CUMBERLAND RIVER AT WOODLAND ST AT NASHVILLE	144
20	03431599 WHITES CREEK NEAR BORDEAUX	154
21	03431700 RICHLAND CREEK AT CHARLOTTE AVE AT NASHVILLE	156
22	03432350 HARPETH RIVER AT FRANKLIN	158
23	034323531 HARPETH RIVER TRIB AT MACK HATCHER PKWY.	160
24	03432376 HARPETH RIVER TRIB AT MT. HOPE ROAD AT FRANKLIN	162
25	03432387 SOUTH PRONG SPENCER CREEK NEAR FRANKLIN	164
26	03432390 SPENCER CREEK NEAR FRANKLIN	166
27	03432400 HARPETH RIVER BELOW FRANKLIN	168
28	03433500 HARPETH RIVER AT BELLEVUE	170
29	03434500 HARPETH RIVER NEAR KINGSTON SPRINGS	172
30	03435305 RED RIVER BELOW HWY 161 AT BARREN PLAINS	184
31	03435970 MILLERS CREEK AT TURNERSVILLE	186
32	03436100 RED RIVER AT PORT ROYAL	188
33	03436690 YELLOW CREEK AT ELLIS MILLS	192
34	03455000 FRENCH BROAD RIVER NEAR NEWPORT	198
35	03461500 PIGEON RIVER AT NEWPORT	200
36	03465500 NOLICHUCKY RIVER AT EMBREEVILLE	202
37	03466208 BIG LIMESTONE CREEK NEAR LIMESTONE	204
38	03467000 LICK CREEK AT MOHAWK	210
39	03467609 NOLICHUCKY RIVER NEAR LOWLAND	214
40	03469175 LITTLE PIGEON RIVER ABOVE SEVIERVILLE	220
41	03491000 BIG CREEK NEAR ROGERSVILLE	222
42	03497300 LITTLE RIVER ABOVE TOWNSEND	224
43	03498500 LITTLE RIVER NEAR MARYVILLE	228
44	03498850 LITTLE RIVER NEAR ALCOA	230
45	03518500 TELLICO RIVER AT TELLICO PLAINS	232
46	03528000 CLINCH RIVER ABOVE TAZEWELL	234
47	03532000 POWELL RIVER NEAR ARTHUR	236
48	03535000 BULLRUN CREEK NEAR HALLS CROSSROAD	238
49	03535400 BEAVER CREEK AT SOLWAY	240
50	03538235 EAST FORK POPLAR CR AT BEAR CR RD AT OAK RIDGE	242
51	03539600 DADDY'S CREEK NEAR HEBBERTSBURG	244
52	03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING	246
53	03539800 OBED RIVER NEAR LANCING, TN	248
54	03540500 EMORY RIVER AT OAKDALE	250
55	035651140 OSTANAULA CREEK AT HWY 30 NEAR ATHENS	278
56	03566000 HIWASSEE RIVER AT CHARLESTON	282
57	035661285 NORTH MOUSE CR NR ROCKY MTN. HOLLOW NR ATHENS	284
58	03566525 NORTH CHICKAMAUGA CREEK NEAR MONTLAKE	286
59	0356653019 NORTH CHICKAMAUGA CREEK AT HWY 27 NEAR DAISY	288
60	03568000 TENNESSEE RIVER AT CHATTANOOGA	290
61	03570835 SEQUATCHIE RIVER NEAR DUNLAP	292
62	03571000 SEQUATCHIE RIVER NEAR WHITWELL	294
63	03578000 ELK RIVER NEAR PELHAM	296
64	03578500 BRADLEY CREEK NEAR PRAIRIE PLAINS	298
65	03584020 RICHLAND CREEK AT HWY 64 NEAR PULASKI	300
66	03584600 ELK RIVER AT PROSPECT	302
67	03588500 SHOAL CREEK AT IRON CITY	304
68	03593500 TENNESSEE RIVER AT SAVANNAH	306
69	03596100 CRUMPTON CREEK AT RUTLEDGE FALLS	308
70	03597210 GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE	310
71	03597590 WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE	312
72	03597860 DUCK RIVER AT SHELBYVILLE	314
73	03597898 FLAT CREEK AT HWY 231 BELOW SHELBYVILLE	320
74	03598000 DUCK RIVER NEAR SHELBYVILLE	322
75	03598250 NORTH FORK CREEK NEAR POPLINS CROSSROADS	324
76	03599100 BIG ROCK CREEK AT DOUBLE BRIDGE	326
77	03599240 DUCK RIVER ABOVE MILLTOWN	328
78	03599407 DUCK RIVER AT MILE 166.1 NEAR POTTSVILLE	330
79	03599408 DUCK RIVER AT CARPENTERS BRIDGE NEAR POTTSVILLE	332
80	03599450 FOUNTAIN CREEK NEAR FOUNTAIN HEIGHTS	334
81	03599500 DUCK RIVER AT COLUMBIA	336
82	03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK	342
83	03601990 DUCK RIVER AT HWY 100 AT CENTERVILLE	346
84	03602219 PINEY RIVER AT CEDAR HILL	348
85	03602500 PINEY RIVER AT VERNON	350
86	03604000 BUFFALO RIVER NEAR FLATWOODS	352
87	03605078 CYPRESS CREEK AT CAMDEN, TN	354
88	03606500 BIG SANDY RIVER AT BRUCETON	356
89	07024305 BEAVER CREEK AT HWY 22 BYPASS NEAR HUNTINGDON	366
90	07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD	370
91	07025400 NORTH FORK OBION RIVER NEAR MARTIN	372
92	07026040 OBION RIVER AT US HWY 51 NEAR OBION	374
93	07027000 REELFOOT LAKE NEAR TIPTONVILLE	376
94	07027720 SOUTH FOR FORKED DEER RIVER NEAR OWL CITY	378
95	07028500 NORTH FORK FORKED DEER RIVER AT TRENTON	382
96	07028960 MIDDLE FORK FORKED DEER RIVER NEAR FAIRVIEW	384
97	07029500 HATCHIE RIVER AT BOLIVAR	386
98	07030050 HATCHIE RIVER AT RIALTON	388
99	07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON	398
100	07030280 LOOSAHATCHIE RIVER AT BRUNSWICK	400
101	07030356 LOOSAHATCHIE RIVER AT US HWY 51 AT MEMPHIS	402
102	07030392 WOLF RIVER AT LAGRANGE	404
103	07030500 WOLF RIVER AT ROSSVILLE	408
104	07031650 WOLF RIVER AT GERMANTOWN	410
105	07031692 FLETCHER CREEK AT SYCAMORE VIEW	414
106	07031740 WOLF RIVER AT HOLLYWOOD STREET AT MEMPHIS	420
107	07032200 NONCONNAH CREEK NEAR GERMANTOWN	422

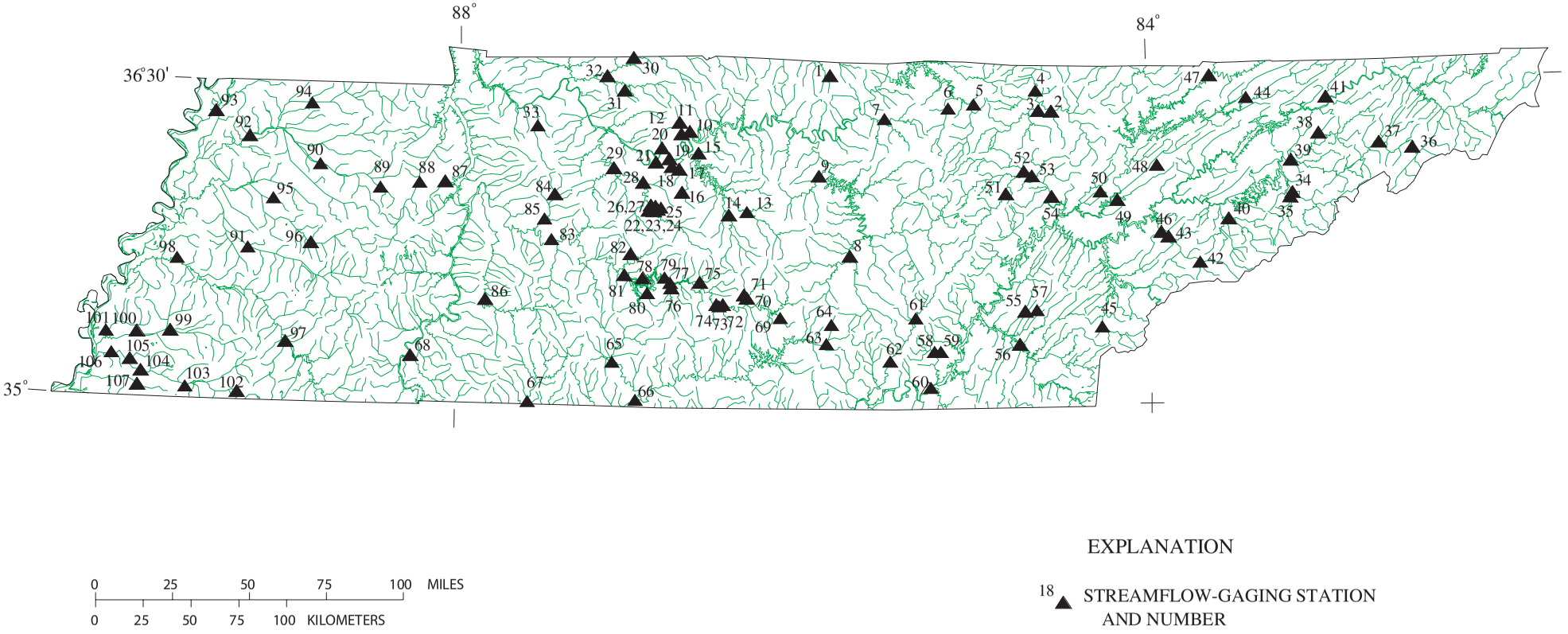

Figure 4. Location of streamflow-gaging stations in Tennessee.

Map number	Station number and name	Page
1	03409000 WHITE OAK CREEK NEAR SUNBRIGHT	424
2	03416000 WOLF RIVER NEAR BYRDSTOWN	424
3	03419200 CANE CREEK NEAR SPENCER	424
4	03421200 CHARLES CREEK NEAR MCMINNVILLE	424
5	03424900 MULHERRIN CREEK NEAR GORDONSVILLE	424
6	03425040 PEYTON CREEK NEAR MONOVILLE	425
7	03425365 SECOND CREEK NEAR WALNUT GROVE	425
8	03425637 STATION CAMP CREEK AT COTTONTOWN	425
9	03426800 EAST FORK STONES RIVER AT WOODBURY	425
10	03426874 BRAWLEYS FORK BELOW BRADYVILLE	425
11	034269424 REED CREEK NEAR BRADYVILLE	425
12	03427690 BUSHMANN CREEK AT PITTS LANE FORD NEAR COMPTON	425
13	03428043 LYTLE CREEK SANBYRNE DRIVE AT MURFREESBORO	425
14	03428500 WEST FORK STONES RIVER NEAR SMYRNA	426
15	03430118 MCCRORY CREEK AT IRONWOOD DRIVE AT DONELSON	426
16	03430400 MILL CREEK AT NOLENSVILLE	426
17	03431000 MILL CREEK NEAR ANTIOCH	426
18	03431040 SEVENMILE CREEK AT BLACKMAN ROAD	426
19	03431062 MILL CREEK TRIB AT GLENROSE AVENUE AT WOODBINE	426
20	03431120 WEST FK BROWNS CR @ GEN. BATES DR @ NASHVILLE	427
21	03431242 EAST FORK BROWNS CREEK AT 100 OAKS MALL AT NASHVILLE	427
22	03431340 BROWNS CREEK AT FACTORY STREET AT NASHVILLE	427
23	03431490 PAGES BRANCH AT AVONDALE	427
24	03431550 EARTHMAN FORK AT WHITES CREEK	427
25	03431581 EWING CREEK BELOW KNIGHT ROAD NEAR BORDEAUX	427
26	03431677 SUGARTREE CR @ YMCA ACCESS RD @ GREEN HILLS	427
27	03431679 SUGARTREE CR @ ABBOTT MARTIN RD @ GREEN HILLS	428
28	03431800 SYCAMORE CREEK NEAR ASHLAND CITY	428
29	03432470 MURFREES FORK ABOVE BURWOOD	428
30	03432925 LITTLE HARPETH RIVER AT GRANNY WHITE PIKE	428
31	03434590 JONES CREEK NEAR BURNS	428
32	034350021 BARTONS CREEK NEAR CUMBERLAND FURNACE	428
33	034350035 LOUISE CREEK NEAR GREYS CHAPEL	428
34	034351105 HONEY RUN CREEK NEAR CROSS PLAINS	428
35	034351113 HONEY RUN CREEK BELOW CROSS PLAINS	429
36	03435739 BEAVER DAM CREEK ABOVE SPRINGFIELD	429
37	03435770 SULPHUR FORK RED RIVER ABOVE SPRINGFIELD	429
38	03435930 SPRING CREEK TRIB NEAR CEDAR HILL	429
39	03436082 SULPHUR FORK CREEK ABOVE PORT ROYAL	429
40	03436700 YELLOW CREEK NEAR SHILOH	429
41	03465780 CLEAR FORK NEAR FAIRVIEW	430
42	03466890 LICK CREEK NEAR ALBANY	430
43	03467480 BENT CREEK AT TAYLOR GAP	430
44	03467993 CEDAR CREEK NEAR VALLEY HOME	430
45	03467998 SINKING FORK AT WHITE PINE	430
46	03470215 DUMPLIN CREEK AT MT. HAREB	430
47	03476960 INDIAN CREEK AT CHILDRESS	430
48	03487550 REEDY CREEK AT OREBANK	431
49	03490522 FORGEY CREEK AT ZION HILL	431
50	03491540 ROBERTSON CREEK NEAR PERSIA	431
51	03498010 LITTLE ELLEJOY CREEK AT PROSPECT	431
52	034991105 STOCK CREEK AT PICKENS GAP RD NR HIGH BLUFF	431
53	03499175 TEN MILE CREEK AT ROBINSON ROAD NEAR KNOXVILLE	431
54	03527800 BIG WAR CREEK AT LUTHER	431
55	03528390 CROOKED CREEK NEAR MAYNARDVILLE	431
56	03534000 COAL CREEK AT LAKE CITY	432
57	03535180 WILLOW FORK NEAR HALLS CROSSROAD	432
58	035351830 BEAVER CREEK NR WILLOW FORK AT HALLS CROSSROAD	432
59	03535195 BEAVER CREEK AT BRICKYARD ROAD NEAR POWELL	432
60	03535617 CONNER CREEK AT STEELE ROAD NEAR SOLWAY	432
61	03555900 COKER CREEK NEAR IRONSBURG	432
62	03565432 OOSTANAULA CREEK ABOVE DAM AT ATHENS	432
63	03565448 OOSTANAULA CREEK AT LONG MILL ROAD NEAR ATHENS	432
64	03566420 WOLFTEVER CREEK NEAR OOLTEWAH	432
65	03566599 NORTH CHICKAMAUGA CR AT GREENS MILL NR HIXSON	433
66	03569168 STRINGERS BRANCH AT LEAWOOD DRIVE AT RED BANK	433
67	03571500 LITTLE SEQUATCHIE RIVER AT SEQUATCHIE	433
68	03571730 STANDIFER BRANCH AT JASPER	433
69	03571800 BATTLE CREEK NEAR MONTEAGLE	433
70	03583300 RICHLAND CREEK NEAR CORNERSVILLE	433
71	03594153 INDIAN CREEK AT HWY 64 NEAR OLIVEHILL	433
72	03597300 WARTRACE CREEK ABOVE BELL BUCKLE	433
73	035994430 FOUNTAIN CREEK NEAR CULLEOKA	434
74	03602170 WEST PINEY RIVER NEAR DICKSON	434
75	03604090 COON CREEK ABOVE CHOP HOLLOW NEAR HOHENWALD	434
76	03604580 BLUE CREEK NEAR NEW HOPE	434
77	03605555 TRACE CREEK ABOVE DENVER	434
78	07024705 MIDDLE FORK OBION RIVER NEAR GLEASON	434
79	07024760 SPRING CREEK NEAR GREENFIELD	434
80	07025500 NORTH FORK OBION RIVER NEAR UNION CITY	435
81	07028505 NORTH FORK FORKED DEER RIVER AT TRENTON	435
82	07029090 LEWIS CREEK NEAR DYERSBURG	435
83	07030000 HATCHIE RIVER NEAR STANTON	435
84	07030100 CANE CREEK AT RIPLEY	435

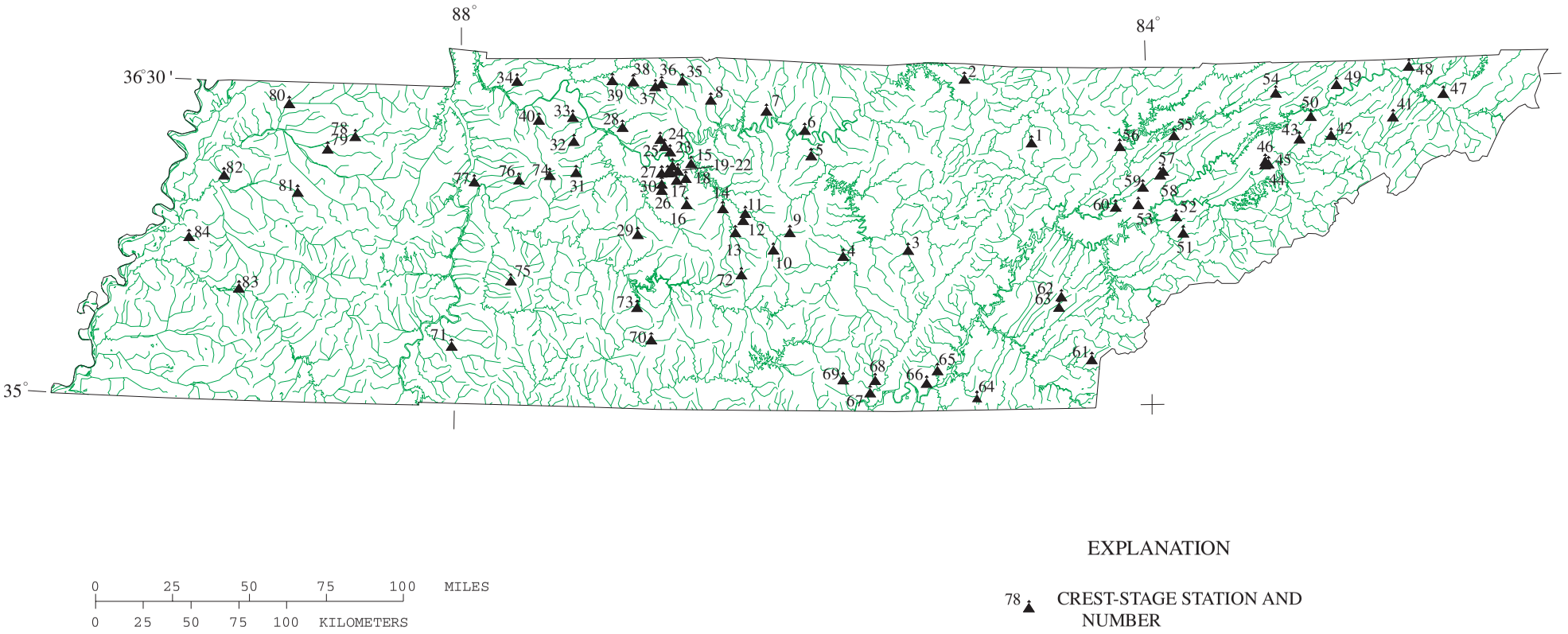

Figure 5. Location of crest-stage stations in Tennessee.

Map number	Station number and name	Page
1	03417500 CUMBERLAND RIVER AT CELINA	62
2	03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM	72
3	03426310 CUMBERLAND RIVER AT OLD HICKORY DAM	86
4	03428200 WEST FORK STONES RIVER AT MURFREESBORO	104
5	03430200 STONES RIVER AT HWY 70 NEAR DONELSON	114
6	03431091 CUMBERLAND RIVER AT OMAHUNDRO WATER PLANT	134
7	03431514 CUMBERLAND RIVER NEAR BORDEAUX	146
8	03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM	176
9	03466208 BIG LIMESTONE CREEK NR LIMESTONE	206
10	03467609 NOLICHUCKY RIVER NR LOWLAND	216
11	03560110 OCOEE RIVER BELOW FIGHTINGTOWN CR AT COPPERHILL	252
12	03561420 OCOEE RIVER ABOVE BARKER MILL CREEK AT MCHARG	262
13	03597860 DUCK RIVER AT SHELBYVILLE	315
14	03600085 CARTERS CREEK AT PETTY LANE NR CARTERS CREEK	338
15	03600086 CARTERS CREEK TRIB NR CARTERS CREEK	340
16	03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK	344
17	07030050 HATCHIE RIVER AT RIALTO	390
18	352515086011702 Cf:G-028	453
19	351428085003600 Hm:O-15	454
20	350750085045802 Hm:O-19	455
21	353232089115601 Ha:H-007	456
22	353839089493500 Ld:F-4	457
23	350034086422800 Li:G-1	458
24	353922083345600 Sv:E-2	459
25	350857089591401 Sh:P-99	460
26	351113089583101 Sh:P-151	461
27	351102089582701 Sh:P-152	462
28	350900089482300 Sh:Q-1	463
29	352042089523401 Sh:U-100	464
30	352042089523402 Sh:U-101	465
31	352042089523403 Sh:U-102	466
32	351917089515101 Sh:V-211	467
33	351916089515101 Sh:V-212	468
34	351917089515102 Sh:V-222	469

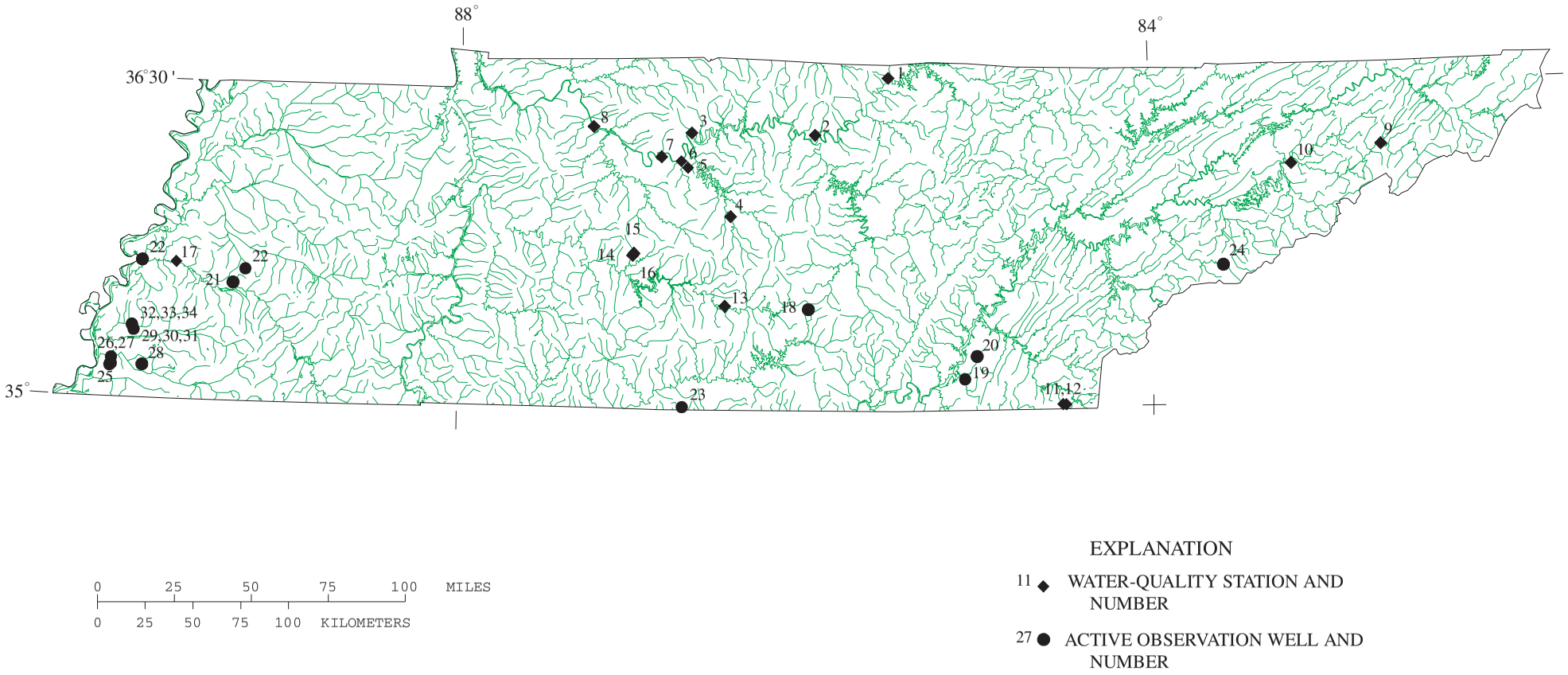

Figure 6. Location of water-quality stations and active observation wells in Tennessee.

03312259 SALT LICK CREEK BELOW RED BOILING SPRINGS, TN

LOCATION.--Lat 36°33'08", long 85°51'26", Macon County, Hydrologic Unit 05110002, near left bank on downstream side of bridge on Chet Road, 14.5 mi east of intersection of Lake Road and Chet Road, 1.24 mi northeast of Red Boiling Springs.

DRAINAGE AREA.--14.5 mi^2.

PERIOD OF RECORD.--January 2004 to September 2004.

GAGE.--Data collection platform. Datum of gage is 740 ft above NGVD of 1929.

REMARKS.--Records good except estimated daily discharges and for discharges above 600 ft^3/s which are fair. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,800 ft^3/s, Feb. 5, gage height, 7.72 ft; minimum daily discharge, 4.8 ft^3/s, July 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR JANUARY 2004 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e14	25	46	29	21	67	35	98	17
2	---	---	---	e20	29	138	27	35	48	16	36	31
3	---	---	---	e18	73	63	25	25	34	11	26	25
4	---	---	---	e120	53	44	23	20	46	8.8	23	17
5	---	---	---	e100	738	130	22	18	28	33	25	15
6	---	---	---	e85	460	218	20	15	21	50	21	13
7	---	---	---	e65	114	88	20	13	17	55	18	13
8	---	---	---	e47	74	58	20	12	14	23	17	14
9	---	---	---	e38	57	45	17	11	12	14	17	13
10	---	---	---	e33	48	36	18	10	11	17	17	12
11	---	---	---	e28	41	31	17	9.9	9.7	25	16	11
12	---	---	---	e25	36	27	83	9.5	12	37	18	11
13	---	---	---	e23	31	24	254	14	13	e34	17	11
14	---	---	---	21	29	23	135	13	9.9	e51	16	10
15	---	---	---	19	27	22	78	36	15	e40	15	10
16	---	---	---	18	23	24	54	19	17	e30	15	13
17	---	---	---	18	22	20	43	13	13	e19	15	295
18	---	---	---	117	20	40	35	18	14	e14	15	53
19	---	---	---	80	20	28	29	18	9.6	e9.5	15	28
20	---	---	---	52	21	44	27	11	8.4	7.1	16	21
21	---	---	---	41	19	77	32	9.3	7.4	6.3	19	17
22	---	---	---	34	17	53	152	8.6	8.0	6.1	17	14
23	---	---	---	28	17	42	152	8.2	14	8.6	16	12
24	---	---	---	25	17	35	106	7.4	9.1	6.4	16	12
25	---	---	---	88	15	31	69	7.0	9.2	6.3	17	11
26	---	---	---	85	15	28	49	25	8.7	7.4	17	9.9
27	---	---	---	58	14	27	37	30	7.1	7.3	16	9.7
28	---	---	---	44	14	25	28	64	6.4	5.9	16	9.4
29	---	---	---	38	13	33	24	58	6.3	5.1	16	8.9
30	---	---	---	33	---	47	24	47	52	4.8	118	9.2
31	---	---	---	27	---	33	---	228	---	204	29	---
TOTAL	---	---	---	1,442	2,082	1,580	1,649	833.9	547.8	797.6	753	746.1
MEAN	---	---	---	46.5	71.8	51.0	55.0	26.9	18.3	25.7	24.3	24.9
MAX	---	---	---	120	738	218	254	228	67	204	118	295
MIN	---	---	---	14	13	20	17	7.0	6.3	4.8	15	8.9

e Estimated

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03408500 NEW RIVER AT NEW RIVER, TN

LOCATION.--Lat 36°23'07", 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 mi^2.

PERIOD OF RECORD.--August 1934 to September 1991, October 1991 to September 1998, as stage only. October 1998 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. WDR TN-73: 1939(M), 1951(M), 1970(M).

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

REMARKS.--No estimated daily discharge. Records good. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,700 ft^3/s, May 27, 1973, gage height, 37.91 ft, from high water mark in gage well, from rating curve extended above 27,000 ft^3/s on basis of slope-area and contracted-opening measurements of peak flow; no flow part of each day Aug. 12-14, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 23, 1929, reached a stage of 41.2 ft, discharge, 74,700 ft^3/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 CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1730	26,100	22.81	Sep 17	1830	*42,800	*30.21
Mar 6	1400	28,100	23.78				

Minimum discharge, 38 ft^3/s, Aug. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	127	1,090	925	618	441	1,280	465	1,060	537	736	233
2	252	120	847	1,200	564	725	1,030	1,100	539	363	318	147
3	214	113	704	1,280	665	1,660	871	2,150	519	371	188	201
4	185	108	676	1,120	736	1,250	745	1,310	1,040	432	131	184
5	168	189	829	3,060	1,280	1,030	624	963	896	295	106	128
6	152	1,220	823	3,790	16,300	16,500	540	751	537	397	101	100
7	137	1,460	780	1,870	6,200	3,830	490	576	378	376	88	106
8	123	909	741	1,320	2,280	1,890	465	453	309	324	74	6,130
9	111	643	678	1,090	1,520	1,340	429	456	269	232	60	3,030
10	104	500	862	883	1,200	1,080	369	409	233	180	49	1,250
11	105	410	2,110	716	993	860	350	315	198	146	43	734
12	104	365	1,400	635	847	745	586	282	184	150	48	527
13	101	534	1,080	586	760	638	5,860	239	258	137	224	374
14	109	532	1,210	530	660	566	3,870	210	298	118	158	282
15	290	441	1,350	500	606	519	2,290	307	696	105	100	219
16	245	674	1,190	453	623	684	1,560	348	474	93	75	189
17	168	1,230	1,410	416	597	1,130	1,170	250	427	163	57	27,600
18	141	1,040	1,360	808	586	1,210	925	215	996	226	47	9,600
19	127	6,800	1,290	1,500	675	1,440	765	247	558	204	41	1,900
20	113	4,290	1,080	1,150	920	1,200	655	200	368	125	38	1,090
21	103	1,890	898	938	1,390	2,500	585	160	280	95	48	728
22	99	1,240	813	802	1,200	1,880	523	139	303	78	132	520
23	92	935	854	684	941	1,320	491	132	296	69	122	390
24	88	957	2,130	598	793	1,030	605	113	848	65	381	318
25	86	1,260	1,750	765	689	846	496	100	1,730	61	424	268
26	84	1,060	1,280	1,440	604	716	712	100	2,940	109	194	221
27	122	890	1,020	1,270	568	626	883	287	1,150	275	127	190
28	240	1,310	852	1,090	499	560	739	354	709	189	96	171
29	204	2,070	732	927	459	503	614	391	509	122	80	159
30	164	1,440	1,060	852	---	1,580	524	263	520	89	161	146
31	140	---	1,030	721	---	1,690	---	1,530	---	317	422	---
TOTAL	4,667	34,757	33,929	33,919	45,773	51,989	31,046	14,815	19,522	6,443	4,869	57,135
MEAN	151	1,159	1,094	1,094	1,578	1,677	1,035	478	651	208	157	1,904
MAX	296	6,800	2,130	3,790	16,300	16,500	5,860	2,150	2,940	537	736	27,600
MIN	84	108	676	416	459	441	350	100	184	61	38	100
CFSM	0.39	3.03	2.87	2.86	4.13	4.39	2.71	1.25	1.70	0.54	0.41	4.99
IN.	0.45	3.38	3.30	3.30	4.46	5.06	3.02	1.44	1.90	0.63	0.47	5.56

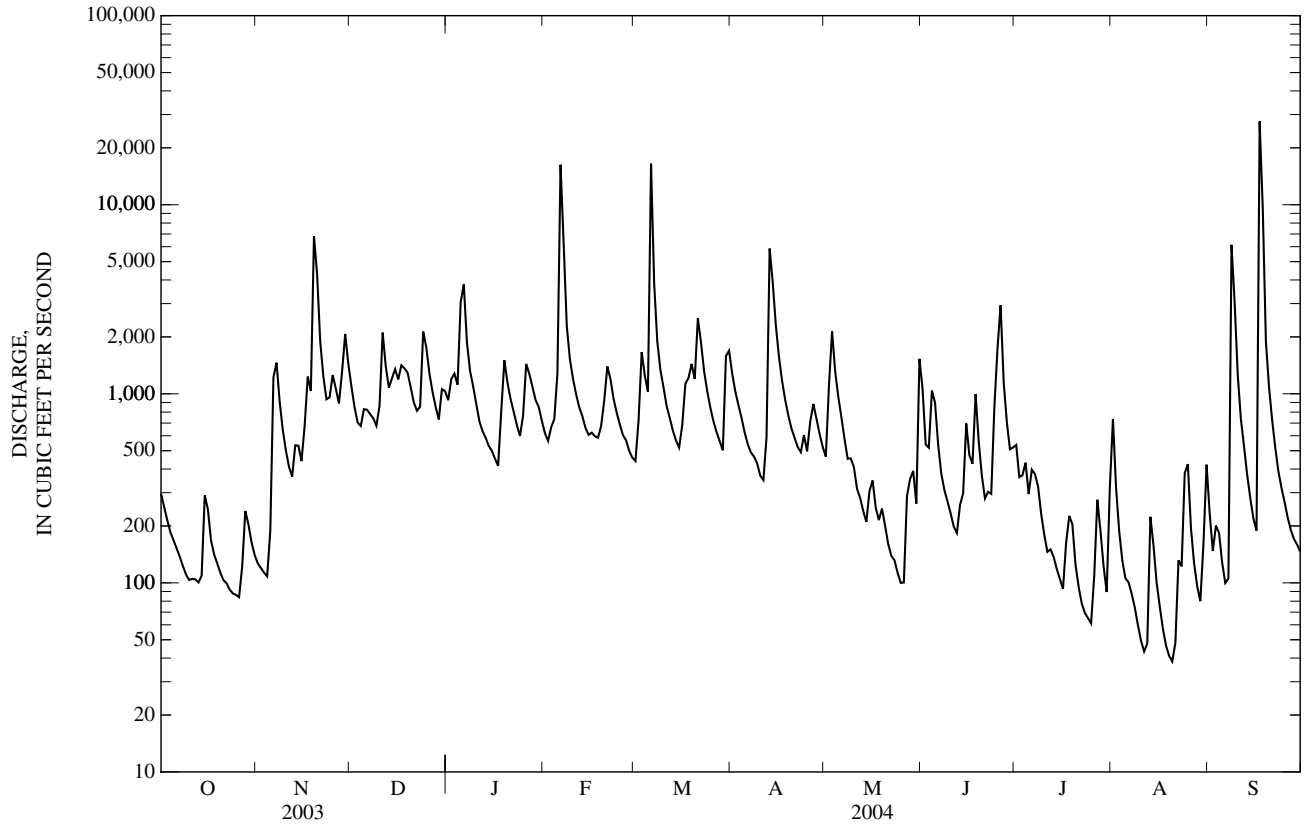
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2004, BY WATER YEAR (WY)

MEAN	138	505	1,073	1,373	1,483	1,526	1,090	680	361	272	163	164
MAX	1,035	2,683	3,359	4,206	3,891	4,371	2,564	3,095	2,850	1,986	1,159	1,904
(WY)	(1990)	(1958)	(1991)	(1937)	(1939)	(1975)	(1977)	(1973)	(1989)	(1967)	(1942)	(2004)
MIN	0.64	2.35	43.9	42.1	112	528	216	60.6	4.54	3.99	5.71	2.68
(WY)	(1953)	(1940)	(1966)	(1981)	(1941)	(2003)	(1942)	(1936)	(1936)	(1944)	(1936)	(1953)

03408500 NEW RIVER AT NEW RIVER, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1934 - 2004	
ANNUAL TOTAL	367,895		338,864			
ANNUAL MEAN	1,008		926		734	
HIGHEST ANNUAL MEAN					1,350	1973
LOWEST ANNUAL MEAN					341	1988
HIGHEST DAILY MEAN	24,800	Feb 16	27,600	Sep 17	a38,000	Dec 23, 1990
LOWEST DAILY MEAN	50	Aug 29	38	Aug 20	0.10	Aug 9, 1944
ANNUAL SEVEN-DAY MINIMUM	59	Aug 27	58	Aug 15	0.10	Aug 9, 1944
MAXIMUM PEAK FLOW			42,800	Sep 17	a63,700	May 27, 1973
MAXIMUM PEAK STAGE			30.21	Sep 17	b37.91	May 27, 1973
INSTANTANEOUS LOW FLOW			c38	Aug 20	d0.00	Aug 12, 1944
ANNUAL RUNOFF (CFSM)	2.64		2.42		1.92	
ANNUAL RUNOFF (INCHES)	35.83		33.00		26.11	
10 PERCENT EXCEEDS	1,830		1,470		1,620	
50 PERCENT EXCEEDS	509		537		262	
90 PERCENT EXCEEDS	120		105		17	

a Highest daily mean and instantaneous peak flows from rating curve extended above 27,000 ft^3/s on basis of slope-area and contracted opening measurements of peak flow.
b Maximum stage from high-water mark in gage well.
c Also occurred Aug. 21.
d Minimum discharge also occurred Aug. 13-15, 1944.



03409500 CLEAR FORK NEAR ROBBINS, TN

LOCATION.--Lat 36°23'17", long 84°37'48", 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 mi^2.

PERIOD OF RECORD.--October 1930 to September 1971, July 1975 to September 1991, October 1991 to September 1998, stage only, October 1998 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.--Data collection platform. 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.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 ft^3/s, from rating curve extended above 14,000 ft^3/s, on basis of slope-area measurement at gage height 18.5 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1030	*23,700	*15.82	Sep 17	1530	21,400	15.13
Mar 6	1030	11,700	11.64				

Minimum discharge, 25 ft^3/s, Aug. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	96	628	703	387	207	1,120	240	1,070	99	647	107
2	211	89	480	1,020	353	289	809	314	511	192	359	108
3	177	85	398	1,290	393	588	644	816	724	477	206	234
4	151	80	396	980	418	538	527	560	2,520	255	140	145
5	134	99	533	1,180	1,710	498	434	414	1,420	165	112	98
6	120	370	544	1,700	17,400	7,760	364	324	743	173	103	74
7	108	460	488	1,120	5,250	3,360	318	254	481	436	97	70
8	97	346	437	824	2,060	1,510	299	198	362	439	80	1,110
9	86	261	387	695	1,310	1,010	271	163	283	234	67	1,120
10	79	209	434	568	979	808	231	587	216	150	57	611
11	75	180	977	455	787	630	211	251	175	110	49	373
12	73	165	752	412	660	531	309	223	145	94	51	243
13	70	171	607	409	591	452	2,500	167	126	85	50	177
14	72	180	689	381	508	393	2,700	135	118	72	57	135
15	146	160	874	359	459	357	1,750	181	112	67	54	107
16	165	314	749	318	412	379	1,120	627	129	80	46	94
17	119	1,070	823	287	370	446	797	321	115	74	39	14,200
18	99	791	818	494	354	549	610	792	98	224	33	6,230
19	89	2,860	793	1,080	332	893	492	1,890	109	121	29	1,660
20	81	3,120	711	800	330	738	413	654	84	85	26	841
21	75	1,440	582	628	365	2,000	362	364	72	65	35	521
22	69	902	528	519	346	1,510	321	234	63	53	30	359
23	65	649	573	434	300	985	292	272	58	46	29	260
24	63	589	1,750	373	282	747	324	209	103	127	55	197
25	60	766	1,400	588	269	591	286	147	146	87	67	160
26	62	614	945	1,740	249	489	439	120	806	574	91	133
27	89	511	712	1,170	252	424	542	195	430	1,840	70	114
28	172	631	571	866	238	371	389	203	238	687	57	101
29	157	1,030	480	671	218	333	316	203	157	340	46	93
30	125	807	759	575	---	2,000	270	163	119	205	52	88
31	108	---	855	472	---	1,840	---	940	---	251	126	---
TOTAL	3,451	19,045	21,673	23,111	37,582	33,226	19,460	12,161	11,733	7,907	2,960	29,763
MEAN	111	635	699	746	1,296	1,072	649	392	391	255	95.5	992
MAX	254	3,120	1,750	1,740	17,400	7,760	2,700	1,890	2,520	1,840	647	14,200
MIN	60	80	387	287	218	207	211	120	58	46	26	70
CFSM	0.41	2.33	2.57	2.74	4.76	3.94	2.38	1.44	1.44	0.94	0.35	3.65
IN.	0.47	2.60	2.96	3.16	5.14	4.54	2.66	1.66	1.60	1.08	0.40	4.07

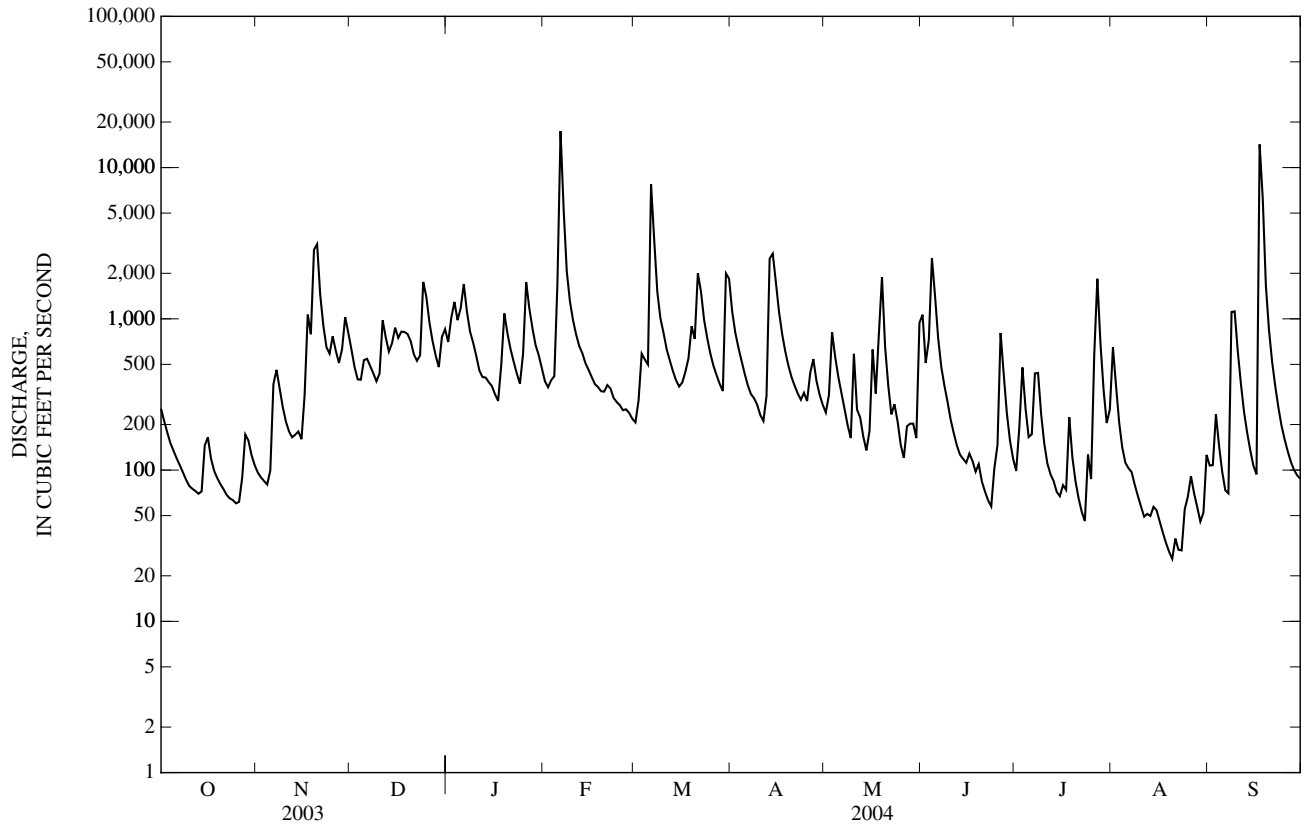
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

MEAN	91.4	297	651	905	1,051	990	734	474	220	160	101	125
MAX	747	1,303	2,470	3,418	2,794	2,757	1,968	2,043	1,742	1,122	940	1,258
(WY)	(1990)	(1958)	(1991)	(1937)	(1939)	(1963)	(1977)	(1984)	(1989)	(1967)	(1971)	(2003)
MIN	1.84	4.97	28.6	32.4	141	298	152	64.1	8.29	6.40	8.07	2.92
(WY)	(1954)	(1954)	(1964)	(1981)	(1941)	(2003)	(1942)	(1948)	(1988)	(1944)	(1987)	(1953)

03409500 CLEAR FORK NEAR ROBBINS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004	
ANNUAL TOTAL	286,119		222,072			
ANNUAL MEAN	784		607		481	
HIGHEST ANNUAL MEAN					864	1989
LOWEST ANNUAL MEAN					215	1931
HIGHEST DAILY MEAN	16,300	Feb 16	17,400	Feb 6	a24,800	Dec 23, 1990
LOWEST DAILY MEAN	14	Aug 30	26	Aug 20	0.20	Sep 20, 1932
ANNUAL SEVEN-DAY MINIMUM	20	Aug 24	32	Aug 17	0.51	Sep 15, 1932
MAXIMUM PEAK FLOW			23,700	Feb 6	a34,000	Feb 3, 1939
MAXIMUM PEAK STAGE			15.82	Feb 6	b18.50	Feb 3, 1939
INSTANTANEOUS LOW FLOW			c25	Aug 20	d0.20	Sep 19, 1932
ANNUAL RUNOFF (CFSM)	2.88		2.23		1.77	
ANNUAL RUNOFF (INCHES)	39.13		30.37		24.01	
10 PERCENT EXCEEDS	1,480		1,110		1,110	
50 PERCENT EXCEEDS	265		332		163	
90 PERCENT EXCEEDS	62		72		11	

a Highest daily mean and instantaneous peak flows from rating curve extended above 14,000 ft^3/s on basis of slope-area measurement of peak flow.
b Maximum stage from floodmarks, site and datum then in use.
c Also occurred August 21.
d Also occurred Sept. 20, 21, 1932.



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 mi above Anderson Branch, 1.3 miles below North White Oak Creek, 10.1 mi southwest of Oneida, and at mile 70.1.

DRAINAGE AREA.--806 mi^2.

PERIOD OF RECORD.--October 1983 to September 1987. October 1998 to September 1999, May 2001 to current year. Occasional discharge measurements, water years 1961-62, 1979-80, 1991-94.

GAGE.--Data collection platform. Datum of gage is 862.79 ft Sandy Hook datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1700	48,100	28.95	Sep 17	1800	*65,900	*33.74
Mar 6	1430	39,700	26.35				

Minimum discharge, 118 ft^3/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

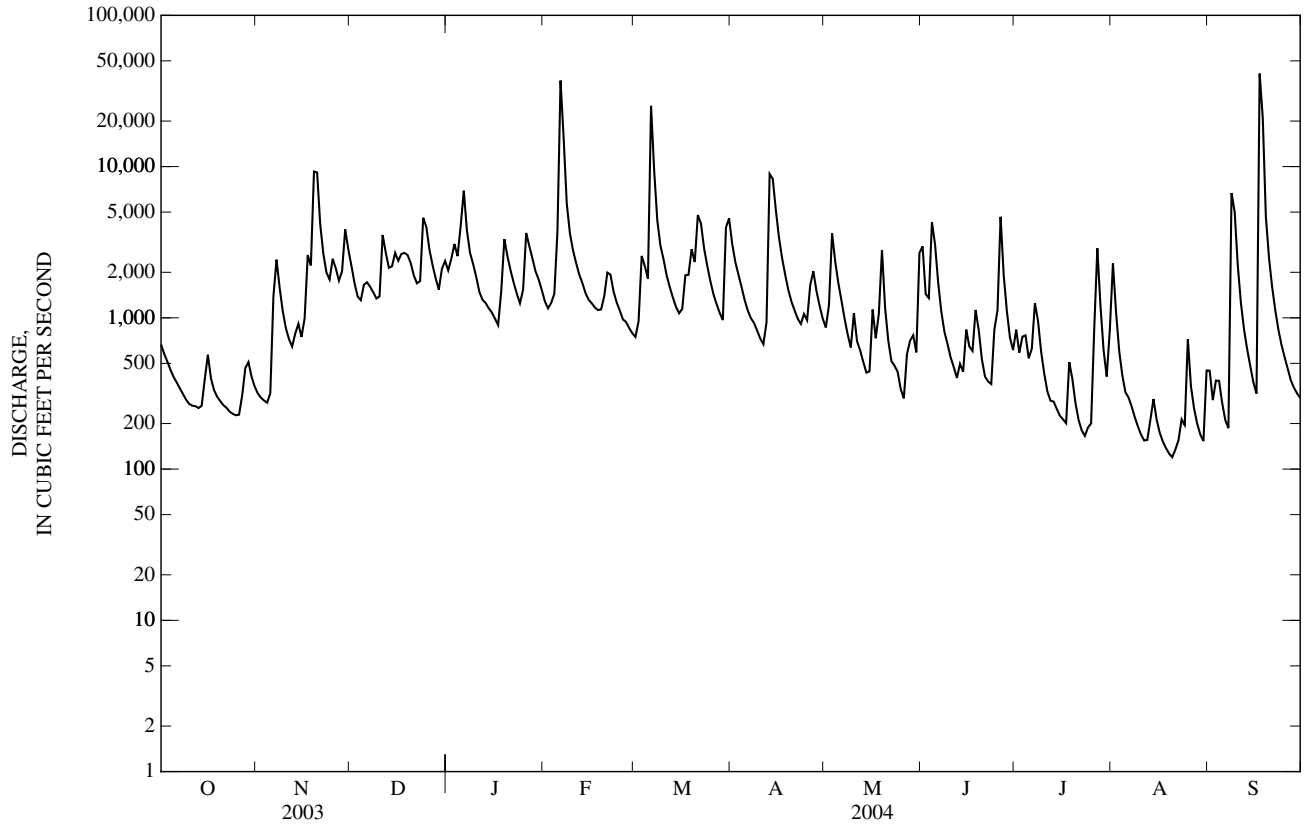
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	667	316	2,210	2,060	1,280	747	3,080	864	2,970	835	2,290	447
2	579	296	1,690	2,460	1,160	946	2,340	1,210	1,430	589	1,090	286
3	515	284	1,380	3,080	1,250	2,570	1,930	3,630	1,350	751	604	384
4	454	275	1,310	2,560	1,440	2,200	1,600	2,360	4,290	766	418	383
5	407	317	1,660	4,060	3,680	1,820	1,310	1,700	3,060	541	322	274
6	374	1,390	1,720	6,930	37,000	25,200	1,120	1,300	1,710	624	297	211
7	342	2,420	1,600	3,780	15,300	9,420	994	991	1,100	1,250	259	186
8	314	1,580	1,470	2,690	5,670	4,420	924	778	809	952	220	6,680
9	288	1,100	1,340	2,260	3,630	3,000	823	637	671	595	191	5,020
10	270	852	1,390	1,860	2,790	2,440	729	1,070	547	426	169	2,230
11	263	722	3,530	1,480	2,300	1,910	669	702	472	326	155	1,260
12	261	646	2,700	1,320	1,930	1,600	935	609	401	283	156	841
13	253	788	2,140	1,250	1,700	1,360	8,940	511	496	279	212	622
14	262	913	2,190	1,160	1,460	1,180	8,290	434	440	250	291	481
15	392	748	2,690	1,080	1,320	1,070	5,130	442	836	225	212	374
16	570	991	2,390	987	1,250	1,150	3,390	1,130	646	213	174	316
17	397	2,600	2,640	895	1,170	1,910	2,480	733	604	201	152	41,200
18	332	2,220	2,680	1,500	1,120	1,930	1,920	1,070	1,130	510	138	21,000
19	300	9,270	2,600	3,320	1,140	2,840	1,520	2,810	829	393	127	4,640
20	281	9,150	2,300	2,550	1,390	2,340	1,280	1,160	533	273	120	2,490
21	264	4,140	1,900	2,050	1,990	4,780	1,120	712	409	211	135	1,600
22	254	2,650	1,690	1,700	1,930	4,190	988	519	380	180	155	1,130
23	239	1,990	1,750	1,440	1,490	2,880	911	483	365	166	213	838
24	232	1,790	4,590	1,250	1,260	2,220	1,060	441	834	188	196	664
25	227	2,460	3,990	1,530	1,120	1,750	966	338	1,120	200	722	550
26	229	2,120	2,820	3,640	977	1,430	1,640	294	4,660	844	351	461
27	308	1,760	2,230	2,980	938	1,230	2,030	575	1,910	2,880	251	386
28	466	2,030	1,820	2,460	855	1,080	1,500	707	1,110	1,200	199	345
29	510	3,850	1,540	2,020	792	967	1,200	767	740	611	169	316
30	408	2,840	2,110	1,790	---	3,960	991	591	613	409	153	296
31	351	---	2,380	1,520	---	4,550	---	2,680	---	835	448	---
TOTAL	11,009	62,508	68,450	69,662	99,332	99,090	61,810	32,248	36,465	18,006	10,589	95,911
MEAN	355	2,084	2,208	2,247	3,425	3,196	2,060	1,040	1,216	581	342	3,197
MAX	667	9,270	4,590	6,930	37,000	25,200	8,940	3,630	4,660	2,880	2,290	41,200
MIN	227	275	1,310	895	792	747	669	294	365	166	120	186
CFSM	0.44	2.59	2.74	2.79	4.25	3.97	2.56	1.29	1.51	0.72	0.42	3.97
IN.	0.51	2.88	3.16	3.22	4.58	4.57	2.85	1.49	1.68	0.83	0.49	4.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	314	1,295	1,853	2,077	2,903	2,288	2,132	1,815	780	489	375	610
MAX	870	3,506	3,434	4,553	6,368	4,021	4,611	5,631	1,976	1,758	1,302	3,197
(WY)	(1986)	(1987)	(2003)	(1999)	(2003)	(2002)	(2003)	(1984)	(2003)	(1999)	(1985)	(2004)
MIN	43.4	49.4	196	602	1,245	1,054	539	347	230	124	61.4	25.9
(WY)	(1999)	(1999)	(2000)	(1986)	(2002)	(2003)	(1986)	(2001)	(1984)	(2000)	(1987)	(1999)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	774,945		665,080			
ANNUAL MEAN	2,123		1,817		1,429	
HIGHEST ANNUAL MEAN					2,169	2003
LOWEST ANNUAL MEAN					899	2000
HIGHEST DAILY MEAN	45,300	Feb 16	41,200	Sep 17	49,300	May 7, 1984
LOWEST DAILY MEAN	137	Aug 28	120	Aug 20	18	Sep 18, 1999
ANNUAL SEVEN-DAY MINIMUM	154	Aug 25	143	Aug 16	20	Sep 14, 1999
MAXIMUM PEAK FLOW			65,900	Sep 17	65,900	Sep 17, 2004
MAXIMUM PEAK STAGE			33.74	Sep 17	33.74	Sep 17, 2004
INSTANTANEOUS LOW FLOW			118	Aug 20	17	Oct 1, 1998
ANNUAL RUNOFF (CFSM)	2.63		2.25		1.77	
ANNUAL RUNOFF (INCHES)	35.77		30.70		24.10	
10 PERCENT EXCEEDS	4,110		3,150		3,050	
50 PERCENT EXCEEDS	931		1,080		620	
90 PERCENT EXCEEDS	268		254		63	



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 at bridge 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 mi^2, includes 6.0 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1991. October 1991 to September 1992, miscellaneous water-quality measurements. October 1992 to September 2000, crest-stage partial record station. October 2000 to current year. Prior to February 1943 monthly discharges only, published in WSP 1306.

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

GAGE.--Water-stage encoder and satellite telemeter at station. Datum of gage is 680.30 ft, Sandy Hook datum. Feb. 24 to April 7, 1943, nonrecording gage 200 ft upstream at same datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft^3/s, May 27, 1973, gage height, 30.46 ft, from rating curve extended above 32,000 ft^3/s, on basis of slope-area measurement of peak flow; minimum, 3.6 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0700	*35,100	*27.52	Sep 17	1100	20,700	21.25
Mar 6	0530	13,700	17.33				

Minimum discharge, 33 ft^3/s, Aug. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	70	522	548	335	261	841	304	691	127	189	93
2	117	67	407	739	299	641	640	312	388	115	140	79
3	108	65	335	760	344	825	524	365	298	112	113	71
4	99	63	319	632	369	637	441	307	422	104	95	60
5	92	74	399	1,150	4,780	604	369	267	416	99	89	54
6	87	113	527	1,260	19,400	6,990	317	241	291	255	87	49
7	83	113	511	834	2,950	1,900	284	205	208	463	75	51
8	78	102	453	643	1,400	1,040	263	174	226	403	64	347
9	73	97	392	550	996	750	242	150	228	237	56	702
10	70	90	556	458	795	586	219	132	207	159	51	430
11	68	86	901	384	663	477	201	121	173	125	47	255
12	67	85	679	343	576	410	467	142	133	112	69	192
13	65	107	543	325	524	351	1,270	153	124	103	82	149
14	66	127	571	304	471	307	1,570	127	117	121	66	118
15	91	115	596	285	433	280	1,430	116	123	138	57	99
16	102	217	523	258	389	294	923	107	153	109	49	89
17	88	527	680	238	356	336	674	169	259	90	44	10,300
18	79	472	658	592	336	486	532	180	219	94	40	2,400
19	74	1,590	664	885	317	507	443	147	148	84	36	918
20	69	1,430	580	661	306	515	375	130	118	72	34	559
21	65	780	493	534	302	1,420	324	112	103	62	39	379
22	63	539	448	450	282	987	287	97	88	58	42	252
23	60	415	474	376	258	709	261	105	80	131	41	178
24	58	426	1,110	324	245	563	272	91	341	109	51	137
25	56	510	878	676	234	464	274	77	339	323	141	112
26	57	438	660	1,170	224	397	823	72	723	362	121	97
27	77	374	533	844	240	345	778	100	435	1,290	86	86
28	101	745	451	654	242	305	564	133	276	621	66	78
29	97	959	390	537	247	281	447	127	194	347	55	72
30	84	683	592	469	---	1,850	365	113	146	216	138	68
31	75	---	632	399	---	1,230	---	850	---	192	150	---
TOTAL	2,499	11,479	17,477	18,282	38,313	26,748	16,420	5,726	7,667	6,833	2,413	18,474
MEAN	80.6	383	564	590	1,321	863	547	185	256	220	77.8	616
MAX	130	1,590	1,110	1,260	19,400	6,990	1,570	850	723	1,290	189	10,300
MIN	56	63	319	238	224	261	201	72	80	58	34	49
CFSM	0.41	1.95	2.88	3.01	6.74	4.40	2.79	0.94	1.30	1.12	0.40	3.14
IN.	0.47	2.18	3.32	3.47	7.27	5.08	3.12	1.09	1.46	1.30	0.46	3.51

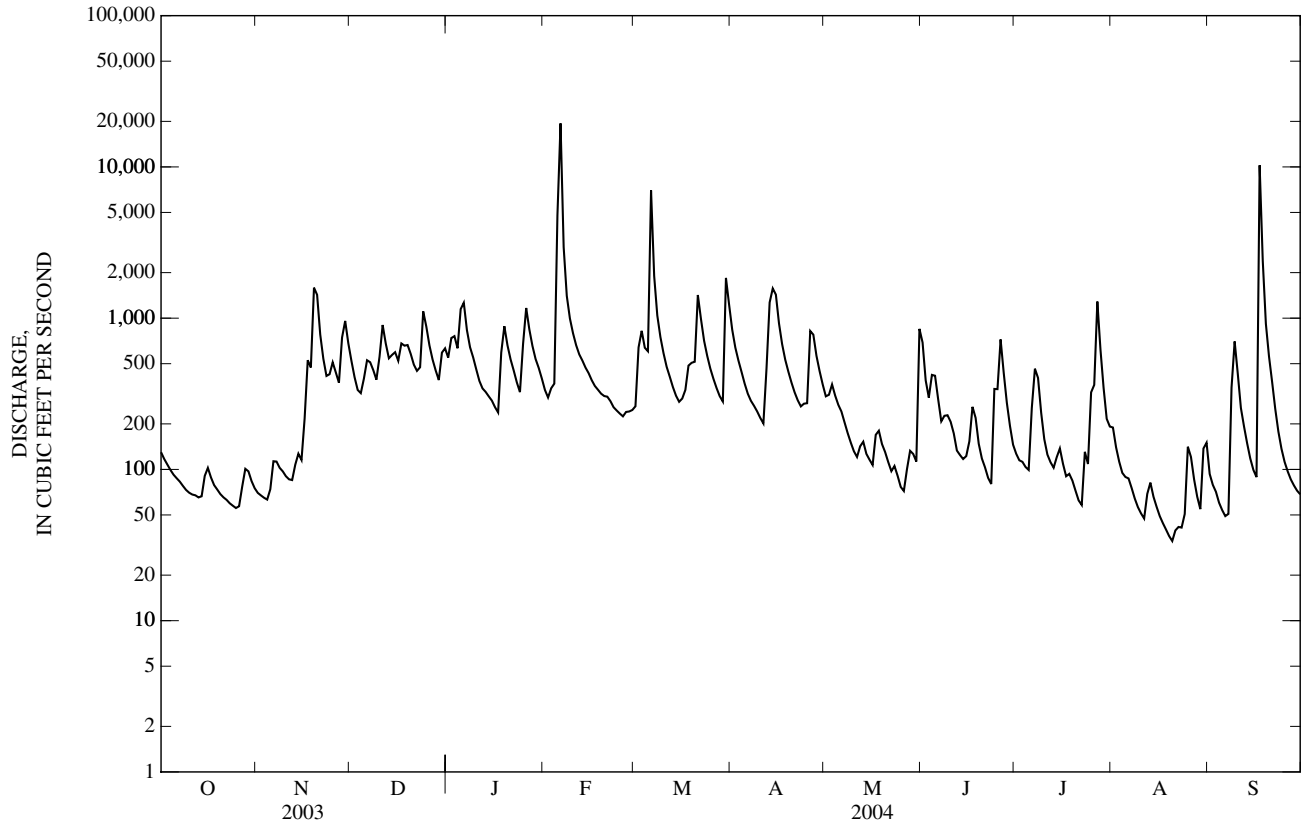
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	95.6	293	631	778	876	867	616	433	181	117	74.2	97.8
MAX	589	973	2,066	2,253	2,240	2,897	1,369	1,909	682	961	722	616
(WY)	(1990)	(1958)	(1991)	(1950)	(2003)	(1975)	(1977)	(1984)	(1989)	(1967)	(1982)	(2004)
MIN	4.76	8.05	22.1	43.6	161	206	139	66.7	10.9	9.73	10.0	7.18
(WY)	(1948)	(1954)	(1964)	(1981)	(1968)	(1983)	(1986)	(1962)	(1988)	(1944)	(1962)	(1953)

03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	221,881		172,331			
ANNUAL MEAN	608		471		420	
HIGHEST ANNUAL MEAN					743	1973
LOWEST ANNUAL MEAN					218	1986
HIGHEST DAILY MEAN	17,700	Feb 16	19,400	Feb 6	23,200	Dec 30, 1969
LOWEST DAILY MEAN	21	Aug 30	34	Aug 20	3.6	Sep 26, 1948
ANNUAL SEVEN-DAY MINIMUM	23	Aug 24	39	Aug 17	3.9	Sep 22, 1948
MAXIMUM PEAK FLOW			35,100	Feb 6	a44,800	May 27, 1973
MAXIMUM PEAK STAGE			27.52	Feb 6	a30.46	May 27, 1973
INSTANTANEOUS LOW FLOW			b33	Aug 20	3.6	Sep 26, 1948
ANNUAL RUNOFF (CFSM)	3.10		2.40		2.14	
ANNUAL RUNOFF (INCHES)	42.11		32.71		29.09	
10 PERCENT EXCEEDS	977		803		941	
50 PERCENT EXCEEDS	266		265		159	
90 PERCENT EXCEEDS	58		68		15	

a From rating curve extended above 32,000 ft^3/s, on basis of slope-area measurement.
b Also occurred Aug. 21.



03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
OCT					
01...	1320	135	189	15.0	3
DEC					
09...	1400	373	125	9.0	9
APR					
07...	0715	301	141	10.0	10
MAY					
24...	1335	86	195	21.5	2

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03415000 WEST FORK OBEY RIVER NEAR ALPINE, TN

LOCATION.--Lat 36°23'50", long 85°10'28", Overton County, Hydrologic Unit 05130105, on left bank 20 ft upstream from bridge on State Highway 52, 0.3 mile upstream from Nettlecarrier Creek, 2.4 miles east of Alpine, and at mile 8.0.

DRAINAGE AREA.--115 mi^2, includes 34 mi^2 without surface drainage.

PERIOD OF RECORD.--October 1942 to September 1971, October 1979 to November 1981. October 2001 to current year. Prior to December 1942 monthly discharges only, published in WSP 1306.

REVISIONS.--WSP 1386: 1943-45(P), 1946, 1948, 1952(P). WSP 1506: Drainage area.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 683.28 ft above NGVD of 1929. Oct. 1942 to Sept. 1971 gage at same site at datum 1.0 ft higher.

REMARKS.--Records good. 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, 15,100 ft^3/s, Mar. 21, 1955, gage height 17.30 ft present datum; minimum 2.6 ft^3/s Sept. 13-19, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of about 15.3 ft (present datum), from flood profile by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0430	*13,500	*16.29
Mar 6	0300	6,560	11.15
Sep 17	0830	6,850	11.40

Minimum discharge, 13 ft^3/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	23	208	241	180	112	297	117	215	68	102	23
2	46	22	160	403	168	420	246	191	115	47	68	20
3	42	22	138	357	190	320	210	185	89	40	52	18
4	39	21	134	285	189	258	184	142	123	34	42	17
5	36	27	168	659	3,310	395	161	127	115	47	39	16
6	33	43	235	544	7,430	3,540	148	111	85	63	37	15
7	31	40	201	354	1,590	864	139	95	79	159	30	16
8	29	34	177	276	690	437	132	82	112	110	26	91
9	27	31	155	232	421	332	121	72	74	71	23	114
10	27	30	312	184	333	258	112	64	81	54	22	67
11	26	29	364	156	277	216	107	71	61	47	20	48
12	25	32	257	145	240	188	430	68	53	43	25	39
13	24	50	209	136	211	164	800	57	49	36	30	32
14	27	53	205	128	192	152	1,080	53	41	43	24	28
15	30	45	193	123	179	141	680	49	55	45	20	24
16	30	175	181	112	159	151	391	46	52	35	18	28
17	26	222	420	107	146	148	271	45	108	31	16	3,600
18	24	155	321	533	137	211	208	45	119	35	15	695
19	23	471	288	497	132	205	172	40	73	31	14	240
20	23	398	237	311	131	258	149	38	67	25	14	148
21	22	226	200	244	126	780	133	34	49	22	19	108
22	21	164	182	202	114	422	119	32	42	25	18	85
23	21	133	197	169	108	316	110	32	41	69	16	70
24	20	150	412	153	106	257	111	32	136	44	178	59
25	20	161	312	355	101	215	105	28	95	84	101	51
26	24	139	245	438	99	188	476	30	118	106	54	46
27	34	126	204	355	102	170	293	54	80	134	38	42
28	43	713	174	300	115	155	199	53	58	86	29	39
29	33	507	158	263	111	151	157	48	47	60	24	36
30	28	292	397	236	---	558	132	38	68	47	28	34
31	25	---	296	211	---	376	---	661	---	127	28	---
TOTAL	910	4,534	7,340	8,709	17,287	12,358	7,873	2,740	2,500	1,868	1,170	5,849
MEAN	29.4	151	237	281	596	399	262	88.4	83.3	60.3	37.7	195
MAX	51	713	420	659	7,430	3,540	1,080	661	215	159	178	3,600
MIN	20	21	134	107	99	112	105	28	41	22	14	15
CFSM	0.36	1.87	2.92	3.47	7.36	4.92	3.24	1.09	1.03	0.74	0.47	2.41
IN.	0.42	2.08	3.37	4.00	7.94	5.68	3.62	1.26	1.15	0.86	0.54	2.69

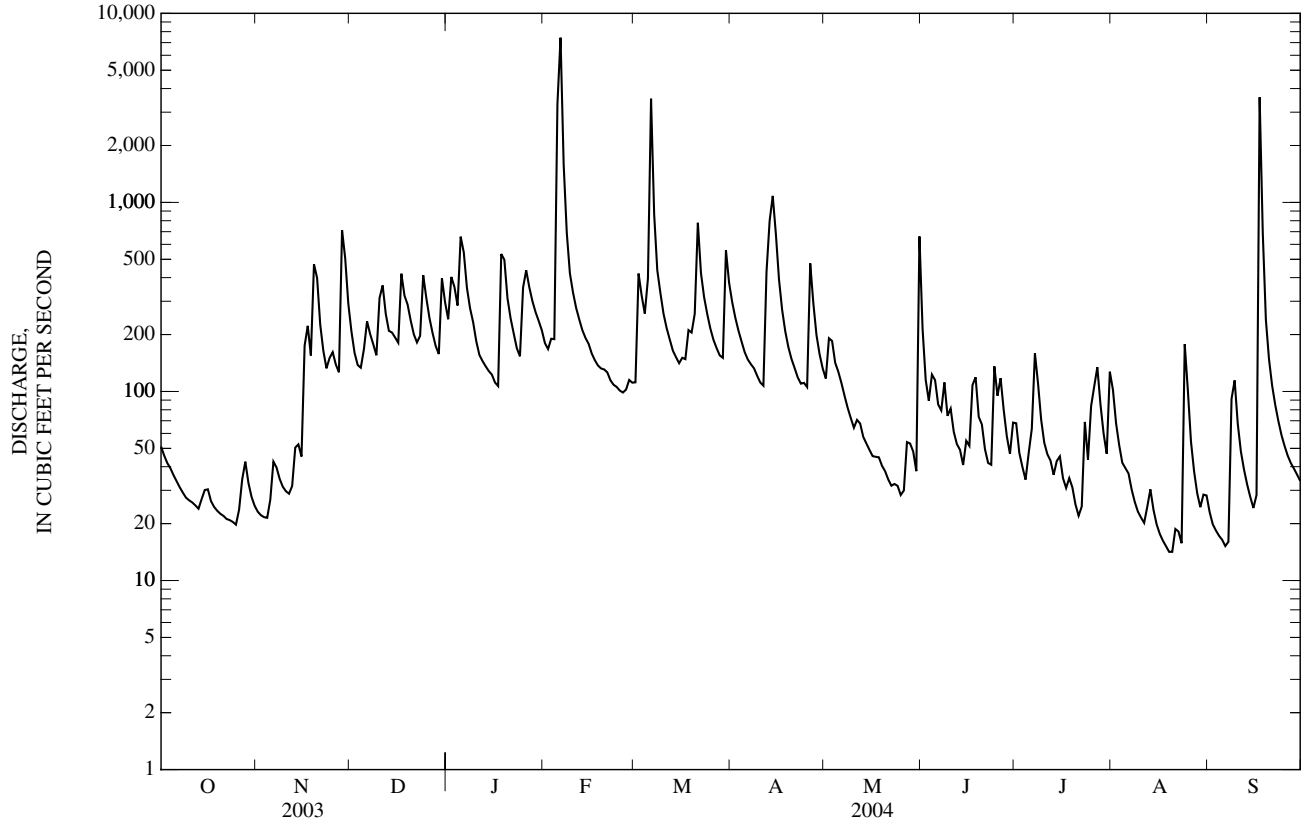
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	23.6	87.3	208	301	383	377	264	138	75.0	47.1	30.6	33.1
MAX	122	384	691	1,024	1,042	859	528	574	266	327	142	195
(WY)	(1980)	(1958)	(1952)	(1950)	(2003)	(1955)	(1962)	(2003)	(1969)	(1967)	(1971)	(2004)
MIN	3.84	4.61	6.28	11.2	79.4	130	68.8	23.5	12.3	7.33	6.09	4.23
(WY)	(1953)	(1954)	(1966)	(1981)	(1968)	(2003)	(1963)	(1948)	(1948)	(1954)	(1962)	(1980)

03415000 WEST FORK OBEY RIVER NEAR ALPINE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	96,320		73,138			
ANNUAL MEAN	264		200		163	
HIGHEST ANNUAL MEAN					268	2003
LOWEST ANNUAL MEAN					81.7	1966
HIGHEST DAILY MEAN	7,810	Feb 16	7,430	Feb 6	7,810	Feb 16, 2003
LOWEST DAILY MEAN	18	Aug 30	14	Aug 19	2.6	Sep 13, 1954
ANNUAL SEVEN-DAY MINIMUM	20	Aug 24	16	Aug 17	2.6	Sep 12, 1954
MAXIMUM PEAK FLOW			13,500	Feb 6	15,100	Mar 21, 1955
MAXIMUM PEAK STAGE			16.29	Feb 6	17.30	Mar 21, 1955
INSTANTANEOUS LOW FLOW			13	Aug 20	a2.6	Sep 13, 1954
ANNUAL RUNOFF (CFSM)	3.26		2.47		2.01	
ANNUAL RUNOFF (INCHES)	44.24		33.59		27.31	
10 PERCENT EXCEEDS	409		368		362	
50 PERCENT EXCEEDS	99		110		50	
90 PERCENT EXCEEDS	26		24		6.4	

a Also occurred Sept. 14-19, 1954.



03417500 CUMBERLAND RIVER AT CELINA, TN

WATER-QUALITY RECORDS

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 mi^2.

PERIOD OF RECORD.--November 1991 to September 1997, October 1999 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1991 to September 1997, October 1999 to September 2004 (discontinued).
pH: November 1991 to September 1997, October 1999 to September 2004 (discontinued).
WATER TEMPERATURE: November 1991 to September 1997, October 1999 to September 2004 (discontinued).
DISSOLVED OXYGEN: October 1992 to September 1997, October 1999 to September 2004 (discontinued).

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Lake Cumberland (station 03413500) and Dale Hollow Lake (station 03416500). Interruptions in the record were due to instrument malfunctions. Records for water temperature are good, for specific conductance and pH are good, for dissolved oxygen are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 280 microsiemens, Aug. 29, 1992; minimum, 113 microsiemens, Mar. 27, 1994.
pH: Maximum, 8.5 units, Mar. 3, 4, 6, 1992; minimum, 6.2 units, Sept. 14, 1993.
WATER TEMPERATURE: Maximum, 20.3°C, Sept. 2, 2002; minimum, 2.5°C, Feb. 9, 1995.
DISSOLVED OXYGEN: Maximum, 15.3 mg/L, Jan. 29, 2000; minimum, 5.0 mg/L, Sept. 14, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 218 microsiemens, Feb. 4; minimum, 137 microsiemens, Feb. 6.
pH: Maximum, 8.3 units, May 24; minimum, 7.2 units, many days.
WATER TEMPERATURE: Maximum, 19.9°C, Sept. 8; minimum, 5.4°C, Feb. 1.
DISSOLVED OXYGEN: Maximum, 13.3 mg/L, Feb. 23, 24; minimum, 5.0 mg/L, Sept. 14.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03417500 CUMBERLAND RIVER AT CELINA, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	213	210	211	196	193	194	186	180	183	182	177	179
2	215	210	211	205	193	199	180	176	177	184	179	181
3	218	213	216	---	---	---	180	175	177	186	183	184
4	218	211	214	203	201	202	178	175	176	194	184	189
5	217	143	187	---	---	---	179	176	177	198	193	196
6	153	137	145	---	---	---	177	173	175	193	188	190
7	206	149	180	---	---	---	178	173	175	196	193	195
8	213	206	211	195	193	194	178	175	176	197	192	194
9	214	212	213	195	190	192	180	176	178	193	189	191
10	213	210	211	193	189	190	179	174	177	192	190	191
11	211	210	210	190	187	188	177	174	176	192	190	191
12	211	210	210	190	187	188	191	176	181	190	188	189
13	210	209	210	190	186	188	193	181	187	189	186	187
14	210	208	209	187	184	185	198	191	194	187	184	185
15	209	207	208	187	184	185	207	198	202	187	184	185
16	210	206	207	187	185	186	209	204	207	189	185	187
17	210	198	205	187	185	186	206	199	202	189	186	188
18	203	198	200	186	183	185	200	195	198	190	184	187
19	203	197	199	186	183	185	198	193	195	189	180	185
20	201	196	198	187	182	184	196	190	193	187	181	184
21	201	196	198	191	184	187	194	187	191	185	181	183
22	200	196	198	192	185	189	192	170	183	185	181	183
23	200	195	197	186	183	184	187	165	174	191	183	186
24	200	195	197	185	178	181	193	186	189	189	185	187
25	198	193	195	187	181	183	199	193	197	184	182	183
26	195	192	193	185	179	182	200	192	197	186	180	183
27	198	193	196	181	175	178	193	185	190	195	183	187
28	198	193	195	180	177	179	187	182	185	197	187	192
29	195	193	194	178	172	174	186	180	182	196	191	193
30	---	---	---	183	177	180	184	179	182	191	185	187
31	---	---	---	188	183	186	---	---	---	191	184	187
MONTH	218	137	201	205	172	186	209	165	186	198	177	187
		JUNE			JULY			AUGUST			SEPTEMBER	
1	202	191	194	189	174	182	---	---	---	194	191	192
2	203	194	198	182	176	180	199	187	196	194	192	193
3	195	188	192	183	178	180	197	178	184	---	---	---
4	190	182	185	183	177	178	195	181	185	---	---	---
5	195	182	189	180	174	176	200	194	196	---	---	---
6	195	189	192	190	171	180	199	196	197	---	---	---
7	191	188	190	199	174	188	199	196	197	180	175	178
8	191	186	189	206	199	203	198	194	196	178	175	177
9	189	186	187	208	191	197	198	195	196	178	174	176
10	189	185	187	192	179	186	197	195	196	176	174	175
11	188	185	187	184	180	182	197	196	197	179	175	176
12	188	186	187	182	179	180	198	197	197	176	172	174
13	188	184	186	181	176	179	198	197	198	174	172	173
14	189	187	188	199	180	186	198	196	197	174	172	173
15	188	186	187	205	190	199	197	195	196	173	172	173
16	190	186	187	213	190	202	196	195	196	174	173	173
17	188	185	186	195	187	191	196	195	196	185	157	169
18	187	185	187	192	181	186	196	194	195	179	175	177
19	188	186	187	184	177	180	195	192	194	188	178	184
20	190	188	189	186	179	182	192	188	188	188	187	187
21	193	189	191	182	181	182	189	188	189	188	184	186
22	194	188	190	183	182	182	189	188	189	184	181	182
23	195	189	192	184	181	182	190	189	190	182	180	181
24	194	189	192	185	183	184	190	189	190	180	179	180
25	196	189	192	190	185	186	191	189	190	181	179	180
26	194	187	190	193	185	188	196	189	191	183	181	182
27	194	188	191	195	187	190	196	189	191	183	182	182
28	209	191	194	192	189	190	196	189	190	184	183	184
29	215	195	206	192	188	190	190	189	190	185	184	184
30	195	182	187	202	189	201	193	189	191	185	184	185
31	---	---	---	---	---	---	195	191	193	---	---	---
MONTH	215	182	190	213	171	186	200	178	193	194	157	180

03417500 CUMBERLAND RIVER AT CELINA, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03417500 CUMBERLAND RIVER AT CELINA, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.1	16.7	16.9	18.2	17.7	18.0	13.9	13.5	13.7	9.8	9.3	9.5
2	17.0	16.6	16.9	18.2	17.9	18.0	13.7	13.0	13.4	10.4	9.8	10
3	17.0	16.5	16.7	18.2	17.8	18.1	13.4	12.9	13.2	11.0	10.3	10.5
4	17.7	16.9	17.4	18.0	17.5	17.8	13.7	13.0	13.4	11.4	11.0	11.2
5	17.6	17.4	17.4	18.2	17.8	18.0	13.6	13.2	13.5	11.4	10.2	10.8
6	17.7	17.0	17.4	18.0	17.4	17.9	13.2	12.7	13.0	10.2	8.1	9.3
7	18.2	17.7	18.0	17.4	16.6	17.0	12.8	12.3	12.6	8.1	7.1	7.5
8	18.2	17.8	18.0	16.6	15.7	16.1	12.8	12.4	12.6	7.6	7.1	7.3
9	18.2	18.1	18.2	15.7	15.2	15.4	13.3	12.7	13.0	7.7	7.4	7.6
10	18.4	18.1	18.2	15.3	14.7	14.9	13.3	12.4	12.9	7.8	7.3	7.6
11	18.5	18.2	18.4	15.9	14.5	15.2	12.4	10.9	11.9	7.4	7.1	7.2
12	18.5	18.3	18.4	17.2	15.9	16.7	11.2	10.7	10.9	7.9	7.2	7.5
13	18.6	18.3	18.5	17.0	15.4	16.3	10.9	10.7	10.8	8.3	7.7	8.0
14	18.5	18.1	18.3	15.4	14.3	14.8	10.9	10.6	10.8	8.2	7.9	8.0
15	17.8	17.4	17.6	14.7	14.1	14.4	10.8	10.3	10.6	8.4	7.9	8.2
16	17.5	17.1	17.3	15.0	14.6	14.8	11.2	10.3	10.8	8.0	7.8	7.9
17	17.6	17.1	17.4	15.3	14.8	15.1	10.9	10.0	10.6	8.5	7.9	8.2
18	17.6	17.2	17.4	15.9	15.3	15.6	10.1	9.8	10.0	8.6	8.3	8.5
19	17.8	17.2	17.6	16.2	15.5	15.9	10.1	9.6	9.9	8.3	7.4	7.7
20	18.2	17.7	18.0	15.5	15.1	15.3	10.1	9.6	9.8	7.4	7.0	7.2
21	18.3	18.0	18.1	15.5	14.9	15.3	10.0	9.5	9.8	7.3	7.0	7.2
22	18.3	17.9	18.1	15.8	15.2	15.5	10.5	9.9	10.2	7.3	7.0	7.2
23	17.9	17.2	17.6	16.0	15.5	15.8	10.8	10.5	10.6	7.1	6.8	7.0
24	17.8	17.4	17.6	16.0	14.9	15.4	10.6	9.9	10.3	7.5	6.8	7.2
25	18.1	17.6	17.8	14.9	14.3	14.5	9.9	9.4	9.6	7.6	7.2	7.4
26	18.2	17.8	18.1	14.9	14.3	14.5	9.6	9.3	9.5	8.0	7.4	7.6
27	17.8	17.1	17.4	15.2	14.9	15.1	9.7	9.3	9.5	8.0	7.4	7.8
28	17.3	17.0	17.1	15.2	13.1	14.1	10.0	9.4	9.7	7.4	6.5	6.9
29	17.4	17.1	17.3	13.2	12.4	12.9	10.3	9.9	10.1	6.5	6.1	6.3
30	17.6	17.1	17.4	13.6	12.9	13.3	10.2	9.7	10	6.5	6.1	6.4
31	17.9	17.4	17.6	---	---	---	9.7	9.3	9.5	6.2	5.6	6.0
MONTH	18.6	16.5	17.7	18.2	12.4	15.7	13.9	9.3	11.2	11.4	5.6	8.0
		FEBRUARY			MARCH			APRIL			MAY	
1	6.2	5.4	5.8	7.2	6.7	6.9	9.1	8.0	8.4	10.2	9.1	9.5
2	6.7	5.9	6.3	8.3	7.2	7.7	8.0	7.5	7.6	10.3	9.8	10
3	6.9	6.5	6.8	---	---	---	8.3	7.5	7.9	9.9	9.2	9.7
4	6.5	6.2	6.4	8.0	7.9	7.9	9.0	8.0	8.5	10.0	9.2	9.6
5	6.9	5.7	6.1	---	---	---	8.7	8.2	8.5	11.8	10.0	10.9
6	7.0	6.2	6.6	---	---	---	8.6	8.0	8.2	11.6	10.0	10.4
7	7.0	6.6	6.9	---	---	---	9.2	8.4	8.8	10.7	10.2	10.5
8	6.6	6.2	6.4	7.0	6.7	6.9	9.6	9.1	9.3	10.6	9.9	10.3
9	6.5	6.2	6.3	6.7	6.2	6.3	9.5	9.1	9.3	10.6	10.1	10.4
10	6.8	6.3	6.6	6.6	5.9	6.3	9.2	8.5	8.8	10.7	10.2	10.5
11	6.7	6.4	6.6	6.8	6.3	6.6	8.6	8.4	8.6	11.0	10.3	10.6
12	6.7	6.4	6.5	7.4	6.6	7.0	9.5	8.4	8.9	11.3	10.3	10.8
13	6.4	6.2	6.3	7.1	6.6	6.9	9.0	8.5	8.8	11.2	10.8	10.9
14	6.3	6.0	6.1	7.0	6.5	6.7	9.4	8.4	8.8	10.9	10.3	10.6
15	6.1	5.8	6.0	7.3	6.6	7.0	10.0	8.7	9.3	11.4	10.8	11.0
16	6.1	5.6	5.9	7.7	7.2	7.5	10.2	9.3	9.7	11.8	10.8	11.2
17	6.4	6.0	6.2	7.7	7.4	7.6	10.2	9.6	9.9	12.7	11.7	12.1
18	6.4	6.0	6.3	7.6	6.9	7.3	10.1	9.0	9.6	13.6	12.6	13.1
19	6.6	6.0	6.3	8.1	7.3	7.7	10.1	9.7	10	14.0	12.8	13.3
20	6.7	6.2	6.5	8.4	7.4	7.9	10.0	9.4	9.7	14.0	13.0	13.5
21	6.7	6.3	6.5	8.4	7.7	7.9	9.4	8.8	9.0	14.0	13.0	13.5
22	6.5	6.1	6.3	7.7	6.6	7.2	11.7	9.0	10.3	14.2	13.3	13.7
23	6.6	6.0	6.3	7.2	6.2	6.7	12.0	11.2	11.8	14.3	13.2	13.7
24	6.9	6.4	6.7	8.4	6.8	7.6	11.2	11.0	11.1	14.8	13.3	13.7
25	6.8	6.4	6.6	8.8	8.1	8.5	11.6	10.8	11.2	14.1	13.2	13.6
26	6.6	6.2	6.3	9.1	8.3	8.8	11.6	10.3	11.1	13.2	12.5	12.9
27	6.8	6.3	6.6	8.8	8.5	8.7	10.3	9.7	9.9	13.4	12.4	12.7
28	7.0	6.3	6.6	9.6	8.4	9.0	9.8	9.4	9.6	13.8	12.9	13.3
29	7.0	6.4	6.7	9.4	8.9	9.1	10.3	9.0	9.6	13.8	13.0	13.6
30	---	---	---	9.3	8.4	8.9	10.6	9.7	10.2	13.0	11.5	12.3
31	---	---	---	9.5	8.8	9.1	---	---	---	14.1	12.2	13.3
MONTH	7.0	5.4	6.4	9.6	5.9	7.6	12.0	7.5	9.4	14.8	9.1	11.8

03417500 CUMBERLAND RIVER AT CELINA, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.7	13.5	14.1	14.2	13.0	13.4	18.7	17.7	18.2	18.1	17.2	17.6
2	13.5	12.2	12.7	14.1	13.2	13.6	18.7	17.5	17.8	18.3	18.1	18.2
3	12.5	11.5	11.8	14.4	13.3	13.8	17.5	16.2	17.0	---	---	---
4	13.1	11.2	12.0	14.9	13.8	14.3	16.2	15.2	15.7	---	---	---
5	12.8	11.6	12.2	15.2	14.2	14.6	15.9	15.3	15.4	---	---	---
6	11.7	11.0	11.4	15.1	14.2	14.5	15.3	14.6	14.9	---	---	---
7	11.7	10.9	11.2	15.0	14.2	14.6	15.6	14.4	15.1	19.8	19.5	19.6
8	11.8	11.4	11.6	14.8	14.0	14.4	15.5	14.9	15.2	19.9	18.7	19.4
9	11.7	11.2	11.5	14.8	14.1	14.5	15.4	15.0	15.2	18.7	17.6	17.9
10	11.6	11.2	11.4	14.9	14.4	14.6	15.2	14.7	15.0	18.6	17.6	18.0
11	11.9	11.4	11.6	15.3	14.1	14.6	15.1	14.6	14.8	19.1	18.2	18.6
12	11.9	11.5	11.7	15.3	14.7	15.0	14.9	14.6	14.7	19.1	18.7	18.9
13	12.3	11.4	11.9	15.2	14.1	14.6	14.6	14.2	14.4	18.8	18.4	18.7
14	12.4	11.9	12.1	15.6	14.2	14.9	14.9	14.2	14.5	18.6	18.4	18.5
15	12.0	11.4	11.6	15.5	14.7	15.1	15.2	14.6	14.9	18.8	18.5	18.7
16	12.0	11.2	11.5	15.0	14.2	14.5	15.5	14.8	15.2	18.9	18.2	18.7
17	12.2	11.9	12.0	14.6	13.7	14.2	15.7	15.1	15.4	18.8	18.2	18.5
18	12.2	11.6	11.9	14.7	13.8	14.2	16.0	15.3	15.6	18.4	17.9	18.2
19	12.2	11.8	12.0	14.9	14.0	14.4	16.3	15.6	16.0	19.0	18.1	18.5
20	13.1	11.9	12.5	14.7	14.1	14.4	16.2	15.7	15.9	18.3	17.8	18.0
21	13.6	12.5	13.0	14.8	13.9	14.4	15.9	15.6	15.7	18.5	17.7	18.1
22	13.2	12.3	12.8	14.7	14.1	14.4	15.8	15.4	15.6	18.2	18.0	18.1
23	12.9	12.5	12.7	14.4	13.9	14.2	16.8	15.8	16.2	18.3	17.7	18.0
24	13.0	11.9	12.4	14.6	13.8	14.2	17.0	16.5	16.7	18.2	17.8	18.0
25	13.0	12.5	12.7	14.8	14.1	14.4	16.8	16.3	16.6	18.2	17.6	17.9
26	12.7	11.8	12.1	15.0	14.8	14.8	17.4	16.5	16.9	18.2	18.0	18.1
27	13.1	11.8	12.4	15.0	14.7	14.8	17.7	16.8	17.2	18.2	17.8	18.0
28	13.7	12.6	13.1	15.2	14.2	14.7	17.7	17.0	17.4	18.2	18.0	18.1
29	13.6	13.0	13.4	15.5	14.8	15.1	17.9	17.3	17.5	18.2	17.8	18.0
30	13.7	13.0	13.4	15.6	14.9	15.2	18.0	17.4	17.7	17.8	17.2	17.5
31	---	---	---	18.5	15.1	16.8	17.5	17.2	17.4	---	---	---
MONTH	14.7	10.9	12.2	18.5	13.0	14.6	18.7	14.2	16.0	19.9	17.2	18.3

03417500 CUMBERLAND RIVER AT CELINA, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.5	8.1	8.2	7.2	7.0	7.1	8.9	8.7	8.8	10.8	10.6	10.7
2	8.6	8.2	8.4	7.4	7.0	7.2	9.1	8.7	8.9	10.7	10.5	10.6
3	8.7	8.2	8.4	7.4	7.1	7.3	9.2	8.8	9.0	10.5	10.3	10.4
4	8.6	8.1	8.2	8.1	7.4	7.7	9.3	8.9	9.1	10.4	10.3	10.3
5	8.7	8.3	8.5	7.9	7.5	7.7	9.1	8.9	9.0	10.5	10.2	10.3
6	8.6	7.8	8.0	7.6	7.4	7.5	9.2	9.0	9.2	11.1	10.5	10.7
7	8.0	7.8	7.8	7.6	7.1	7.5	9.3	9.1	9.2	11.5	11.1	11.3
8	7.9	7.7	7.8	8.2	7.6	8.0	9.3	9.2	9.3	11.5	11.3	11.4
9	8.0	7.7	7.9	8.6	8.0	8.3	9.4	9.2	9.3	11.4	11.3	11.3
10	7.8	7.6	7.6	9.1	8.6	8.8	9.6	9.2	9.3	11.5	11.3	11.4
11	7.7	7.5	7.6	9.2	8.9	9.1	10.0	9.5	9.7	11.6	11.5	11.6
12	7.6	7.3	7.4	8.9	8.3	8.5	10.0	9.9	9.9	11.7	11.4	11.6
13	7.4	7.0	7.3	8.7	8.3	8.5	10.0	9.9	10	11.4	11.3	11.4
14	7.1	6.8	6.9	8.9	8.5	8.7	10.0	9.9	9.9	11.5	11.3	11.4
15	7.3	6.7	6.8	9.0	8.5	8.8	10.4	10.0	10.2	11.5	11.3	11.4
16	6.9	6.6	6.8	8.8	8.4	8.6	10.4	10.1	10.2	11.5	11.3	11.4
17	6.7	6.6	6.6	9.2	8.7	8.9	10.4	10.2	10.3	11.5	11.2	11.3
18	7.0	6.6	6.8	9.1	8.8	9.0	10.5	10.3	10.4	11.2	11.0	11.1
19	7.0	6.8	6.9	8.8	8.2	8.5	10.5	10.4	10.4	11.3	11.0	11.1
20	7.0	6.7	6.9	8.5	8.2	8.4	10.5	10.3	10.4	11.6	11.3	11.5
21	7.0	6.6	6.8	8.3	8.2	8.2	10.6	10.4	10.5	11.7	11.5	11.6
22	6.9	6.6	6.8	8.4	8.2	8.4	10.6	10.4	10.5	11.7	11.5	11.6
23	6.6	6.4	6.5	8.4	8.2	8.3	10.4	10.3	10.3	11.8	11.6	11.7
24	7.1	6.4	6.8	8.6	8.2	8.5	10.5	10.3	10.4	11.7	11.6	11.6
25	7.2	6.8	7.0	8.6	8.0	8.4	10.8	10.5	10.7	11.6	11.4	11.5
26	7.3	6.9	7.2	8.4	8.0	8.2	10.8	10.6	10.7	11.4	11.3	11.4
27	7.2	6.9	7.1	8.3	8.1	8.2	10.8	10.7	10.7	11.4	11.1	11.2
28	7.2	6.8	7.0	9.1	8.2	8.8	10.8	10.7	10.7	11.8	11.2	11.5
29	7.2	6.8	7.0	9.4	8.7	9.1	10.7	10.6	10.6	12.0	11.6	11.8
30	7.3	7.1	7.2	8.8	8.6	8.7	10.8	10.6	10.7	12.1	11.8	12.0
31	7.4	7.1	7.2	---	---	---	10.9	10.7	10.8	12.2	11.9	12.1
MONTH	8.7	6.4	7.3	9.4	7.0	8.3	10.9	8.7	10.0	12.2	10.2	11.3
		FEBRUARY			MARCH			APRIL			MAY	
1	12.3	12.1	12.3	---	---	---	12.3	11.9	12.2	12.0	11.8	11.9
2	12.4	12.0	12.2	---	---	---	12.5	12.2	12.4	11.9	11.7	11.8
3	12.1	11.8	12.0	---	---	---	12.5	12.3	12.4	12.2	11.7	11.9
4	12.3	11.9	12.1	---	---	---	12.6	12.3	12.4	12.6	12.2	12.4
5	12.3	11.9	12.1	---	---	---	12.8	12.3	12.6	12.6	12.3	12.5
6	12.1	11.5	11.9	---	---	---	12.7	12.6	12.6	12.3	12.2	12.3
7	11.8	11.3	11.6	---	---	---	12.6	12.4	12.6	12.4	11.8	12.2
8	12.3	11.4	11.9	---	---	---	12.6	12.3	12.4	12.3	11.8	12.1
9	12.5	11.3	11.9	---	---	---	12.6	12.3	12.5	12.2	11.5	12.0
10	12.7	11.2	12.0	---	---	---	12.5	12.2	12.4	12.2	10.8	11.7
11	13.1	12.1	12.6	---	---	---	12.4	12.1	12.3	11.9	10.5	11.2
12	13.1	12.1	12.8	---	---	---	12.3	11.5	11.8	12.0	10.7	11.2
13	13.2	12.2	12.7	---	---	---	11.8	11.6	11.7	11.3	9.2	10.1
14	13.0	12.4	12.6	---	---	---	11.7	11.6	11.7	---	---	---
15	13.2	12.0	12.5	---	---	---	12.0	11.7	11.9	---	---	---
16	12.9	12.1	12.6	---	---	---	12.3	11.9	12.2	---	---	---
17	12.7	12.0	12.2	---	---	---	12.1	12.0	12.1	---	---	---
18	12.7	12.0	12.4	---	---	---	12.1	11.9	12.0	---	---	---
19	12.7	12.4	12.6	---	---	---	12.1	12.0	12.1	---	---	---
20	12.6	12.4	12.5	---	---	---	12.1	12.0	12.1	---	---	---
21	12.7	12.3	12.5	---	---	---	12.1	11.9	12.0	---	---	---
22	13.0	12.5	12.8	---	---	---	11.9	10.8	11.4	---	---	---
23	13.3	12.7	13.0	---	---	---	11.2	10.8	11.0	---	---	---
24	13.3	12.8	13.1	12.4	12.3	12.3	11.5	11.2	11.3	---	---	---
25	---	---	---	12.3	12.2	12.3	11.3	11.3	11.3	11.6	11.4	11.5
26	---	---	---	12.3	12.2	12.2	12.0	11.2	11.6	11.5	10.9	11.3
27	---	---	---	12.2	12.0	12.2	12.1	11.9	12.0	11.0	9.8	10.6
28	---	---	---	12.1	11.9	12.0	12.1	11.9	12.0	10.3	9.8	10.1
29	---	---	---	12.1	11.9	12.0	12.2	11.9	12.1	10.6	9.8	10.3
30	---	---	---	12.0	11.9	12.0	12.1	11.8	11.9	10.9	10.4	10.6
31	---	---	---	12.0	11.9	11.9	---	---	---	10.9	9.3	10.0
MONTH	13.3	11.2	12.4	12.4	11.9	12.1	12.8	10.8	12.0	12.6	9.2	11.4

03417500 CUMBERLAND RIVER AT CELINA, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.7	9.2	9.4	9.1	8.5	8.9	---	---	---	8.0	6.8	7.5
2	10.6	9.7	10.2	9.2	8.7	8.9	---	---	---	7.7	7.3	7.5
3	10.5	10.2	10.3	9.4	9.0	9.2	---	---	---	---	---	---
4	10.3	9.4	9.9	9.5	9.1	9.2	---	---	---	---	---	---
5	9.8	9.4	9.6	9.4	9.1	9.2	---	---	---	---	---	---
6	10.1	9.8	10	9.4	8.8	9.1	---	---	---	---	---	---
7	10.0	9.9	10	9.5	9.0	9.2	---	---	---	7.1	6.3	6.7
8	10.2	9.9	10.0	9.4	8.9	9.1	---	---	---	6.7	5.4	6.1
9	10.0	9.8	9.9	9.3	8.3	8.9	8.1	7.6	7.9	6.8	5.3	5.9
10	10.0	9.7	9.9	---	---	---	8.0	7.2	7.7	7.6	5.7	6.8
11	9.9	9.6	9.7	---	---	---	7.4	6.8	7.2	7.9	6.6	7.3
12	10.0	9.6	9.7	---	---	---	7.2	6.6	6.9	7.7	6.3	7.1
13	9.8	9.5	9.7	---	---	---	7.1	6.5	6.9	7.2	5.6	6.6
14	9.7	9.3	9.5	---	---	---	7.4	6.4	7.0	7.5	5.0	6.5
15	9.8	9.5	9.6	---	---	---	7.4	6.6	7.1	7.3	6.4	6.9
16	9.6	9.5	9.6	---	---	---	7.3	6.6	7.0	7.3	5.7	6.6
17	9.7	9.5	9.6	---	---	---	7.3	6.5	6.9	8.6	7.1	7.9
18	9.6	9.4	9.5	---	---	---	7.1	6.1	6.7	7.8	7.2	7.5
19	9.5	9.3	9.4	---	---	---	7.0	6.0	6.6	7.7	7.2	7.5
20	9.7	9.3	9.4	---	---	---	6.9	6.2	6.5	8.3	7.5	7.9
21	9.7	9.4	9.6	---	---	---	6.8	5.8	6.3	8.3	7.8	8.1
22	9.7	9.4	9.5	---	---	---	6.9	5.6	6.3	8.1	7.7	7.9
23	9.8	9.2	9.3	---	---	---	7.0	6.5	6.7	7.9	7.2	7.5
24	9.8	9.2	9.4	---	---	---	7.2	6.2	6.8	7.3	6.9	7.1
25	9.5	9.0	9.2	---	---	---	7.3	6.2	7.0	6.9	6.4	6.7
26	9.4	9.0	9.2	8.4	8.1	8.2	7.2	6.3	6.9	6.8	6.2	6.6
27	9.4	9.0	9.2	8.5	8.1	8.2	7.2	6.4	6.9	7.1	6.6	6.9
28	9.4	9.0	9.2	8.4	8.1	8.2	7.1	6.2	6.8	7.1	6.8	6.9
29	9.4	9.0	9.2	8.5	8.2	8.3	7.2	6.5	6.8	7.6	6.9	7.3
30	9.4	8.9	9.1	8.5	8.2	8.3	7.5	6.6	7.1	8.1	7.5	7.8
31	---	---	---	8.6	6.9	7.9	7.6	6.0	7.2	---	---	---
MONTH	10.6	8.9	9.6	9.5	6.9	8.7	8.1	5.6	6.9	8.6	5.0	7.1

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03418070 ROARING RIVER ABOVE GAINESBORO, TN

LOCATION.--Lat 36°21'03", long 85°32'44", 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 9.9.

DRAINAGE AREA.--210 mi^2, includes 34 mi^2 without surface drainage.

PERIOD OF RECORD.--October 1974 to September 1991. October 1992 to September 1997, crest-stage partial record station. October 2001 to current year. Prior to December 1942 monthly discharges only, published in WSP 1306.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 520.56 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated daily discharges, which are fair, and those below 5.0 ft^3/s, which are poor. Minimum discharge for current year and period of record, no flow many days each year. 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, 22,400 ft^3/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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0530	*17,100	*19.64	Sep 17	1030	5,090	11.66
Mar 6	0500	8,880	15.21				

Minimum discharge, no flow, many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	1.2	461	546	286	136	247	125	448	64	61	0.25
2	23	1.2	346	697	262	659	206	276	181	42	29	4.2
3	19	1.2	280	642	375	493	175	330	137	19	12	16
4	16	1.2	273	519	375	360	152	210	122	6.5	5.9	1.9
5	13	13	308	1,020	6,610	397	132	168	112	7.5	6.8	0.00
6	9.7	14	355	e1,050	12,800	5,530	118	143	e87	41	7.3	0.00
7	6.3	10	322	e727	3,180	1,610	110	117	e80	79	2.1	0.00
8	3.4	7.4	280	571	1,390	775	105	98	e150	63	0.06	12
9	1.8	5.2	236	494	930	534	95	85	81	30	0.00	47
10	1.8	3.6	424	409	700	381	84	77	50	10	0.00	26
11	2.3	2.9	672	349	558	288	80	73	33	7.2	0.00	12
12	1.5	6.4	469	318	465	236	398	68	29	9.3	0.03	2.2
13	1.1	27	376	284	397	191	2,070	62	91	8.6	0.00	0.00
14	3.1	9.5	353	249	345	163	1,640	61	61	16	0.00	0.00
15	4.4	6.8	321	220	308	143	993	57	37	11	0.00	0.00
16	2.1	38	323	191	269	135	593	53	56	3.8	0.00	0.02
17	1.1	188	1,100	174	243	125	407	46	178	0.02	0.00	3,110
18	1.1	150	740	832	222	165	298	38	340	0.00	0.00	1,260
19	1.1	606	591	957	208	150	237	30	224	0.00	0.00	351
20	1.1	528	469	625	197	200	198	20	143	0.00	0.00	190
21	1.1	269	385	492	191	778	170	11	87	0.00	0.58	115
22	1.1	163	340	410	170	456	145	34	66	0.03	4.1	76
23	1.1	111	456	348	157	310	158	37	63	33	0.00	56
24	1.1	252	871	311	147	237	175	17	49	8.5	0.18	45
25	1.1	269	650	658	135	193	130	7.7	43	26	19	37
26	2.1	177	509	806	133	163	432	7.8	57	84	24	31
27	7.3	135	415	597	141	144	296	99	48	98	3.5	26
28	5.1	2,100	353	495	144	125	206	83	28	43	4.0	22
29	3.0	1,170	315	415	139	122	165	81	15	18	15	19
30	1.3	639	1,060	375	---	416	143	56	14	7.0	7.8	17
31	1.2	---	712	325	---	328	---	1,090	---	51	12	---
TOTAL	168.4	6,905.6	14,765	16,106	31,477	15,943	10,358	3,660.5	3,110	786.45	214.35	5,476.57
MEAN	5.43	230	476	520	1,085	514	345	118	104	25.4	6.91	183
MAX	30	2,100	1,100	1,050	12,800	5,530	2,070	1,090	448	98	61	3,110
MIN	1.1	1.2	236	174	133	122	80	7.7	14	0.00	0.00	0.00
CFSM	0.03	1.31	2.71	2.95	6.17	2.92	1.96	0.67	0.59	0.14	0.04	1.04
IN.	0.04	1.46	3.12	3.40	6.65	3.37	2.19	0.77	0.66	0.17	0.05	1.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	68.3	175	407	515	606	581	375	289	89.2	35.4	43.8	75.7
MAX	476	539	1,440	1,271	1,671	2,507	1,015	1,361	483	147	331	261
(WY)	(1990)	(1980)	(1991)	(1979)	(2003)	(1975)	(1979)	(1984)	(1981)	(1989)	(1982)	(1982)
MIN	0.00	0.39	0.43	0.22	74.3	36.6	8.05	0.46	0.00	0.06	0.00	0.00
(WY)	(1979)	(1981)	(1981)	(1981)	(1981)	(1983)	(1986)	(1985)	(1984)	(1984)	(1975)	(1976)

03418070 ROARING RIVER ABOVE GAINESBORO, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	134,158.78		108,970.87			
ANNUAL MEAN	368		298		270	
HIGHEST ANNUAL MEAN					455	1975
LOWEST ANNUAL MEAN					83.0	1986
HIGHEST DAILY MEAN	12,500	Feb 16	12,800	Feb 6	15,800	Mar 13, 1975
LOWEST DAILY MEAN	0.00	Jul 5	0.00	Jul 18	0.00	Oct 28, 1974
ANNUAL SEVEN-DAY MINIMUM	0.09	Sep 15	0.00	Aug 13	0.00	Oct 28, 1974
MAXIMUM PEAK FLOW			17,100	Feb 6	22,400	Mar 12, 1975
MAXIMUM PEAK STAGE			19.64	Feb 6	21.83	Mar 12, 1975
INSTANTANEOUS LOW FLOW			a0.00	Jul 17		
ANNUAL RUNOFF (CFSM)	2.09		1.69		1.53	
ANNUAL RUNOFF (INCHES)	28.36		23.03		20.85	
10 PERCENT EXCEEDS	788		629		641	
50 PERCENT EXCEEDS	105		112		44	
90 PERCENT EXCEEDS	1.1		1.1		0.00	

a See REMARKS.
e Estimated

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN

WATER-QUALITY RECORDS

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.

DRAINAGE AREA.--8,095 mi^2.

PERIOD OF RECORD.--October 1980 to September 1997, October 1999 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1980 to September 1997, October 1999 to September 2004 (discontinued).
pH: October 1990 to September 1997, October 1999 to September 2004 (discontinued).
WATER TEMPERATURE: October 1980 to September 1997, October 1999 to September 2004 (discontinued).
DISSOLVED OXYGEN: October 1980 to September 1997, October 1999 to September 2004 (discontinued).

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Cordell Hull Dam and other reservoirs above station. Interruptions in the record were due to instrument malfunctions. All parameters affected by release from Cordell Hull Dam. Records for water temperature are good, for specific conductance are good, for pH are good, for dissolved oxygen are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 290 microsiemens, Mar. 27, 1990; minimum, 140 microsiemens, Sept. 3, 1984.
pH: Maximum, 8.9 units, Aug. 14, 29, 2002; minimum, 6.6 units, May 31, 1994, Jan. 1, 2002.
WATER TEMPERATURE: Maximum, 23.7°C, July 13, 1995 July 31, 1997; minimum, 2.0°C, Jan. 12, 15-21, 1981.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Mar. 4, 1983; minimum, 3.7 mg/L, Aug. 5, 1988.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 222 microsiemens, Jan. 12; minimum, 144 microsiemens, Feb. 7, 8.
pH: Maximum, 8.4 units, June 2, July 9, 15, Sept. 30; minimum, 7.2 units, Oct. 3, 4, 12, 13, May 23.
WATER TEMPERATURE: Maximum, 22.0°C, Sept. 15; minimum, 5.7°C, Feb. 5.
DISSOLVED OXYGEN: Maximum, 13.9 mg/L, Feb. 19.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	205	199	202	199	196	197	203	199	201	211	210	210
2	204	201	202	200	198	199	199	196	197	211	209	210
3	209	202	204	199	198	198	209	199	205	210	209	210
4	208	201	203	200	197	198	211	208	209	211	210	210
5	206	201	203	200	198	199	213	210	211	211	209	210
6	207	202	204	200	197	198	212	208	210	211	208	209
7	206	200	202	199	197	198	209	208	208	211	208	210
8	203	200	201	199	197	198	209	206	207	215	211	213
9	202	199	200	201	197	199	209	206	207	218	214	216
10	203	199	201	202	195	199	210	207	209	219	216	218
11	205	199	201	198	195	196	210	208	209	221	218	220
12	203	195	198	198	196	196	209	207	207	222	218	219
13	203	195	197	201	195	197	209	207	208	219	217	218
14	198	195	196	200	197	198	211	207	209	220	217	218
15	198	194	195	202	198	200	216	210	213	220	217	218
16	195	194	194	205	201	202	217	214	216	219	216	217
17	197	194	195	205	202	203	218	214	215	216	214	215
18	199	194	195	205	202	203	215	213	214	220	212	213
19	200	194	195	204	203	204	214	213	214	212	207	210
20	201	194	196	206	204	205	215	214	214	209	206	208
21	200	195	196	210	206	207	216	215	216	209	206	207
22	201	196	197	216	210	214	217	215	216	209	207	208
23	199	196	197	218	210	214	216	214	215	209	206	207
24	199	195	196	212	208	209	215	210	213	212	209	211
25	198	195	196	210	208	209	210	210	210	216	209	211
26	198	193	195	209	207	208	211	210	211	211	209	210
27	198	193	194	211	207	208	214	211	213	213	209	211
28	196	194	194	211	207	209	215	214	214	211	209	210
29	201	193	195	208	205	206	215	212	214	211	209	210
30	197	194	195	206	200	203	213	212	212	212	209	211
31	198	194	195	---	---	---	212	211	211	214	210	211
MONTH	209	193	198	218	195	202	218	196	211	222	206	212

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	213	210	211	196	193	195	191	187	188	196	194	195
2	217	211	213	196	193	195	190	187	188	196	191	192
3	215	212	214	195	193	194	190	186	188	192	189	191
4	216	214	215	197	193	195	190	187	188	190	188	189
5	216	211	214	197	194	195	194	189	191	188	186	187
6	215	161	200	202	196	199	195	191	193	187	185	186
7	161	144	149	204	193	201	194	190	192	190	185	187
8	149	144	146	193	173	180	192	188	190	191	189	190
9	177	149	161	180	176	178	193	186	189	192	190	191
10	196	177	188	190	175	182	192	185	188	192	188	190
11	202	196	199	195	190	193	192	185	186	189	187	187
12	203	201	202	195	193	194	193	183	186	187	186	186
13	202	200	201	195	193	194	185	182	183	188	185	186
14	201	199	200	195	193	194	183	182	183	187	184	185
15	201	199	200	195	193	194	187	183	185	187	183	184
16	200	198	199	195	192	194	186	184	185	186	184	185
17	199	197	198	194	193	193	187	184	186	187	184	185
18	198	195	197	193	192	193	190	187	188	187	184	186
19	198	196	197	194	192	193	195	190	192	187	185	186
20	199	197	198	195	193	194	199	195	197	188	185	186
21	200	198	198	195	192	193	199	196	197	187	184	185
22	198	196	198	194	193	193	199	193	195	186	184	185
23	198	195	197	194	193	194	193	190	191	188	185	186
24	197	195	196	196	193	194	---	---	---	187	184	185
25	199	196	197	198	194	196	---	---	---	189	185	187
26	197	195	196	199	193	196	177	169	174	190	188	189
27	197	195	196	196	190	193	173	167	169	191	190	190
28	201	195	196	194	190	191	180	173	176	191	190	191
29	198	194	195	193	191	192	188	180	183	192	190	191
30	---	---	---	193	190	191	195	187	191	196	190	192
31	---	---	---	191	189	189	---	---	---	192	188	189
MONTH	217	144	196	204	173	193	199	167	187	196	183	188
		JUNE			JULY			AUGUST			SEPTEMBER	
1	190	188	189	184	182	182	200	193	197	192	189	190
2	192	190	191	184	182	182	204	199	201	193	190	191
3	194	191	192	186	182	183	201	196	198	195	189	191
4	198	190	192	185	182	183	198	196	197	191	189	190
5	191	189	190	187	183	184	198	194	196	195	190	192
6	192	191	192	186	183	184	195	191	193	199	190	194
7	193	189	191	185	183	183	196	190	193	201	193	197
8	191	187	188	186	182	183	198	193	195	204	199	201
9	191	186	187	187	183	184	202	196	198	206	197	202
10	193	186	188	188	183	184	204	198	200	208	197	204
11	195	188	190	187	183	184	203	199	201	207	198	203
12	198	188	191	187	184	185	204	199	202	208	200	204
13	194	187	191	188	185	186	203	199	202	209	198	205
14	196	187	191	188	186	187	206	199	201	209	199	205
15	192	186	189	190	187	188	204	198	200	209	199	204
16	191	186	188	190	187	188	202	197	199	209	200	205
17	191	185	187	190	186	188	202	196	199	208	199	204
18	188	183	185	190	187	188	205	197	199	206	193	200
19	188	182	185	192	188	189	200	194	198	203	194	199
20	189	181	184	192	187	190	202	195	198	204	199	202
21	185	181	183	196	190	192	200	195	198	203	197	201
22	185	182	183	197	189	193	202	195	198	205	198	202
23	185	182	183	195	192	194	203	193	197	201	196	198
24	190	182	184	195	192	193	198	193	195	197	192	194
25	188	182	183	197	193	194	198	193	195	201	197	198
26	186	182	183	198	194	196	196	188	191	204	199	202
27	185	182	183	195	193	194	190	188	188	205	204	204
28	185	181	182	196	192	194	191	188	189	206	201	203
29	184	180	181	194	192	193	192	190	190	202	200	201
30	184	180	182	193	191	192	191	189	190	204	199	201
31	---	---	---	194	192	193	192	189	190	---	---	---
MONTH	198	180	187	198	182	188	206	188	196	209	189	200

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.2	18.7	19.0	17.1	16.9	17.0	12.5	11.9	12.3	9.5	9.2	9.3
2	18.7	18.3	18.6	17.3	16.9	17.1	11.9	11.5	11.6	9.7	9.5	9.6
3	18.3	18.0	18.2	17.4	17.0	17.2	11.6	11.4	11.5	10.0	9.6	9.8
4	18.3	17.9	18.2	17.4	17.1	17.3	11.8	11.4	11.6	10.8	10.0	10.4
5	17.9	17.8	17.8	17.8	17.4	17.5	11.8	11.6	11.7	10.9	10.8	10.9
6	17.8	17.6	17.7	17.6	17.4	17.6	11.6	11.4	11.5	10.9	10.2	10.6
7	18.0	17.6	17.7	17.4	17.1	17.3	11.5	11.3	11.4	10.2	9.8	10.0
8	18.0	17.6	17.7	17.1	16.6	16.9	11.7	11.3	11.5	9.8	9.3	9.6
9	17.9	17.7	17.8	16.6	16.2	16.5	11.8	11.6	11.7	9.3	8.7	9.1
10	18.1	17.8	18.0	16.4	16.0	16.2	11.8	11.5	11.7	8.7	7.9	8.3
11	18.4	18.0	18.2	16.1	16.0	16.1	11.5	11.2	11.4	7.9	7.3	7.5
12	18.4	18.2	18.3	16.1	15.7	16.0	11.2	10.9	11.1	7.3	6.8	7.0
13	18.6	18.3	18.4	15.8	15.1	15.5	10.9	10.6	10.7	6.8	6.6	6.7
14	18.6	18.3	18.5	15.1	14.8	14.9	10.6	10.4	10.5	7.0	6.6	6.8
15	18.3	18.1	18.2	14.8	14.6	14.7	10.5	10.2	10.3	7.1	6.8	7.0
16	18.2	18.0	18.1	14.7	14.5	14.6	10.3	9.8	10.1	7.2	6.9	7.0
17	18.1	17.8	17.9	15.1	14.4	14.6	9.8	9.4	9.6	7.5	7.1	7.3
18	17.8	17.5	17.7	14.7	14.4	14.6	9.4	9.2	9.3	7.8	7.5	7.7
19	17.5	17.2	17.4	14.6	14.4	14.4	9.2	8.9	9.1	7.7	7.4	7.6
20	17.8	17.2	17.4	14.7	14.5	14.6	8.9	8.6	8.8	7.4	7.2	7.3
21	17.4	17.1	17.2	14.6	14.3	14.4	8.8	8.6	8.7	7.3	7.2	7.2
22	17.6	17.0	17.2	15.0	14.5	14.7	8.7	8.5	8.6	7.2	6.7	7.0
23	17.4	16.9	17.2	15.1	14.7	15.0	8.8	8.6	8.7	6.8	6.4	6.6
24	17.5	17.0	17.2	15.1	14.3	14.7	8.8	8.6	8.7	6.5	6.2	6.3
25	17.5	17.2	17.4	14.3	14.0	14.1	8.9	8.7	8.8	6.6	6.3	6.5
26	17.5	17.3	17.4	14.0	13.8	13.8	9.0	8.6	8.8	7.1	6.6	6.8
27	17.3	17.0	17.2	14.0	13.8	13.9	9.2	8.8	9.0	7.1	7.0	7.1
28	17.0	16.7	16.9	13.9	13.2	13.6	9.0	8.9	9.0	7.0	6.9	6.9
29	16.7	16.5	16.7	13.2	13.0	13.1	9.0	8.8	8.9	7.1	6.9	6.9
30	16.9	16.5	16.7	13.1	12.5	12.8	9.1	8.8	8.9	7.0	6.8	6.9
31	17.1	16.8	17.0	---	---	---	9.2	8.9	9.1	6.8	6.4	6.5
MONTH	19.2	16.5	17.7	17.8	12.5	15.4	12.5	8.5	10.1	10.9	6.2	7.9
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	6.2	6.4	7.3	7.2	7.2	11.2	10.8	11.1	14.5	14.1	14.3
2	6.5	6.3	6.3	7.8	7.3	7.6	11.0	10.5	10.7	14.1	13.6	13.8
3	6.3	6.0	6.1	7.9	7.7	7.8	11.0	10.4	10.7	13.6	12.8	13.3
4	6.0	5.8	6.0	8.6	7.9	8.2	11.3	10.6	10.8	13.1	12.5	12.8
5	6.0	5.7	5.9	8.9	8.4	8.6	11.3	10.6	10.9	13.1	12.8	12.9
6	6.5	6.0	6.4	9.7	8.9	9.4	11.3	10.7	10.9	14.0	12.8	13.3
7	7.1	6.5	6.9	10.0	9.6	9.8	11.3	10.8	11.0	13.8	12.9	13.4
8	6.9	6.8	6.9	10.7	10.0	10.4	11.4	10.9	11.1	14.2	13.6	13.9
9	6.9	6.8	6.8	10.6	10.0	10.3	12.0	11.0	11.4	14.6	13.9	14.2
10	6.8	6.7	6.8	10.0	8.8	9.5	11.9	11.5	11.7	14.4	14.1	14.3
11	6.7	6.6	6.7	8.8	7.9	8.2	11.7	11.4	11.6	14.6	14.2	14.3
12	7.0	6.7	6.8	7.9	7.4	7.5	11.5	11.2	11.4	15.2	14.2	14.6
13	6.9	6.7	6.8	7.6	7.1	7.4	11.2	10.5	10.9	14.9	14.3	14.6
14	6.8	6.6	6.7	7.6	7.4	7.5	10.5	9.9	10.0	15.0	14.2	14.6
15	6.7	6.3	6.5	7.9	7.6	7.7	10.4	9.7	10.0	14.9	14.3	14.7
16	6.3	6.0	6.1	8.1	7.9	8.0	11.2	10.2	10.5	16.0	14.7	15.0
17	6.2	6.1	6.2	8.3	8.0	8.1	11.4	10.6	11.0	16.4	14.7	15.2
18	6.3	6.1	6.2	8.7	8.2	8.4	12.4	11.4	11.9	16.7	14.7	15.6
19	6.6	6.2	6.4	9.2	8.6	8.9	12.9	12.2	12.5	16.4	15.0	15.7
20	6.8	6.5	6.6	9.5	9.1	9.3	13.5	12.8	13.1	17.2	14.8	16.0
21	7.0	6.7	6.8	9.4	9.2	9.4	13.4	13.2	13.3	16.9	14.9	15.8
22	7.2	6.8	6.9	9.2	8.9	9.1	13.8	13.1	13.3	16.1	15.1	15.6
23	7.1	6.9	7.0	9.2	8.9	9.0	13.2	12.6	12.9	16.8	15.1	15.7
24	7.2	7.0	7.1	9.5	9.0	9.2	---	---	---	17.3	15.4	16.2
25	7.1	6.8	7.0	9.8	9.2	9.5	---	---	---	17.8	15.7	16.3
26	6.9	6.6	6.8	9.8	9.5	9.7	13.0	12.4	12.6	17.6	15.7	16.7
27	6.8	6.6	6.7	10.3	9.5	9.9	13.8	13.0	13.5	18.1	16.0	16.8
28	7.1	6.7	6.9	11.0	10.0	10.5	14.4	13.5	13.9	18.3	16.6	17.3
29	7.3	7.0	7.1	11.2	10.8	10.9	14.3	13.9	14.1	20.4	17.3	18.0
30	---	---	---	11.6	11.1	11.3	14.5	14.1	14.2	21.3	17.8	19.1
31	---	---	---	11.5	11.2	11.3	---	---	---	21.0	18.8	20.1
MONTH	7.3	5.7	6.6	11.6	7.1	9.0	14.5	9.7	11.8	21.3	12.5	15.3

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.1	19.0	19.4	17.9	16.6	17.3	19.9	18.6	19.1	20.2	19.1	19.4
2	19.7	18.3	18.9	18.9	16.8	17.5	19.3	18.2	18.8	20.2	19.2	19.5
3	19.0	18.0	18.6	20.0	16.8	18.1	18.8	18.0	18.3	20.3	19.1	19.7
4	18.7	17.6	18.2	19.7	16.8	17.9	20.2	17.9	18.5	20.1	19.4	19.6
5	17.9	17.6	17.8	19.6	16.9	18.1	20.2	18.2	19.0	20.6	19.4	19.7
6	17.9	17.2	17.6	20.0	17.1	18.5	21.2	19.0	19.8	20.8	19.2	19.6
7	17.2	16.4	16.8	20.1	18.1	19.3	21.4	19.9	20.4	20.5	19.1	19.6
8	16.9	15.6	16.2	20.6	18.2	19.4	21.3	20.0	20.4	19.4	18.7	19.0
9	16.5	15.9	16.3	21.1	18.6	19.5	21.5	19.9	20.6	20.2	18.9	19.4
10	16.9	15.8	16.3	20.6	18.8	19.5	21.4	19.6	20.6	20.8	19.0	19.6
11	16.6	15.8	16.2	20.4	18.9	19.3	20.8	19.3	20.1	20.4	19.3	19.7
12	17.1	15.7	16.3	20.2	18.5	19.1	20.6	19.3	20.0	20.8	19.4	20.0
13	16.6	15.9	16.2	20.3	18.5	19.2	19.3	18.5	19.0	21.7	19.6	20.4
14	16.4	16.0	16.2	20.7	18.1	19.3	18.5	17.8	18.2	21.9	19.9	21.0
15	16.8	16.0	16.4	21.0	18.2	19.3	18.2	17.5	17.8	22.0	20.0	20.9
16	17.1	16.0	16.5	20.6	18.6	19.3	17.9	17.3	17.6	21.6	20.3	20.8
17	16.4	16.0	16.2	20.4	18.8	19.4	17.8	17.3	17.6	21.1	20.1	20.4
18	16.9	16.2	16.4	20.2	18.4	19.1	18.0	17.3	17.7	20.3	19.7	20.1
19	16.9	16.1	16.5	20.3	18.3	19.0	18.2	17.7	17.9	19.7	19.3	19.6
20	17.3	16.1	16.7	20.7	18.2	19.3	18.1	17.9	18.1	19.9	19.1	19.4
21	17.7	16.0	16.8	20.8	18.3	19.2	18.2	18.0	18.1	20.0	19.2	19.5
22	18.3	16.3	17.0	20.5	18.0	19.0	18.4	17.9	18.2	20.4	19.4	19.7
23	17.4	16.2	16.9	20.5	17.8	18.9	18.5	18.1	18.3	20.2	19.6	20.0
24	18.6	16.4	17.4	20.5	18.4	19.4	18.6	18.2	18.4	20.5	19.6	20.1
25	18.3	16.6	17.5	20.4	18.5	19.1	18.7	18.3	18.5	21.0	19.8	20.3
26	17.8	16.9	17.3	19.5	18.3	18.6	18.9	18.4	18.7	20.6	19.6	20.1
27	18.7	17.1	17.7	19.7	18.1	18.7	19.2	18.5	18.9	20.7	19.8	20.2
28	18.3	17.2	17.7	20.3	18.3	19.0	20.0	18.8	19.2	20.3	19.9	20.1
29	18.4	17.1	17.6	20.1	18.0	18.6	19.7	18.8	19.0	20.1	19.8	20.0
30	17.8	16.9	17.3	20.7	18.0	18.7	19.4	18.8	18.9	20.0	19.6	19.8
31	---	---	---	20.7	17.9	19.0	20.1	18.6	19.4	---	---	---
MONTH	20.1	15.6	17.1	21.1	16.6	18.9	21.5	17.3	18.9	22.0	18.7	19.9

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.4	6.2	7.9	8.0	7.4	7.8	---	---	---	12.0	11.7	11.9
2	8.6	7.2	8.1	8.0	7.4	7.7	10.0	9.8	9.8	11.8	11.6	11.8
3	8.4	6.1	7.9	7.9	7.4	7.7	9.8	9.6	9.7	11.8	11.6	11.7
4	8.7	5.3	8.0	7.9	7.2	7.6	10.0	9.6	9.8	11.7	11.4	11.5
5	8.7	6.8	8.3	7.9	7.0	7.7	10.0	9.7	9.9	11.5	11.1	11.3
6	8.6	5.5	8.1	7.7	7.2	7.5	10.1	9.8	10	11.2	10.9	11.1
7	8.9	6.6	8.3	7.7	7.3	7.6	10.2	9.9	10.0	11.0	10.8	10.9
8	8.9	8.3	8.7	7.7	7.3	7.6	10.2	9.9	10.1	10.9	10.7	10.8
9	8.5	7.6	8.3	8.1	7.2	7.7	10.0	9.9	9.9	---	---	---
10	8.1	7.3	7.8	8.1	7.5	7.8	10.2	9.9	10.0	---	---	---
11	7.7	4.3	7.1	8.0	7.5	7.8	10.4	10.1	10.3	---	---	---
12	7.9	5.4	7.4	8.1	7.7	8.0	10.5	10.2	10.4	11.4	10.6	10.8
13	7.6	5.3	7.1	8.3	7.8	8.1	10.5	10.2	10.4	11.2	10.7	11.0
14	7.2	6.6	7.1	8.7	8.1	8.4	10.5	10.2	10.4	11.5	11.1	11.3
15	7.3	6.0	7.1	8.7	7.8	8.5	10.5	10.4	10.5	11.7	11.3	11.6
16	7.6	7.1	7.3	8.4	7.7	8.2	10.8	10.4	10.6	11.9	11.6	11.8
17	7.5	7.2	7.3	8.5	7.8	8.2	11.0	10.6	10.8	12.0	11.8	11.9
18	7.4	6.8	7.2	8.7	8.1	8.4	11.2	10.9	11.1	12.1	11.7	12.0
19	7.4	7.1	7.3	8.9	8.6	8.7	11.2	11.2	11.2	12.2	11.9	12.0
20	7.7	6.8	7.1	8.9	8.5	8.7	11.3	11.1	11.2	12.3	11.7	12.0
21	7.7	7.1	7.4	8.6	8.4	8.5	11.4	11.2	11.3	12.3	11.5	11.9
22	8.0	7.2	7.5	8.6	8.4	8.5	11.4	11.3	11.3	12.3	11.2	11.8
23	7.9	7.2	7.6	---	---	---	11.6	11.3	11.4	12.6	11.2	11.9
24	7.9	7.2	7.6	---	---	---	11.4	11.3	11.4	12.7	11.6	12.2
25	8.0	7.0	7.6	---	---	---	11.6	11.3	11.5	13.0	11.2	12.2
26	7.8	7.1	7.5	---	---	---	11.7	11.5	11.6	12.9	11.5	11.9
27	7.9	6.8	7.6	---	---	---	11.5	11.1	11.3	---	---	---
28	7.7	7.3	7.5	---	---	---	11.2	11.1	11.1	---	---	---
29	7.7	7.0	7.4	---	---	---	11.2	11.0	11.1	---	---	---
30	7.9	7.1	7.6	---	---	---	11.2	11.1	11.2	---	---	---
31	7.9	7.0	7.7	---	---	---	11.2	11.0	11.1	---	---	---
MONTH	8.9	4.3	7.6	8.9	7.0	8.0	11.7	9.6	10.7	13.0	10.6	11.6
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	13.0	12.8	12.9	12.8	12.3	12.6	10.1	9.2	9.7
2	---	---	---	13.0	12.9	12.9	12.7	12.0	12.5	10.2	9.6	10
3	13.4	13.2	13.3	13.0	12.8	12.9	12.7	12.0	12.4	10.8	9.5	10.0
4	13.6	13.3	13.5	13.1	12.8	12.9	12.6	12.0	12.4	10.7	10.0	10.1
5	13.7	13.2	13.6	12.9	12.7	12.8	12.9	12.1	12.6	10.6	10.1	10.3
6	13.7	12.9	13.3	12.7	12.1	12.3	13.2	11.8	12.7	10.8	10.2	10.5
7	12.9	12.6	12.7	12.1	11.7	11.9	13.2	12.5	12.8	10.7	10.3	10.5
8	12.7	12.6	12.6	11.7	11.1	11.3	13.2	12.8	13.0	10.8	10.4	10.6
9	13.8	12.6	12.7	11.2	11.1	11.2	13.2	10.6	12.8	11.1	10.7	10.8
10	12.8	12.6	12.7	11.8	11.2	11.4	13.4	11.8	12.9	11.5	10.6	10.8
11	13.1	12.8	13.0	12.4	11.8	12.1	13.0	11.4	12.8	11.0	10.7	10.9
12	13.1	12.9	13.0	12.5	12.3	12.4	12.7	9.9	12.1	11.7	10.7	11.0
13	13.2	13.0	13.2	12.7	12.5	12.6	13.0	11.8	12.5	11.2	10.5	11.0
14	13.3	13.2	13.2	12.8	12.7	12.7	12.8	11.7	12.1	11.1	10.6	10.9
15	13.2	13.1	13.2	12.8	12.7	12.8	12.4	11.3	11.6	11.1	8.3	10.7
16	13.2	13.1	13.2	12.8	12.7	12.8	11.3	11.1	11.2	11.9	10.9	11.2
17	13.1	13.1	13.1	12.8	12.4	12.7	11.1	10.8	11.0	11.8	10.2	11.2
18	13.1	13.1	13.1	12.5	12.4	12.4	10.9	10.6	10.8	11.8	10.0	11.0
19	13.9	13.0	13.1	12.6	12.4	12.5	11.2	10.6	10.9	11.7	10.2	11.0
20	13.0	12.9	13.0	12.8	12.4	12.6	11.7	10.9	11.2	11.6	9.8	11.0
21	12.9	12.8	12.9	12.6	12.4	12.6	11.5	10.8	11.1	11.6	8.8	10.9
22	12.9	12.7	12.8	12.6	12.4	12.5	11.8	10.3	11.1	11.4	10.6	11.0
23	12.8	12.4	12.7	12.8	12.4	12.7	11.1	10.9	10.9	11.6	9.2	10.9
24	12.5	12.3	12.3	12.7	12.4	12.6	10.9	10.7	10.8	11.4	10.0	10.8
25	13.4	12.5	12.7	12.9	12.3	12.7	---	---	---	11.5	9.8	10.5
26	12.8	12.7	12.8	13.1	12.4	12.9	11.9	9.2	9.7	10.8	9.8	10.3
27	12.9	12.7	12.8	13.5	12.6	13.1	10.6	8.9	9.2	10.6	9.8	10.1
28	12.9	12.8	12.8	13.6	12.8	13.2	10.0	8.8	9.1	10.0	9.6	9.8
29	13.0	12.6	12.9	13.3	12.7	13.1	10.0	9.0	9.2	10.0	9.4	9.7
30	---	---	---	13.2	12.6	13.0	9.6	9.2	9.3	9.6	6.6	9.1
31	---	---	---	13.0	12.6	12.8	---	---	---	9.6	9.1	9.3
MONTH	13.9	12.3	13.0	13.6	11.1	12.6	13.4	8.8	11.5	11.9	6.6	10.5

03418420 CUMBERLAND RIVER BELOW CORDELL HULL DAM, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.8	9.4	9.6	8.6	8.0	8.2	9.6	8.5	9.0	9.1	7.7	8.0
2	10.7	9.1	9.7	8.9	7.8	8.2	9.3	4.6	8.0	8.7	7.0	7.8
3	10.9	9.1	10	9.3	7.2	8.4	9.6	6.4	8.2	9.0	7.0	8.0
4	11.0	9.3	10.3	9.0	7.9	8.3	10.2	6.1	7.9	8.3	7.2	7.5
5	10.4	9.8	9.9	8.9	7.1	8.2	9.5	4.8	7.4	9.0	6.7	7.4
6	10.9	9.6	10.2	9.1	7.9	8.4	9.2	4.5	7.1	9.4	6.9	7.6
7	11.1	10.0	10.6	9.0	8.1	8.5	9.5	4.3	6.6	8.8	6.2	7.6
8	11.1	9.8	10.5	9.5	8.1	8.7	9.2	3.0	6.3	8.0	6.9	7.4
9	10.3	9.3	9.9	10.0	8.2	8.8	10.1	2.2	7.2	9.5	6.4	7.7
10	10.6	9.0	10	9.7	8.4	9.0	10.6	3.3	7.9	8.8	7.2	7.6
11	10.7	9.6	10.2	9.6	8.5	8.9	10.1	3.8	8.0	8.6	7.1	7.6
12	10.6	9.8	10.2	9.9	8.1	8.9	9.8	8.4	9.2	8.8	7.2	7.7
13	10.3	7.9	10.0	9.4	8.6	8.9	8.9	5.9	7.4	9.9	6.7	8.0
14	---	---	---	9.5	8.1	8.8	9.0	2.1	7.8	9.7	7.3	8.4
15	---	---	---	10.0	7.9	8.8	9.0	2.3	7.6	9.9	6.9	8.2
16	---	---	---	9.6	8.3	8.8	9.4	3.5	8.3	9.1	7.4	8.2
17	---	---	---	9.7	8.5	9.0	9.3	4.8	8.2	8.8	8.0	8.4
18	---	---	---	9.6	8.1	8.9	9.3	4.2	8.1	8.5	8.1	8.3
19	---	---	---	10.1	8.4	9.1	10.4	6.9	8.4	8.3	8.0	8.2
20	---	---	---	10.2	7.9	9.1	8.6	5.0	7.9	9.5	8.0	8.4
21	---	---	---	10.4	7.5	8.9	8.3	5.0	7.4	10.3	7.9	8.8
22	12.4	10.9	11.6	10.3	7.4	8.8	7.9	3.6	7.0	10.8	7.2	9.1
23	13.4	11.4	12.4	10.1	6.2	8.6	8.2	5.0	7.3	10.8	8.3	9.7
24	13.6	11.3	12.6	10.4	6.7	9.0	8.1	4.9	7.4	11.3	7.9	10.0
25	11.9	10.5	11.2	10.5	6.9	8.9	8.3	4.9	7.4	11.5	8.4	9.9
26	---	---	---	9.2	8.0	8.5	8.1	6.2	7.7	9.4	7.2	8.4
27	---	---	---	9.0	7.8	8.3	8.1	7.2	7.7	9.8	6.4	8.6
28	---	---	---	9.8	5.8	7.8	8.7	7.4	7.9	9.1	7.7	8.6
29	---	---	---	10.0	6.3	8.1	8.8	7.5	7.9	12.1	7.4	10.4
30	8.7	8.2	8.4	9.7	6.8	7.9	9.2	7.5	7.8	11.6	10.4	10.9
31	---	---	---	9.6	7.1	8.2	9.4	7.3	8.2	---	---	---
MONTH	13.6	7.9	10.4	10.5	5.8	8.6	10.6	2.1	7.7	12.1	6.2	8.4

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03421000 COLLINS RIVER NEAR MCMINNVILLE, TN

LOCATION.--Lat 35°42'29", long 85°43'54", 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 mi^2.

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.--Data collection platform. 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 and specific conductance are published in this report as miscellaneous water-quality data.

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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1730	*32,800	*26.55	Jun 26	0530	15,300	16.92
Mar 6	1730	24,100	22.34	Sep 18	0330	13,700	15.88

Minimum discharge, 179 ft^3/s, Oct. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

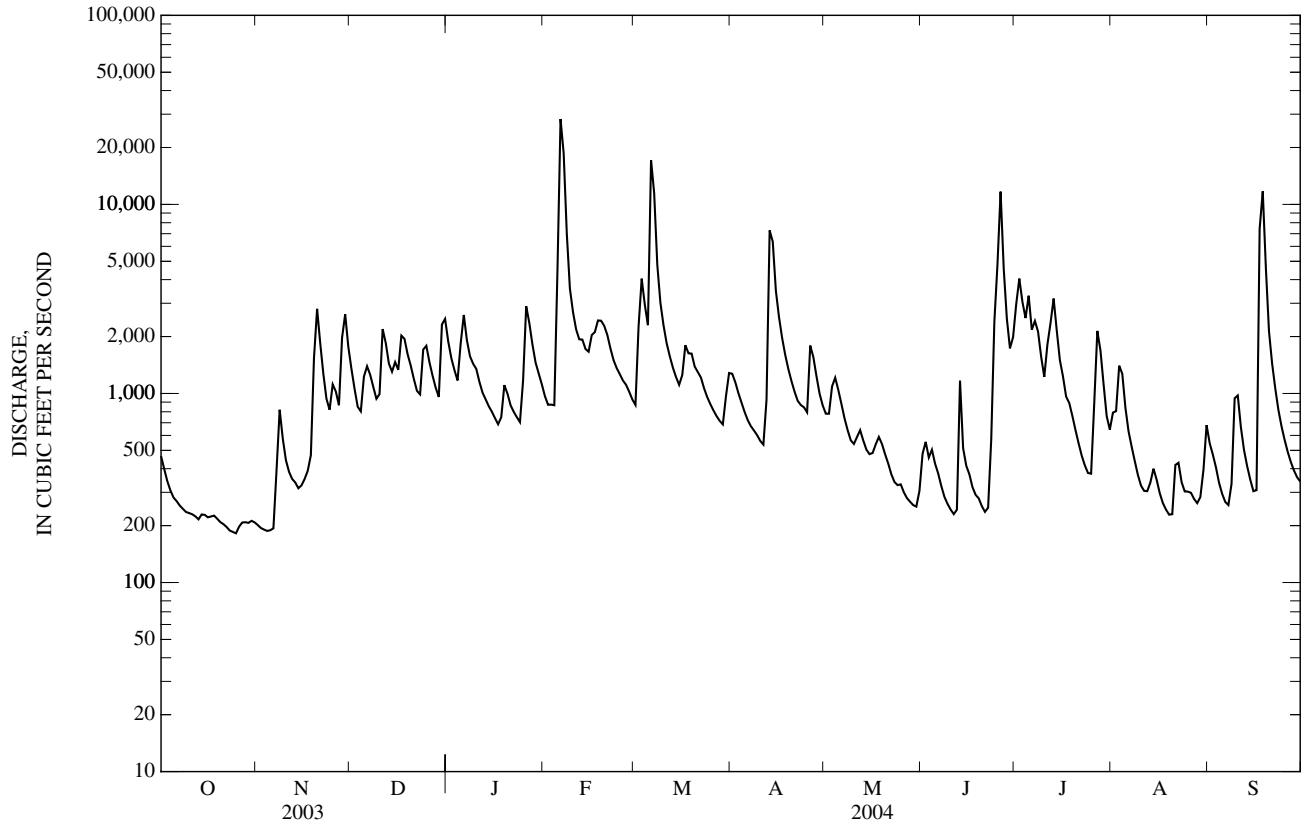
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	201	1,350	1,890	967	870	1,270	782	480	2,960	792	546
2	399	194	1,060	1,540	871	2,260	1,150	781	555	4,050	806	475
3	344	191	851	1,330	873	4,050	1,000	1,090	458	3,050	1,400	407
4	307	187	805	1,170	867	2,950	893	1,210	504	2,510	1,270	337
5	281	189	1,230	1,840	4,380	2,300	796	1,040	426	3,290	840	294
6	269	194	1,390	2,600	28,300	17,100	722	880	378	2,170	631	267
7	255	393	1,260	1,910	18,700	11,500	671	738	324	2,420	523	257
8	245	820	1,080	1,570	7,030	4,790	636	639	284	2,130	439	333
9	236	577	938	1,440	3,590	3,020	601	565	261	1,560	370	943
10	233	444	993	1,350	2,690	2,290	561	540	243	1,220	325	976
11	230	385	2,190	1,150	2,180	1,840	536	589	230	1,810	305	662
12	224	353	1,850	1,010	1,930	1,570	927	640	243	2,360	304	502
13	216	338	1,440	931	1,930	1,370	7,280	564	1,170	3,180	338	413
14	229	315	1,300	856	1,720	1,220	6,350	505	513	2,150	400	350
15	228	326	1,470	801	1,660	1,110	3,490	477	415	1,500	350	304
16	221	353	1,330	740	2,040	1,250	2,540	484	374	1,230	297	308
17	224	390	2,020	687	2,110	1,800	1,970	539	319	963	263	7,430
18	226	472	1,940	749	2,430	1,630	1,600	589	291	890	243	11,700
19	217	1,540	1,610	1,110	2,420	1,620	1,350	540	279	760	229	4,600
20	209	2,800	1,400	997	2,280	1,390	1,160	477	253	641	230	2,130
21	203	1,840	1,190	866	2,040	1,300	1,020	426	237	544	419	1,440
22	197	1,270	1,030	800	1,730	1,210	914	373	249	468	430	1,070
23	188	937	989	749	1,500	1,060	869	340	573	416	340	821
24	185	821	1,710	705	1,360	957	844	327	2,390	380	303	672
25	182	1,120	1,790	1,170	1,260	879	795	331	4,820	377	303	569
26	197	1,020	1,460	2,900	1,170	813	1,790	300	11,700	885	298	491
27	208	866	1,240	2,360	1,110	759	1,560	280	4,580	2,140	277	434
28	208	1,970	1,070	1,810	1,020	716	1,240	267	2,490	1,690	263	392
29	207	2,630	958	1,460	930	686	997	257	1,730	1,120	283	361
30	212	1,770	2,320	1,270	---	966	864	252	1,980	758	394	342
31	208	---	2,480	1,120	---	1,280	---	305	---	644	680	---
TOTAL	7,454	24,906	43,744	40,881	101,088	76,556	46,396	17,127	38,749	50,266	14,345	39,826
MEAN	240	830	1,411	1,319	3,486	2,470	1,547	552	1,292	1,621	463	1,328
MAX	466	2,800	2,480	2,900	28,300	17,100	7,280	1,210	11,700	4,050	1,400	11,700
MIN	182	187	805	687	867	686	536	252	230	377	229	257
CFSM	0.38	1.30	2.20	2.06	5.45	3.86	2.42	0.86	2.02	2.53	0.72	2.07
IN.	0.43	1.45	2.54	2.38	5.88	4.45	2.70	1.00	2.25	2.92	0.83	2.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	317	776	1,602	2,123	2,428	2,518	1,788	1,118	638	453	324	306
MAX	2,345	4,286	6,783	6,262	6,564	6,279	4,412	5,021	4,216	2,091	1,439	1,328
(WY)	(1976)	(1958)	(1991)	(1974)	(1939)	(1929)	(1994)	(2003)	(1928)	(1989)	(1942)	(2004)
MIN	63.5	69.0	107	126	391	619	462	225	85.9	115	76.2	62.9
(WY)	(1932)	(1932)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1988)	(1944)	(1925)	(1925)

03421000 COLLINS RIVER NEAR MCMINNVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	568,665		501,338			
ANNUAL MEAN	1,558		1,370		1,194	
HIGHEST ANNUAL MEAN					2,193	1973
LOWEST ANNUAL MEAN					409	1931
HIGHEST DAILY MEAN	39,500	May 7	28,300	Feb 6	64,100	Dec 23, 1990
LOWEST DAILY MEAN	164	Sep 20	182	Oct 25	37	Oct 28, 1961
ANNUAL SEVEN-DAY MINIMUM	174	Sep 15	194	Oct 21	50	Sep 24, 1925
MAXIMUM PEAK FLOW			32,800	Feb 6	75,300	Mar 23, 1929
MAXIMUM PEAK STAGE			26.55	Feb 6	39.10	Mar 23, 1929
INSTANTANEOUS LOW FLOW			179	Oct 26	35	Sep 21, 1930
ANNUAL RUNOFF (CFSM)	2.43		2.14		1.86	
ANNUAL RUNOFF (INCHES)	33.05		29.14		25.34	
10 PERCENT EXCEEDS	2,680		2,420		2,600	
50 PERCENT EXCEEDS	749		865		539	
90 PERCENT EXCEEDS	219		244		114	



03424730 SMITH FORK AT TEMPERANCE HALL, TN

LOCATION.--Lat 36°05'14", long 85°54'26", Dekalb County, Hydrologic Unit 05130108, on left bank 150 ft downstream from James Slager Memorial bridge on State Highway 264, 0.3 mi northwest of Temperance Hall, and at mile 8.8.

DRAINAGE AREA.--214 mi^2.

PERIOD OF RECORD.--August 1991 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 499.00 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	0930	7,390	14.49	Mar 6	0600	10,900	18.78
Feb 5	2030	*14,500	*22.12	Apr 13	1130	6,640	13.58
Mar 2	0600	4,500	10.86	Jun 3	0430	5,240	11.85

Minimum discharge, 23 ft^3/s, Sept. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	41	337	398	219	522	287	107	315	119	83	36
2	52	38	244	375	201	2,410	248	126	161	126	71	41
3	47	37	199	371	281	1,140	218	154	1,760	129	61	74
4	44	36	186	319	325	696	195	165	416	112	55	53
5	43	41	184	1,450	6,540	718	174	141	222	232	65	42
6	44	46	192	1,060	9,480	5,750	159	115	148	299	72	35
7	43	60	190	579	2,150	1,530	156	100	132	1,090	59	32
8	40	50	175	420	1,110	868	148	90	232	707	49	35
9	38	45	161	358	720	626	137	81	129	320	44	43
10	38	42	437	306	542	465	123	76	102	213	41	42
11	38	41	599	262	428	369	118	156	91	242	38	34
12	38	41	366	236	366	317	640	143	377	456	43	30
13	38	50	279	215	323	267	3,790	138	1,270	594	43	28
14	40	60	270	195	286	239	2,160	168	661	318	40	26
15	46	55	280	184	270	221	1,010	244	335	214	36	24
16	45	107	258	166	241	225	630	284	224	152	33	26
17	43	287	435	153	215	212	454	242	374	118	31	1,600
18	41	213	411	1,080	203	198	350	169	628	99	30	600
19	40	904	351	871	194	205	286	322	354	85	28	248
20	36	583	300	484	192	234	246	191	216	77	30	151
21	36	308	251	359	186	862	219	135	157	67	34	106
22	34	208	221	293	167	553	200	109	129	62	38	83
23	32	158	348	248	154	397	189	98	227	74	38	69
24	33	610	972	219	149	318	177	84	231	61	37	59
25	31	522	517	e1,400	143	271	158	74	579	699	34	53
26	34	316	365	1,260	180	242	188	69	727	722	32	48
27	44	230	289	646	462	213	166	62	337	646	30	45
28	60	3,660	242	435	803	196	135	63	220	254	28	45
29	60	1,130	224	345	670	194	120	63	168	156	31	44
30	52	520	935	299	---	372	116	59	139	112	28	40
31	45	---	564	252	---	352	---	486	---	94	37	---
TOTAL	1,315	10,439	10,782	15,238	27,200	21,182	13,197	4,514	11,061	8,649	1,319	3,792
MEAN	42.4	348	348	492	938	683	440	146	369	279	42.5	126
MAX	60	3,660	972	1,450	9,480	5,750	3,790	486	1,760	1,090	83	1,600
MIN	31	36	161	153	143	194	116	59	91	61	28	24
CFSM	0.20	1.63	1.63	2.30	4.38	3.19	2.06	0.68	1.72	1.30	0.20	0.59
IN.	0.23	1.81	1.87	2.65	4.73	3.68	2.29	0.78	1.92	1.50	0.23	0.66

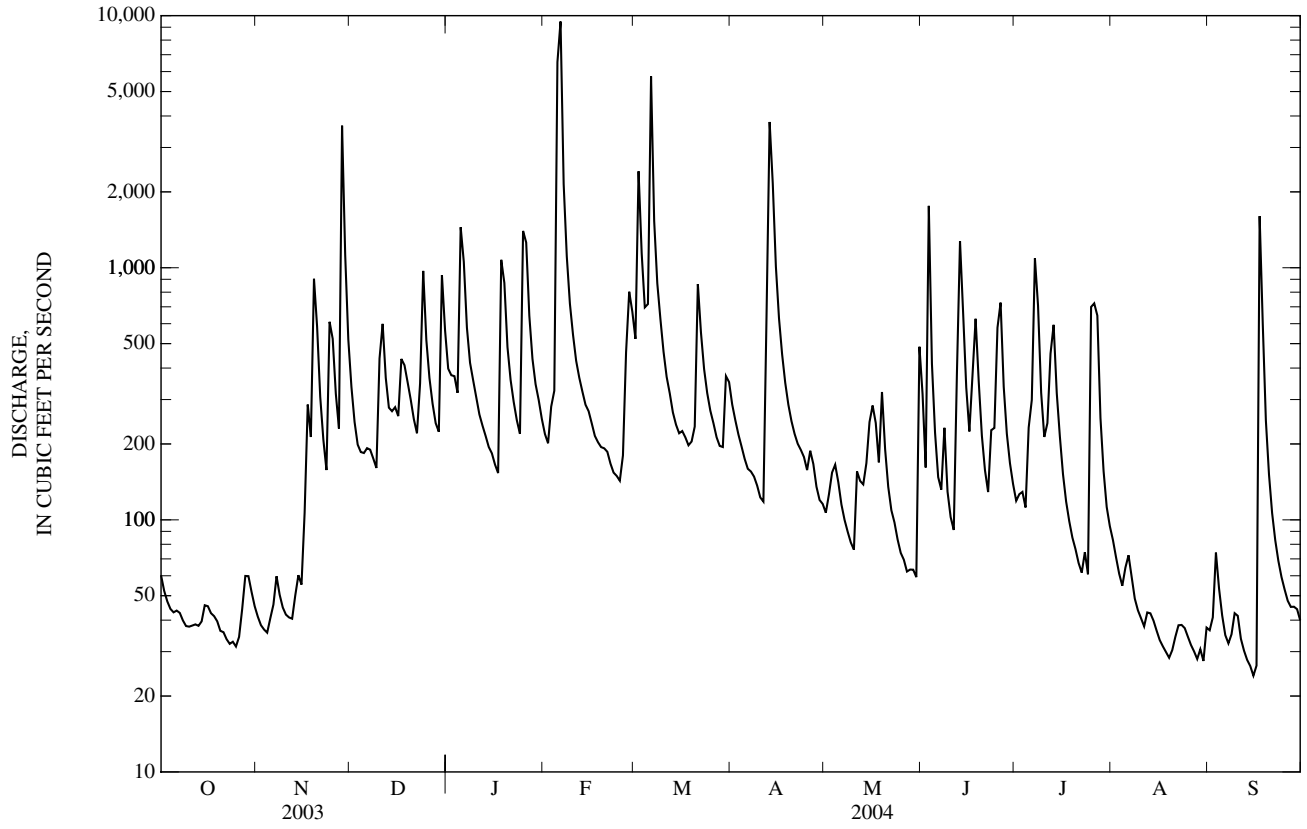
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	76.9	199	447	568	622	698	438	332	245	135	82.2	83.4
MAX	270	559	815	1,081	1,643	1,516	1,095	1,213	768	460	285	389
(WY)	(1996)	(1997)	(2003)	(1999)	(2003)	(1994)	(1994)	(2003)	(1998)	(1992)	(2003)	(1992)
MIN	15.1	29.5	72.7	82.9	212	278	158	61.4	44.0	25.6	22.5	12.5
(WY)	(2001)	(2000)	(2000)	(2000)	(1993)	(2003)	(1992)	(1992)	(2002)	(2000)	(1999)	(1999)

03424730 SMITH FORK AT TEMPERANCE HALL, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	163,214		128,688			
ANNUAL MEAN	447		352		327	
HIGHEST ANNUAL MEAN					488	1994
LOWEST ANNUAL MEAN					187	2000
HIGHEST DAILY MEAN	11,000	Feb 15	9,480	Feb 6	11,800	Jan 23, 1999
LOWEST DAILY MEAN	25	Sep 20	24	Sep 15	9.7	Sep 10, 1999
ANNUAL SEVEN-DAY MINIMUM	30	Sep 15	30	Sep 10	10	Sep 7, 1999
MAXIMUM PEAK FLOW			14,500	Feb 5	19,900	Jan 23, 1999
MAXIMUM PEAK STAGE			22.12	Feb 5	26.12	Jan 23, 1999
INSTANTANEOUS LOW FLOW			a23	Sep 15	9.0	Sep 8, 1999
ANNUAL RUNOFF (CFSM)	2.09		1.64		1.53	
ANNUAL RUNOFF (INCHES)	28.37		22.37		20.74	
10 PERCENT EXCEEDS	814		678		653	
50 PERCENT EXCEEDS	171		187		119	
90 PERCENT EXCEEDS	41		38		25	

a Also occurred Sept. 16.
e Estimated



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

LOCATION.--Lat 36°17'49", long 86°39'31", 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.

DRAINAGE AREA.--11,673 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to September 1942, October 1947 to current year. Prior to July 1953, published as "at dam 3, near Old Hickory". July 1953 to September 1986 published as "below Old Hickory".

GAGE.--Datum of gage is NGVD of 1929.

REMARKS.--Flow regulated by six lakes or reservoirs (see p. 194).

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 173,000 ft^3/s, Jan. 29, 1937; maximum gage height, 438.80 ft, Mar. 14, 1975; minimum daily discharge, 86 ft^3/s, Aug. 15, 1936; minimum gage height since filling of Cheatham Lake on Oct. 1, 1956, 383.49 ft, Sept. 10, 1962, at present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1793, 437.4 ft Dec. 31, 1926, at present datum, from profile by U.S. Army Corps of Engineers, discharge, 200,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 98,100 ft^3/s, Feb. 7; minimum daily, 5,750 ft^3/s, Nov. 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,200	16,600	36,300	27,700	14,700	23,600	22,500	22,300	29,200	20,400	28,300	18,600
2	12,400	16,100	24,600	31,300	15,200	34,200	23,600	19,700	27,300	18,300	21,600	18,000
3	14,700	14,600	24,000	32,500	21,400	32,500	14,700	23,400	18,700	16,200	14,400	15,200
4	12,300	13,700	25,000	28,400	27,600	22,800	16,900	25,800	17,400	12,200	15,900	14,300
5	12,200	12,400	24,000	27,100	52,500	21,300	15,400	15,800	24,000	14,700	16,400	10,900
6	15,800	11,300	22,700	26,500	94,700	57,800	17,500	16,600	24,500	13,400	18,000	10,900
7	16,700	12,400	21,300	32,900	98,100	56,000	16,600	20,500	18,800	22,500	13,800	9,790
8	18,300	11,700	23,700	23,900	85,700	41,900	19,500	27,600	17,600	22,100	13,900	8,970
9	18,300	11,300	24,200	20,100	71,500	39,000	19,500	22,700	19,900	22,000	13,400	9,610
10	18,300	5,800	22,900	19,700	55,500	35,400	19,500	18,900	19,900	21,900	15,200	10,400
11	18,300	5,760	20,200	16,700	40,800	35,100	14,300	19,100	20,000	18,400	17,900	10,500
12	13,800	5,750	22,300	15,800	41,400	36,300	11,400	19,800	15,400	17,400	19,200	9,030
13	12,600	9,050	20,900	16,900	44,200	35,500	28,100	16,000	18,000	16,800	19,300	10,100
14	17,100	10,200	18,100	18,300	44,000	35,400	47,700	15,500	20,800	18,800	19,500	10,600
15	18,000	9,260	21,100	18,300	43,900	32,000	39,900	24,200	19,500	19,400	19,600	16,100
16	17,800	8,670	19,200	18,700	42,500	35,100	25,000	18,900	18,600	19,400	18,300	16,600
17	17,000	8,430	17,200	20,400	38,300	33,900	23,600	12,300	19,500	19,400	18,300	22,800
18	15,600	11,500	20,900	25,200	30,600	28,100	24,600	10,400	19,500	19,400	18,300	33,200
19	13,700	26,700	22,700	34,400	32,900	32,500	22,700	9,720	19,600	19,400	19,500	27,600
20	14,100	28,800	19,600	35,300	36,300	24,000	22,300	13,000	18,700	20,100	19,500	13,200
21	17,000	25,800	21,400	27,500	29,900	25,000	24,900	10,800	15,800	20,500	19,500	12,200
22	15,600	23,900	25,100	25,300	20,800	32,600	31,000	10,300	14,400	20,200	19,000	17,200
23	15,600	14,600	23,800	25,500	25,800	25,900	43,400	7,680	12,400	18,300	19,600	18,900
24	18,300	16,000	20,700	23,500	29,000	24,300	40,400	8,420	12,400	15,900	19,400	18,800
25	19,800	20,400	28,300	22,600	28,100	25,300	27,100	8,700	13,500	17,300	19,600	18,600
26	12,900	22,800	24,900	33,000	21,000	27,400	19,800	9,250	14,600	15,300	19,500	19,400
27	15,000	26,100	20,300	35,600	21,700	23,500	19,200	10,000	18,100	11,100	19,500	18,000
28	18,600	25,100	21,000	27,500	25,400	17,800	25,000	12,400	25,200	16,300	17,100	18,100
29	19,500	33,700	23,900	27,900	23,600	16,700	21,100	13,500	22,400	16,700	14,500	16,800
30	19,500	41,000	22,200	27,800	---	17,900	22,100	11,000	20,400	14,700	12,200	14,600
31	17,700	---	26,300	17,900	---	19,500	---	21,200	---	16,400	12,500	---
TOTAL	497,700	499,420	708,800	784,200	1,157,100	948,300	719,300	495,470	576,100	554,900	552,700	469,000
MEAN	16,050	16,650	22,860	25,300	39,900	30,590	23,980	15,980	19,200	17,900	17,830	15,630
MAX	19,800	41,000	36,300	35,600	98,100	57,800	47,700	27,600	29,200	22,500	28,300	33,200
MIN	11,200	5,750	17,200	15,800	14,700	16,700	11,400	7,680	12,400	11,100	12,200	8,970

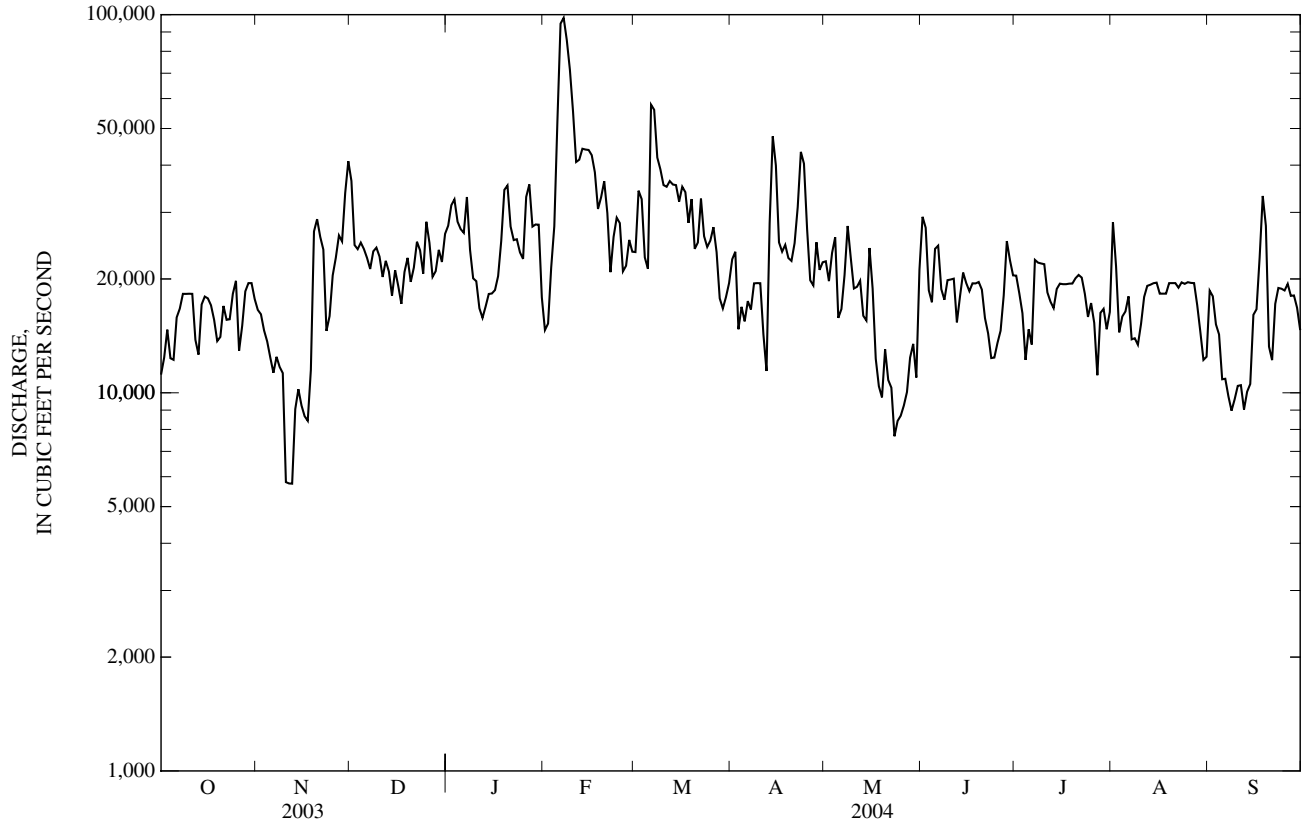
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

MEAN	9,191	12,150	21,450	27,640	27,840	31,210	28,290	20,700	15,780	12,780	12,250	10,190
MAX	29,430	29,530	43,590	79,580	61,700	73,880	74,400	65,100	40,510	28,410	21,400	27,600
(WY)	(1990)	(1980)	(1979)	(1974)	(1957)	(1975)	(1994)	(1984)	(1997)	(1967)	(1982)	(1979)
MIN	2,660	3,449	3,974	4,656	8,524	6,778	6,963	5,465	6,048	4,211	4,991	2,723
(WY)	(1969)	(1981)	(1981)	(1981)	(1981)	(1981)	(1986)	(1988)	(1988)	(1974)	(1975)	(1968)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1957 - 2004	
ANNUAL TOTAL	8,881,660		7,962,990			
ANNUAL MEAN	24,330		21,760		19,090	
HIGHEST ANNUAL MEAN					28,560	1974
LOWEST ANNUAL MEAN					8,780	1988
HIGHEST DAILY MEAN	91,600	Feb 17	98,100	Feb 7	146,000	Mar 14, 1975
LOWEST DAILY MEAN	5,750	Nov 12	5,750	Nov 12	200	Nov 3, 1957
ANNUAL SEVEN-DAY MINIMUM	7,780	Nov 10	7,780	Nov 10	1,070	Oct 28, 1969
10 PERCENT EXCEEDS	42,900		33,400		40,500	
50 PERCENT EXCEEDS	19,800		19,500		13,800	
90 PERCENT EXCEEDS	12,200		12,200		5,360	

* Regulated period only.



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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1979 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1979 to September 2004 (discontinued).
pH: April 1979 to September 2004 (discontinued).
WATER TEMPERATURE: April 1979 to September 2004 (discontinued).
DISSOLVED OXYGEN: April 1979 to September 2004 (discontinued).
TURBIDITY: October 1992 to September 2004 (discontinued).

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 instrument malfunctions. Supersaturation of dissolved oxygen may occur due to local hydraulic conditions. All parameters affected by release from Old Hickory Dam. Records for water temperature and specific conductance are excellent, pH and turbidity are fair, and dissolved oxygen are poor

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 269 microsiemens, Jan. 3, 4, 2002; minimum, 137 microsiemens, March 14, 1994.
pH: Maximum, 9.8 units, March 26, 1988; minimum, 6.4 units, July 28, 1991, July 24, 25, 26, 1993.
WATER TEMPERATURE: Maximum, 27.6°C, August 8, 1988; minimum, 2.1°C, Dec. 24, 1989.
DISSOLVED OXYGEN: Maximum, 17.5 mg/L Dec. 6, 11, 2002; minimum, 2.9 mg/L, Sept. 5, 1988, July 8, 1993.
TURBIDITY: Maximum recorded, 250 NTU, Feb. 7, 2004, minimum, 1 NTU, many days during the 1996, Sept. 20, 1997, and many days during the 2000, 2001, and 2002 water years, Oct. 4, 5, 6, 2002, Sept. 8, 2003.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 233 microsiemens, Dec. 30, Jan. 11, 12; minimum, 171 microsiemens, July 8, 9.
pH: Maximum, 8.9 units, July 30; minimum, 7.2 units, Nov. 22, 23, Dec. 1, 2.
WATER TEMPERATURE: Maximum, 24.8°C, July 30; minimum, 6.0°C, Jan. 31, Feb. 1.
DISSOLVED OXYGEN: Maximum, 16.3 mg/L, Feb. 5; minimum, 5.7 mg/L, May 26, June 17.
TURBIDITY: Maximum, 250 NTU, Feb. 7; minimum, 2.0 NTU, many days.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	199	194	197	195	193	194	224	223	224	228	226	227
2	200	197	199	197	193	195	226	224	225	230	224	227
3	201	198	200	198	196	197	228	226	227	231	229	230
4	202	200	201	197	193	196	227	227	227	232	229	231
5	200	196	198	196	193	194	230	227	228	230	228	229
6	197	193	195	196	194	195	230	225	227	230	227	228
7	194	190	192	196	194	195	225	214	219	229	226	227
8	192	190	191	196	195	195	214	211	212	229	227	228
9	193	191	192	196	195	195	215	212	213	230	225	227
10	193	191	192	196	196	196	215	214	215	231	227	229
11	---	---	---	196	196	196	216	215	215	233	230	232
12	---	---	---	197	196	196	216	214	215	233	230	232
13	---	---	---	198	196	197	214	214	214	232	230	231
14	193	191	192	198	197	198	214	214	214	232	228	230
15	206	189	193	199	198	198	218	214	215	230	228	229
16	196	189	191	199	198	199	222	218	220	229	227	228
17	196	191	193	200	199	199	224	221	223	229	227	228
18	192	188	190	200	198	200	225	224	224	230	227	229
19	191	188	190	201	200	200	224	223	223	228	222	225
20	191	188	189	203	199	201	223	221	222	224	221	222
21	192	190	191	203	202	202	223	222	222	226	222	224
22	191	189	190	211	203	205	225	222	224	228	224	225
23	193	189	192	217	211	214	227	225	226	232	228	230
24	193	191	192	219	215	217	228	224	227	231	229	230
25	192	191	192	222	219	220	226	222	224	229	226	227
26	194	191	192	225	222	224	223	221	222	226	221	224
27	195	193	194	224	222	223	224	220	222	224	221	222
28	195	192	193	229	223	224	228	224	225	226	224	225
29	195	192	194	232	229	231	231	226	229	224	221	222
30	194	192	193	230	224	228	233	230	231	228	222	226
31	194	192	194	---	---	---	232	227	230	227	226	227
MONTH	206	188	193	232	193	204	233	211	222	233	221	227

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

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	226	225	226	201	197	199	200	198	199	199	193	197
2	226	222	224	199	197	198	201	197	199	193	187	189
3	223	221	222	201	197	199	199	196	197	188	183	186
4	223	220	221	207	201	204	197	196	197	186	183	184
5	225	219	221	210	206	209	197	195	196	188	186	187
6	228	195	218	213	203	207	195	193	194	190	187	188
7	195	177	184	219	209	214	195	193	193	193	190	191
8	196	187	192	209	196	199	193	193	193	196	193	195
9	188	174	178	208	199	203	193	192	193	197	196	196
10	179	174	177	214	208	211	193	192	192	197	195	196
11	177	174	175	213	201	209	193	192	192	195	193	194
12	184	175	178	202	191	195	194	192	193	193	192	193
13	194	184	189	192	187	190	194	190	192	193	192	192
14	201	194	197	190	186	188	190	187	189	193	192	193
15	202	200	201	192	189	191	194	186	189	195	192	193
16	202	200	201	193	190	191	199	194	197	196	194	195
17	202	200	201	191	189	190	204	198	202	197	195	196
18	202	200	201	189	186	188	208	204	206	196	195	195
19	204	201	202	187	184	185	210	208	209	200	196	197
20	203	199	201	187	185	186	211	209	210	198	197	197
21	201	199	200	186	184	185	212	209	211	199	196	197
22	201	199	200	189	185	187	209	200	203	199	198	198
23	201	199	200	191	189	190	200	196	197	200	199	199
24	201	196	200	193	189	191	199	196	198	201	199	201
25	202	198	200	198	192	195	197	196	196	202	201	201
26	201	197	200	201	197	199	198	195	196	203	202	202
27	201	199	200	201	200	201	199	198	198	203	201	202
28	201	199	200	202	201	202	200	198	199	202	201	201
29	201	199	200	201	199	200	201	199	200	201	200	201
30	---	---	---	199	198	199	200	199	200	202	201	202
31	---	---	---	199	195	196	---	---	---	201	198	200
MONTH	228	174	200	219	184	197	212	186	198	203	183	195
		JUNE			JULY			AUGUST			SEPTEMBER	
1	199	198	199	196	192	194	190	186	188	191	190	190
2	199	197	198	193	187	191	193	188	191	191	190	190
3	199	199	199	188	182	186	195	191	193	190	189	190
4	199	198	199	183	181	183	195	194	195	189	189	189
5	200	199	200	181	178	180	195	194	195	190	189	189
6	202	200	201	179	177	178	195	194	194	191	190	190
7	203	202	202	178	173	176	195	194	195	191	191	191
8	204	203	204	174	171	173	196	195	196	191	191	191
9	204	203	203	173	171	172	197	194	195	192	191	192
10	203	202	203	175	173	174	194	191	192	192	191	192
11	203	202	202	176	175	175	191	189	190	193	192	192
12	203	202	203	178	176	177	189	188	189	193	192	192
13	203	202	203	183	178	180	188	187	187	193	192	192
14	203	200	202	183	180	182	187	186	187	193	192	193
15	200	198	199	182	180	181	187	186	186	193	191	192
16	198	196	197	181	179	181	191	187	189	194	193	193
17	198	196	197	183	180	182	193	190	191	194	194	194
18	198	196	197	188	172	184	194	191	193	195	193	194
19	197	196	197	192	173	185	197	192	194	197	194	196
20	199	197	198	193	186	190	196	192	193	197	195	196
21	201	198	199	195	188	193	194	193	193	195	194	195
22	199	198	198	195	190	193	194	191	193	197	195	196
23	199	198	198	195	187	191	193	191	192	201	196	198
24	199	197	198	196	188	192	194	192	193	207	201	203
25	200	198	199	195	187	191	194	191	193	209	205	207
26	200	198	199	195	189	191	195	192	193	210	207	209
27	200	196	198	194	187	190	194	191	192	209	206	208
28	200	197	198	190	187	189	194	191	192	207	201	205
29	201	195	198	191	188	189	195	191	192	208	199	202
30	197	194	196	193	186	189	193	189	191	201	198	199
31	---	---	---	191	188	190	191	190	190	---	---	---
MONTH	204	194	199	196	171	185	197	186	192	210	189	195

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

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	7.9	7.5	7.4	7.3	7.2	7.8	7.7	8.1	8.0	8.4	8.3
2	8.3	8.0	7.6	7.4	7.3	7.2	7.7	7.7	8.0	8.0	8.3	8.2
3	8.4	8.1	7.7	7.6	7.4	7.3	7.7	7.7	8.1	8.0	8.4	8.2
4	8.3	8.0	7.6	7.5	7.4	7.4	7.7	7.7	8.1	8.0	8.5	8.3
5	8.3	8.0	7.6	7.5	7.5	7.4	7.7	7.7	8.1	8.0	8.4	8.3
6	8.2	8.1	7.5	7.4	7.5	7.5	7.8	7.7	8.1	7.8	8.3	8.2
7	8.3	8.0	7.5	7.4	7.5	7.4	7.8	7.6	7.8	7.7	8.3	8.2
8	8.3	8.0	7.5	7.5	7.5	7.4	7.6	7.6	7.7	7.7	8.2	8.1
9	8.2	7.9	7.6	7.5	7.5	7.4	7.6	7.6	7.7	7.6	8.1	8.1
10	8.2	7.9	7.6	7.5	7.6	7.5	7.7	7.6	7.7	7.6	8.2	8.1
11	---	---	7.7	7.6	7.6	7.5	7.7	7.6	7.7	7.6	8.2	8.0
12	---	---	7.6	7.5	7.6	7.6	7.7	7.7	7.7	7.6	8.0	8.0
13	---	---	7.5	7.5	7.6	7.6	7.8	7.7	7.7	7.7	8.0	7.9
14	7.8	7.6	7.6	7.5	7.6	7.5	7.8	7.7	7.8	7.7	8.0	7.9
15	7.6	7.3	7.6	7.6	7.6	7.5	7.8	7.8	7.8	7.8	8.0	8.0
16	7.8	7.5	7.6	7.5	7.6	7.6	7.9	7.7	7.8	7.8	8.1	8.0
17	7.6	7.5	7.5	7.5	7.6	7.6	7.8	7.7	7.8	7.8	8.2	8.1
18	7.6	7.5	7.5	7.4	7.6	7.6	7.8	7.7	7.9	7.7	8.2	8.1
19	7.6	7.5	7.5	7.4	7.6	7.6	8.2	7.7	8.0	7.9	8.3	8.1
20	7.7	7.5	7.4	7.3	7.6	7.6	7.7	7.7	8.0	8.0	8.3	8.2
21	7.6	7.5	7.3	7.3	7.7	7.5	7.7	7.7	8.1	8.0	8.4	8.2
22	7.6	7.4	7.3	7.2	7.7	7.6	7.8	7.7	8.1	8.0	8.5	8.3
23	7.6	7.5	7.3	7.2	7.6	7.6	7.9	7.8	8.0	8.0	8.4	8.3
24	7.7	7.5	7.3	7.3	7.8	7.6	8.0	7.8	8.2	8.0	8.4	8.2
25	7.7	7.6	7.4	7.3	7.8	7.7	8.0	8.0	8.3	8.2	8.4	8.2
26	7.6	7.6	7.4	7.4	7.8	7.8	8.0	8.0	8.3	8.2	8.5	8.2
27	7.7	7.6	7.4	7.3	7.8	7.8	8.0	7.9	8.3	8.2	8.5	8.3
28	7.6	7.5	7.4	7.3	7.8	7.8	8.0	7.9	8.4	8.3	8.6	8.4
29	7.5	7.4	7.4	7.3	7.8	7.7	8.0	7.9	8.4	8.3	8.6	8.3
30	7.5	7.4	7.3	7.3	7.8	7.7	7.9	7.8	---	---	8.5	8.3
31	7.5	7.4	---	---	7.8	7.7	8.0	7.9	---	---	8.4	8.3
MONTH	8.4	7.3	7.7	7.2	7.8	7.2	8.2	7.6	8.4	7.6	8.6	7.9
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.4	8.3	8.4	8.2	8.4	7.8	8.4	7.9	8.7	7.6	8.6	8.2
2	8.4	8.3	8.2	8.0	8.5	8.1	8.3	7.9	8.6	7.7	8.6	8.3
3	8.5	8.3	8.2	8.0	8.1	8.0	8.7	7.7	8.4	7.7	8.5	8.1
4	8.6	8.4	8.1	7.9	8.3	7.8	8.0	7.8	8.3	7.8	8.3	8.0
5	8.7	8.5	8.1	7.9	8.5	8.1	7.9	7.7	8.2	7.8	8.1	7.9
6	8.6	8.5	8.2	7.9	8.3	7.9	8.1	7.8	8.6	8.0	8.1	7.9
7	8.7	8.5	8.2	7.9	8.5	8.0	8.2	7.8	8.6	8.3	8.0	7.8
8	8.7	8.4	8.4	8.2	8.2	7.7	8.2	7.7	8.5	8.1	8.4	7.9
9	8.6	8.3	8.3	8.1	8.2	7.8	8.2	7.7	8.4	7.8	8.5	8.2
10	8.6	8.5	8.1	7.8	8.0	7.8	8.2	7.9	8.2	7.8	8.4	8.1
11	8.6	8.4	7.9	7.5	7.9	7.7	7.9	7.6	8.2	7.9	8.4	8.0
12	8.5	8.2	8.0	7.5	7.8	7.7	7.9	7.6	8.4	8.0	8.1	7.9
13	8.3	8.2	7.8	7.6	8.3	7.7	7.8	7.3	8.5	8.2	8.3	7.9
14	8.2	8.1	7.8	7.5	8.1	7.8	7.9	7.3	8.3	8.1	8.4	8.0
15	8.1	8.0	7.7	7.4	8.0	7.7	8.1	7.8	8.2	7.9	8.8	8.1
16	8.0	7.9	7.8	7.6	7.9	7.7	8.2	7.8	8.3	7.9	8.4	7.9
17	8.0	7.9	7.8	7.5	7.8	7.7	8.1	7.7	8.4	7.9	8.1	8.0
18	8.1	7.9	7.8	7.4	8.0	7.7	7.9	7.7	8.6	7.9	8.4	8.1
19	8.2	8.0	7.9	7.3	7.9	7.7	8.1	7.8	8.3	8.0	8.2	8.0
20	8.4	8.2	7.9	7.4	8.3	7.8	8.1	7.7	8.3	8.0	8.1	8.0
21	8.4	8.1	7.8	7.4	8.4	7.9	8.1	7.6	8.1	7.8	8.3	8.0
22	8.1	8.0	8.0	7.5	8.3	7.9	7.9	7.6	8.2	7.8	8.3	8.1
23	8.0	7.9	8.0	7.5	8.1	7.7	7.9	7.6	8.4	7.9	8.5	8.2
24	7.9	7.8	7.8	7.6	8.6	7.7	8.0	7.5	8.3	7.8	8.5	8.0
25	7.8	7.7	8.0	7.5	8.2	7.7	7.8	7.6	8.2	7.8	8.3	7.9
26	7.8	7.7	7.8	7.4	8.2	7.7	7.7	7.5	8.1	7.8	8.2	7.9
27	8.0	7.8	8.3	7.5	8.7	8.0	7.7	7.5	8.0	7.7	8.1	7.8
28	8.3	8.0	8.1	7.6	8.5	8.2	8.6	7.7	8.0	7.7	8.1	7.8
29	8.5	8.1	8.4	7.7	8.5	8.1	8.5	7.8	7.9	7.6	8.3	7.8
30	8.4	8.1	8.4	7.7	8.4	8.0	8.9	7.7	7.9	7.6	8.3	7.9
31	---	---	8.5	7.8	---	---	8.0	7.6	8.4	7.9	---	---
MONTH	8.7	7.7	8.5	7.3	8.7	7.7	8.9	7.3	8.7	7.6	8.8	7.8

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

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.9	20.4	20.7	17.6	17.1	17.3	12.2	11.9	12.1	8.8	8.5	8.6
2	20.4	20.0	20.2	18.0	17.4	17.6	11.9	11.6	11.8	9.3	8.8	9.0
3	20.0	19.6	19.8	18.0	17.6	17.8	11.6	11.4	11.5	9.9	9.3	9.6
4	19.6	19.4	19.5	18.0	17.7	17.9	11.5	11.4	11.4	10.5	9.9	10.3
5	19.5	19.2	19.3	18.0	17.9	18.0	11.5	11.2	11.3	10.6	10.2	10.4
6	19.6	19.1	19.3	17.9	17.5	17.7	11.2	10.7	11.0	10.2	9.4	9.9
7	19.6	19.2	19.4	17.5	16.9	17.2	10.8	10.7	10.7	9.4	9.1	9.3
8	19.8	19.3	19.6	16.9	16.3	16.6	10.8	10.6	10.7	9.1	8.9	9.0
9	19.9	19.6	19.7	16.3	15.7	16.0	11.1	10.7	10.9	8.9	8.7	8.8
10	19.8	19.7	19.8	15.8	15.5	15.7	11.2	10.9	11.1	8.7	8.2	8.4
11	---	---	---	15.7	15.6	15.7	11.0	10.6	10.8	8.2	7.9	8.1
12	---	---	---	15.9	15.7	15.8	10.6	10.3	10.4	8.2	7.8	8.0
13	---	---	---	15.8	15.0	15.3	10.3	9.9	10.0	8.1	7.8	8.0
14	19.5	19.0	19.3	15.0	14.6	14.7	9.9	9.7	9.8	8.2	7.9	8.1
15	19.0	18.8	18.9	14.6	14.3	14.4	9.7	9.5	9.6	8.2	8.0	8.1
16	19.0	18.6	18.8	14.6	14.5	14.5	9.7	9.6	9.7	8.3	8.0	8.1
17	18.8	18.4	18.5	14.8	14.5	14.6	9.6	9.2	9.4	8.3	8.2	8.2
18	18.4	18.2	18.3	15.1	14.8	14.9	9.3	9.1	9.2	8.2	7.8	8.1
19	18.5	18.1	18.3	15.2	14.9	15.0	9.1	8.8	9.0	7.8	7.0	7.4
20	18.8	18.2	18.5	15.4	15.1	15.2	8.8	8.5	8.7	7.0	6.6	6.8
21	18.7	18.4	18.6	15.3	15.1	15.2	8.7	8.5	8.6	6.8	6.6	6.7
22	18.6	18.3	18.5	15.2	14.8	15.0	8.9	8.6	8.7	6.9	6.7	6.8
23	18.6	18.3	18.5	15.2	14.9	15.1	8.9	8.8	8.9	6.7	6.3	6.5
24	18.5	18.1	18.3	15.2	14.3	14.8	8.8	8.3	8.5	6.8	6.5	6.6
25	18.4	18.2	18.3	14.3	13.9	14.1	8.3	8.1	8.2	6.9	6.5	6.7
26	18.3	17.8	18.1	13.9	13.5	13.6	8.2	8.0	8.1	7.4	6.9	7.1
27	17.8	17.5	17.7	13.5	13.4	13.4	8.2	8.0	8.1	7.4	6.9	7.3
28	17.5	17.1	17.2	13.4	12.9	13.2	8.4	8.0	8.2	6.9	6.5	6.7
29	17.1	16.9	17.0	12.9	12.4	12.6	8.5	8.2	8.3	6.5	6.3	6.4
30	17.1	16.7	16.9	12.4	12.1	12.2	8.6	8.3	8.4	6.5	6.3	6.4
31	17.3	16.8	17.0	---	---	---	8.7	8.3	8.5	6.4	6.0	6.3
MONTH	20.9	16.7	18.7	18.0	12.1	15.4	12.2	8.0	9.7	10.6	6.0	7.9
		FEBRUARY			MARCH			APRIL			MAY	
1	6.4	6.0	6.2	8.3	8.0	8.2	12.7	12.5	12.6	16.5	16.0	16.2
2	6.4	6.3	6.4	8.6	8.2	8.4	12.6	12.3	12.4	16.4	15.7	16.0
3	6.4	6.2	6.3	8.7	8.4	8.5	12.6	12.2	12.4	16.4	16.0	16.1
4	6.6	6.2	6.4	9.3	8.6	8.9	12.7	12.3	12.5	16.3	15.7	16.0
5	6.7	6.5	6.6	9.7	9.3	9.5	12.9	12.4	12.6	16.4	15.9	16.2
6	6.8	6.3	6.6	10.5	9.6	10.1	13.2	12.6	12.8	17.3	16.2	16.6
7	6.4	6.2	6.3	10.6	10.2	10.4	13.9	12.9	13.3	17.4	16.4	16.8
8	6.8	6.3	6.6	10.6	10.4	10.5	13.8	13.3	13.5	18.3	17.4	18.0
9	6.9	6.7	6.8	10.6	10.3	10.5	14.2	13.3	13.8	18.5	17.8	18.1
10	7.2	6.9	7.1	10.3	9.9	10.1	14.3	14.0	14.1	18.5	17.7	18.0
11	7.3	7.1	7.2	9.9	9.8	9.8	14.0	13.7	13.8	18.7	17.7	18.1
12	7.5	7.3	7.4	10.0	9.8	9.9	13.9	13.3	13.6	18.7	17.7	18.2
13	7.4	7.3	7.4	9.9	9.6	9.8	13.3	12.3	12.8	18.5	18.0	18.2
14	7.3	7.1	7.2	9.8	9.3	9.6	12.3	11.9	12.1	18.9	18.0	18.4
15	7.2	6.9	7.1	9.3	9.1	9.2	12.3	11.7	12.0	18.9	18.0	18.4
16	6.9	6.7	6.8	9.3	9.0	9.2	13.0	12.2	12.5	19.1	18.8	18.9
17	7.1	6.8	7.0	9.3	9.1	9.2	13.5	12.4	12.9	19.6	18.6	19.1
18	7.3	7.0	7.1	9.8	9.3	9.5	14.0	13.2	13.6	19.6	18.6	19.1
19	7.4	6.9	7.2	10.6	9.6	10.1	14.5	13.6	14.0	19.8	18.5	19.2
20	7.4	7.2	7.3	10.8	10.3	10.6	15.0	14.2	14.6	20.0	18.5	19.1
21	7.4	7.2	7.3	10.7	10.3	10.5	14.9	14.4	14.6	19.8	18.4	19.2
22	7.6	7.1	7.3	10.5	10.1	10.2	15.0	14.6	14.8	20.6	19.2	19.7
23	7.6	7.3	7.5	10.4	9.9	10.2	15.0	14.6	14.8	21.1	19.6	20.2
24	8.0	7.6	7.8	10.8	10.0	10.4	15.5	14.9	15.2	20.7	19.7	20.2
25	7.9	7.7	7.8	11.5	10.6	11.0	15.5	15.1	15.3	21.3	19.7	20.4
26	7.7	7.5	7.6	12.1	11.3	11.7	15.7	15.2	15.4	21.1	19.8	20.4
27	7.6	7.3	7.4	12.5	11.8	12.2	15.9	15.6	15.7	22.1	20.2	21.2
28	7.8	7.3	7.5	13.1	12.3	12.7	16.2	15.7	15.9	22.0	20.7	21.3
29	8.2	7.6	7.9	13.1	12.4	12.6	16.3	15.6	16.0	22.8	21.2	22.1
30	---	---	---	13.2	12.6	12.9	16.3	15.8	16.0	23.2	21.8	22.3
31	---	---	---	13.0	12.7	12.8	---	---	---	23.0	21.6	22.3
MONTH	8.2	6.0	7.1	13.2	8.0	10.3	16.3	11.7	13.9	23.2	15.7	18.8

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

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.2	22.1	22.7	21.6	21.1	21.3	24.6	22.7	23.7	23.2	22.6	22.9
2	22.8	21.9	22.4	21.2	20.3	20.9	24.4	22.8	23.5	23.1	22.7	22.9
3	21.9	21.6	21.7	22.2	19.8	20.8	23.8	22.8	23.3	23.0	22.4	22.7
4	22.1	21.4	21.8	20.4	19.9	20.2	23.7	22.7	23.3	22.9	22.3	22.5
5	22.8	21.8	22.4	20.6	19.8	20.1	23.5	22.6	23.1	22.6	22.1	22.5
6	22.7	22.2	22.5	21.1	20.1	20.5	23.7	23.0	23.5	22.7	22.3	22.6
7	23.4	22.5	22.8	21.4	20.3	20.8	23.7	23.4	23.6	22.5	22.1	22.3
8	23.1	22.3	22.5	21.7	20.2	20.8	23.6	23.1	23.3	23.5	22.4	23.0
9	23.0	22.1	22.6	21.9	20.7	21.2	23.5	22.7	23.0	23.4	23.1	23.2
10	22.9	22.0	22.4	22.3	21.4	21.7	22.9	22.3	22.6	23.6	22.9	23.2
11	22.7	22.0	22.5	22.0	21.2	21.7	22.9	22.1	22.5	23.3	22.5	22.9
12	22.6	22.2	22.4	22.4	21.8	22.0	23.0	22.2	22.7	22.9	22.4	22.6
13	23.8	22.4	22.8	22.4	21.4	22.1	22.6	22.0	22.4	23.2	22.5	22.8
14	23.1	22.4	22.8	23.1	21.4	22.4	22.1	21.9	22.0	23.4	22.8	23.1
15	22.7	21.9	22.2	23.2	22.6	23.0	22.1	21.8	21.9	24.1	23.0	23.4
16	22.3	21.8	22.1	23.2	22.7	22.9	22.5	21.9	22.2	23.5	22.9	23.1
17	21.9	21.5	21.7	23.2	22.4	22.9	22.5	22.1	22.3	23.0	22.8	22.9
18	21.8	21.3	21.5	22.9	22.4	22.7	22.8	21.9	22.4	22.8	22.2	22.6
19	21.5	21.1	21.3	23.1	22.8	23.0	22.8	22.1	22.5	22.2	21.7	21.9
20	22.3	21.4	21.9	23.2	22.4	22.8	22.7	22.4	22.6	22.0	21.6	21.8
21	22.5	21.6	21.9	23.1	22.2	22.5	22.4	21.7	22.0	22.1	21.7	21.8
22	22.4	21.4	21.8	22.6	21.9	22.3	22.4	22.0	22.1	22.1	21.7	21.8
23	21.9	21.1	21.5	22.8	21.9	22.5	22.5	21.7	22.1	22.1	21.8	21.9
24	22.9	21.3	21.9	23.2	22.0	22.6	22.4	21.6	22.0	22.4	21.7	21.9
25	22.6	21.3	21.8	23.1	22.7	22.9	22.4	21.7	22.0	22.4	21.8	22.0
26	22.3	21.5	21.8	23.0	22.3	22.7	22.6	21.7	22.1	22.3	21.8	22.1
27	23.1	21.9	22.4	22.7	22.1	22.5	22.4	21.9	22.1	22.1	21.4	21.9
28	22.6	22.0	22.4	24.2	22.5	23.5	22.4	21.9	22.2	21.7	21.3	21.5
29	22.4	21.6	22.1	24.1	22.3	23.4	22.5	21.8	22.2	21.4	21.1	21.2
30	22.1	21.1	21.8	24.8	22.1	23.3	22.2	21.8	21.9	21.2	20.9	21.0
31	---	---	---	23.2	22.4	22.7	22.8	21.9	22.4	---	---	---
MONTH	23.8	21.1	22.1	24.8	19.8	22.1	24.6	21.6	22.6	24.1	20.9	22.4

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

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.5	7.5	8.0	10.7	9.6	10.3	11.9	10.1	10.8	13.1	11.6	12.9
2	9.8	7.5	8.6	10.3	9.8	10.1	10.3	10.1	10.2	13.1	12.8	12.9
3	9.6	8.8	9.2	10.4	9.5	10.1	10.8	10.0	10.4	12.8	11.5	12.5
4	9.3	8.2	8.7	10.5	10.0	10.2	10.2	9.6	9.9	12.7	11.4	12.4
5	9.3	8.2	8.7	10.1	9.5	9.7	9.8	9.6	9.7	12.6	11.3	12.0
6	9.1	8.4	8.7	9.6	9.1	9.4	9.9	9.7	9.8	12.7	12.5	12.6
7	9.4	8.2	8.7	9.4	8.6	8.9	9.8	9.6	9.7	12.6	12.5	12.5
8	9.4	8.3	8.7	9.0	8.5	8.8	9.7	9.5	9.6	12.5	12.4	12.5
9	9.1	7.8	8.5	9.5	8.7	9.2	9.7	9.5	9.6	12.5	12.3	12.4
10	8.8	7.7	8.4	9.6	9.0	9.3	10.0	9.7	9.8	12.6	12.3	12.4
11	---	---	---	9.9	9.2	9.5	10.2	9.8	10.0	12.7	12.3	12.4
12	---	---	---	10.0	9.4	9.6	10.3	10.1	10.2	12.7	12.5	12.6
13	---	---	---	9.8	9.3	9.5	10.4	10.2	10.3	12.8	12.4	12.6
14	8.6	6.8	7.5	10.1	9.6	9.8	10.5	10.3	10.4	12.9	12.7	12.8
15	7.6	6.7	7.2	10.1	9.8	10	10.6	10.4	10.5	13.1	12.8	12.9
16	7.9	7.1	7.4	9.8	9.5	9.7	10.5	10.3	10.4	13.2	12.9	13.1
17	9.8	7.0	7.7	9.8	9.1	9.6	10.8	10.4	10.6	13.2	12.9	13.1
18	9.0	7.6	8.2	9.6	9.0	9.3	10.8	10.6	10.7	13.2	13.0	13.1
19	8.4	7.7	8.2	9.4	9.1	9.2	11.0	10.8	10.9	13.5	13.1	13.3
20	8.9	8.1	8.4	9.5	9.1	9.3	11.1	10.8	11.0	13.6	13.4	13.5
21	8.8	8.0	8.4	9.5	9.1	9.3	11.2	11.0	11.1	13.6	12.8	13.4
22	8.8	7.7	8.3	9.6	9.2	9.4	11.2	10.8	11.0	13.5	12.5	12.9
23	9.0	7.9	8.6	9.5	9.1	9.3	11.1	10.9	11.0	12.7	12.4	12.6
24	9.1	8.5	8.9	9.5	9.2	9.4	11.2	10.1	10.6	12.8	12.5	12.7
25	9.4	7.9	8.8	9.8	9.2	9.6	10.4	10.0	10.2	13.3	12.6	12.7
26	9.1	8.1	8.5	9.8	9.7	9.8	10.3	10.0	10.2	---	---	---
27	9.3	8.3	8.9	9.8	9.6	9.7	10.4	10.1	10.2	---	---	---
28	9.2	8.2	8.7	10.2	9.6	9.9	11.9	10.3	11.6	---	---	---
29	10.4	8.1	8.8	10.4	9.9	10.1	12.4	11.6	11.9	---	---	---
30	10.8	10.2	10.4	12.0	9.9	11.2	12.9	12.3	12.6	---	---	---
31	10.5	9.1	10.2	---	---	---	12.8	11.6	12.4	---	---	---
MONTH	10.8	6.7	8.5	12.0	8.5	9.6	12.9	9.5	10.6	13.6	11.3	12.8
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	11.9	11.6	11.7	12.3	11.8	11.9	11.6	11.0	11.3
2	14.0	12.8	13.9	11.8	11.5	11.7	12.1	11.6	11.9	11.1	10.2	10.5
3	13.9	13.6	13.7	12.8	11.6	11.9	12.3	11.4	12.0	10.8	9.9	10.3
4	13.8	13.5	13.7	12.4	11.9	12.2	12.4	12.0	12.2	10.6	9.5	9.9
5	16.3	13.2	14.3	12.2	11.5	11.8	12.5	11.9	12.3	10.6	9.6	10.1
6	15.3	14.9	15.0	13.5	11.5	12.8	12.7	12.1	12.4	11.0	9.9	10.3
7	15.5	15.3	15.4	13.1	12.3	12.8	13.4	12.3	12.8	10.9	9.9	10.4
8	15.4	14.8	15.1	12.9	10.5	11.3	13.2	12.1	12.6	11.5	10.9	11.2
9	14.9	14.2	14.5	10.6	10.2	10.3	12.9	12.1	12.6	11.2	10.6	10.9
10	14.4	12.8	13.8	10.7	10.2	10.5	12.9	12.6	12.7	11.3	10.1	10.5
11	14.5	12.0	13.0	10.8	10.5	10.7	12.8	12.1	12.3	10.9	9.6	10.3
12	---	---	---	10.5	10.2	10.3	12.4	11.5	11.9	10.9	10.0	10.4
13	---	---	---	10.5	10.3	10.4	12.3	11.4	11.5	10.3	9.8	10.0
14	---	---	---	11.0	10.4	10.6	13.9	12.2	13.4	10.3	9.5	9.9
15	---	---	---	11.3	10.8	11.1	13.0	11.6	12.4	10.0	9.1	9.5
16	---	---	---	12.0	11.3	11.5	11.6	11.4	11.5	10.1	9.1	9.6
17	---	---	---	11.7	11.5	11.6	11.6	11.2	11.3	9.9	8.5	9.2
18	---	---	---	11.8	11.6	11.7	11.8	11.2	11.5	10.2	8.1	9.2
19	11.0	10.8	10.9	12.1	11.6	11.9	12.1	11.3	11.7	10.4	7.4	9.4
20	11.0	10.9	10.9	12.1	11.8	12.0	12.6	11.9	12.2	10.5	8.6	9.3
21	11.2	10.9	11.0	12.1	11.8	12.0	12.3	11.1	11.6	10.3	8.4	9.4
22	11.3	11.1	11.2	12.3	11.9	12.1	11.1	10.6	10.9	10.3	9.0	9.6
23	11.4	11.2	11.3	12.5	12.0	12.2	12.4	10.3	11.3	9.7	8.7	9.1
24	13.5	11.3	11.5	12.6	12.0	12.3	12.4	9.7	10.6	9.0	8.3	8.7
25	11.5	11.3	11.4	12.5	12.1	12.3	10.0	9.5	9.7	9.7	7.9	8.9
26	11.6	11.2	11.4	12.7	12.0	12.4	10.2	9.5	9.8	9.3	5.7	8.6
27	11.8	11.5	11.6	13.0	12.3	12.7	11.0	10.0	10.4	9.9	7.1	8.9
28	12.0	11.6	11.8	13.1	12.6	12.8	11.4	10.5	11.0	9.4	8.0	8.8
29	12.1	11.7	11.9	13.0	12.2	12.5	11.8	10.9	11.4	10.0	8.3	9.2
30	---	---	---	12.4	11.9	12.2	11.8	10.9	11.3	10.1	7.9	9.1
31	---	---	---	12.2	11.8	12.0	---	---	---	9.3	8.3	8.9
MONTH	16.3	10.8	12.7	13.5	10.2	11.8	13.9	9.5	11.7	11.6	5.7	9.7

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

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.3	8.5	8.9	9.7	8.6	9.1	11.7	9.0	10.6	9.1	8.2	8.7
2	9.9	8.3	9.0	9.8	8.9	9.3	11.4	9.0	10.1	8.9	8.3	8.6
3	8.8	8.4	8.5	10.6	8.4	9.4	9.5	8.2	9.2	9.1	7.6	8.4
4	9.3	8.2	8.8	9.2	8.7	8.9	9.2	7.8	8.5	8.9	7.5	8.0
5	9.9	8.6	9.2	9.0	8.7	8.8	8.4	7.6	8.0	8.5	7.3	7.9
6	9.3	8.0	8.5	9.5	8.6	8.9	8.7	7.8	8.2	8.2	7.6	7.9
7	10.6	8.6	9.4	10.0	8.3	9.3	9.2	8.4	8.8	7.8	7.0	7.3
8	9.5	8.1	8.6	10.2	9.2	9.5	9.5	8.1	8.7	8.5	6.6	7.7
9	9.7	8.3	9.0	10.3	9.2	9.7	9.5	7.7	8.5	8.8	7.8	8.3
10	8.8	7.7	8.4	10.4	9.3	9.7	9.2	8.1	8.6	9.1	7.8	8.3
11	8.7	8.1	8.4	9.7	8.9	9.4	9.1	8.1	8.6	8.9	7.6	8.1
12	8.3	7.2	7.8	9.6	8.9	9.3	9.1	8.4	8.8	8.6	7.3	7.9
13	8.9	7.3	8.0	9.4	8.2	8.8	9.0	8.4	8.7	8.9	7.4	8.2
14	9.0	7.7	8.3	9.4	8.2	8.8	8.9	8.4	8.6	9.2	8.0	8.5
15	8.7	7.6	8.1	9.4	8.8	9.2	9.0	8.4	8.6	9.8	7.1	8.4
16	8.0	5.9	7.5	9.5	8.6	9.0	9.6	8.3	8.9	8.6	7.1	8.1
17	7.8	5.7	6.7	9.5	8.6	8.9	10.1	8.6	9.4	8.8	7.9	8.3
18	8.5	6.9	7.9	9.6	8.6	9.1	10.3	8.5	9.4	11.7	8.2	10.3
19	8.3	7.5	7.8	10.0	9.2	9.6	9.5	8.7	9.1	11.3	8.7	9.7
20	8.9	7.6	8.3	10.4	9.2	9.7	9.0	8.5	8.8	9.2	8.2	8.7
21	9.2	7.8	8.5	10.6	9.0	9.6	8.5	7.6	8.0	10.3	8.6	9.3
22	9.1	8.2	8.6	10.0	9.3	9.6	9.1	8.0	8.5	10.5	9.3	9.9
23	8.4	7.8	8.1	9.8	9.1	9.5	10.0	8.2	8.9	10.5	9.0	9.8
24	9.4	7.4	8.3	9.8	8.6	9.2	9.8	8.6	9.1	10.5	8.7	9.6
25	8.5	7.4	7.9	9.3	8.3	9.0	9.8	8.5	9.2	10.5	8.2	9.2
26	8.5	7.5	7.9	9.2	8.4	8.9	9.4	8.4	8.9	10.1	8.4	9.3
27	9.5	8.0	8.6	9.1	8.1	8.8	9.2	8.3	8.7	9.4	7.6	8.8
28	9.4	8.7	9.0	10.8	8.9	10.1	9.1	8.2	8.6	9.0	7.5	8.4
29	9.9	8.8	9.4	10.9	9.5	10.3	8.7	7.8	8.4	9.6	7.5	8.7
30	10.1	9.1	9.6	10.8	9.4	9.9	8.2	7.3	7.5	9.7	8.0	8.9
31	---	---	---	9.8	8.8	9.3	8.7	7.5	8.1	---	---	---
MONTH	10.6	5.7	8.4	10.9	8.1	9.3	11.7	7.3	8.8	11.7	6.6	8.6

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

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11	7	9	5	25	16	10	7	17	12	8	6
2	15	7	11	5	23	18	10	6	13	10	9	6
3	12	7	9	6	20	13	13	10	13	9	14	6
4	17	7	14	5	14	11	12	10	12	9	9	8
5	12	8	14	6	16	11	12	9	48	9	10	8
6	14	8	14	6	17	12	13	10	150	43	18	9
7	16	9	15	6	16	12	13	10	250	150	22	17
8	16	10	12	6	18	13	12	9	160	110	58	20
9	15	9	9	6	14	12	12	9	170	140	25	20
10	16	9	10	6	15	12	13	10	160	120	20	16
11	---	---	9	5	17	11	30	10	130	88	18	15
12	---	---	8	5	14	10	12	10	---	---	21	18
13	---	---	11	6	14	9	12	9	---	---	22	20
14	11	6	11	7	13	10	12	8	---	---	22	18
15	10	4	9	7	11	10	9	7	---	---	18	15
16	8	4	10	7	17	10	9	6	---	---	16	14
17	6	4	10	6	15	10	8	6	---	---	15	11
18	9	4	12	6	13	10	10	6	6	5	14	11
19	10	5	12	8	15	11	10	6	7	5	12	10
20	8	5	13	9	12	10	12	7	5	4	13	10
21	8	5	12	10	12	10	16	9	6	5	13	10
22	9	5	15	10	14	10	22	14	5	5	16	10
23	16	5	16	10	13	12	17	12	5	5	12	10
24	14	5	14	10	14	10	15	10	6	5	13	10
25	16	5	13	10	11	8	11	9	8	6	14	10
26	17	5	12	9	11	8	15	9	6	6	14	11
27	9	5	13	8	11	7	21	12	6	5	13	10
28	10	5	11	9	12	8	22	17	7	5	13	11
29	9	6	17	11	10	8	27	21	7	6	22	10
30	11	6	17	14	11	8	28	19	---	---	15	11
31	9	6	---	---	9	7	28	14	---	---	13	10
MONTH	17	4	17	5	25	7	30	6	250	4	58	6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13	10	18	13	28	9	10	5	6	4	5	3
2	14	10	21	14	15	8	7	4	6	4	6	2
3	19	9	21	16	13	8	14	3	7	5	4	3
4	14	9	---	---	11	6	12	5	8	3	4	3
5	13	9	---	---	13	7	12	4	7	3	4	2
6	17	9	---	---	13	8	33	4	6	2	4	3
7	16	8	---	---	14	10	25	4	7	3	4	3
8	12	8	---	---	---	---	6	3	7	4	5	2
9	---	---	---	---	---	---	5	4	10	4	6	3
10	---	---	6	4	---	---	6	4	10	3	4	3
11	---	---	6	4	---	---	5	4	13	4	4	2
12	---	---	6	5	---	---	7	4	8	4	7	2
13	13	11	9	5	---	---	7	4	32	4	4	2
14	13	11	6	5	---	---	6	4	10	4	4	2
15	14	12	7	4	---	---	6	5	13	6	4	2
16	17	14	7	5	---	---	13	4	10	6	6	3
17	18	16	7	5	---	---	6	4	9	3	8	4
18	18	16	8	3	---	---	7	4	9	4	8	4
19	17	16	6	3	---	---	6	4	7	3	7	4
20	16	12	6	4	---	---	7	4	5	3	5	4
21	16	14	6	4	---	---	7	5	6	4	6	4
22	18	15	6	4	---	---	7	4	7	4	6	3
23	22	14	6	4	---	---	6	4	6	4	6	4
24	20	15	6	4	---	---	8	4	5	3	6	4
25	31	19	6	4	---	---	6	4	7	3	7	4
26	23	19	11	3	---	---	5	4	7	3	15	4
27	20	10	14	4	15	7	5	4	6	2	7	4
28	14	10	13	4	17	7	6	4	6	3	32	4
29	15	12	13	5	11	7	6	4	8	2	9	3
30	19	12	13	5	10	5	5	4	5	2	36	5
31	---	---	21	7	---	---	6	4	5	3	---	---
MONTH	31	8	21	3	28	5	33	3	32	2	36	2

03426385 MANSKER CREEK ABOVE GOODLETTSVILLE, TN

LOCATION.--Lat 36°20'20", long 86°43'04", Davidson County, Hydrologic Unit 05130202, on left bank at downstream end of bridge on U.S. Highway 31W, at mouth of Slater Creek, 400 ft below Lumsley Fork, and 1.2 mi north of Goodlettsville.

DRAINAGE AREA.--27.7 mi^2, includes Slater Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Data collection platform. Datum of gage is 434.99 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Periodic obsevations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1315	*2,820	*9.64	Apr 23	0600	1,250	6.44
Apr 22	0600	1,930	7.87				

Minimum daily discharge, 1.5 ft^3/s, July 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	6.9	17	47	37	113	39	26	23	7.2	17	4.4
2	7.0	6.5	15	81	62	140	34	56	15	6.3	9.3	4.9
3	6.4	6.4	14	67	159	77	30	61	13	4.0	6.6	5.0
4	6.0	6.2	16	54	94	59	27	53	12	3.7	5.9	5.1
5	5.7	10	15	81	985	193	24	40	9.7	4.2	24	4.2
6	5.8	11	15	66	296	261	22	32	8.1	4.0	13	3.4
7	5.3	9.6	13	49	149	119	21	25	7.2	8.8	8.3	2.8
8	5.0	8.3	13	40	97	79	20	20	6.5	5.9	6.2	2.7
9	5.0	7.7	12	36	76	60	18	17	5.9	4.2	5.1	2.5
10	6.4	7.4	42	31	64	46	16	15	5.4	3.5	4.3	2.4
11	6.2	6.9	38	27	54	39	16	13	4.8	14	3.8	2.2
12	5.5	7.0	29	24	49	35	112	12	17	8.0	3.7	2.2
13	5.5	7.9	30	22	43	31	e300	13	10	6.2	3.3	2.6
14	11	7.1	109	21	39	28	194	12	7.3	9.8	3.0	3.1
15	8.6	8.8	57	19	35	26	99	305	6.4	6.6	2.7	2.3
16	6.8	12	65	17	31	26	67	81	5.6	5.1	2.4	3.8
17	6.4	12	67	17	29	24	49	46	13	4.2	2.3	8.7
18	5.9	143	48	81	27	25	40	33	10	3.4	2.2	4.7
19	5.7	97	37	65	26	22	34	25	7.0	3.0	2.0	3.3
20	5.5	48	30	46	25	56	29	20	5.6	2.7	19	2.7
21	5.4	30	26	37	23	90	70	16	4.7	2.3	21	2.4
22	5.4	22	23	32	21	57	656	13	4.2	2.0	9.6	2.3
23	5.4	17	49	28	20	45	457	11	3.8	1.7	8.7	2.1
24	5.4	59	74	26	19	38	198	9.3	3.5	1.5	12	1.9
25	5.3	39	50	297	18	34	109	8.0	3.8	4.2	15	1.9
26	14	28	38	162	17	30	80	7.3	3.7	4.9	15	1.7
27	11	25	31	97	15	28	55	6.7	3.1	3.6	9.4	1.7
28	8.8	26	27	70	14	25	41	8.4	2.8	2.6	7.3	1.7
29	7.8	23	90	57	14	34	33	7.3	2.5	2.2	6.4	1.7
30	7.1	20	130	49	---	43	30	6.6	2.7	2.0	6.6	1.7
31	7.1	---	68	41	---	43	---	79	---	69	5.6	---
TOTAL	210.3	718.7	1,288	1,787	2,538	1,926	2,920	1,077.6	227.3	210.8	260.7	92.1
MEAN	6.78	24.0	41.5	57.6	87.5	62.1	97.3	34.8	7.58	6.80	8.41	3.07
MAX	14	143	130	297	985	261	656	305	23	69	24	8.7
MIN	5.0	6.2	12	17	14	22	16	6.6	2.5	1.5	2.0	1.7
CFSM	0.24	0.86	1.50	2.08	3.16	2.24	3.51	1.25	0.27	0.25	0.30	0.11
IN.	0.28	0.97	1.73	2.40	3.41	2.59	3.92	1.45	0.31	0.28	0.35	0.12

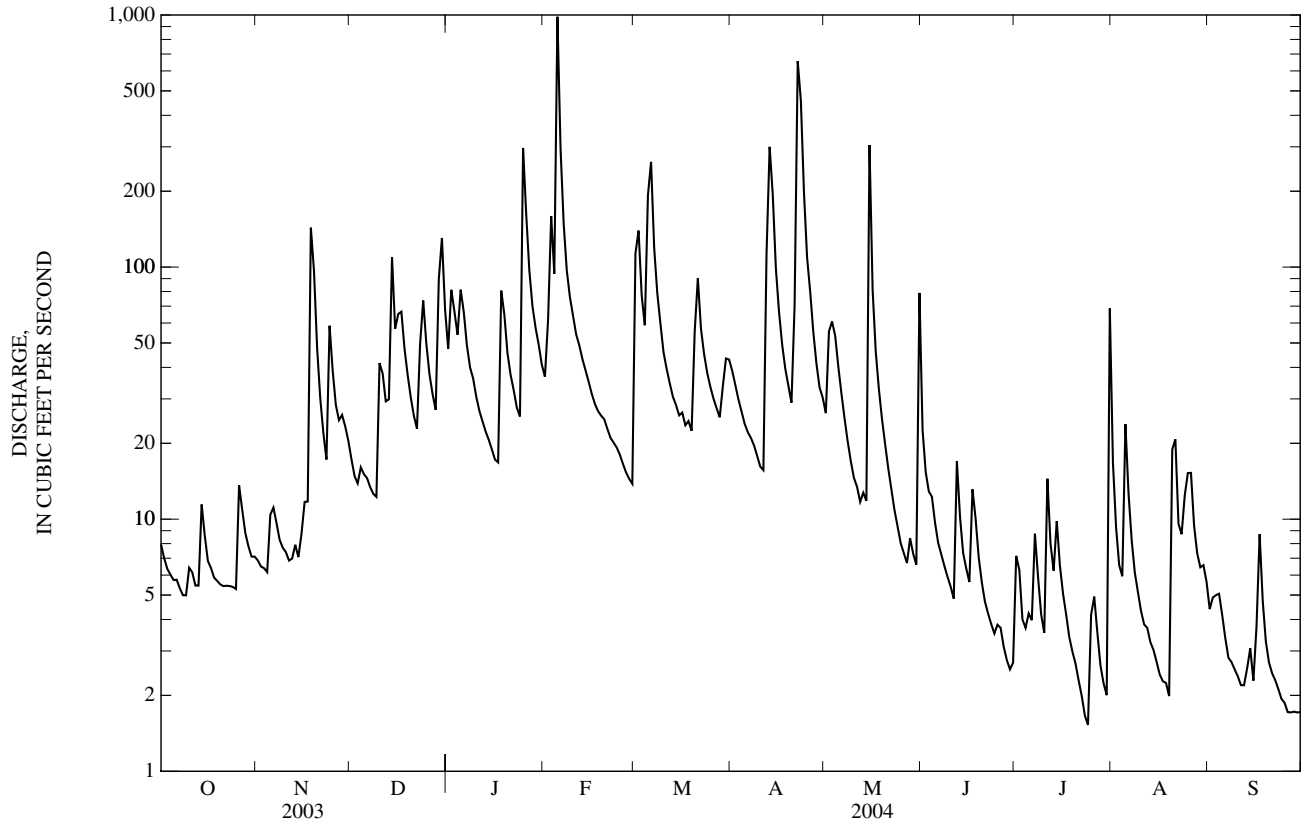
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	11.3	32.4	51.2	67.2	85.5	91.2	68.6	50.2	31.8	7.50	5.43	11.1
MAX	32.1	81.9	123	157	174	251	116	97.3	127	12.7	14.0	52.2
(WY)	(2003)	(1997)	(1997)	(1999)	(2003)	(1997)	(1998)	(1998)	(1998)	(1998)	(1994)	(1996)
MIN	1.40	2.94	10.1	15.4	35.7	33.8	23.2	12.7	5.31	2.58	1.17	0.38
(WY)	(2001)	(1999)	(2000)	(2000)	(2002)	(2003)	(1995)	(2001)	(2000)	(1995)	(1993)	(1999)

03426385 MANSKER CREEK ABOVE GOODLETTSVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	15,356.1		13,256.5			
ANNUAL MEAN	42.1		36.2		42.6	
HIGHEST ANNUAL MEAN					63.9	1997
LOWEST ANNUAL MEAN					20.9	2000
HIGHEST DAILY MEAN	1,190	May 7	985	Feb 5	1,890	Mar 2, 1997
LOWEST DAILY MEAN	1.9	Jul 27	1.5	Jul 24	0.02	Sep 9, 1999
ANNUAL SEVEN-DAY MINIMUM	2.1	Aug 23	1.8	Sep 24	0.04	Sep 3, 1999
MAXIMUM PEAK FLOW			2,820	Feb 5	12,500	Mar 2, 1997
MAXIMUM PEAK STAGE			9.64	Feb 5	13.31	Mar 2, 1997
ANNUAL RUNOFF (CFSM)	1.52		1.31		1.54	
ANNUAL RUNOFF (INCHES)	20.62		17.80		20.91	
10 PERCENT EXCEEDS	76		78		85	
50 PERCENT EXCEEDS	18		15		14	
90 PERCENT EXCEEDS	3.3		3.0		1.9	

e Estimated



03426385 MANSKER CREEK ABOVE GOODLETTSVILLE, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC 08...	1400	13	465	10.0	46
JAN 27...	1045	99	385	7.0	11
APR 20...	1130	30	394	17.0	3
JUN 08...	1120	6.2	367	29.5	5
AUG 05...	1240	26	375	23.5	7

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03426470 DRY CREEK NEAR EDENWOLD, TN

LOCATION.--Lat 36°17'03", long 86°42'22", Davidson County, Hydrologic Unit 05130202, on right wingwall on downstream side of bridge on Gallatin Pike, 0.6 mi southwest of Edenwold, 0.6 mi northeast of Amqui, and at mile 1.2.

DRAINAGE AREA.--7.64 mi^2.

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

GAGE.--Data collection platform. Elevation of gage is 430 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges which are fair, and discharges above 1,000 ft^3/s, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 22	0515	*2,050	*8.33

No other peak greater than base discharge.

Minimum discharge, 0.14 ft^3/s, Sept. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.9	6.3	12	7.8	99	5.7	7.0	4.3	0.90	1.5	0.42
2	1.6	1.8	5.3	50	31	42	5.0	36	3.2	0.73	1.0	0.98
3	1.4	1.7	5.1	21	65	18	4.5	36	3.9	0.61	0.82	1.0
4	1.3	1.9	6.4	15	23	13	4.2	18	2.9	1.2	0.94	0.79
5	1.3	3.9	5.7	17	481	60	3.9	12	2.2	e1.9	14	0.64
6	1.4	3.6	5.4	14	101	54	3.6	8.5	1.8	e1.2	2.4	0.49
7	1.3	2.6	4.9	11	33	21	3.6	6.8	1.7	2.9	1.3	0.42
8	1.3	2.2	4.6	9.6	21	15	3.4	5.8	1.5	1.5	1.1	0.39
9	1.3	2.0	4.9	9.0	16	12	3.4	5.1	1.4	1.1	0.87	0.34
10	3.4	1.9	15	7.6	15	9.5	3.3	4.6	1.3	0.93	0.72	0.28
11	2.0	1.8	11	6.6	12	8.2	3.3	4.7	1.2	1.2	0.64	0.25
12	1.6	1.9	8.2	6.0	12	6.8	36	3.9	1.8	1.1	0.70	0.50
13	1.5	1.9	8.0	5.5	10	5.9	91	4.8	2.2	0.96	0.70	0.46
14	4.5	1.8	26	5.1	9.0	5.4	37	4.5	1.7	1.1	0.55	0.46
15	3.0	2.3	14	4.6	7.9	5.0	18	191	1.5	0.94	0.48	0.38
16	2.2	3.7	24	4.4	6.6	5.1	12	21	1.2	0.81	0.40	0.90
17	2.0	3.5	18	4.5	6.0	4.5	9.4	11	1.2	0.73	0.35	2.0
18	1.8	70	14	41	5.4	4.3	7.8	7.6	1.2	0.61	0.31	0.94
19	1.6	28	12	17	5.1	4.0	6.5	5.8	0.96	0.52	0.29	0.65
20	1.6	14	9.9	12	5.0	11	5.7	4.6	0.81	0.46	1.5	0.50
21	1.6	9.1	8.2	9.5	4.7	12	30	3.8	0.77	0.43	2.9	0.39
22	1.6	6.7	7.0	8.1	4.2	7.6	354	3.1	0.71	0.41	1.5	0.27
23	1.6	5.4	19	7.1	4.1	6.4	131	2.7	0.82	0.42	1.1	0.23
24	1.5	29	20	6.5	4.0	5.8	45	2.4	0.74	0.40	1.4	0.21
25	1.5	13	13	131	3.7	5.1	23	2.2	0.88	0.63	1.3	0.18
26	5.6	8.9	10	33	3.6	4.9	18	1.9	0.81	0.82	1.1	0.16
27	3.7	8.2	8.3	21	3.4	4.4	13	1.8	0.66	0.68	0.83	0.18
28	2.8	14	7.0	15	3.4	4.2	10	2.4	0.61	0.50	0.71	0.18
29	2.4	10	40	13	3.3	7.8	8.0	1.8	0.57	0.40	0.63	0.17
30	2.1	8.2	34	11	---	7.5	7.7	2.0	0.59	0.39	0.61	0.17
31	2.0	---	17	8.9	---	6.9	---	26	---	13	0.49	---
TOTAL	64.2	264.9	392.2	537.0	907.2	476.3	907.0	448.8	45.13	39.48	43.14	14.93
MEAN	2.07	8.83	12.7	17.3	31.3	15.4	30.2	14.5	1.50	1.27	1.39	0.50
MAX	5.6	70	40	131	481	99	354	191	4.3	13	14	2.0
MIN	1.3	1.7	4.6	4.4	3.3	4.0	3.3	1.8	0.57	0.39	0.29	0.16
CFSM	0.27	1.16	1.66	2.27	4.09	2.01	3.96	1.89	0.20	0.17	0.18	0.07
IN.	0.31	1.29	1.91	2.61	4.42	2.32	4.42	2.19	0.22	0.19	0.21	0.07

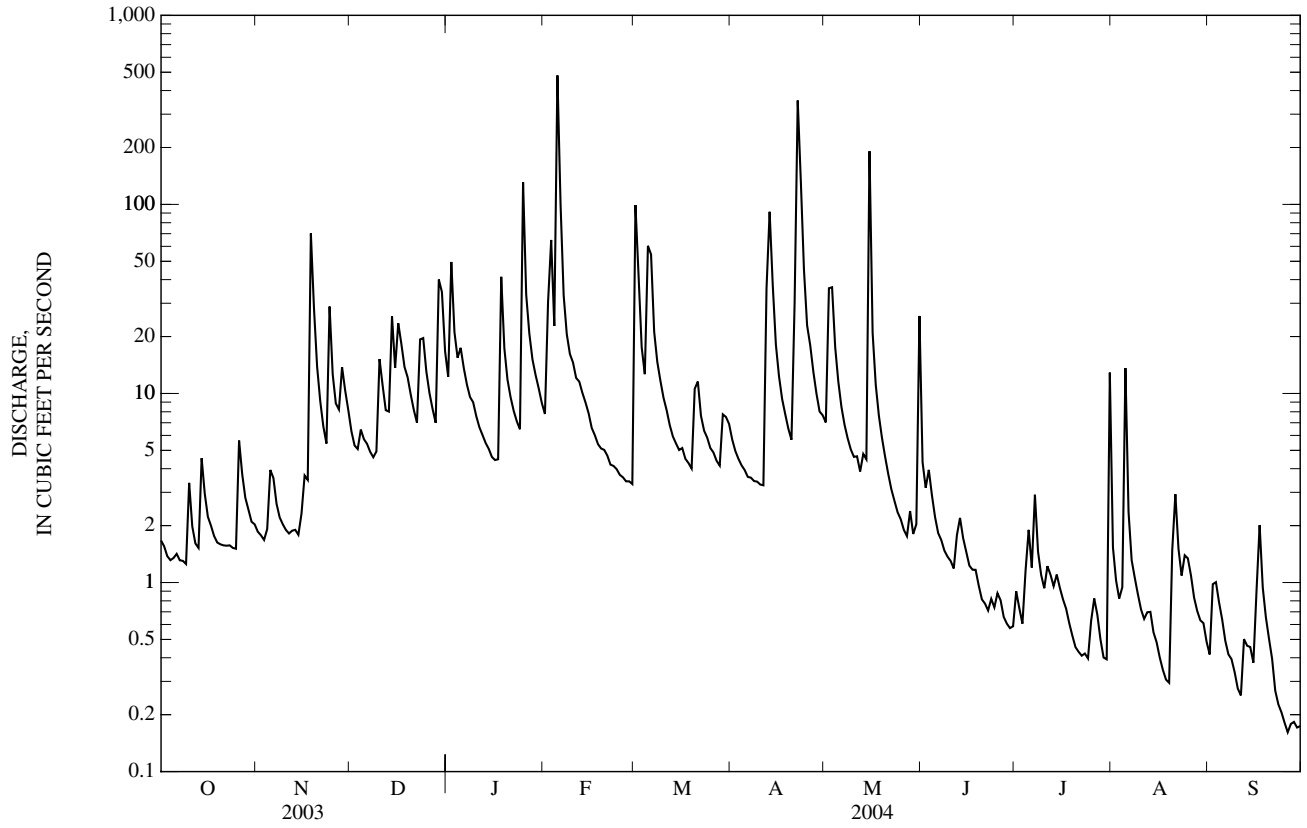
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	3.22	11.2	16.2	19.1	24.4	22.6	19.2	12.7	13.9	3.30	1.57	4.82
MAX	10.1	30.8	34.2	49.9	55.9	57.0	48.5	27.5	47.3	12.9	3.28	17.7
(WY)	(2003)	(1997)	(1997)	(1999)	(2003)	(1997)	(1998)	(2003)	(1998)	(2002)	(2002)	(2003)
MIN	0.17	0.68	4.46	6.56	10.1	7.85	5.78	2.51	1.16	0.33	0.20	0.12
(WY)	(2001)	(1999)	(2000)	(2000)	(2002)	(2001)	(2001)	(2001)	(2000)	(2000)	(2000)	(1999)

03426470 DRY CREEK NEAR EDENWOLD, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	4,861.13		4,140.28			
ANNUAL MEAN	13.3		11.3		12.6	
HIGHEST ANNUAL MEAN					17.6	1997
LOWEST ANNUAL MEAN					5.12	2000
HIGHEST DAILY MEAN	447	Sep 22	481	Feb 5	679	Jun 5, 1998
LOWEST DAILY MEAN	0.60	Jul 26	0.16	Sep 26	0.02	Sep 8, 1999
ANNUAL SEVEN-DAY MINIMUM	0.76	Jul 22	0.18	Sep 24	0.04	Aug 20, 2000
MAXIMUM PEAK FLOW			2,050	Apr 22	6,360	Jun 5, 1998
MAXIMUM PEAK STAGE			8.33	Apr 22	10.21	Jun 5, 1998
INSTANTANEOUS LOW FLOW			0.14	Sep 26	0.02	Aug 23, 2000
ANNUAL RUNOFF (CFSM)	1.74		1.48		1.65	
ANNUAL RUNOFF (INCHES)	23.67		20.16		22.40	
10 PERCENT EXCEEDS	20		21		21	
50 PERCENT EXCEEDS	4.4		3.8		3.3	
90 PERCENT EXCEEDS	1.1		0.51		0.35	

e Estimated



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 50 (revised) ft upstream from highway bridge, 2.5 mi southwest of Lascassas, 3.7 mi downstream from Bradley Creek, 6.0 mi northeast of the courthouse in Murfreesboro, and at mile 15.4.

DRAINAGE AREA.--262 mi^2.

PERIOD OF RECORD.--October 1950 to November 1958, May 1963 to September 1991, October 1991 to September 2000, crest-stage partial record station. October 2000 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.--Data collection platform. 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. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1902, 39.48 ft, Mar. 13, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	1000	8,200	18.61
Feb 6	0400	*19,600	*30.41
Mar 6	0700	11,400	22.33
Apr 13	1200	7,290	17.41
Jun 25	2000	8,390	18.86

Minimum discharge, 18 ft^3/s, Sept. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	38	413	489	225	306	293	93	329	388	48	23
2	50	36	279	394	202	2,350	250	99	147	817	44	26
3	45	34	215	346	278	1,050	215	130	212	343	39	40
4	42	33	191	291	267	703	191	153	126	241	37	47
5	40	35	194	1,570	7,720	923	168	119	98	644	44	36
6	39	40	188	1,280	14,400	7,440	151	100	72	341	42	30
7	37	40	173	702	2,940	1,890	142	87	61	2,690	39	26
8	35	39	156	488	1,330	970	138	77	56	1,160	34	24
9	35	35	140	411	867	687	129	70	51	512	31	25
10	33	33	442	367	677	508	117	65	147	320	29	30
11	34	32	732	301	538	389	112	801	72	258	27	27
12	35	32	430	260	459	322	742	226	55	223	60	23
13	33	37	305	225	435	272	4,710	142	933	193	95	21
14	34	46	286	198	379	240	2,870	151	668	189	52	22
15	34	47	305	179	343	217	1,230	169	240	147	37	20
16	37	72	271	157	343	237	747	219	161	111	31	22
17	40	185	468	143	389	269	520	171	299	91	27	1,400
18	37	238	462	1,310	595	232	380	128	484	79	26	624
19	35	796	356	1,090	582	252	302	152	312	69	25	236
20	33	594	282	593	535	227	256	122	167	61	36	135
21	31	294	229	410	454	469	223	94	110	54	45	94
22	31	191	195	317	349	355	200	79	88	49	38	73
23	28	142	349	259	290	284	178	71	106	45	47	59
24	27	948	1,030	222	257	245	161	63	455	43	64	50
25	28	698	595	1,830	228	215	143	57	3,150	48	48	44
26	36	352	396	1,430	319	192	145	53	2,130	132	38	39
27	42	240	299	768	601	175	140	50	617	187	33	36
28	57	4,780	243	523	437	162	118	48	329	109	30	33
29	56	1,530	219	389	333	157	106	47	219	74	26	31
30	47	690	1,220	322	---	251	98	46	204	58	23	30
31	42	---	741	265	---	309	---	459	---	52	22	---
MEAN	38.4	410	381	565	1,268	719	506	140	403	314	39.3	111
MAX	57	4,780	1,220	1,830	14,400	7,440	4,710	801	3,150	2,690	95	1,400
MIN	27	32	140	143	202	157	98	46	51	43	22	20

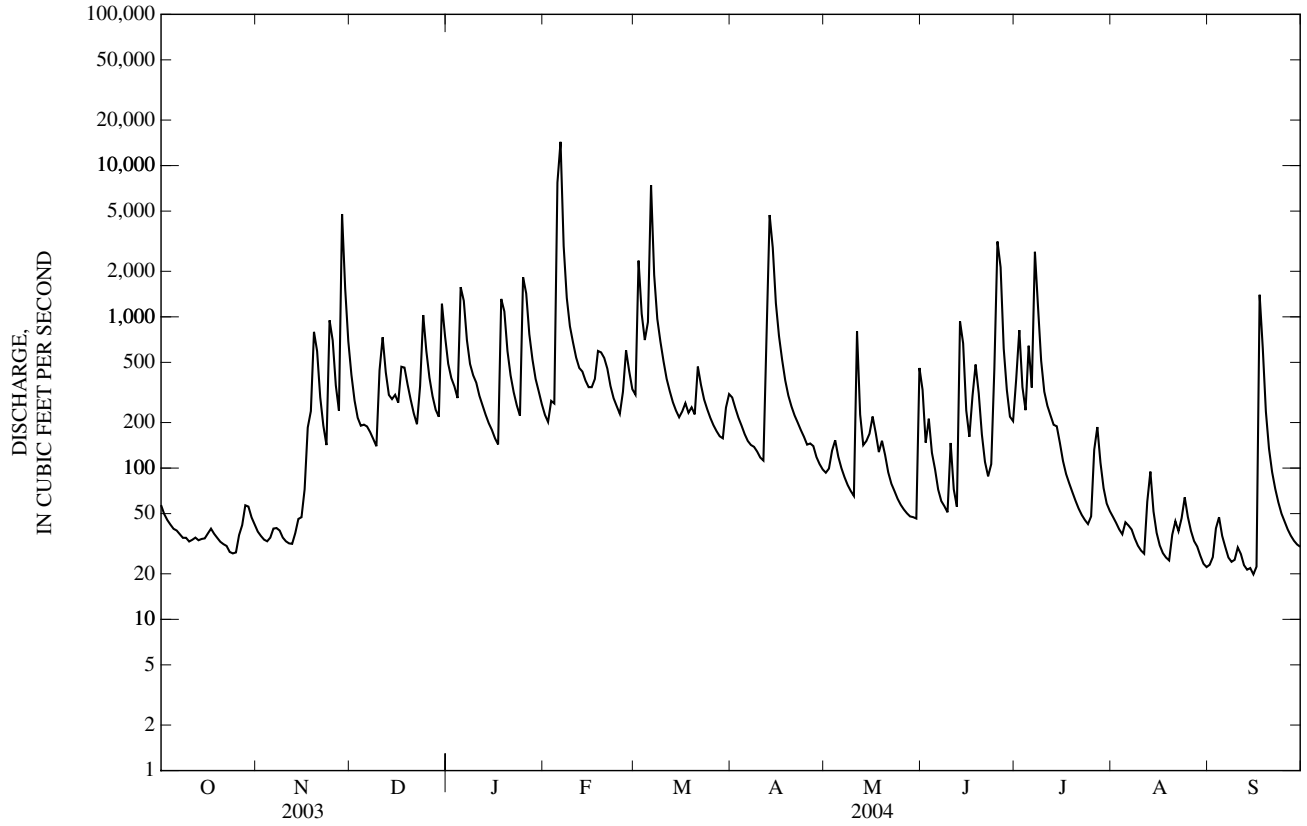
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	147	389	748	805	903	921	619	478	183	127	87.0	152
MAX	1,211	1,466	2,027	2,184	2,136	3,201	1,605	2,214	1,261	898	448	1,078
(WY)	(1976)	(1987)	(1991)	(1974)	(1956)	(1975)	(1973)	(1984)	(1989)	(1989)	(1966)	(1986)
MIN	7.13	9.56	19.6	55.4	205	205	69.5	34.6	9.62	16.8	13.3	10.9
(WY)	(1954)	(1954)	(1966)	(1981)	(1968)	(1966)	(1986)	(1988)	(1988)	(1988)	(1957)	(1968)

03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL MEAN	545		404		460	
HIGHEST ANNUAL MEAN					921	1973
LOWEST ANNUAL MEAN					141	1981
HIGHEST DAILY MEAN	15,900	May 6	14,400	Feb 6	34,900	Mar 13, 1975
LOWEST DAILY MEAN	21	Sep 20	20	Sep 15	0.40	Aug 31, 1953
ANNUAL SEVEN-DAY MINIMUM	24	Sep 15	24	Sep 10	2.9	Sep 22, 1954
MAXIMUM PEAK FLOW			19,600	Feb 6	41,200	Mar 13, 1975
MAXIMUM PEAK STAGE			30.41	Feb 6	39.48	Mar 13, 1975
INSTANTANEOUS LOW FLOW			a18	Sep 15	0.20	Oct 23, 1953
10 PERCENT EXCEEDS	963		744		963	
50 PERCENT EXCEEDS	162		170		121	
90 PERCENT EXCEEDS	36		33		17	

a Also occurred Sept. 16.



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 sewage 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 mi^2, includes 17 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

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

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 514.95 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow is affected by Murfreesboro sewage treatment plant outflow. An annual average of 11.6 ft^3/s, with a maximum of 15.5 ft^3/s is discharged to the West Fork Stones River 25 ft above the station. Prior to July 1987 an annual average of 7.7 ft^3/s was discharged. Natural flow of stream affected by transbasin diversion of water from East Fork Stones River basin into the West Fork Stones River basin.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	1300	4,740	11.59	Mar 6	1000	6,830	14.26
Feb 6	0500	*15,800	*19.69	Jun 25	2300	6,280	13.69

Minimum discharge, 20 ft^3/s, Nov. 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	35	338	303	194	197	154	77	156	720	54	32
2	62	31	271	268	185	978	129	98	108	759	48	35
3	52	30	233	235	219	585	113	119	83	454	42	114
4	43	28	221	212	204	423	118	109	69	366	39	90
5	40	27	206	588	3,890	486	116	95	58	528	89	60
6	40	36	182	584	12,000	3,670	105	81	50	348	55	50
7	38	34	159	363	1,850	1,030	83	69	46	1,500	46	45
8	35	30	142	295	978	626	69	61	40	554	44	40
9	35	29	126	282	693	486	61	54	37	361	40	38
10	35	28	241	251	561	395	56	51	45	299	36	35
11	38	27	413	219	473	334	54	92	37	491	35	32
12	36	29	282	195	430	291	330	56	49	332	43	29
13	31	39	232	173	412	260	2,320	59	397	267	40	29
14	38	33	225	154	359	237	1,720	57	340	247	40	30
15	46	31	219	139	327	220	734	113	211	211	36	28
16	35	58	207	124	321	232	495	97	163	172	33	42
17	30	60	227	115	354	240	385	110	145	144	30	2,420
18	34	107	233	477	565	218	315	96	131	119	29	645
19	33	314	207	599	492	250	271	88	98	99	27	364
20	36	276	176	366	415	216	238	65	78	83	110	271
21	33	188	153	291	340	211	217	55	64	69	90	220
22	32	136	137	250	278	183	199	48	64	60	50	183
23	32	110	171	218	244	157	179	45	136	53	61	147
24	30	285	548	192	235	139	159	41	293	51	98	120
25	29	359	363	819	218	128	140	39	1,980	188	64	92
26	69	233	279	801	237	116	129	35	1,680	e300	55	80
27	76	187	233	458	229	107	113	34	480	e450	47	72
28	57	2,420	202	346	206	99	100	35	355	101	42	65
29	45	864	205	288	185	119	89	34	291	83	38	60
30	41	461	546	252	---	148	83	37	275	69	37	55
31	37	---	406	220	---	162	---	215	---	61	35	---
TOTAL	1,287	6,525	7,783	10,077	27,094	12,943	9,274	2,265	7,959	9,539	1,533	5,523
MEAN	41.5	218	251	325	934	418	309	73.1	265	308	49.5	184
MAX	76	2,420	548	819	12,000	3,670	2,320	215	1,980	1,500	110	2,420
MIN	29	27	126	115	185	99	54	34	37	51	27	28

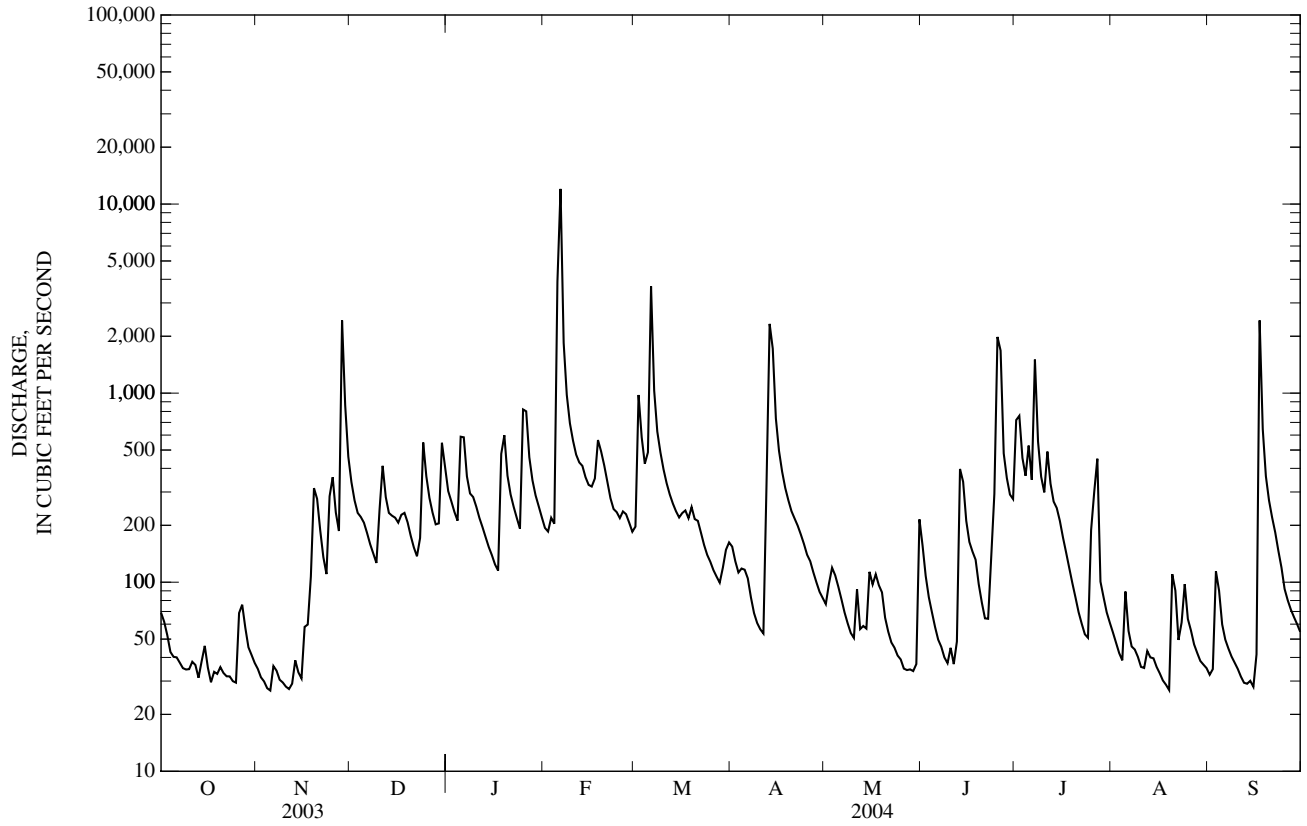
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

MEAN	134	266	477	567	555	659	337	234	160	102	69.6	134
MAX	894	1,035	1,259	1,453	1,250	1,773	954	1,041	765	658	348	880
(WY)	(1976)	(1987)	(1991)	(1974)	(2003)	(1975)	(1994)	(2003)	(1989)	(1989)	(1996)	(1979)
MIN	7.60	10.4	31.6	25.4	133	216	58.4	23.8	11.0	13.9	12.2	11.3
(WY)	(1981)	(1981)	(1981)	(1981)	(1978)	(1981)	(1986)	(1981)	(1988)	(1988)	(1976)	(1980)

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		aWATER YEARS 1972 - 2004	
ANNUAL TOTAL	117,997		101,802			
ANNUAL MEAN	323		278		311	
HIGHEST ANNUAL MEAN					517	1973
LOWEST ANNUAL MEAN					76.0	1981
HIGHEST DAILY MEAN	8,640	May 7	12,000	Feb 6	21,200	Mar 13, 1975
LOWEST DAILY MEAN	16	Sep 19	27	Nov 5	4.7	Oct 13, 1980
ANNUAL SEVEN-DAY MINIMUM	17	Sep 15	30	Nov 5	5.3	Nov 8, 1980
MAXIMUM PEAK FLOW			15,800	Feb 6	31,000	Mar 13, 1975
MAXIMUM PEAK STAGE			19.69	Feb 6	23.80	Mar 13, 1975
INSTANTANEOUS LOW FLOW			20	Nov 5	2.9	Jul 7, 1988
10 PERCENT EXCEEDS	554		488		633	
50 PERCENT EXCEEDS	137		130		112	
90 PERCENT EXCEEDS	30		35		17	

a See REMARKS.
e Estimated



03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

WATER-QUALITY RECORDS

LOCATION.--At bridge on Blanton Drive, 900 ft upstream from Sinking Creek, 0.7 mi upstream from discharge station.

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.--Periods of missing record were due to instrument malfunctions. Records for water temperature, pH and specific conductance records are good, dissolved oxygen are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 529 microsiemens, Jan. 24, 2000; minimum, 63 microsiemens, Dec. 25, 1987.
pH: Maximum, 9.0 units, Mar. 24, 1986; minimum, 5.8 units, June 18, 1992.
WATER TEMPERATURE: Maximum, 33.3°C, July 31, 1999; minimum, 0.2°C, Feb. 3, 4, 5, 6, 1996.
DISSOLVED OXYGEN: Maximum, 21.6 mg/L, Jan. 15, Mar. 11, 12, 2003; minimum, 1.6 mg/L, Sept. 12, 1990.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 488 microsiemens, Nov. 21, 22; minimum, 108 microsiemens, Feb. 6.
pH: Maximum, 8.6 units, March 21, 22; minimum, 7.3 units, Feb. 7, March 6.
WATER TEMPERATURE: Maximum, 29.7°C, Aug. 4; minimum, 4.7°C, Dec. 21, Feb. 1.
DISSOLVED OXYGEN: Maximum, 19.4 mg/L, Feb. 4; minimum, 3.3 mg/L, Nov. 5.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	435	422	430	426	411	422	422	400	412	403	373	387
2	437	424	432	427	422	425	437	422	430	427	403	414
3	439	423	432	430	417	425	442	437	440	440	427	433
4	438	423	431	437	420	431	444	441	442	446	440	442
5	436	422	430	446	435	439	454	444	450	444	398	425
6	438	432	435	454	446	450	460	454	457	398	330	341
7	439	429	435	459	454	457	463	458	460	396	346	373
8	439	433	436	460	456	459	466	460	463	424	396	413
9	440	433	436	456	440	446	469	459	465	438	424	430
10	440	433	437	440	433	435	466	420	443	443	435	439
11	444	437	441	435	431	433	454	424	443	446	438	443
12	448	440	444	438	433	435	424	400	408	447	435	442
13	446	440	443	442	436	440	411	399	403	453	436	444
14	445	435	439	449	432	442	432	411	420	448	432	442
15	447	436	443	445	430	438	449	432	441	449	427	440
16	442	436	439	445	418	433	454	449	451	449	423	438
17	445	437	440	433	420	428	457	442	448	449	425	438
18	444	431	439	433	385	413	463	457	460	432	365	398
19	431	422	426	433	375	400	465	460	463	387	348	358
20	431	420	426	465	430	453	467	459	464	381	348	364
21	431	425	427	488	456	478	470	459	465	408	381	396
22	430	413	421	488	474	484	470	456	464	423	408	413
23	423	413	418	481	469	476	472	447	460	428	415	422
24	421	410	417	474	398	428	453	399	430	432	414	425
25	420	408	415	454	440	447	399	383	388	430	310	378
26	419	366	403	450	443	448	415	387	401	311	275	288
27	425	410	416	443	411	434	435	415	424	372	311	345
28	419	407	413	411	186	278	446	435	440	399	372	387
29	415	404	409	347	223	292	449	431	444	413	399	405
30	423	414	418	400	347	378	440	412	426	419	408	413
31	424	417	420	---	---	---	417	372	382	423	410	418
MONTH	448	366	429	488	186	428	472	372	438	453	275	406

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	425	408	419	407	366	395	388	375	382	402	397	400
2	425	413	420	374	285	336	393	366	380	398	387	392
3	418	405	410	344	281	306	390	363	377	390	368	382
4	427	410	419	387	344	369	387	364	375	378	369	375
5	428	108	278	399	292	382	382	365	372	400	373	387
6	216	108	139	292	154	216	377	365	370	403	400	401
7	304	216	269	346	253	310	373	365	369	404	398	401
8	341	304	324	373	346	361	377	367	372	402	394	399
9	359	341	351	383	373	378	372	369	370	412	392	399
10	368	359	364	387	381	385	383	366	373	398	388	395
11	380	368	371	391	383	388	384	381	383	400	366	383
12	375	372	373	392	372	385	386	296	345	388	360	374
13	377	372	375	391	368	383	355	202	269	360	338	349
14	379	375	377	392	383	389	313	208	262	368	338	358
15	390	379	382	395	376	388	365	313	342	374	358	366
16	394	381	388	395	359	383	386	365	376	363	358	361
17	393	385	390	394	358	381	391	382	388	386	360	372
18	392	388	391	398	358	381	399	382	391	393	386	390
19	380	365	372	390	350	376	399	379	391	393	384	389
20	391	378	388	384	350	371	398	380	392	393	383	389
21	400	384	392	390	370	376	405	383	394	386	383	385
22	404	376	394	391	349	376	399	376	390	395	386	391
23	405	388	397	391	344	373	399	385	393	394	388	391
24	408	375	396	393	346	373	402	349	391	388	382	387
25	405	370	391	395	353	376	403	391	397	382	369	377
26	449	393	409	394	363	379	404	392	399	371	364	368
27	448	393	418	392	370	380	408	396	400	369	364	367
28	412	367	395	385	372	379	404	394	399	386	367	374
29	409	359	389	387	371	378	399	394	397	375	368	373
30	---	---	---	374	369	372	401	397	399	374	369	371
31	---	---	---	388	374	382	---	---	---	374	261	301
MONTH	449	108	372	407	154	368	408	202	375	412	261	379
		JUNE			JULY			AUGUST			SEPTEMBER	
1	343	286	311	391	276	358	430	414	424	405	400	403
2	356	343	353	321	276	306	421	394	412	404	398	401
3	364	353	356	376	321	353	405	390	399	417	398	408
4	370	364	368	397	376	388	398	382	392	412	401	408
5	372	362	368	399	382	392	382	329	362	413	385	403
6	368	356	363	383	366	372	379	358	373	385	358	372
7	369	357	364	373	234	278	378	355	371	358	346	351
8	370	358	364	363	272	321	358	348	354	351	346	349
9	366	357	362	386	363	381	360	348	357	358	346	353
10	367	356	362	400	386	392	374	358	369	359	353	357
11	366	358	363	412	373	400	380	369	375	364	356	360
12	365	309	355	373	346	356	382	368	374	371	361	367
13	366	267	321	372	353	363	388	381	385	375	366	371
14	353	268	289	389	357	372	395	381	390	380	368	375
15	301	272	285	415	389	402	388	372	381	387	377	381
16	340	301	320	423	415	419	376	366	371	387	340	377
17	360	340	352	430	423	427	369	358	364	340	176	209
18	368	347	357	434	424	429	365	358	361	335	227	282
19	378	357	367	430	414	424	362	356	360	399	334	370
20	400	378	389	423	409	418	361	313	342	432	399	416
21	406	393	401	421	400	412	332	302	317	447	432	439
22	403	393	399	418	389	404	336	331	334	453	441	449
23	408	368	390	404	377	393	335	328	332	460	451	456
24	388	348	367	395	377	387	356	330	344	466	454	460
25	394	150	328	391	228	329	367	338	349	464	450	458
26	301	151	234	375	251	324	391	367	385	461	442	455
27	357	301	332	365	256	319	406	389	400	460	437	450
28	375	356	367	382	365	377	410	387	406	461	440	451
29	394	349	367	424	380	399	411	402	408	466	440	454
30	393	373	384	438	424	432	406	401	404	463	436	451
31	---	---	---	434	423	430	416	402	405	---	---	---
MONTH	408	150	351	438	228	379	430	302	374	466	176	395

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.8	16.8	17.6	18.3	16.3	17.3	11.0	9.7	10.2	9.3	8.1	8.7
2	16.8	14.6	15.8	18.8	16.8	17.7	10.2	9.1	9.6	11.1	9.2	10.2
3	16.2	13.9	15.3	18.7	16.9	17.7	9.9	9.2	9.5	13.9	11.1	12.7
4	18.3	15.8	17.0	18.9	16.8	17.8	10.0	9.6	9.8	15.5	13.7	14.7
5	18.0	16.8	17.1	19.7	18.0	18.9	10.0	9.2	9.8	15.4	11.8	13.7
6	18.4	16.5	17.4	19.1	17.0	18.3	9.2	8.2	8.9	11.8	7.6	9.4
7	19.0	16.8	18.0	17.0	14.3	15.7	9.2	7.4	8.2	7.6	6.1	6.7
8	19.7	18.0	18.8	14.3	12.4	13.2	9.1	7.0	8.2	6.2	6.0	6.1
9	20.0	18.6	19.4	12.8	11.4	12.1	10.5	8.3	9.4	6.7	6.1	6.4
10	20.2	19.6	19.9	13.6	11.7	12.6	10.5	10.0	10.4	6.8	5.5	6.1
11	20.8	19.3	20.1	15.5	13.4	14.4	10.0	8.6	9.4	6.6	5.0	5.7
12	20.9	19.9	20.3	16.6	15.2	16.0	8.9	7.6	8.2	7.8	5.5	6.5
13	21.3	19.7	20.4	15.9	12.2	14.0	7.7	7.5	7.6	8.5	6.4	7.3
14	20.6	18.6	20.0	12.2	10.4	11.0	7.7	7.4	7.6	8.7	6.4	7.5
15	18.6	16.4	17.4	11.8	11.0	11.3	8.5	7.3	7.8	8.7	7.3	7.9
16	17.7	15.8	16.8	13.4	11.8	12.5	9.3	7.6	8.5	8.4	6.4	7.4
17	16.8	16.1	16.3	15.4	13.4	14.4	9.1	7.9	8.5	8.7	7.4	8.1
18	17.2	15.5	16.2	16.0	15.3	15.6	8.1	7.6	7.9	9.3	8.6	8.9
19	17.4	15.3	16.3	16.1	14.3	15.3	7.6	6.4	7.1	8.7	6.7	7.7
20	18.3	15.9	17.0	15.3	13.7	14.3	6.8	5.5	6.1	6.9	5.7	6.2
21	19.0	17.2	18.0	15.1	12.9	13.9	6.7	4.7	5.7	7.1	6.0	6.4
22	18.7	16.7	17.6	15.3	13.2	14.2	7.9	5.4	6.6	7.7	6.0	6.6
23	18.0	15.7	16.8	15.3	13.4	14.5	8.5	7.2	7.8	7.0	5.3	6.0
24	17.6	15.3	16.4	15.2	12.3	13.7	8.4	7.8	8.1	7.9	5.7	6.7
25	18.4	16.1	17.1	12.3	10.6	11.4	8.2	7.1	7.6	9.2	7.2	8.1
26	17.7	16.0	17.2	11.2	10.5	10.8	7.8	6.4	7.0	11.3	9.2	10.5
27	16.2	15.1	15.7	12.1	11.0	11.4	8.1	6.3	7.0	11.3	9.2	10.5
28	15.4	13.8	14.5	12.3	10.9	11.8	8.3	6.5	7.4	9.2	7.4	8.2
29	15.7	14.2	15.0	10.9	10.2	10.6	9.3	7.8	8.6	8.1	6.7	7.4
30	16.6	14.6	15.6	10.9	9.7	10.2	9.6	8.8	9.2	7.9	6.1	7.3
31	17.6	15.7	16.6	---	---	---	9.3	8.1	8.6	6.7	4.9	5.7
MONTH	21.3	13.8	17.3	19.7	9.7	14.1	11.0	4.7	8.3	15.5	4.9	8.1
		FEBRUARY			MARCH			APRIL			MAY	
1	7.3	4.7	5.9	11.8	9.9	10.8	15.9	13.4	14.6	22.4	19.9	21.0
2	7.7	6.4	7.2	13.5	11.6	12.7	16.6	12.5	14.4	21.8	18.4	20.0
3	7.9	7.1	7.7	13.7	12.9	13.3	17.3	12.6	14.9	18.4	16.5	17.1
4	8.3	6.5	7.3	15.1	13.4	14.2	16.6	13.2	14.9	18.9	15.0	16.8
5	7.1	5.1	6.1	15.5	14.9	15.1	16.2	12.9	14.5	21.0	16.8	18.7
6	9.1	6.0	8.3	15.2	13.6	14.2	17.6	13.2	15.2	23.0	18.8	20.7
7	9.0	7.9	8.4	14.1	12.9	13.6	17.8	14.8	16.2	24.4	20.0	22.1
8	8.3	7.4	7.9	13.0	11.9	12.4	19.9	16.0	17.6	25.3	21.1	23.2
9	8.7	8.0	8.3	12.2	10.9	11.8	20.0	16.1	17.9	25.7	22.3	24.0
10	10.1	8.7	9.3	12.2	9.8	10.9	18.3	16.2	16.8	25.0	23.0	24.1
11	10.3	9.1	9.7	12.0	10.3	11.1	16.2	15.4	15.8	25.0	22.5	23.7
12	10.1	9.4	9.8	13.0	10.2	11.3	15.4	13.0	14.1	25.1	22.6	24.0
13	9.7	8.5	9.1	12.8	10.1	11.3	13.4	9.4	11.0	24.6	23.1	23.8
14	9.5	8.6	9.0	12.3	11.4	11.9	12.0	9.3	10.5	25.2	22.6	23.9
15	9.0	7.6	8.6	12.9	11.7	12.3	14.6	11.8	13.2	24.4	22.4	23.3
16	8.1	6.9	7.5	14.9	12.5	13.4	16.9	13.8	15.2	23.8	21.7	22.6
17	8.4	7.4	7.8	15.7	13.0	14.0	18.8	15.4	16.9	25.5	22.2	23.7
18	8.6	7.1	7.9	16.4	13.4	14.7	20.4	17.1	18.5	25.0	23.1	24.0
19	9.1	7.4	8.3	17.3	14.0	15.4	20.6	18.1	19.2	26.1	23.1	24.5
20	9.9	8.7	9.3	17.5	14.6	15.9	20.8	18.6	19.4	27.1	23.7	25.4
21	11.1	9.2	10	16.4	13.5	15.2	19.9	18.4	19.1	27.9	24.6	26.3
22	11.2	9.0	9.9	15.3	12.1	13.3	20.2	18.2	19.1	27.7	25.3	26.6
23	10.4	9.4	9.9	14.9	10.6	12.8	20.2	18.2	19.1	27.8	25.4	26.6
24	11.2	9.6	10.2	16.2	12.2	14.1	22.3	18.6	20.2	27.4	25.2	26.3
25	10.2	9.2	9.6	17.8	13.1	15.4	21.3	19.8	20.6	27.8	25.4	26.7
26	9.3	8.0	8.4	18.9	15.2	17.1	21.6	19.3	20.4	27.3	26.0	26.7
27	8.8	7.6	8.1	20.0	16.3	18.2	21.3	18.2	19.6	27.2	25.7	26.5
28	10.8	7.1	8.7	21.1	17.5	19.3	20.9	17.0	18.8	26.6	25.0	25.6
29	11.4	8.3	9.8	19.8	16.9	18.2	21.4	18.4	19.8	26.0	24.1	25.1
30	---	---	---	18.4	15.8	17.0	21.4	19.6	20.4	27.0	24.6	25.8
31	---	---	---	16.6	14.4	15.4	---	---	---	26.7	23.8	24.6
MONTH	11.4	4.7	8.6	21.1	9.8	14.1	22.3	9.3	16.9	27.9	15.0	23.7

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.8	22.5	24.1	22.2	21.4	21.6	28.4	25.3	26.8	25.9	23.7	24.9
2	26.3	23.2	24.6	21.9	20.6	21.3	28.6	25.6	27.2	26.0	24.7	25.4
3	25.2	23.4	24.1	23.1	21.4	22.1	29.1	26.0	27.7	25.6	24.7	25.2
4	25.3	22.1	23.6	24.3	22.1	23.0	29.7	26.8	28.3	26.1	24.5	25.2
5	25.7	22.7	24.2	24.1	22.4	23.2	29.0	25.6	27.1	26.8	24.3	25.5
6	25.4	22.7	24.2	25.5	22.7	23.8	26.1	23.5	24.9	27.3	24.5	26.0
7	26.6	23.6	25.1	23.7	22.2	22.7	25.4	22.2	24.0	27.1	24.8	25.8
8	27.4	24.5	26.0	23.4	21.8	22.4	25.9	23.1	24.7	24.8	23.9	24.3
9	27.7	25.7	26.8	24.8	22.2	23.3	26.4	23.8	25.1	24.0	22.6	23.4
10	28.7	25.7	27.3	24.4	23.3	23.8	27.1	24.2	25.7	24.5	21.9	23.3
11	29.0	26.7	28.0	23.8	22.6	23.3	27.0	25.5	26.2	25.4	22.8	24.1
12	29.5	27.1	28.2	25.8	23.4	24.4	25.8	23.2	24.2	25.7	23.8	24.8
13	27.1	24.7	25.9	27.0	24.2	25.3	23.2	21.1	22.1	25.8	24.1	24.9
14	24.9	23.9	24.3	26.6	24.2	25.3	22.6	20.3	21.5	26.4	24.0	25.1
15	24.9	23.4	24.1	26.9	23.8	25.2	23.2	20.5	22.0	26.5	24.1	25.3
16	26.7	23.5	25.0	25.6	23.6	24.8	23.6	21.0	22.4	25.6	23.0	24.7
17	26.0	24.5	25.3	25.7	23.6	24.7	25.1	21.8	23.4	23.0	20.9	21.3
18	27.3	24.8	25.9	26.8	23.9	25.2	26.1	22.9	24.4	21.4	20.1	20.6
19	27.6	25.3	26.3	26.6	23.9	25.1	27.5	24.6	26.0	21.4	19.3	20.1
20	27.1	24.4	25.7	27.3	24.3	25.7	26.4	23.9	25.1	21.7	18.9	20.0
21	27.8	24.5	26.1	27.8	24.7	26.2	23.9	23.1	23.5	21.9	18.8	20.1
22	27.1	25.2	26.2	28.6	25.6	27.1	24.9	22.0	23.4	22.1	18.7	20.3
23	26.2	24.7	25.1	29.1	26.1	27.7	25.2	23.5	24.4	22.4	19.3	20.9
24	25.0	23.3	24.3	28.9	26.9	28.0	25.8	23.7	24.6	22.8	20.4	21.6
25	24.3	21.5	23.1	28.2	25.0	26.5	25.7	24.3	25.0	23.7	21.4	22.4
26	21.9	21.1	21.6	25.0	23.8	24.5	26.7	24.4	25.5	23.5	21.3	22.4
27	21.9	20.4	21.1	24.7	22.6	23.5	27.6	25.2	26.4	23.2	20.9	22.1
28	21.9	20.6	21.1	25.5	22.0	23.6	27.3	26.1	26.7	22.6	21.2	21.9
29	23.0	21.1	21.9	26.2	22.9	24.5	27.3	25.3	26.4	21.7	20.1	20.9
30	22.8	21.6	22.1	26.6	24.0	25.3	26.8	25.6	26.1	20.6	18.4	19.7
31	---	---	---	26.9	25.2	26.0	26.1	24.7	25.4	---	---	---
MONTH	29.5	20.4	24.7	29.1	20.6	24.5	29.7	20.3	25.0	27.3	18.4	23.1

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.9	7.7	9.3	8.5	6.6	7.5	12.3	11.3	11.7	15.9	14.3	14.9
2	12.2	8.4	10.3	8.2	6.5	7.2	12.7	10.8	12.0	15.5	13.6	14.4
3	12.6	9.0	11.0	7.6	6.2	6.8	12.5	11.4	11.8	15.8	12.6	13.9
4	12.0	8.9	10.5	7.5	4.7	6.2	11.9	11.3	11.5	14.8	12.0	13.1
5	11.1	8.7	9.6	6.0	3.3	4.9	12.0	10.8	11.5	13.8	11.9	12.7
6	10.7	8.2	9.6	6.5	4.8	5.8	12.9	11.4	12.0	15.0	13.8	14.5
7	10.5	8.5	9.3	6.9	6.1	6.7	13.9	11.9	12.6	16.4	15.0	15.5
8	9.4	7.9	8.7	8.9	6.9	7.9	14.1	12.1	12.8	15.8	14.7	15.3
9	9.0	7.7	8.3	9.9	8.5	9.2	14.2	11.4	12.5	15.0	14.0	14.5
10	8.2	6.9	7.6	10.1	7.8	9.3	11.4	10.4	10.8	15.2	13.1	14.1
11	8.3	6.9	7.7	9.4	6.7	8.4	12.1	11.0	11.5	14.0	12.8	13.2
12	8.1	7.2	7.6	7.6	5.5	6.8	13.1	11.5	12.1	16.8	13.7	15.3
13	8.8	7.2	7.7	9.0	6.5	7.8	12.4	11.8	12.0	15.8	12.9	14.0
14	7.6	6.3	6.9	10.3	9.0	9.6	---	---	---	16.4	12.2	13.7
15	8.6	6.1	7.2	10.0	8.8	9.6	---	---	---	16.4	11.5	13.3
16	9.0	7.5	8.3	8.9	7.8	8.6	---	---	---	16.9	11.7	13.7
17	9.1	7.4	8.2	7.8	5.8	7.0	---	---	---	15.9	11.5	13.2
18	9.7	7.5	8.5	---	---	---	12.3	11.3	11.6	12.0	11.0	11.5
19	9.7	7.8	9.1	---	---	---	13.5	11.4	12.3	12.4	11.6	12.1
20	9.7	8.2	8.9	---	---	---	15.6	12.2	13.5	14.2	12.3	13.1
21	9.7	6.3	8.5	---	---	---	16.4	13.1	14.3	15.3	12.7	13.5
22	9.9	6.8	8.4	---	---	---	17.1	13.3	14.7	16.3	12.7	13.8
23	9.7	7.3	8.4	---	---	---	13.8	12.3	13.0	17.5	12.9	14.5
24	9.7	7.3	8.4	10.4	9.7	10.0	13.6	12.3	13.2	18.2	12.9	14.7
25	9.6	7.4	8.2	11.2	10.1	10.7	14.5	13.3	13.8	13.0	11.9	12.3
26	7.5	6.7	7.0	11.5	10.4	11.0	15.8	13.8	14.6	11.9	11.0	11.4
27	9.6	6.8	8.1	10.7	9.7	10.4	16.7	14.3	15.0	12.0	10.9	11.4
28	8.9	7.0	8.2	11.7	10.4	11.0	17.2	14.3	15.3	15.0	11.9	13.1
29	9.2	7.4	8.5	11.4	11.1	11.3	15.7	13.4	14.4	16.2	12.8	13.9
30	9.3	7.6	8.4	11.9	11.1	11.5	14.8	13.3	14.0	16.9	12.7	14.2
31	8.7	7.1	7.9	---	---	---	15.3	14.1	14.6	18.3	13.4	15.2
MONTH	12.6	6.1	8.5	11.9	3.3	8.6	17.2	10.4	12.9	18.3	10.9	13.7
		FEBRUARY			MARCH			APRIL			MAY	
1	19.0	13.9	15.6	14.0	10.3	11.8	12.1	8.3	9.9	10.4	6.9	8.3
2	16.6	12.4	14.1	10.7	9.7	10.2	13.4	8.6	10.6	10.3	6.5	8.1
3	14.8	12.1	13.1	10.4	9.9	10.1	13.7	8.8	10.8	10.3	7.8	8.8
4	19.4	12.6	15.2	11.4	9.3	10.2	13.9	8.7	10.8	11.7	8.0	9.5
5	14.2	12.9	13.6	9.9	9.1	9.4	13.9	8.9	10.9	10.6	7.6	9.2
6	13.6	11.9	12.3	10.0	9.4	9.7	13.2	8.9	10.7	10.0	7.2	8.3
7	13.0	12.3	12.7	10.6	9.9	10.2	12.2	8.2	10	9.7	6.7	7.9
8	13.8	12.9	13.3	12.2	10.2	10.9	12.0	7.1	9.4	9.3	5.9	7.5
9	13.3	12.7	12.9	11.7	10.2	10.9	11.5	6.1	8.8	9.0	5.8	7.2
10	13.6	12.2	12.8	14.4	10.7	12.0	9.3	6.7	8.2	8.4	5.7	7.0
11	14.0	12.1	12.7	14.1	10.6	11.9	9.6	7.0	8.1	9.0	5.9	7.2
12	13.3	11.8	12.4	15.9	10.5	12.4	10.0	7.8	8.8	8.6	5.8	7.1
13	15.0	12.1	13.2	16.7	10.4	12.8	11.8	10.0	11.0	7.9	5.4	6.6
14	14.7	12.0	13.0	14.3	9.9	11.4	12.0	11.0	11.6	8.8	5.8	7.2
15	13.5	11.9	12.5	15.7	9.6	11.9	12.3	10.4	11.2	7.6	6.1	6.8
16	16.7	12.5	14.1	16.4	9.2	11.9	12.6	9.8	11.0	8.4	5.5	6.9
17	16.0	12.9	13.8	14.6	8.8	11.3	13.5	9.3	10.9	9.3	6.2	7.5
18	14.5	12.9	13.3	15.1	8.0	11.1	14.2	8.9	10.8	9.1	6.5	7.6
19	14.2	11.7	12.8	16.0	10.4	12.9	14.4	8.5	10.6	9.4	6.5	7.7
20	12.4	11.0	11.7	12.8	8.4	10.4	14.8	8.2	10.6	8.8	6.1	7.3
21	15.9	11.0	12.6	11.6	7.9	9.3	13.7	7.8	10.3	8.5	5.7	7.1
22	16.7	11.0	13.1	11.4	7.8	9.2	13.9	7.8	10.1	8.5	5.6	7.0
23	15.7	10.9	12.6	10.5	7.7	8.8	12.7	7.6	9.6	8.6	5.6	7.0
24	17.0	10.8	12.9	9.5	6.9	8.0	14.1	7.7	10.2	8.8	5.9	7.3
25	17.8	10.6	13.6	8.4	6.2	7.1	11.1	7.3	8.8	9.8	5.9	7.6
26	14.8	10.8	12.5	---	---	---	12.4	7.1	9.1	9.5	5.9	7.7
27	17.5	11.2	13.7	---	---	---	12.2	7.4	9.2	9.0	6.0	7.5
28	19.3	11.5	14.5	---	---	---	12.3	7.7	9.5	7.6	5.5	6.6
29	18.9	11.1	14.3	8.1	7.1	7.7	11.3	7.5	9.1	8.1	5.5	6.9
30	---	---	---	10.3	6.9	8.3	10.5	6.8	8.4	8.0	5.2	6.7
31	---	---	---	10.9	7.4	8.9	---	---	---	8.3	6.0	6.9
MONTH	19.4	10.6	13.3	16.7	6.2	10.4	14.8	6.1	10.0	11.7	5.2	7.5

03428200 WEST FORK STONES RIVER AT MURFREESBORO, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.4	5.8	7.0	9.8	8.4	9.1	10.1	6.4	8.1	9.1	5.8	7.8
2	9.3	6.2	7.5	9.4	8.9	9.2	9.8	6.0	7.8	8.2	6.2	7.2
3	7.6	6.0	6.8	9.7	8.6	9.0	10.0	5.6	7.8	8.5	5.9	7.2
4	9.2	6.2	7.5	10.1	8.4	8.9	10.0	5.6	7.8	9.5	6.4	7.7
5	9.8	6.2	7.8	9.6	8.3	8.8	8.1	5.4	6.7	---	---	---
6	10.2	6.3	8.1	9.8	8.0	8.7	10.1	5.3	7.5	---	---	---
7	10.4	6.2	8.2	8.8	7.9	8.5	10.2	6.0	8.0	---	---	---
8	9.9	6.1	7.8	9.3	8.5	8.8	9.5	6.3	8.1	---	---	---
9	---	---	---	9.9	8.1	8.8	10.4	6.5	8.6	---	---	---
10	10.7	5.4	7.9	9.1	7.9	8.3	10.5	6.3	8.7	---	---	---
11	9.4	5.4	7.3	9.6	7.9	8.7	9.5	7.0	8.3	---	---	---
12	7.8	5.3	6.6	9.2	7.5	8.3	9.4	6.6	8.2	---	---	---
13	8.0	6.0	7.1	9.7	7.5	8.3	10.7	7.1	8.9	9.7	8.6	8.6
14	8.0	7.1	7.5	9.2	7.3	8.0	11.4	8.0	9.7	9.4	6.1	7.7
15	8.0	7.0	7.4	10.2	7.2	8.3	11.2	7.9	9.6	9.4	6.5	7.8
16	8.8	6.7	7.5	9.8	7.2	8.3	11.5	7.9	9.8	7.6	6.4	6.7
17	8.4	6.1	7.3	10.0	7.2	8.3	11.5	8.3	9.8	8.9	7.2	8.6
18	8.9	6.5	7.5	10.9	7.2	8.6	11.0	7.7	9.3	9.4	8.7	9.0
19	9.7	6.2	7.6	10.9	7.0	8.6	10.0	6.8	8.5	9.8	8.7	9.1
20	10.7	6.5	8.2	11.4	6.6	8.6	8.2	6.4	7.2	10.3	8.6	9.2
21	11.3	6.6	8.6	11.7	6.3	8.7	7.6	6.2	7.0	11.1	9.1	9.7
22	9.7	6.4	7.9	11.4	6.2	8.5	10.0	6.3	7.9	11.4	8.8	9.7
23	8.4	6.7	7.4	11.2	5.9	8.4	8.2	6.1	7.1	12.0	8.5	9.7
24	9.3	6.4	7.7	10.3	5.1	7.9	9.7	6.2	8.0	12.6	8.3	10
25	8.7	6.1	8.3	8.0	5.8	6.8	9.3	6.1	7.6	13.0	8.2	10.0
26	9.6	8.5	9.3	9.1	7.7	8.5	10.2	6.5	8.2	14.2	8.0	10.4
27	10.3	9.3	9.7	10.0	7.2	8.3	10.1	6.4	8.2	14.3	7.9	10.6
28	10.3	9.2	9.5	11.0	7.3	8.8	8.6	6.2	7.5	13.1	7.4	10.1
29	10.2	8.7	9.3	11.2	7.4	9.0	9.7	5.9	7.9	12.9	7.5	10
30	9.8	8.5	9.1	10.7	7.3	8.8	8.7	6.1	7.5	12.7	7.9	10.0
31	---	---	---	9.5	6.5	7.9	8.8	6.2	7.6	---	---	---
MONTH	11.3	5.3	7.9	11.7	5.1	8.5	11.5	5.3	8.2	14.3	5.8	8.9

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03430147 STONERS CREEK NEAR HERMITAGE, TN

LOCATION.--Lat 36°11'40", long 86°36'28", Davidson County, Hydrologic Unit 05130203, on downstream end of pier at center of culvert under Andrew Jackson Parkway, 0.8 mi southwest of Hermitage.

DRAINAGE AREA.--20.6 mi^2.

PERIOD OF RECORD.--January 1992 to September 2004 (discontinued).

GAGE.--Data collection platform. Datum of gage is 411.70 ft above NGVD of 1929.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 25	0915	814	6.21	Mar 5	2215	970	6.70
Feb 5	1345	*3,090	*11.16	Apr 22	0715	1,380	7.83

Minimum discharge, 0.47 ft^3/s, Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	4.0	28	37	24	63	21	29	36	3.5	1.3	0.99
2	8.5	3.7	22	75	71	97	18	106	22	7.0	2.1	59
3	7.3	3.2	19	48	141	45	15	95	23	3.9	1.5	24
4	6.3	3.6	27	39	69	36	13	64	18	3.1	1.3	7.5
5	6.0	12	24	50	1,380	227	12	45	13	2.6	49	4.5
6	6.5	8.0	21	40	428	267	11	35	10	3.3	7.4	3.2
7	5.1	5.4	18	33	151	87	10	27	8.5	9.3	3.5	2.5
8	4.5	4.4	17	30	86	58	9.2	22	7.3	4.0	2.3	2.1
9	4.3	3.9	15	30	63	45	8.2	19	6.2	3.1	1.7	1.8
10	4.2	3.8	55	26	56	35	7.4	17	5.7	3.0	1.3	1.6
11	3.9	3.5	38	23	45	29	7.0	19	5.2	5.6	1.1	1.4
12	3.8	4.1	29	21	44	24	86	14	23	6.5	1.2	18
13	3.7	4.2	24	19	37	21	264	17	29	4.6	1.00	4.1
14	11	3.8	42	18	33	19	109	23	17	3.9	0.85	3.1
15	7.9	5.5	33	16	29	18	60	242	10	3.6	0.80	2.4
16	4.7	21	33	15	24	21	42	63	7.8	2.7	0.71	22
17	3.9	14	32	15	22	17	32	41	7.1	2.3	0.63	92
18	3.6	100	29	162	20	16	26	39	5.8	2.0	0.58	18
19	3.4	67	27	69	18	14	21	32	5.0	1.7	0.53	8.6
20	3.2	40	23	47	17	21	18	23	4.3	1.5	5.0	5.4
21	3.2	27	20	37	16	34	26	18	3.8	1.3	7.3	3.9
22	2.7	20	19	30	14	21	435	15	3.6	1.2	3.4	3.1
23	2.8	16	37	25	14	18	220	12	6.0	1.1	2.0	2.6
24	2.8	113	48	23	13	15	130	9.9	3.7	1.0	2.6	2.2
25	3.1	46	35	283	12	14	79	8.3	4.6	0.98	3.5	2.1
26	11	33	29	108	13	12	60	8.2	4.2	1.0	5.8	1.6
27	10	27	24	69	13	11	45	7.0	3.6	1.3	2.5	1.5
28	6.9	93	21	50	11	10	35	11	2.9	1.0	5.7	1.4
29	5.1	50	50	40	11	33	29	8.0	2.6	0.96	2.1	1.3
30	4.6	37	91	34	---	41	27	6.3	2.5	0.89	1.6	1.2
31	5.0	---	46	28	---	27	---	209	---	2.3	1.3	---
TOTAL	169.0	777.1	976	1,540	2,875	1,396	1,875.8	1,284.7	301.4	90.23	121.60	303.09
MEAN	5.45	25.9	31.5	49.7	99.1	45.0	62.5	41.4	10.0	2.91	3.92	10.1
MAX	11	113	91	283	1,380	267	435	242	36	9.3	49	92
MIN	2.7	3.2	15	15	11	10	7.0	6.3	2.5	0.89	0.53	0.99
CFSM	0.26	1.26	1.53	2.41	4.81	2.19	3.04	2.01	0.49	0.14	0.19	0.49
IN.	0.31	1.40	1.76	2.78	5.19	2.52	3.39	2.32	0.54	0.16	0.22	0.55

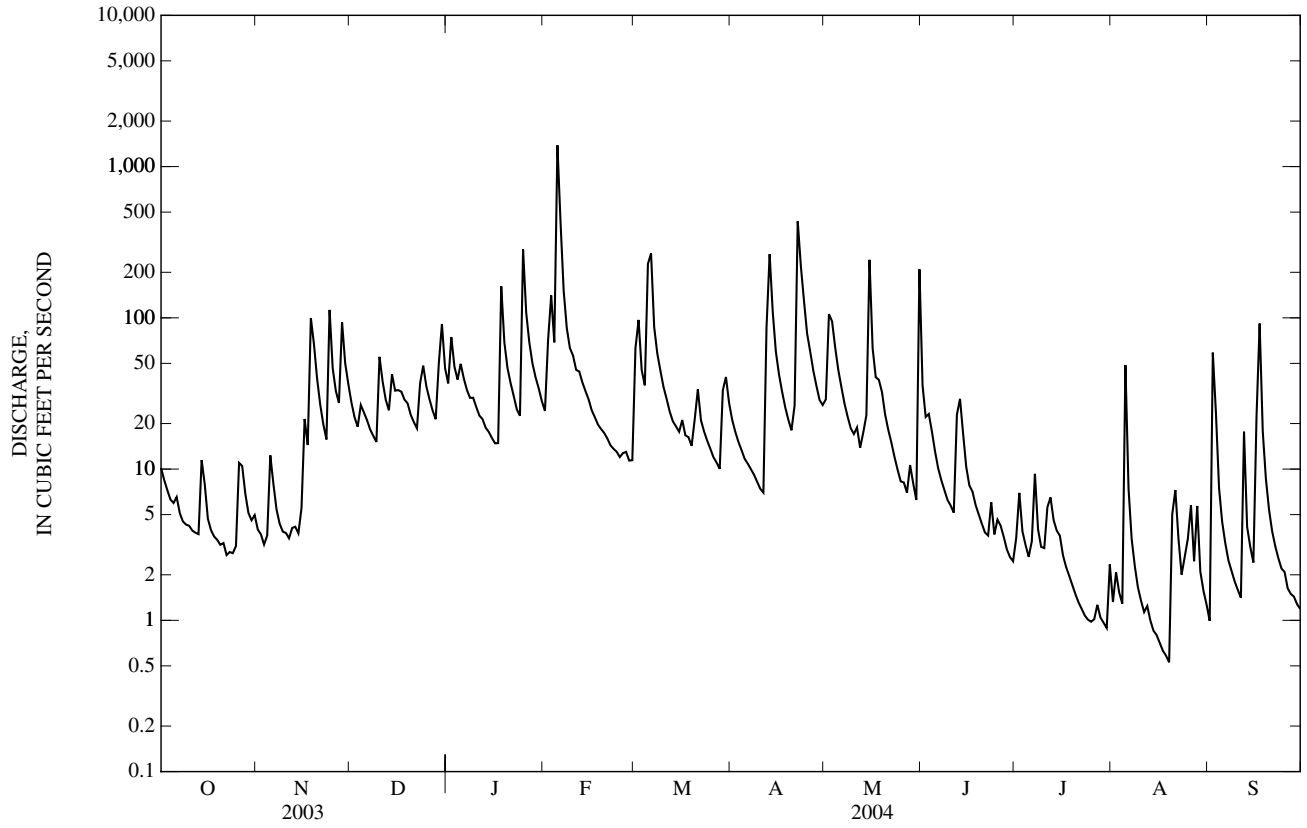
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	10.1	22.4	38.1	49.2	60.0	65.8	39.6	37.7	24.7	12.2	5.33	12.7
MAX	43.3	53.1	75.6	108	136	149	112	128	101	62.0	19.4	92.7
(WY)	(1996)	(1996)	(1997)	(1999)	(2003)	(1997)	(1994)	(2003)	(1998)	(1992)	(2003)	(2003)
MIN	0.42	1.12	11.4	14.6	27.5	28.0	10.7	5.24	3.24	1.37	0.79	0.28
(WY)	(2001)	(1999)	(2000)	(2003)	(1995)	(2003)	(1992)	(1992)	(2000)	(2000)	(1993)	(1998)

03430147 STONERS CREEK NEAR HERMITAGE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	17,242.7		11,709.92			
ANNUAL MEAN	47.2		32.0		31.8	
HIGHEST ANNUAL MEAN					51.0	2003
LOWEST ANNUAL MEAN					15.3	2000
HIGHEST DAILY MEAN	2,140	Sep 22	1,380	Feb 5	2,140	Sep 22, 2003
LOWEST DAILY MEAN	2.1	Sep 20	0.53	Aug 19	0.04	Sep 5, 1999
ANNUAL SEVEN-DAY MINIMUM	3.0	Oct 19	0.73	Aug 13	0.05	Sep 2, 1999
MAXIMUM PEAK FLOW			3,090	Feb 5	a4,770	Sep 22, 2003
MAXIMUM PEAK STAGE			11.16	Feb 5	13.34	Sep 22, 2003
INSTANTANEOUS LOW FLOW			0.47	Aug 19	0.09	Oct 14, 2000
ANNUAL RUNOFF (CFSM)	2.29		1.55		1.54	
ANNUAL RUNOFF (INCHES)	31.14		21.15		20.97	
10 PERCENT EXCEEDS	81		63		63	
50 PERCENT EXCEEDS	17		14		11	
90 PERCENT EXCEEDS	4.3		1.8		1.0	

a From rating curve extended above 500 ft^3/s on basis of contracted-opening measurement of peak flow.



03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°11'11", long 86°37'58", Davidson County, Hydrologic Unit 05130203, on the right bank of Stones River approximately 3.85 mi upstream from the mouth at the Cumberland River, at mile 205.85.

DRAINAGE AREA.--934 mi^2.

PERIOD OF RECORD.--September 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 2003 to September 2004.
pH: September 2003 to September 2004.
WATER TEMPERATURE: September 2003 to September 2004.
DISSOLVED OXYGEN: September 2003 to September 2004.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Interruptions in the record were due to instrument malfunctions. Records for water temperature are good, for specific conductance are good, for pH are good, for dissolved oxygen are poor.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 618 microsiemens, Aug. 4, 5; minimum, 144 microsiemens, Feb. 5.
pH: Maximum, 8.8 units, March 24, 25; minimum, 6.8 units, Sept. 25.
WATER TEMPERATURE: Maximum, 26.4°C, Aug. 4, 5; minimum, 4.5°C, Feb. 1, 5.
DISSOLVED OXYGEN: Maximum, 18.9 mg/L, April 6; minimum, 0.7 mg/L, several days in July, August, and September.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	408	288	328	343	265	283	271	267	269	381	301	318
2	333	286	306	360	307	321	272	270	271	405	302	319
3	319	277	298	359	260	317	272	269	271	372	303	313
4	365	290	319	293	260	274	273	269	271	397	304	317
5	418	365	403	376	259	284	276	271	273	417	306	330
6	443	391	419	353	260	300	319	272	290	366	315	334
7	446	393	435	310	261	282	321	273	294	333	312	318
8	455	286	382	299	265	283	341	273	293	380	310	329
9	344	296	328	309	264	283	316	272	290	367	308	331
10	382	339	363	303	264	282	340	277	300	370	310	340
11	405	337	381	315	264	286	342	277	300	360	310	336
12	419	352	372	307	263	286	372	280	303	369	310	337
13	455	379	402	313	266	286	383	280	307	372	310	340
14	458	280	340	341	264	281	416	282	316	368	312	338
15	320	288	301	385	282	332	342	282	301	362	319	344
16	312	273	290	506	382	441	386	280	311	362	323	342
17	302	277	284	599	476	515	350	282	312	370	322	353
18	340	293	314	581	258	453	373	284	306	399	285	347
19	361	314	347	436	282	345	361	289	304	403	339	355
20	393	267	339	444	269	320	398	289	324	418	336	358
21	298	272	283	329	265	284	436	288	328	366	333	347
22	304	274	290	327	263	285	404	289	313	395	332	350
23	300	263	284	306	262	282	426	289	333	377	332	349
24	287	257	269	363	269	293	367	293	328	370	332	350
25	273	265	269	311	269	285	384	296	318	385	222	317
26	369	271	332	386	266	293	348	296	318	390	336	346
27	478	261	362	326	266	281	396	295	341	387	340	350
28	286	256	269	335	270	291	403	293	338	372	344	352
29	320	257	285	305	268	273	375	292	322	384	342	348
30	285	257	274	269	267	268	378	301	322	378	349	357
31	287	257	278	---	---	---	362	301	317	394	353	362
MONTH	478	256	327	599	258	310	436	267	306	418	222	340

03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	425	352	381	393	274	312	494	446	477	434	321	357
2	421	334	369	325	273	285	483	456	473	434	338	369
3	371	329	351	346	282	297	479	410	450	431	308	367
4	423	358	370	336	283	302	517	439	466	433	307	366
5	380	144	265	344	187	287	510	485	495	423	309	367
6	331	226	296	278	172	239	510	480	498	474	305	385
7	336	330	333	346	276	286	533	462	515	413	303	351
8	367	321	347	290	278	287	545	519	528	324	310	316
9	366	352	363	287	282	285	559	541	552	443	318	365
10	372	366	370	289	281	285	563	547	559	462	301	393
11	372	370	371	298	283	290	564	489	505	370	300	338
12	371	360	366	300	295	297	519	297	399	361	298	321
13	366	355	362	300	295	297	356	239	287	406	299	361
14	355	348	353	301	296	298	373	301	333	392	293	340
15	356	349	353	306	301	303	403	303	358	345	220	272
16	350	340	346	304	294	298	388	305	354	413	307	365
17	340	329	335	332	294	301	420	301	369	445	299	380
18	334	324	328	344	296	309	433	300	357	494	342	411
19	324	304	311	326	296	305	382	299	331	489	298	394
20	304	291	296	389	314	347	386	296	331	414	295	346
21	348	299	307	393	365	378	351	296	321	474	295	356
22	354	301	314	404	297	329	326	164	253	436	326	376
23	303	294	300	383	296	326	382	267	326	508	401	460
24	352	289	307	376	293	320	337	282	308	526	477	484
25	369	297	318	356	312	323	386	305	340	529	295	458
26	354	293	321	363	317	333	387	304	342	368	295	330
27	350	290	319	444	341	401	420	304	351	360	292	323
28	327	288	308	451	382	423	373	300	321	393	293	338
29	369	286	317	416	377	396	397	299	343	387	330	346
30	---	---	---	428	308	354	367	299	326	463	379	422
31	---	---	---	493	412	449	---	---	---	449	184	241
MONTH	425	144	334	493	172	321	564	164	396	529	184	364
		JUNE			JULY			AUGUST			SEPTEMBER	
1	428	285	399	357	296	305	286	248	267	546	507	535
2	464	294	340	355	297	313	344	244	301	577	311	514
3	343	294	303	417	316	348	383	313	337	437	305	325
4	368	294	320	397	359	384	383	331	345	441	305	379
5	375	294	320	424	356	403	378	205	265	409	302	353
6	373	294	305	467	403	437	367	286	319	386	302	338
7	369	315	333	484	300	398	419	309	362	464	333	356
8	399	344	383	331	300	302	473	364	420	523	375	426
9	464	356	415	373	300	336	476	374	429	501	361	442
10	458	379	436	352	300	332	473	431	446	505	378	463
11	506	430	486	350	305	336	469	424	445	516	389	474
12	523	383	461	365	302	340	510	439	468	523	352	495
13	427	381	413	357	339	351	532	320	449	519	422	494
14	483	379	429	---	---	---	336	319	324	486	325	372
15	538	483	521	---	---	---	392	329	346	469	375	425
16	536	464	489	390	315	337	396	361	390	512	285	409
17	529	292	410	369	320	343	420	381	405	300	277	293
18	387	293	310	361	323	342	434	399	414	292	281	285
19	356	293	305	401	360	366	420	405	414	382	281	336
20	365	293	323	416	321	380	490	413	441	398	299	355
21	380	295	328	384	337	370	550	488	511	415	300	338
22	386	293	327	433	353	396	565	489	526	364	302	328
23	362	295	323	419	365	400	540	509	530	347	304	326
24	371	297	331	399	344	371	586	536	558	351	306	330
25	366	297	329	393	373	381	569	520	553	356	310	329
26	364	316	332	403	288	318	550	527	535	358	314	330
27	407	297	349	321	287	305	618	549	581	353	314	334
28	375	297	319	309	283	297	618	510	549	345	318	333
29	346	297	308	314	277	297	565	435	511	372	318	340
30	338	297	305	307	269	296	564	484	501	349	313	332
31	---	---	---	306	279	291	550	500	514	---	---	---
MONTH	538	285	365	484	269	347	618	205	434	577	277	380

03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.4	19.1	19.8	18.8	18.2	18.5	13.2	12.8	13.0	8.2	7.4	7.8
2	20.9	18.6	20.1	18.8	18.1	18.5	12.8	12.6	12.7	9.2	8.0	8.2
3	20.8	18.8	20.2	19.1	17.8	18.3	12.6	12.3	12.5	9.9	8.2	8.6
4	20.7	19.7	20.1	18.8	17.9	18.4	12.3	12.1	12.2	11.4	8.8	9.1
5	20.1	18.4	19.2	19.2	18.5	18.8	12.1	11.8	11.9	10.9	8.2	9.2
6	19.7	17.9	18.7	18.5	17.2	18.0	11.8	11.3	11.5	8.5	7.7	8.0
7	19.4	18.3	18.9	18.0	16.9	17.7	11.6	10.9	11.2	7.8	7.5	7.7
8	20.2	18.7	19.4	17.8	15.8	17.3	11.4	10.5	11.1	7.5	7.3	7.4
9	20.0	19.5	19.6	17.5	15.3	16.9	11.4	11.0	11.2	7.3	7.0	7.2
10	20.1	19.7	19.9	17.3	15.8	16.8	11.4	10.7	11.2	7.3	6.4	7.0
11	20.1	19.6	19.8	17.5	16.4	17.0	10.9	10.3	10.6	7.2	6.1	6.8
12	20.4	19.8	20.1	17.6	16.8	17.2	10.5	9.6	10.3	7.5	6.5	6.8
13	20.2	19.5	19.8	16.8	15.1	16.1	10.2	9.4	10	7.5	6.2	6.8
14	20.4	19.6	20.0	16.4	15.1	15.9	10.0	9.4	9.7	7.4	6.0	6.7
15	20.3	18.5	19.8	15.2	14.1	14.7	10.0	9.4	9.7	7.2	6.5	6.8
16	20.5	18.8	19.9	14.4	13.7	14.0	9.7	9.3	9.5	7.2	6.1	6.7
17	20.0	19.3	19.8	15.5	14.1	14.6	9.6	9.1	9.3	7.5	6.6	7.0
18	19.7	18.8	19.3	16.8	15.0	15.9	9.2	8.8	9.1	9.2	6.7	8.1
19	19.0	17.9	18.5	16.4	15.6	16.1	8.9	8.6	8.8	7.6	6.3	6.6
20	19.9	17.6	18.7	15.9	14.8	15.6	8.8	7.9	8.5	6.6	5.9	6.3
21	19.8	19.2	19.6	15.9	15.2	15.6	8.8	7.4	8.2	6.5	6.1	6.2
22	19.6	18.8	19.3	15.9	15.2	15.6	8.7	8.0	8.4	6.4	5.7	6.1
23	19.5	18.4	19.1	16.0	15.3	15.7	8.9	8.3	8.5	6.1	5.4	5.8
24	20.0	18.5	19.3	15.7	13.0	14.7	8.6	7.9	8.2	6.4	5.7	6.0
25	19.5	19.1	19.3	15.0	13.7	14.6	7.9	7.6	7.8	7.1	5.1	6.0
26	19.4	17.4	18.4	14.7	13.5	14.4	8.0	7.3	7.7	9.0	6.3	6.8
27	19.0	16.5	17.5	14.4	14.0	14.3	8.2	7.0	7.8	8.2	5.9	6.4
28	19.0	17.8	18.6	14.3	13.2	13.9	8.3	7.1	7.9	6.2	5.7	5.9
29	18.7	17.9	18.2	13.8	13.0	13.5	8.5	7.8	8.0	6.2	5.6	5.8
30	18.7	18.0	18.3	13.4	13.2	13.3	9.0	7.6	8.2	6.3	5.5	5.7
31	19.1	18.2	18.5	---	---	---	8.2	7.5	7.8	5.7	5.2	5.4
MONTH	20.9	16.5	19.3	19.2	13.0	16.1	13.2	7.0	9.8	11.4	5.1	6.9
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	4.5	5.4	9.1	7.6	8.1	13.6	12.9	13.2	17.7	14.6	15.5
2	7.0	5.5	5.9	10.8	7.6	8.5	14.1	12.6	13.3	17.8	15.8	16.5
3	7.9	5.4	6.6	9.3	7.6	8.0	14.9	12.6	13.8	16.0	14.0	14.7
4	7.2	5.2	5.7	9.7	7.6	8.6	14.6	13.5	14.0	15.7	13.7	14.2
5	6.7	4.5	5.5	13.2	8.8	10.2	14.7	13.3	14.0	17.2	14.3	15.2
6	7.8	5.8	6.6	13.6	9.0	10.8	15.0	13.5	14.1	18.3	14.6	15.6
7	5.9	5.8	5.8	11.0	8.1	8.9	16.2	14.3	15.1	17.9	14.4	15.3
8	7.3	5.2	5.9	8.5	8.2	8.3	17.6	15.3	15.6	15.0	14.5	14.7
9	5.2	5.2	5.2	8.8	8.2	8.5	16.2	15.6	15.8	17.7	14.9	16.2
10	5.4	5.2	5.3	8.8	8.2	8.5	16.0	15.1	15.6	18.6	14.3	17.4
11	5.5	5.3	5.4	9.2	8.8	9.0	16.0	15.1	15.8	17.3	14.5	15.4
12	5.6	5.4	5.5	9.0	8.6	8.9	15.7	12.0	13.6	16.8	14.4	15.4
13	5.5	5.4	5.4	9.4	8.8	9.1	12.0	9.9	10.5	18.4	15.2	17.0
14	5.6	5.5	5.5	9.6	9.2	9.4	11.2	10.2	10.6	17.9	15.6	16.3
15	5.5	5.4	5.5	9.7	9.4	9.6	12.2	11.2	11.6	19.4	17.0	18.6
16	5.5	5.4	5.5	10.0	9.4	9.7	14.7	11.9	13.3	19.9	17.9	18.4
17	5.6	5.5	5.6	10.2	9.2	9.6	15.5	12.9	14.1	20.2	15.1	17.6
18	6.0	5.5	5.7	11.4	9.7	10.3	16.7	13.2	14.0	20.2	15.9	17.8
19	6.3	5.6	6.0	10.9	9.9	10.4	14.7	13.0	13.6	21.1	15.0	17.5
20	6.7	6.2	6.4	12.8	10.8	11.6	14.6	13.3	13.8	19.0	15.0	16.2
21	6.9	6.1	6.3	13.0	12.0	12.5	14.8	13.5	14.1	19.4	15.0	15.9
22	7.4	6.1	6.5	12.0	9.6	10.6	16.0	13.6	15.3	19.6	15.4	17.1
23	6.7	6.4	6.5	11.8	9.4	10.6	15.9	13.8	15.0	22.1	18.6	20.6
24	7.7	6.3	6.8	12.6	10.7	11.4	16.3	13.7	14.1	23.6	21.2	22.5
25	7.2	6.2	6.6	12.1	11.5	11.7	15.8	13.5	14.5	24.9	15.2	21.4
26	7.1	6.3	6.7	12.9	11.8	12.0	15.7	13.3	14.2	19.8	15.1	16.6
27	7.4	6.2	6.8	16.1	12.2	14.7	16.0	12.8	13.8	18.8	15.5	16.6
28	8.1	6.4	7.2	16.9	14.5	15.4	15.1	12.6	13.7	18.4	15.6	16.7
29	8.6	7.0	7.8	16.2	14.4	15.5	16.6	14.4	14.7	18.4	16.2	17.0
30	---	---	---	14.5	11.6	13.2	15.7	14.1	14.7	20.8	18.4	19.6
31	---	---	---	14.4	13.5	13.7	---	---	---	21.6	20.2	20.8
MONTH	8.6	4.5	6.1	16.9	7.6	10.6	17.6	9.9	14.0	24.9	13.7	17.1

03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.9	19.9	20.2	18.5	17.9	18.1	22.8	21.6	22.1	25.3	24.2	24.7
2	22.4	15.8	17.5	18.7	18.1	18.4	25.0	22.5	23.4	25.1	23.7	24.5
3	17.1	15.8	16.2	20.5	18.6	19.4	25.9	24.2	24.8	23.9	22.6	23.4
4	16.5	15.9	16.1	22.3	20.5	21.3	26.4	25.1	25.4	23.0	19.8	21.6
5	17.6	16.2	16.5	25.5	22.1	22.9	26.4	19.3	22.6	21.5	20.2	20.4
6	17.8	16.2	16.5	25.9	23.4	24.0	21.2	19.5	19.8	22.9	20.2	20.5
7	19.1	16.4	17.4	24.8	18.2	22.4	21.8	19.2	20.3	21.7	20.6	20.9
8	19.6	18.5	19.1	19.0	18.3	18.7	22.8	20.8	21.5	22.6	21.2	21.7
9	22.3	19.4	20.9	20.3	18.9	19.1	23.7	21.8	22.5	22.4	21.4	21.9
10	23.3	21.3	22.0	20.0	18.8	19.1	24.7	22.6	23.4	23.4	21.5	22.4
11	24.3	22.3	22.8	20.4	18.6	19.3	24.1	23.7	23.9	24.1	22.6	23.2
12	25.9	22.9	23.9	21.4	18.9	19.4	24.1	23.2	23.7	24.0	21.9	23.4
13	25.6	22.6	24.2	20.8	19.1	19.4	23.3	19.6	21.7	23.5	22.0	22.6
14	24.2	22.0	23.0	20.4	18.9	19.3	19.9	19.1	19.4	23.5	21.6	22.6
15	22.6	21.0	21.7	20.3	19.0	19.3	20.2	19.7	20.0	24.3	22.4	23.4
16	23.5	21.0	22.8	20.4	19.4	19.7	21.0	20.1	20.4	24.2	20.0	22.4
17	24.2	16.5	20.3	21.2	19.6	19.9	21.6	20.5	21.3	20.5	20.1	20.3
18	18.9	16.6	17.1	20.6	19.6	19.9	23.0	21.5	22.3	21.2	20.5	20.9
19	17.7	16.2	16.7	21.1	20.4	20.7	23.9	22.6	23.2	21.2	20.4	20.8
20	17.5	16.8	17.0	23.9	20.9	21.9	24.1	23.8	23.9	21.6	19.9	20.6
21	18.9	16.9	17.2	25.1	22.6	23.3	23.9	22.9	23.3	21.8	20.0	20.6
22	18.7	17.1	17.3	26.2	24.2	24.7	23.8	22.0	22.6	21.6	20.1	20.8
23	18.3	17.1	17.4	25.8	24.9	25.3	23.5	23.0	23.1	21.6	20.4	20.8
24	20.0	17.4	17.8	26.3	25.1	25.9	24.0	22.9	23.3	21.6	20.5	20.8
25	18.7	17.2	17.7	26.3	25.8	26.1	24.4	23.4	23.7	21.8	20.7	20.9
26	19.3	17.5	18.2	26.1	19.4	21.8	24.6	23.8	24.1	21.2	20.5	20.7
27	20.3	17.3	18.5	23.6	19.3	20.6	24.7	23.8	24.0	21.0	20.2	20.5
28	18.0	17.4	17.7	21.4	19.1	19.8	25.8	24.0	25.0	21.0	20.2	20.6
29	18.3	17.5	17.7	21.4	19.6	19.9	25.6	24.3	25.0	21.0	19.9	20.4
30	18.3	17.6	17.9	21.7	19.8	20.3	25.1	24.5	24.7	20.7	19.2	20.0
31	---	---	---	21.8	20.8	21.2	25.2	24.1	24.6	---	---	---
MONTH	25.9	15.8	19.0	26.3	17.9	21.0	26.4	19.1	22.9	25.3	19.2	21.6

03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	8.5	6.8	7.6	9.5	9.0	9.2	12.7	11.7	12.2
2	---	---	---	9.4	6.6	8.2	9.7	9.2	9.5	12.3	11.2	12.1
3	---	---	---	11.7	5.5	7.8	9.9	9.5	9.7	12.4	11.2	12.1
4	---	---	---	7.1	5.6	6.2	9.8	9.4	9.6	12.6	11.6	12.0
5	---	---	---	7.1	5.8	6.3	9.6	9.5	9.5	12.2	10.6	11.6
6	---	---	---	6.8	4.4	5.5	10.3	9.3	9.6	12.3	11.3	11.7
7	---	---	---	5.4	4.2	5.0	10.5	9.5	9.9	12.5	11.8	12.1
8	---	---	---	6.2	4.9	5.4	10.5	9.4	9.9	12.5	11.9	12.2
9	---	---	---	6.7	5.0	5.7	10.7	9.7	10.2	12.5	11.7	12.2
10	---	---	---	7.2	5.6	6.1	10.3	9.9	10.1	13.2	11.7	12.3
11	---	---	---	7.8	5.8	6.6	10.8	9.8	10.1	13.3	12.1	12.6
12	---	---	---	7.7	6.5	7.0	10.7	9.9	10.2	13.8	12.2	12.8
13	---	---	---	7.8	5.9	6.7	10.5	9.7	10.1	13.7	12.1	12.7
14	---	---	---	7.6	6.4	7.0	10.3	10.0	10.2	13.5	12.1	12.6
15	---	---	---	7.9	6.8	7.4	11.1	10.0	10.4	13.6	12.2	12.7
16	4.2	3.2	3.9	9.0	7.6	8.0	10.7	10.2	10.5	13.8	12.3	12.9
17	4.2	3.2	3.8	10.2	8.2	8.7	11.4	10.2	10.6	13.8	12.2	13.0
18	3.2	0.8	1.7	9.2	8.0	8.6	10.9	10.2	10.6	13.8	11.0	12.0
19	2.7	0.8	2.1	8.4	6.9	7.7	11.2	10.4	10.7	13.2	11.7	12.6
20	4.4	2.3	3.2	8.4	7.2	7.7	11.9	10.6	11.1	13.5	12.6	13.0
21	3.1	1.0	2.2	8.5	7.2	7.8	11.9	10.8	11.3	13.9	12.9	13.2
22	2.3	0.9	1.3	8.7	7.6	8.1	12.1	11.1	11.5	14.0	12.6	13.3
23	3.4	0.9	1.9	9.4	7.9	8.6	11.9	11.1	11.4	14.2	12.9	13.5
24	4.9	2.1	3.4	9.6	8.3	8.8	12.1	10.9	11.4	14.4	13.2	13.8
25	4.8	3.0	4.0	9.1	8.3	8.6	12.0	11.1	11.4	13.4	12.5	13.1
26	6.2	3.9	5.2	9.4	8.5	8.8	12.3	11.3	11.6	14.2	11.9	13.3
27	8.4	2.8	5.8	9.1	8.3	8.7	12.8	11.2	11.8	13.9	12.4	13.5
28	6.8	4.8	5.9	9.5	8.6	8.8	12.7	11.4	12.0	14.4	13.2	13.9
29	7.5	5.2	5.9	9.0	8.4	8.8	12.3	11.3	11.9	14.5	13.5	14.1
30	7.4	5.5	6.2	9.5	9.0	9.3	12.3	11.0	11.7	14.3	13.6	14.0
31	8.2	6.2	7.1	---	---	---	12.7	11.6	12.1	14.8	13.8	14.4
MONTH	8.4	0.8	4.0	11.7	4.2	7.5	12.8	9.0	10.6	14.8	10.6	12.8
		FEBRUARY			MARCH			APRIL			MAY	
1	15.2	13.3	14.2	12.4	11.7	12.1	12.1	10.8	11.4	8.7	7.1	7.7
2	14.8	13.3	14.2	12.8	10.5	11.9	13.1	10.7	11.7	9.4	7.9	8.7
3	14.5	12.0	13.2	12.7	11.4	12.3	14.4	11.0	12.8	10.2	7.3	8.6
4	14.6	12.9	14.0	13.5	11.8	12.7	14.1	11.8	12.9	10.1	7.1	8.6
5	13.7	12.8	13.4	13.2	10.2	12.3	16.3	11.6	13.8	9.4	6.6	8.0
6	13.0	11.9	12.6	12.4	9.6	11.2	18.9	13.8	15.9	10.6	6.5	7.6
7	12.9	12.5	12.7	12.2	11.4	11.9	18.6	14.0	15.7	9.4	6.0	6.8
8	14.1	11.2	12.8	12.2	11.8	12.0	15.9	12.2	14.4	7.6	5.2	6.2
9	14.8	14.1	14.6	12.6	11.9	12.2	13.8	11.2	12.7	10.1	5.8	8.2
10	14.9	14.6	14.7	13.0	11.9	12.5	13.2	8.0	10.9	11.5	5.4	8.9
11	14.7	14.4	14.6	13.6	12.8	13.2	13.2	8.6	11.8	8.0	5.2	5.8
12	14.5	14.2	14.3	13.3	12.6	13.0	11.6	8.7	10.1	6.8	5.0	5.7
13	14.3	14.1	14.2	14.0	12.7	13.4	10.4	8.3	9.7	8.5	4.9	6.7
14	14.2	13.9	14.0	14.1	13.5	13.8	10.6	8.8	9.6	7.0	4.9	5.5
15	13.9	13.8	13.9	13.9	13.2	13.6	9.7	8.8	9.3	8.2	6.0	7.5
16	14.0	13.8	13.9	13.8	12.7	13.3	10.3	8.8	9.5	8.2	6.5	7.5
17	14.0	13.8	13.9	13.2	12.3	12.8	10.2	9.1	9.6	7.4	4.5	6.3
18	13.9	12.4	13.2	14.4	12.5	13.4	10.8	9.0	9.6	9.1	5.3	6.9
19	12.6	12.4	12.5	13.4	12.7	13.0	9.7	8.8	9.2	10.0	4.0	6.4
20	12.5	12.2	12.3	13.6	11.8	12.9	9.7	8.5	9.1	7.8	3.8	4.9
21	12.3	12.0	12.3	13.5	10.8	11.9	9.5	8.3	8.9	8.8	3.5	4.7
22	12.6	12.1	12.2	13.5	11.8	12.7	9.3	8.2	8.8	8.7	3.8	5.4
23	12.5	12.3	12.4	15.0	11.8	13.6	8.7	7.8	8.2	10.0	5.9	8.5
24	12.5	11.9	12.1	16.4	13.2	14.4	8.0	7.2	7.6	12.6	8.2	10.3
25	12.7	11.8	12.1	16.9	12.8	14.8	8.4	7.3	7.7	15.0	3.1	9.2
26	12.7	11.6	12.2	15.2	13.5	14.3	8.7	7.1	7.7	7.8	2.9	4.0
27	13.5	11.8	12.4	18.8	13.4	16.7	9.7	6.9	7.6	6.7	3.0	4.2
28	13.2	12.2	12.5	17.9	15.2	16.6	8.6	7.0	7.6	6.5	2.8	3.9
29	13.6	12.3	12.8	17.7	9.3	14.3	9.7	7.5	8.0	5.1	3.4	4.1
30	---	---	---	12.3	9.7	11.6	8.8	7.3	7.6	8.1	5.1	7.0
31	---	---	---	11.8	9.5	10.4	---	---	---	8.3	5.4	6.9
MONTH	15.2	11.2	13.2	18.8	9.3	13.1	18.9	6.9	10.3	15.0	2.8	6.8

03430200 STONES RIVER AT US HWY 70 NEAR DONELSON, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.7	4.7	5.9	2.3	0.8	1.7	2.5	1.8	1.9	9.0	6.5	7.4
2	8.1	2.8	3.9	2.2	0.7	1.4	4.7	2.0	2.4	7.6	6.2	6.7
3	4.2	2.5	3.0	2.0	0.8	1.3	9.4	2.3	5.6	6.2	4.4	5.4
4	3.8	2.5	3.0	2.6	0.7	1.8	9.9	6.6	7.8	5.9	2.4	3.8
5	4.6	2.2	2.9	6.6	0.7	3.3	9.2	1.9	5.4	3.1	0.8	2.3
6	4.3	1.7	2.3	11.8	1.9	6.0	2.7	0.7	1.8	3.1	0.9	1.9
7	4.4	1.5	2.9	12.9	1.9	6.6	3.1	0.7	1.6	2.8	0.8	1.2
8	5.2	3.5	4.5	---	---	---	3.5	0.9	2.4	5.1	1.9	3.0
9	6.9	4.4	6.0	---	---	---	5.5	2.2	3.4	5.3	2.4	3.9
10	12.0	6.1	7.8	---	---	---	7.4	3.6	5.0	6.7	4.2	5.2
11	16.4	8.7	11.3	---	---	---	9.3	4.7	5.9	7.8	5.1	6.3
12	16.7	8.8	13.2	---	---	---	10.6	6.8	8.2	8.6	6.3	7.4
13	14.9	7.7	10.6	2.2	2.0	2.1	13.6	1.1	7.4	8.3	6.0	7.0
14	13.5	7.2	9.3	2.2	1.0	1.6	---	---	---	8.4	5.0	6.5
15	9.9	7.0	7.9	---	---	---	---	---	---	10.6	4.1	7.3
16	13.3	6.8	11.3	---	---	---	6.8	0.7	2.9	9.4	3.6	6.4
17	13.4	3.4	6.9	---	---	---	7.0	2.0	5.4	4.1	2.4	3.2
18	6.0	2.6	3.3	---	---	---	8.5	2.8	6.3	2.9	1.2	2.3
19	4.0	2.4	3.2	---	---	---	6.9	2.8	5.1	1.5	0.8	0.9
20	3.6	2.5	3.1	5.5	0.9	2.2	5.6	2.1	4.0	4.1	0.8	1.9
21	4.9	2.7	3.3	11.4	2.6	5.0	6.5	2.1	3.9	4.2	1.5	3.2
22	4.3	2.8	3.2	14.4	6.3	8.4	11.8	2.6	5.2	3.8	1.1	2.1
23	4.2	2.7	3.1	11.9	8.7	10.1	11.8	8.0	9.3	3.2	1.0	1.3
24	5.3	3.0	3.5	14.4	8.2	11.7	11.4	7.0	8.6	2.9	1.0	1.2
25	4.7	3.1	3.5	12.4	7.6	10.6	11.7	7.6	9.0	2.0	1.0	1.1
26	3.8	2.4	2.9	10.2	0.8	3.9	10.8	5.5	8.4	1.2	0.9	1.0
27	5.7	2.1	3.6	5.0	0.7	1.1	9.1	5.2	6.4	1.2	0.9	1.0
28	3.1	1.7	2.6	1.7	0.8	1.0	11.4	6.2	8.5	2.7	1.0	1.7
29	2.8	1.5	2.1	1.5	1.0	1.2	8.8	5.5	7.1	2.6	0.7	1.5
30	2.4	1.1	1.9	1.6	1.2	1.4	8.6	4.5	6.5	3.3	0.8	1.5
31	---	---	---	1.8	1.6	1.7	9.7	6.9	7.9	---	---	---
MONTH	16.7	1.1	5.1	14.4	0.7	4.0	13.6	0.7	5.6	10.6	0.7	3.5

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03430550 MILL CREEK NEAR NOLENSVILLE, TN

LOCATION.--Lat 36°00'32", long 86°42'05", Davidson County, Hydrologic Unit 05130202, near left bank on downstream side of bridge on US Highway 31A, 800 ft upstream from Holt Creek, 0.6 mi upstream from Owl Creek, 4.6 mi northwest of Nolensville, and at mile 19.6.

DRAINAGE AREA.--40.5 mi^2.

PERIOD OF RECORD.--March 1992 to September 2004 (discontinued).

REVISED RECORD.--WRD TN-94-1: 1992 (M), WRD TN-03-1: 2001-02 (P).

GAGE.--Data collection platform. Datum of gage is 527.74 ft above NGVD of 1929.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1345	*8,180	*16.22	Mar 5	2045	4,260	12.58

Minimum daily discharge, 0.72 ft^3/s, Oct. 10.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	4.0	58	67	40	183	73	34	41	52	3.9	3.6
2	6.2	4.5	45	76	75	255	62	104	27	41	3.1	20
3	4.5	4.7	39	66	166	125	54	87	38	21	2.6	17
4	3.5	4.9	40	58	101	96	46	75	23	23	3.0	11
5	2.8	8.1	35	82	3,310	820	40	57	17	18	339	7.7
6	2.6	3.7	e26	72	689	447	36	44	13	13	57	6.2
7	1.5	2.3	e23	62	232	171	32	35	10	33	29	5.5
8	0.99	1.8	e20	55	155	119	31	28	11	18	18	4.2
9	0.76	1.4	21	55	121	94	25	24	17	12	13	3.7
10	0.72	1.5	63	46	105	77	23	30	14	25	9.2	4.2
11	1.4	1.4	58	41	88	67	22	66	8.6	17	7.4	4.4
12	3.1	2.7	46	37	88	59	173	31	139	14	14	4.2
13	3.3	4.8	41	33	80	52	582	41	155	8.8	11	6.3
14	5.9	4.3	e60	30	73	48	240	41	66	7.0	8.1	12
15	8.0	5.5	e54	27	66	44	142	322	44	5.6	6.6	9.7
16	9.5	25	e48	24	59	46	103	129	32	4.7	5.5	31
17	9.2	26	51	23	55	38	81	89	46	4.4	4.5	102
18	6.9	e273	44	284	49	37	67	69	43	3.8	4.1	36
19	6.0	e174	39	132	46	32	58	56	26	3.0	3.7	17
20	5.4	91	33	90	43	68	51	44	19	2.4	8.7	11
21	5.4	62	29	72	40	114	48	34	15	1.8	11	7.6
22	5.0	46	26	61	36	73	62	27	12	1.8	7.7	6.2
23	4.7	35	70	51	34	60	130	21	11	1.7	6.2	6.1
24	3.4	175	98	46	31	52	96	17	9.6	2.3	6.8	5.4
25	2.9	91	71	378	28	44	68	14	9.0	1.9	5.8	4.6
26	5.0	65	58	154	42	39	56	12	8.8	3.8	5.1	4.0
27	5.4	57	49	103	46	35	45	10	6.9	3.6	4.9	3.8
28	4.5	249	41	79	39	32	37	9.3	5.7	2.5	4.9	3.6
29	4.4	109	72	66	37	101	31	8.5	5.2	2.0	4.8	3.4
30	4.6	75	133	57	---	121	31	7.9	7.9	1.9	4.1	3.2
31	4.5	---	85	47	---	89	---	145	---	4.3	3.9	---
TOTAL	140.37	1,608.6	1,576	2,474	5,974	3,638	2,545	1,711.7	880.7	354.3	616.6	364.6
MEAN	4.53	53.6	50.8	79.8	206	117	84.8	55.2	29.4	11.4	19.9	12.2
MAX	9.5	273	133	378	3,310	820	582	322	155	52	339	102
MIN	0.72	1.4	20	23	28	32	22	7.9	5.2	1.7	2.6	3.2
CFSM	0.11	1.32	1.25	1.97	5.08	2.90	2.09	1.36	0.72	0.28	0.49	0.30
IN.	0.13	1.48	1.45	2.27	5.48	3.34	2.34	1.57	0.81	0.33	0.57	0.33

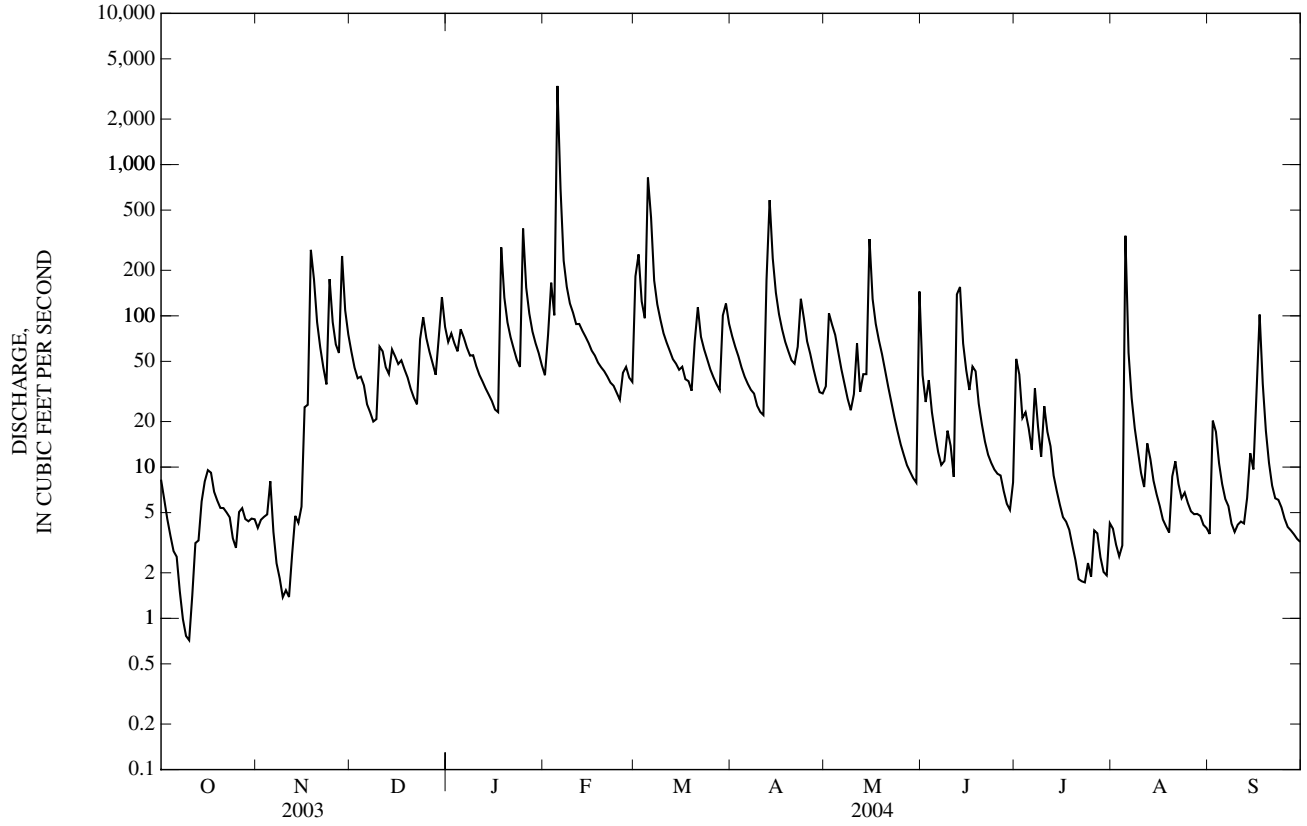
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	23.2	44.6	79.7	112	141	164	74.5	80.9	50.5	16.4	8.86	14.6
MAX	146	122	159	225	302	372	209	241	210	58.8	35.0	102
(WY)	(1996)	(1996)	(1997)	(1999)	(2003)	(1997)	(1994)	(2003)	(1998)	(1992)	(1995)	(2003)
MIN	0.39	1.67	28.4	38.3	40.3	51.4	20.3	8.40	4.00	2.35	1.03	0.85
(WY)	(2001)	(1999)	(2000)	(2003)	(2002)	(2003)	(1992)	(1992)	(2002)	(2000)	(2000)	(2000)

03430550 MILL CREEK NEAR NOLENSVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	30,733.89		21,883.87			
ANNUAL MEAN	84.2		59.8		68.0	
HIGHEST ANNUAL MEAN					104	1994
LOWEST ANNUAL MEAN					41.3	1993
HIGHEST DAILY MEAN	2,630	Jun 7	3,310	Feb 5	4,070	Mar 27, 1994
LOWEST DAILY MEAN	0.60	Sep 13	0.72	Oct 10	0.08	Sep 13, 1993
ANNUAL SEVEN-DAY MINIMUM	0.98	Sep 7	1.5	Oct 5	0.10	Sep 9, 1993
MAXIMUM PEAK FLOW			8,180	Feb 5	13,000	Oct 5, 1995
MAXIMUM PEAK STAGE			16.22	Feb 5	17.88	May 25, 2000
INSTANTANEOUS LOW FLOW					0.14	Oct 30, 1999
ANNUAL RUNOFF (CFSM)	2.08		1.48		1.68	
ANNUAL RUNOFF (INCHES)	28.21		20.09		22.81	
10 PERCENT EXCEEDS	118		106		127	
50 PERCENT EXCEEDS	26		31		20	
90 PERCENT EXCEEDS	1.7		3.7		1.4	

e Estimated



03431060 MILL CREEK AT THOMPSON LANE NEAR WOODBINE, TN

LOCATION.--Lat 36°07'03", long 86°43'08", Davidson County, Hydrologic Unit 05130202, at bridge on Thompson Lane, 1.4 miles west of Arlington Church, 1.5 miles upstream from U.S. Highway 41 and 70S, and 1.6 miles downstream from Sevenmile Creek, and at mile 6.3.

DRAINAGE AREA.--93.4 mi^2.

PERIOD OF RECORD.--Crest-stage gage July 1964 to September 1996. October 1996 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 432.55 ft above NGVD of 1929. July 1964 to September 1996, crest-stage gage at same site and datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	2100	*13,000	*15.51	Mar 6	0015	6,250	11.19

Minimum daily discharge, 4.6 ft^3/s, Oct. 31.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

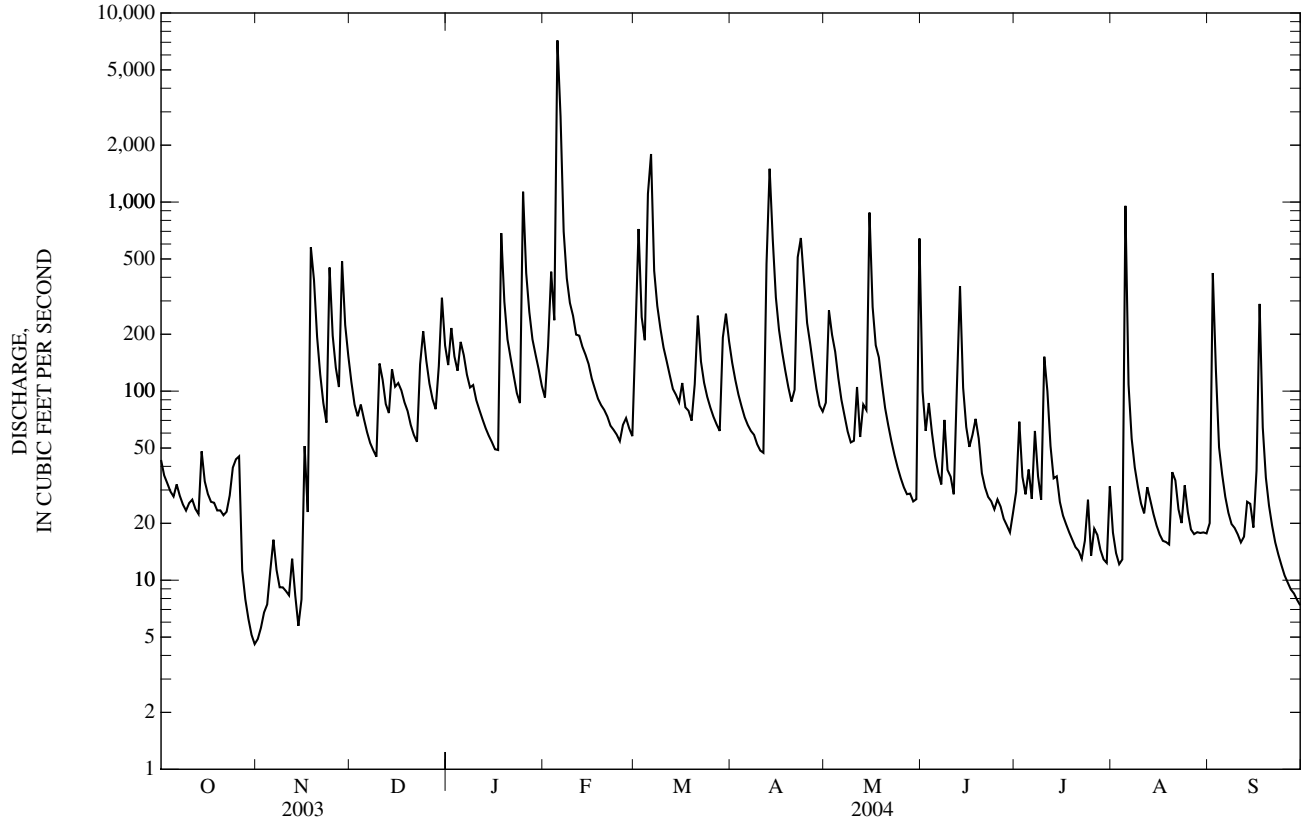
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	4.9	111	137	93	199	141	87	100	29	18	20
2	36	5.6	85	216	173	720	115	267	62	69	14	422
3	33	6.8	74	152	428	246	96	198	87	35	12	128
4	29	7.4	85	128	237	186	83	162	60	28	13	50
5	28	11	71	182	7,160	1,110	73	118	45	38	955	36
6	32	16	61	155	2,840	1,800	66	90	37	27	108	28
7	28	11	53	122	700	433	62	74	32	62	56	23
8	25	9.2	49	105	396	282	59	61	70	35	39	20
9	23	9.2	45	108	293	214	52	54	38	27	31	19
10	26	8.8	140	90	251	170	49	55	35	152	25	17
11	27	8.3	115	80	199	144	47	105	28	100	23	16
12	24	13	85	71	197	121	472	57	105	51	31	17
13	22	8.3	77	64	172	103	1,500	85	359	35	26	26
14	48	5.7	131	58	156	96	635	79	104	35	22	25
15	33	7.9	106	54	139	87	313	880	65	26	19	19
16	29	51	110	49	117	110	211	279	51	22	17	38
17	26	23	101	49	103	82	162	175	59	20	16	289
18	26	576	87	685	91	79	129	151	71	18	16	64
19	23	387	78	297	84	70	105	109	56	16	15	35
20	23	194	66	188	80	109	88	81	37	15	37	25
21	22	123	59	150	73	251	102	66	31	14	34	19
22	23	87	54	121	66	143	511	54	28	13	24	16
23	28	68	138	98	62	111	645	46	26	16	20	14
24	39	451	207	86	59	93	387	40	24	27	32	12
25	44	196	145	1,130	54	82	229	35	27	13	23	11
26	45	133	110	421	66	73	177	31	25	19	19	9.7
27	11	105	91	262	72	67	134	29	21	17	18	8.9
28	7.9	486	80	188	64	62	103	29	19	14	18	8.5
29	6.2	224	136	156	58	192	84	26	18	13	18	7.9
30	5.1	154	312	130	---	257	78	27	23	12	18	7.4
31	4.6	---	174	107	---	183	---	642	---	31	18	---
TOTAL	819.8	3,391.1	3,236	5,839	14,483	7,875	6,908	4,192	1,743	1,029	1,735	1,431.4
MEAN	26.4	113	104	188	499	254	230	135	58.1	33.2	56.0	47.7
MAX	48	576	312	1,130	7,160	1,800	1,500	880	359	152	955	422
MIN	4.6	4.9	45	49	54	62	47	26	18	12	12	7.4
CFSM	0.28	1.21	1.12	2.02	5.35	2.72	2.47	1.45	0.62	0.36	0.60	0.51
IN.	0.33	1.35	1.29	2.33	5.77	3.14	2.75	1.67	0.69	0.41	0.69	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	35.1	94.8	180	237	353	306	159	222	168	34.8	23.8	62.1
MAX	111	167	349	521	767	771	298	730	586	56.2	56.0	292
(WY)	(2003)	(1997)	(1997)	(1999)	(2003)	(1997)	(2000)	(2003)	(1998)	(2002)	(2004)	(2003)
MIN	1.89	13.4	71.5	78.7	104	125	52.9	59.8	22.5	8.14	6.99	4.09
(WY)	(2001)	(1999)	(2000)	(2003)	(2002)	(2003)	(1997)	(2001)	(2000)	(2000)	(2000)	(2000)

03431060 MILL CREEK AT THOMPSON LANE NEAR WOODBINE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	81,041.9		52,682.3			
ANNUAL MEAN	222		144		155	
HIGHEST ANNUAL MEAN					246	2003
LOWEST ANNUAL MEAN					106	2000
HIGHEST DAILY MEAN	7,650	May 5	7,160	Feb 5	7,650	May 5, 2003
LOWEST DAILY MEAN	4.6	Oct 31	4.6	Oct 31	0.75	Sep 21, 2000
ANNUAL SEVEN-DAY MINIMUM	5.8	Oct 29	5.8	Oct 29	0.95	Sep 16, 2000
MAXIMUM PEAK FLOW			13,000	Feb 5	26,200	May 4, 1979
MAXIMUM PEAK STAGE			15.51	Feb 5	20.63	May 4, 1979
ANNUAL RUNOFF (CFSM)	2.38		1.54		1.66	
ANNUAL RUNOFF (INCHES)	32.28		20.98		22.57	
10 PERCENT EXCEEDS	348		258		278	
50 PERCENT EXCEEDS	68		62		51	
90 PERCENT EXCEEDS	17		15		5.3	



03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°09'50", long 86°41'57", Davidson County, Hydrologic Unit 05130202, on the left bank Of Mill Creek approximately .9 mi upstream from the mouth at the Cumberland River, and at mil 194.5.

DRAINAGE AREA.--107 mi^2.

PERIOD OF RECORD.--October 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2003 to September 2004.
pH: October 2003 to September 2004.
WATER TEMPERATURE: October 2003 to September 2004.
DISSOLVED OXYGEN: October 2003 to September 2004.
TURBIDITY: October 2003 to September 2004.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Records for water temperature are good, for specific conductance are good, for pH are fair, for dissolved oxygen and turbidity are poor.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 605 microsiemens, Sept. 23; minimum, 124 microsiemens, August 5.
pH: Maximum, 8.8 units, several days; minimum, 7.2 units, Nov. 6, 7.
WATER TEMPERATURE: Maximum, 29.0°C, July 13, 14; minimum, 3.5°C, Jan. 31, Feb. 1.
DISSOLVED OXYGEN: Maximum, 20.9 mg/L, Dec. 22; minimum, 3.5 mg/L, July 26.
TURBIDITY: Maximum, undetermined NTU; minimum, undetermined NTU.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	573	548	561	547	451	536	557	532	547	536	513	529
2	574	546	563	555	539	550	565	548	558	540	366	436
3	577	553	566	562	539	556	573	556	565	522	446	503
4	568	523	553	564	515	556	558	501	526	549	522	542
5	570	545	557	565	353	492	561	513	547	554	481	517
6	553	534	547	526	399	462	574	555	565	522	483	509
7	543	530	536	565	507	543	576	560	568	540	522	533
8	543	532	536	573	563	567	576	563	572	553	531	547
9	545	537	541	570	537	567	574	559	568	555	541	550
10	545	541	543	572	550	568	564	357	464	566	541	555
11	549	538	540	570	562	566	512	430	487	560	526	546
12	555	543	547	576	515	565	527	511	522	566	526	546
13	561	554	558	544	456	483	559	527	550	551	520	538
14	556	416	507	468	426	444	555	475	508	544	522	533
15	458	419	437	529	461	506	546	512	534	538	511	528
16	524	442	499	527	354	442	560	513	543	533	510	524
17	533	490	521	449	429	439	542	500	528	530	511	524
18	547	496	540	532	206	405	569	542	559	524	266	358
19	547	516	539	463	292	364	572	557	564	479	327	416
20	558	491	546	514	463	493	579	557	569	513	479	502
21	555	352	510	555	514	539	574	555	565	530	513	525
22	569	352	495	568	554	564	572	547	564	546	524	534
23	559	429	537	580	568	574	559	402	507	551	523	537
24	559	462	541	572	303	406	477	415	460	549	516	534
25	525	334	437	517	394	456	521	477	501	542	215	332
26	541	343	416	552	517	538	548	521	539	472	316	415
27	469	358	434	563	551	558	561	538	552	501	472	485
28	494	469	481	555	319	424	565	536	552	519	500	513
29	528	486	515	501	353	440	573	384	534	524	515	521
30	516	477	505	532	501	523	448	383	423	529	519	524
31	534	458	517	---	---	---	513	431	475	534	522	528
MONTH	577	334	520	580	206	504	579	357	533	566	215	506

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	551	519	535	464	249	414	473	451	465	515	361	497
2	552	345	495	365	201	274	483	459	473	426	328	367
3	419	349	389	452	365	418	494	453	475	453	399	426
4	491	419	457	468	452	463	493	448	474	495	453	475
5	500	137	262	490	149	421	489	451	471	516	495	507
6	402	183	308	381	130	271	478	442	463	527	507	517
7	462	402	437	436	381	414	478	452	466	532	513	522
8	491	462	478	456	436	447	483	451	472	531	509	524
9	508	491	501	465	456	461	484	454	473	528	503	517
10	518	507	511	470	459	465	490	461	483	533	505	520
11	504	495	500	471	459	466	503	490	498	522	450	483
12	505	486	499	472	457	466	506	229	377	489	442	470
13	502	493	498	476	456	467	333	247	292	448	379	413
14	511	499	506	472	451	462	445	333	397	473	383	443
15	517	510	515	471	450	459	486	445	469	401	202	291
16	520	511	516	461	397	439	496	486	491	489	392	453
17	515	507	511	455	397	437	504	494	500	514	484	499
18	536	504	524	466	419	442	504	492	499	523	398	488
19	530	503	518	454	418	438	511	495	504	501	419	482
20	523	495	508	460	388	434	514	487	501	529	496	511
21	521	486	507	388	335	360	515	383	487	532	506	519
22	513	477	494	412	356	387	389	171	292	527	503	516
23	494	478	487	454	412	440	449	167	356	522	507	516
24	489	471	480	475	429	457	416	317	359	530	504	519
25	486	465	477	475	417	450	471	416	453	536	499	519
26	486	461	476	476	422	451	488	427	463	546	505	526
27	480	441	465	469	427	450	497	488	493	540	507	522
28	476	441	461	470	442	457	506	496	500	533	499	515
29	473	446	460	471	293	410	512	494	503	529	499	514
30	---	---	---	401	327	376	507	476	494	537	501	518
31	---	---	---	451	395	418	---	---	---	513	145	273
MONTH	552	137	475	490	130	426	515	167	455	546	145	479
		JUNE			JULY			AUGUST			SEPTEMBER	
1	440	348	401	530	483	499	491	365	421	533	525	528
2	476	440	465	515	419	463	403	337	372	530	144	444
3	484	439	465	489	452	475	412	388	396	445	175	334
4	493	461	482	457	403	429	436	407	414	533	445	494
5	514	484	503	439	369	399	440	124	232	561	533	554
6	497	485	491	478	420	458	413	282	354	588	557	577
7	518	493	504	458	316	384	483	413	454	602	577	589
8	529	207	410	433	314	385	513	483	502	603	571	593
9	474	254	385	450	430	440	529	510	521	580	566	574
10	516	474	499	497	213	427	575	515	549	567	511	557
11	515	503	511	385	223	285	537	521	526	567	541	558
12	532	172	439	388	279	342	529	503	518	549	259	444
13	377	243	276	461	388	439	508	496	501	494	290	401
14	431	294	375	487	461	475	508	491	497	458	283	407
15	488	431	465	484	463	472	508	427	499	531	458	501
16	510	488	503	511	484	497	498	427	490	557	286	518
17	521	504	514	516	505	509	500	469	491	479	267	367
18	508	444	479	516	509	513	497	469	491	502	472	482
19	483	400	455	516	507	511	501	493	496	553	501	533
20	482	410	463	519	510	513	503	386	472	581	553	568
21	497	469	485	519	508	513	434	348	385	595	575	588
22	524	482	507	518	504	510	455	371	423	604	579	595
23	514	495	505	515	501	508	480	452	467	605	578	591
24	519	491	507	512	488	498	480	389	460	589	583	586
25	518	482	500	488	439	459	451	370	405	589	581	584
26	505	480	494	466	425	450	430	376	394	585	578	582
27	495	482	486	469	446	455	495	430	462	584	579	582
28	502	495	500	473	465	469	508	467	494	585	561	580
29	503	492	498	476	469	473	518	493	511	584	569	576
30	502	494	497	469	452	459	528	513	518	586	532	571
31	---	---	---	470	441	454	530	516	523	---	---	---
MONTH	532	172	469	530	213	457	575	124	459	605	144	529

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.0	16.1	16.8	17.6	16.7	17.0	10.0	9.4	9.7	9.2	7.4	8.2
2	16.8	14.1	15.1	18.0	17.1	17.5	9.9	7.8	8.6	12.2	9.2	10.7
3	15.8	13.4	14.5	18.0	17.4	17.6	9.1	8.2	8.6	15.2	12.2	13.6
4	17.6	15.4	16.1	17.7	17.1	17.4	9.7	9.0	9.3	16.1	15.1	15.5
5	17.6	16.0	16.7	20.0	17.3	18.5	9.7	9.0	9.5	16.1	10.6	13.3
6	18.1	16.3	16.8	19.6	16.4	17.8	9.0	8.2	8.4	10.6	6.7	8.6
7	18.6	17.0	17.7	16.4	14.0	15.0	8.2	6.7	7.3	6.7	4.4	5.1
8	19.0	18.1	18.5	14.0	11.8	12.6	8.4	6.6	7.2	5.8	4.8	5.2
9	19.2	18.7	18.9	12.4	11.1	11.5	10.9	8.4	9.3	6.1	5.4	5.7
10	19.6	19.1	19.3	13.4	11.3	12.0	11.6	9.6	10.9	6.1	5.0	5.5
11	20.1	19.4	19.6	15.3	13.3	14.1	9.6	8.3	8.8	6.0	3.9	4.9
12	20.1	19.7	19.9	17.2	15.1	16.2	8.3	6.5	7.1	7.7	5.5	6.3
13	19.8	19.4	19.6	16.6	12.7	14.0	7.0	6.3	6.5	8.3	6.5	7.2
14	19.8	18.1	19.3	12.7	9.9	11.0	7.2	6.7	7.1	8.1	6.4	7.2
15	18.1	16.1	16.6	11.3	10.5	10.8	8.2	6.8	7.3	8.1	7.1	7.5
16	17.1	15.8	16.5	13.2	11.3	12.4	9.6	7.6	8.5	7.6	5.9	6.5
17	16.7	16.0	16.4	15.4	13.2	14.3	9.3	7.5	8.2	8.8	7.3	7.9
18	16.2	15.7	15.9	17.2	15.3	16.0	7.9	7.3	7.6	9.3	8.2	8.8
19	16.7	15.4	16.0	16.5	14.7	15.8	7.7	6.3	7.0	8.2	6.0	7.1
20	17.5	16.3	16.6	14.8	13.1	14.0	6.3	4.7	5.3	6.0	4.6	5.3
21	18.3	17.3	17.7	14.4	12.7	13.6	5.9	4.1	4.8	6.6	5.3	5.8
22	18.3	17.6	17.9	15.3	12.9	13.9	8.2	5.4	6.3	6.7	5.1	5.8
23	17.6	16.8	17.2	15.9	14.0	14.9	9.5	8.1	8.8	6.1	4.0	4.9
24	17.3	16.3	16.6	15.6	11.0	12.9	8.9	7.5	8.1	7.8	5.4	6.2
25	17.4	16.4	16.9	11.0	9.4	10.2	7.5	6.3	6.9	8.9	5.2	7.0
26	17.6	15.8	16.9	10.9	9.6	10.2	6.8	5.2	6.1	11.8	8.9	10.7
27	15.8	14.5	15.2	12.4	10.9	11.5	7.4	5.1	6.2	11.5	8.3	10.0
28	15.5	13.4	14.1	12.6	10.2	11.7	7.8	5.6	6.7	8.3	6.0	6.9
29	14.8	13.8	14.2	10.2	9.1	9.6	10.2	7.8	8.8	7.6	5.4	6.4
30	15.4	14.6	14.9	9.9	8.5	8.9	10.1	8.6	9.3	7.6	6.0	6.8
31	16.9	15.3	16.1	---	---	---	8.8	7.2	8.0	6.0	3.5	4.7
MONTH	20.1	13.4	16.9	20.0	8.5	13.8	11.6	4.1	7.8	16.1	3.5	7.6
		FEBRUARY			MARCH			APRIL			MAY	
1	6.7	3.5	5.0	12.1	10.3	11.0	13.8	11.5	12.6	21.9	18.8	20.0
2	8.0	6.3	7.1	13.5	11.4	12.4	15.1	11.0	12.7	20.8	16.6	18.1
3	8.0	7.1	7.7	13.1	11.9	12.5	16.7	11.7	14.2	16.6	14.5	15.3
4	8.0	6.1	7.0	15.0	12.4	13.6	15.9	12.3	14.1	17.7	13.5	15.4
5	7.5	4.6	5.9	15.7	14.6	14.9	15.5	11.8	13.6	20.0	15.6	17.7
6	9.9	7.4	9.4	14.9	13.2	13.8	17.3	12.2	14.4	22.2	17.1	19.5
7	9.8	8.6	9.1	13.8	12.2	12.9	17.8	14.2	15.9	23.1	18.3	20.7
8	8.6	7.5	7.9	12.9	10.8	11.7	19.9	15.8	17.4	23.4	19.9	21.2
9	8.4	7.6	8.0	12.2	10.6	11.2	19.5	15.7	17.5	24.2	20.7	22.3
10	9.9	8.3	8.9	11.5	8.6	9.8	19.0	15.3	16.3	23.9	20.9	21.9
11	10.1	8.8	9.4	11.3	9.3	10.2	15.9	14.3	14.9	23.4	20.0	21.7
12	10.1	9.5	9.7	11.7	9.3	10.1	14.9	11.5	12.8	23.3	20.9	22.1
13	9.8	7.8	8.6	11.6	9.1	10.2	11.5	9.8	10.2	23.2	20.9	21.7
14	8.9	8.1	8.4	11.7	10.3	11.2	13.4	9.7	11.2	22.8	20.7	21.5
15	8.8	7.8	8.3	11.8	10.4	11.1	15.8	11.9	13.5	21.7	18.9	19.9
16	7.8	6.5	7.1	13.8	11.7	12.4	18.0	13.3	15.4	19.8	18.2	18.9
17	9.6	7.4	8.5	13.8	12.1	12.8	19.7	15.1	17.2	22.1	18.6	20.2
18	9.3	7.1	7.9	16.1	13.4	14.2	21.2	16.7	18.8	22.0	20.0	21.1
19	9.5	7.6	8.3	16.3	14.0	14.8	20.7	17.6	19.3	23.2	19.9	21.6
20	10.0	8.9	9.5	16.5	14.7	15.5	21.1	18.0	19.6	24.8	20.8	22.8
21	10.7	9.4	10	16.1	12.6	14.1	20.6	17.6	18.5	25.4	22.2	23.7
22	10.7	8.4	9.5	12.8	10.2	11.5	17.6	16.0	16.8	26.0	22.6	24.3
23	10.3	8.7	9.1	13.3	9.4	11.3	18.2	16.2	17.1	26.1	23.0	24.6
24	10.6	9.6	9.9	15.8	11.6	13.2	19.1	16.6	17.7	26.0	22.9	24.6
25	10.9	8.5	9.5	17.8	13.6	15.3	18.5	17.2	17.9	26.3	23.0	24.7
26	9.0	8.2	8.4	19.2	16.2	17.3	19.1	16.4	17.7	26.0	23.7	24.7
27	8.6	6.8	7.6	20.7	17.1	18.6	18.9	15.5	17.2	25.7	23.7	24.7
28	10.3	6.8	8.1	21.3	17.8	19.4	19.0	14.5	16.6	25.7	23.1	24.0
29	11.4	8.7	9.7	20.3	14.7	17.1	20.1	16.4	18.3	24.1	22.4	23.3
30	---	---	---	15.7	13.5	14.6	20.3	18.2	19.3	25.5	23.3	24.2
31	---	---	---	14.3	12.5	13.2	---	---	---	25.5	21.2	22.3
MONTH	11.4	3.5	8.4	21.3	8.6	13.3	21.2	9.7	16.0	26.3	13.5	21.6

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	20.6	22.0	25.2	23.7	24.5	26.7	24.5	25.8	24.6	23.7	23.9
2	24.2	21.4	22.4	25.6	22.8	23.9	27.3	24.6	25.4	24.6	23.4	24.1
3	24.1	21.7	22.2	26.8	24.0	25.1	27.8	26.3	26.8	23.8	22.6	23.2
4	23.3	20.1	21.7	27.6	25.2	26.2	27.8	26.1	26.9	24.3	22.8	23.3
5	23.9	21.0	22.0	27.2	24.4	26.0	27.7	22.9	24.1	25.6	22.4	23.8
6	23.9	21.6	22.8	27.4	24.4	25.8	24.4	21.4	22.8	26.4	23.3	24.6
7	25.0	21.7	23.1	27.2	24.0	24.9	24.4	20.8	22.6	26.4	24.4	25.3
8	25.0	23.4	24.1	25.3	24.1	24.5	24.7	21.4	23.1	24.4	22.9	23.4
9	25.4	22.7	23.9	26.0	24.0	25.2	25.6	22.3	23.8	23.3	22.0	22.7
10	26.7	23.6	24.8	27.5	24.3	26.1	25.7	23.2	24.5	24.0	22.1	22.8
11	27.8	24.6	25.9	26.0	24.3	25.1	25.7	24.7	25.1	24.4	23.2	23.7
12	27.7	24.5	26.3	27.9	24.5	26.0	25.3	22.7	23.7	24.1	21.3	23.0
13	25.0	23.0	24.1	29.0	25.7	27.1	22.7	20.4	21.2	23.4	20.8	21.7
14	24.9	22.5	23.5	29.0	25.2	26.8	21.3	19.8	20.4	24.3	21.7	22.9
15	24.5	23.2	23.9	27.7	25.3	26.3	22.4	20.4	21.0	24.6	22.4	23.5
16	27.1	23.3	24.9	26.4	24.8	25.6	23.6	21.4	22.0	24.6	21.9	23.6
17	26.6	24.6	25.4	26.1	24.8	25.1	24.1	22.1	22.7	22.4	21.3	21.8
18	26.9	24.4	25.4	26.6	25.2	25.8	24.4	22.9	23.5	21.7	19.8	20.5
19	26.3	24.5	25.3	26.5	25.4	25.8	25.0	23.7	24.5	21.5	19.4	20.5
20	25.9	23.1	24.5	26.0	24.9	25.3	25.5	24.0	24.7	21.7	18.6	20.2
21	26.2	23.2	24.7	26.0	25.0	25.5	24.2	22.9	23.3	21.7	18.8	20.3
22	26.7	24.7	25.6	27.1	25.8	26.5	23.7	21.8	22.4	21.5	19.3	20.3
23	26.6	24.4	25.3	27.4	25.7	26.9	23.6	23.0	23.3	21.8	20.2	21.0
24	25.7	23.6	24.6	28.0	26.4	27.1	25.7	23.3	24.2	22.6	21.1	21.6
25	25.8	24.0	24.8	27.8	25.6	26.9	25.6	24.1	24.7	23.0	22.0	22.4
26	24.7	23.2	23.9	26.5	25.2	25.8	25.5	24.4	24.7	22.8	22.2	22.4
27	24.9	23.4	23.9	26.3	24.1	25.1	26.8	24.6	25.5	22.3	21.5	21.8
28	24.9	23.9	24.3	25.5	24.6	24.9	27.0	24.9	25.9	21.7	21.0	21.3
29	25.1	24.0	24.5	25.8	24.7	25.0	25.5	24.9	25.1	21.3	20.5	20.9
30	25.3	24.4	24.6	26.2	25.0	25.4	25.4	24.6	25.0	20.5	19.3	19.7
31	---	---	---	27.3	25.5	26.2	24.8	24.0	24.3	---	---	---
MONTH	27.8	20.1	24.1	29.0	22.8	25.7	27.8	19.8	24.0	26.4	18.6	22.3

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.6	9.3	11.0	10.7	7.7	9.1	13.7	11.3	12.1	16.7	12.2	13.7
2	14.1	9.3	11.1	10.2	7.2	8.5	14.3	11.6	12.6	12.5	10.3	11.2
3	14.8	9.7	11.9	9.7	7.0	8.5	14.0	11.5	12.4	13.6	9.2	10.6
4	14.5	9.5	11.7	9.2	7.0	8.2	12.9	11.0	11.6	11.7	8.1	9.5
5	13.9	8.9	10.9	9.6	6.3	8.0	12.8	10.3	11.4	11.2	8.0	9.4
6	14.5	8.7	10.8	8.5	5.2	6.5	14.2	11.0	12.1	18.3	10.5	14.6
7	14.2	8.4	10.6	9.5	7.0	7.8	15.2	11.5	12.8	19.7	16.0	17.6
8	13.8	8.6	10.3	11.5	8.2	9.1	17.4	12.1	13.5	18.5	14.1	15.9
9	14.2	8.6	10.7	11.9	9.1	10.1	16.6	11.8	13.6	14.6	12.4	13.3
10	12.0	7.8	9.9	13.7	9.5	11.0	16.6	10.4	11.7	16.9	12.0	13.7
11	12.0	7.8	9.6	13.4	8.9	10.4	14.2	10.6	11.8	17.4	12.4	14.1
12	12.0	7.2	8.9	11.8	7.5	9.1	15.5	11.2	12.6	18.2	11.9	14.1
13	10.8	7.5	9.3	12.5	7.3	9.0	14.8	12.2	13.2	18.7	11.4	14.0
14	11.2	7.3	9.1	13.6	8.7	10.5	15.9	12.5	13.9	18.2	11.2	13.8
15	10.8	7.5	8.4	13.6	9.3	11.0	18.1	13.3	15.0	19.0	10.9	14.0
16	10.8	7.5	8.7	10.6	9.1	9.7	14.8	12.0	13.2	19.0	11.5	14.2
17	10.2	7.4	8.5	11.7	9.1	10.0	17.0	11.5	13.6	17.1	11.0	13.3
18	10.6	8.0	8.9	9.4	8.4	8.9	14.8	11.4	12.7	13.7	10.5	11.1
19	10.6	8.0	9.0	9.9	9.1	9.6	15.9	11.5	13.1	13.1	11.3	12.1
20	10.5	7.9	9.0	11.2	9.7	10.3	18.8	12.5	14.7	15.2	12.3	13.4
21	9.6	8.5	9.2	11.5	9.8	10.3	19.9	13.6	16.2	15.4	12.4	13.3
22	9.7	8.3	9.1	11.6	9.2	10.2	20.9	13.3	15.8	15.8	12.1	13.6
23	9.1	7.7	8.6	12.0	9.2	10.1	19.9	12.4	13.8	16.7	12.3	13.9
24	9.6	8.2	8.9	10.6	9.1	10.2	15.5	12.5	13.7	17.3	12.1	13.9
25	10.2	8.5	9.4	12.3	10.6	11.3	18.2	13.6	15.3	13.6	11.2	12.0
26	10.5	7.5	8.4	12.5	10.9	11.4	19.4	13.9	15.6	11.6	10.4	11.0
27	10.9	7.7	9.1	11.5	10.3	10.8	20.0	14.0	15.9	12.4	10.4	11.2
28	10.5	7.9	8.7	11.1	10.0	10.6	20.0	13.8	16.0	14.6	11.5	12.7
29	11.9	8.2	9.6	13.2	11.1	12.1	15.7	11.7	13.5	15.1	12.2	13.2
30	11.9	8.0	9.3	13.5	11.8	12.3	13.3	11.6	12.4	15.4	11.6	13.0
31	10.9	7.8	9.2	---	---	---	15.8	12.1	13.4	15.8	12.5	13.6
MONTH	14.8	7.2	9.6	13.7	5.2	9.8	20.9	10.3	13.5	19.7	8.0	13.1
		FEBRUARY			MARCH			APRIL			MAY	
1	15.9	12.6	13.8	16.2	10.4	11.5	13.6	9.4	11.2	12.9	7.1	9.1
2	13.8	11.5	12.2	11.0	10.4	10.8	15.6	9.4	11.6	10.1	7.7	8.8
3	12.1	11.5	11.8	12.5	10.5	11.1	15.9	8.8	11.5	10.8	8.8	9.7
4	14.9	11.8	12.8	13.3	10.0	11.4	17.4	8.1	11.5	12.8	9.3	10.7
5	12.8	11.6	12.2	11.3	9.4	9.9	17.8	8.2	12.0	12.9	8.6	10.1
6	11.6	10.7	10.8	10.6	9.8	10.3	17.6	8.3	12.0	12.9	8.2	10
7	11.5	10.7	11.1	12.0	10.3	11.1	16.9	7.1	11.0	13.0	7.7	9.9
8	12.4	11.3	11.7	13.0	11.0	11.7	16.5	6.4	10.0	13.2	7.0	8.8
9	12.3	11.7	11.9	12.9	10.9	11.7	15.7	5.8	9.6	12.5	6.3	8.8
10	12.3	11.5	11.8	14.4	11.7	12.8	12.8	5.8	8.3	11.0	6.6	8.4
11	12.6	11.3	11.8	14.5	11.4	12.7	12.5	6.2	9.2	11.6	6.9	9.1
12	12.6	11.3	11.8	15.2	11.5	12.8	10.7	7.2	9.3	11.0	6.9	8.7
13	13.6	11.6	12.3	15.8	11.3	12.9	11.2	10.0	10.8	10.0	6.6	8.4
14	13.6	12.0	12.5	15.5	10.6	12.4	12.0	10.7	11.3	11.1	7.6	8.8
15	13.5	12.0	12.5	16.3	10.9	13.2	12.0	10.3	11.1	9.3	8.1	9.0
16	14.4	12.6	13.1	15.4	9.7	12.1	11.4	9.3	10.3	10.4	9.3	9.7
17	14.5	12.3	13.1	15.8	9.4	11.3	10.8	8.7	9.6	11.1	8.8	9.8
18	15.1	12.3	13.5	16.3	8.9	12.3	---	---	---	10.9	8.2	9.3
19	15.0	11.9	13.0	16.6	8.4	10.7	---	---	---	10.8	8.2	9.5
20	15.0	11.1	12.4	16.5	8.3	10.7	---	---	---	11.8	8.0	9.7
21	16.3	11.1	12.9	12.7	8.3	10.3	---	---	---	11.7	7.6	9.3
22	16.0	11.4	13.5	15.9	9.8	12.1	9.0	8.4	8.6	12.0	7.2	9.3
23	16.6	11.4	12.9	16.9	10.2	12.7	9.8	8.2	8.5	12.1	6.9	9.0
24	16.7	11.3	13.1	17.4	9.5	12.5	9.1	8.4	8.7	12.3	7.0	9.2
25	17.2	11.4	13.5	17.1	8.6	12.0	9.8	8.3	8.8	12.9	6.6	9.3
26	17.7	11.7	14.2	16.2	7.6	11.1	10.1	8.0	8.8	11.6	6.7	8.8
27	18.3	12.1	14.6	15.1	6.9	10.4	11.0	7.8	9.2	11.9	6.5	8.8
28	17.9	12.6	14.8	14.2	6.3	9.6	12.0	8.3	9.6	10.5	6.6	8.2
29	17.8	11.6	14.2	9.4	6.1	7.7	12.3	7.8	9.7	11.8	6.9	8.9
30	---	---	---	10.8	8.6	9.6	11.8	7.3	9.1	11.8	7.0	9.1
31	---	---	---	12.3	8.8	10.3	---	---	---	9.9	8.4	8.7
MONTH	18.3	10.7	12.8	17.4	6.1	11.3	17.8	5.8	10.1	13.2	6.3	9.2

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.2	8.4	9.0	9.2	5.1	7.0	8.2	4.0	5.8	8.2	6.8	7.2
2	10.8	7.9	8.9	12.1	7.8	9.8	6.9	5.3	6.1	8.5	6.4	7.7
3	10.4	8.0	9.0	10.9	7.5	8.9	7.5	5.5	6.6	8.5	7.4	7.8
4	11.6	8.5	9.9	---	---	---	7.3	5.1	6.1	9.6	7.2	8.0
5	12.0	7.8	9.3	---	---	---	7.3	5.4	6.9	10.3	7.1	8.3
6	12.3	7.3	9.3	10.3	6.7	8.4	8.5	7.1	7.7	10.4	6.6	8.0
7	12.3	6.6	9.5	8.9	6.3	7.6	9.3	6.9	7.9	9.6	6.1	7.4
8	10.4	6.1	7.3	8.8	6.5	7.2	9.9	6.9	8.1	10.6	6.4	7.6
9	9.5	5.9	7.3	8.1	5.9	6.8	10.9	6.5	8.3	11.2	7.0	8.3
10	10.0	5.8	7.4	8.9	5.4	6.9	11.5	6.2	8.1	11.2	7.7	9.2
11	10.0	5.7	7.2	8.2	7.1	7.5	11.3	6.1	7.8	10.8	7.5	8.8
12	9.5	5.1	6.8	9.4	7.0	8.0	11.3	6.3	8.7	10.8	6.6	8.7
13	7.2	6.6	6.9	9.6	6.8	7.8	12.3	7.0	8.9	9.6	6.2	7.1
14	8.5	6.6	7.3	10.1	6.0	7.3	12.6	7.9	10.1	9.8	6.7	7.8
15	8.9	6.3	7.4	10.1	5.8	7.3	12.0	8.6	10.7	10.3	6.3	7.6
16	9.8	6.6	7.9	10.1	6.6	7.9	12.7	10.8	11.7	10.3	6.0	7.5
17	10.3	5.7	7.4	9.9	7.1	8.6	12.0	10.0	11.0	8.8	7.8	8.3
18	10.8	6.0	8.0	10.4	7.6	8.9	12.4	9.8	11.0	9.9	7.8	8.4
19	10.1	6.2	7.8	11.0	7.7	9.2	10.7	8.1	9.5	10.6	7.6	8.8
20	11.3	6.2	8.0	10.3	7.6	9.3	9.3	5.6	7.8	10.8	7.9	9.1
21	11.3	5.5	8.0	10.2	7.8	8.9	8.3	6.0	6.8	11.4	7.8	9.1
22	11.3	5.6	7.7	9.5	6.5	8.1	10.4	6.3	7.4	11.5	7.4	8.7
23	10.6	4.6	7.0	9.0	4.6	7.2	11.1	6.1	8.3	11.8	7.3	8.9
24	11.8	5.5	8.4	10.3	4.6	7.1	9.9	6.8	8.6	11.8	7.3	8.9
25	11.5	5.3	7.3	10.8	3.6	7.3	8.6	5.0	6.5	11.8	7.1	9.0
26	10.9	5.8	7.6	7.3	3.5	6.5	8.8	5.0	6.9	11.0	7.5	9.1
27	11.1	6.2	7.7	9.8	6.3	7.8	8.4	5.7	7.0	10.3	7.7	9.0
28	10.3	6.1	8.5	10.5	7.4	8.7	8.0	4.8	6.1	10.5	8.8	9.8
29	9.5	5.8	7.6	10.1	7.9	9.0	8.8	5.4	7.8	10.1	8.0	9.2
30	9.6	5.6	7.3	10.0	8.0	9.2	9.9	7.3	8.5	10.4	8.0	9.6
31	---	---	---	10.1	6.4	8.3	8.7	6.9	7.8	---	---	---
MONTH	12.3	4.6	8.0	12.1	3.5	8.0	12.7	4.0	8.1	11.8	6.0	8.4

03431083 MILL CREEK AT LEBANON ROAD AT NASHVILLE, TN—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.1	1.2	4.6	1.5	16	3.7	9.5	2.9	2.9	0.9	120	12
2	4.3	1.2	5.5	1.8	7.8	1.8	120	3.6	96	1.0	220	39
3	2.4	0.6	4.9	1.6	3.6	1.8	25	9.1	94	37	40	22
4	3.2	0.8	5.9	2.0	8.3	2.1	14	5.9	40	9.1	29	18
5	8.8	2.2	38	1.8	7.8	1.1	18	7.0	760	6.5	470	19
6	14	8.1	19	1.5	3.6	0.6	18	7.4	220	46	450	28
7	21	1.0	2.5	0.7	1.6	0.6	10	5.5	46	22	---	---
8	35	1.2	1.4	0.5	1.5	0.5	8.2	2.7	22	10	---	---
9	35	2.2	2.3	0.4	2.5	0.4	4.9	1.7	13	7.8	---	---
10	6.6	2.2	1.9	0.4	40	0.8	2.6	0.7	13	8.1	---	---
11	6.7	1.8	1.4	0.5	21	8.5	4.3	0.8	12	5.3	---	---
12	11	1.7	26	1.1	14	6.8	3.1	0.6	10	5.3	---	---
13	5.5	1.3	20	5.9	7.0	2.1	1.5	0.4	8.1	4.5	---	---
14	37	2.2	8.8	2.8	11	2.6	1.2	0.4	6.7	4.0	---	---
15	13	3.9	3.8	1.9	6.1	2.7	1.3	0.3	5.2	3.8	---	---
16	4.3	1.1	19	2.6	13	1.9	1.1	0.1	4.9	3.7	4.8	3.4
17	4.1	1.1	13	5.8	10	2.4	1.8	0.1	4.9	3.6	6.6	2.3
18	4.5	1.1	890	3.4	3.0	1.2	470	0.6	6.2	4.2	4.4	2.1
19	3.6	0.9	760	52	4.0	1.3	94	15	8.2	6.0	6.6	2.2
20	4.3	1.4	57	23	1.8	1.0	17	4.8	8.8	7.1	12	2.2
21	6.3	2.1	25	8.8	1.4	0.8	6.6	2.4	11	8.2	30	11
22	5.9	3.4	14	4.4	1.6	0.6	3.7	1.3	13	9.9	30	8.6
23	8.4	1.4	13	3.5	26	1.0	2.5	0.9	13	11	9.4	2.8
24	4.2	0.7	180	7.9	33	20	2.0	0.6	14	11	3.8	2.0
25	5.8	2.0	85	13	26	6.6	610	0.9	15	12	4.9	2.1
26	33	3.7	14	4.3	7.8	2.1	120	22	13	12	4.4	2.0
27	8.5	2.3	6.2	2.9	4.0	1.5	25	11	13	12	4.6	2.1
28	2.9	1.1	160	3.8	4.7	1.2	16	2.7	12	11	5.3	2.0
29	2.8	0.6	85	16	35	0.9	3.9	1.8	16	12	---	---
30	2.6	1.2	16	5.5	52	25	5.0	1.3	---	---	---	---
31	3.8	1.5	---	---	45	9.0	2.9	1.0	---	---	---	---
MONTH	37	0.6	890	0.4	52	0.4	610	0.1	760	0.9	470	2.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	60	9.8	11	3.1	---	---	18	7.5
2	---	---	---	---	16	5.9	15	4.2	---	---	520	5.4
3	---	---	---	---	13	6.4	9.9	2.7	8.9	3.4	240	17
4	---	---	---	---	9.8	4.6	13	2.3	18	5.3	---	---
5	---	---	---	---	---	---	18	3.6	950	6.2	---	---
6	---	---	---	---	---	---	17	2.9	100	22	---	---
7	---	---	---	---	8.3	2.5	22	8.3	26	9.1	---	---
8	---	---	---	---	300	3.6	18	5.5	11	4.7	---	---
9	---	---	---	---	58	7.5	9.9	5.6	17	3.9	---	---
10	---	---	---	---	21	3.6	86	5.5	17	3.3	---	---
11	---	---	---	---	12	3.3	120	36	10	3.6	---	---
12	---	---	18	7.2	680	3.8	56	21	20	4.1	---	---
13	---	---	33	13	520	72	26	8.7	50	3.7	---	---
14	---	---	48	9.9	76	18	25	8.4	17	3.3	---	---
15	9.1	2.7	770	44	28	11	21	6.6	11	3.2	---	---
16	14	1.2	61	18	61	7.4	21	7.3	5.4	2.7	---	---
17	14	0.5	27	8.2	33	7.3	20	5.0	8.4	2.4	---	---
18	6.4	0.5	50	8.2	160	7.1	14	4.4	6.6	2.4	---	---
19	5.5	0.5	49	7.5	44	7.8	12	4.2	21	2.4	---	---
20	5.6	0.3	17	5.8	21	6.8	13	4.6	18	2.5	---	---
21	24	1.0	19	5.1	26	5.6	11	5.7	23	11	---	---
22	250	20	12	3.8	15	5.9	11	5.8	20	4.3	---	---
23	340	8.3	10	3.4	15	6.5	13	6.3	17	3.7	---	---
24	64	20	16	3.0	15	5.3	19	4.6	14	3.7	---	---
25	20	10	23	4.8	14	6.3	11	6.4	17	4.9	---	---
26	21	8.3	7.7	5.2	20	5.1	10	5.9	14	4.6	---	---
27	11	3.7	7.9	4.7	17	5.2	25	5.9	9.0	4.3	---	---
28	---	---	7.5	5.0	17	5.1	17	7.7	10	4.3	8.2	2.4
29	---	---	11	4.2	13	4.0	16	6.7	11	4.1	8.8	2.4
30	---	---	6.6	4.0	12	3.7	14	6.5	8.3	4.4	9.5	2.7
31	---	---	280	4.4	---	---	18	6.6	14	5.8	---	---
MONTH	340	0.3	770	3.0	680	2.5	120	2.3	950	2.4	520	2.4

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°09'46", long 86°43'31", Davidson County, Hydrologic Unit 05130202, on right bank 0.8 mi downstream from Mill Creek, upstream of Omohundro Filtration Plant, and at mile 193.7.

DRAINAGE AREA.--12,819 mi^2.

PERIOD OF RECORD.--October 1996 to September 1999, October 2000 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1996 to September 1999, October 2000 to current year.
pH: October 1996 to September 1999, October 2000 to current year.
WATER TEMPERATURE: October 1996 to September 1999, October 2000 to current year.
DISSOLVED OXYGEN: October 1996 to September 1999, October 2000 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1996.

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 282 microsiemens, Jan. 8, 2002; minimum, 166 microsiemens, June 4, 1998.
pH: Maximum, 9.1 units, Feb. 11, 12, 13, 2001; minimum, 6.9 units, July 30, 1997.
WATER TEMPERATURE: Maximum, 27.3°C, July 31, 1997; minimum, 3.0°C, Jan. 5, 2001.
DISSOLVED OXYGEN: Maximum, 14.9 mg/L, Jan. 18, 2002; minimum, 3.7 mg/L, Nov. 4, 2001.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 258 microsiemens, Feb. 1; minimum, 172 microsiemens, Sept. 13.
pH: Maximum, 8.5 units, several days; minimum, 7.0 units, May 18.
WATER TEMPERATURE: Maximum, 24.3°C, Aug. 7, Sept. 10; minimum, 5.7°C, Feb. 1.
DISSOLVED OXYGEN: Maximum, 14.4 mg/L, Mar. 208; minimum 5.6 mg/L, May 18.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	209	190	196	198	187	191	230	222	225	238	226	231
2	218	194	206	190	188	189	228	223	226	236	224	229
3	209	191	200	197	189	190	233	204	226	234	224	228
4	203	191	196	200	192	195	233	223	230	236	225	229
5	197	193	195	205	194	200	232	219	230	235	223	228
6	194	189	191	203	192	197	234	225	230	234	221	227
7	190	186	188	208	192	200	232	216	225	231	219	226
8	197	185	187	208	193	203	223	209	215	230	219	224
9	197	188	190	205	184	195	218	210	213	234	221	227
10	193	186	189	191	182	186	222	211	215	238	223	229
11	189	187	188	201	183	192	226	214	218	244	229	236
12	191	186	189	201	183	192	225	213	217	248	232	239
13	191	187	189	201	182	190	224	212	216	249	232	239
14	204	186	191	194	183	191	223	212	217	245	232	238
15	200	182	192	194	183	190	228	213	219	243	231	237
16	210	182	195	205	189	193	230	215	220	243	231	237
17	214	196	205	196	193	195	235	217	227	241	229	233
18	216	199	207	198	189	194	235	221	226	231	228	230
19	203	185	196	201	192	196	235	221	226	240	223	229
20	203	184	187	219	199	204	236	222	227	233	221	225
21	204	186	194	211	203	206	237	220	224	234	222	229
22	202	185	193	212	204	207	232	220	222	245	221	231
23	197	187	192	224	208	216	232	221	223	241	226	233
24	197	187	193	232	217	222	238	225	229	243	229	235
25	197	187	190	251	217	228	236	220	225	239	222	229
26	193	188	190	245	222	233	233	218	223	237	220	226
27	193	188	191	240	212	228	231	219	223	236	218	227
28	203	189	195	249	217	230	231	222	225	240	221	231
29	196	188	190	251	231	236	238	227	231	237	220	233
30	197	189	191	241	227	231	247	234	239	240	220	232
31	199	190	193	---	---	---	244	230	237	252	238	242
MONTH	218	182	193	251	182	204	247	204	224	252	218	231

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	258	225	244	210	197	200	196	192	195	203	190	195
2	245	221	231	211	197	201	196	194	195	190	189	190
3	248	222	234	208	198	203	206	191	195	201	186	189
4	240	220	228	216	202	208	196	188	190	189	183	184
5	238	206	220	221	206	212	191	188	190	198	184	190
6	225	214	219	219	201	206	190	185	188	199	187	190
7	214	179	189	218	202	209	191	186	187	194	185	190
8	204	185	194	215	202	207	189	183	186	189	186	187
9	209	198	203	206	202	204	186	183	184	194	189	192
10	210	198	202	212	206	210	185	182	183	197	191	195
11	222	209	213	212	209	211	185	181	183	203	191	196
12	217	209	212	209	196	202	191	182	185	206	188	193
13	218	210	214	197	194	196	189	183	186	191	189	190
14	222	218	220	194	192	193	187	179	181	205	191	195
15	225	222	224	198	193	195	186	178	180	202	188	194
16	228	222	224	198	194	197	200	182	189	201	196	198
17	232	225	228	196	188	194	201	188	191	208	198	202
18	239	227	233	197	187	193	199	191	194	222	198	213
19	239	222	227	196	182	188	204	192	198	234	197	202
20	226	214	219	187	183	185	204	196	199	234	199	210
21	223	211	216	188	184	186	205	197	200	223	207	214
22	232	207	221	194	182	185	205	191	196	217	199	205
23	224	213	219	198	187	191	199	191	194	202	197	199
24	216	203	208	199	189	191	197	190	193	205	196	200
25	217	202	209	203	190	194	205	192	196	201	196	198
26	215	201	207	196	193	194	212	194	199	252	198	212
27	217	203	208	199	196	197	209	193	198	240	198	210
28	216	201	207	202	197	199	210	192	198	212	196	202
29	208	199	202	200	196	198	204	193	197	218	200	205
30	---	---	---	205	196	198	206	193	199	200	194	198
31	---	---	---	198	193	195	---	---	---	200	193	195
MONTH	258	179	216	221	182	198	212	178	192	252	183	198
		JUNE			JULY			AUGUST			SEPTEMBER	
1	195	193	194	213	193	207	193	187	191	196	192	194
2	206	193	197	212	191	203	197	189	192	197	190	194
3	213	195	203	234	184	201	208	192	197	202	192	196
4	214	197	206	191	180	184	199	190	195	225	184	198
5	212	192	201	197	177	181	201	188	195	219	194	204
6	211	194	197	181	178	179	217	193	204	226	186	208
7	214	197	201	195	177	179	218	185	195	227	194	211
8	202	197	199	204	193	199	190	182	186	211	186	198
9	200	197	199	206	180	191	189	177	182	213	195	198
10	200	196	198	202	181	190	189	180	184	199	177	195
11	200	198	199	197	180	183	192	188	190	199	178	195
12	202	199	200	209	180	191	193	188	190	199	189	193
13	205	198	203	207	182	191	192	183	188	198	172	188
14	202	200	201	209	185	195	189	185	187	196	183	190
15	202	200	201	208	183	194	187	174	184	225	192	197
16	202	198	200	208	184	194	194	182	185	236	183	199
17	228	195	201	208	182	190	193	187	190	236	215	221
18	222	182	202	209	185	192	194	189	192	215	202	209
19	218	197	208	190	185	188	198	190	194	205	191	197
20	219	195	206	200	183	189	197	190	194	201	190	199
21	219	199	206	190	184	187	198	191	196	237	196	210
22	221	203	214	189	185	187	198	191	194	232	197	208
23	227	201	213	190	183	187	194	189	192	221	195	203
24	225	196	208	192	186	189	195	191	193	222	192	208
25	219	197	208	193	187	190	199	191	193	224	186	211
26	218	196	206	215	189	195	195	189	193	230	198	215
27	214	198	201	214	189	195	195	190	192	230	208	214
28	212	196	202	218	191	197	196	190	193	232	205	216
29	209	195	201	201	188	192	200	191	194	212	202	208
30	214	194	206	209	191	196	197	191	194	222	201	207
31	---	---	---	207	191	195	196	191	195	---	---	---
MONTH	228	182	203	234	177	191	218	174	192	237	172	203

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.4	20.8	21.1	17.7	17.0	17.3	12.3	11.8	12.0	8.7	8.4	8.5
2	21.0	20.3	20.6	17.8	17.2	17.5	12.0	11.6	11.8	9.2	8.6	8.9
3	20.5	19.9	20.2	18.2	17.5	17.8	11.9	11.2	11.6	9.9	9.2	9.6
4	20.7	20.1	20.3	18.1	17.6	17.8	11.4	11.0	11.2	10.6	9.8	10.3
5	20.1	19.7	19.9	18.2	17.9	18.1	11.3	11.0	11.2	10.6	10.0	10.3
6	20.3	19.5	19.9	17.9	17.3	17.7	11.1	10.6	10.9	10.0	9.3	9.8
7	20.6	19.8	20.1	17.3	16.9	17.1	10.8	10.4	10.6	9.3	8.9	9.1
8	20.5	20.0	20.3	16.9	16.2	16.5	10.6	10.3	10.5	9.0	8.6	8.8
9	20.6	20.1	20.4	16.3	15.8	16.0	10.9	10.5	10.7	8.7	8.4	8.5
10	20.6	20.4	20.5	16.2	15.4	15.8	11.0	10.7	10.9	8.5	8.0	8.3
11	20.8	20.3	20.6	16.5	15.6	15.9	10.8	10.4	10.6	8.2	7.7	7.9
12	20.9	20.5	20.6	16.8	15.8	16.3	10.4	10.0	10.2	8.1	7.6	7.8
13	20.8	20.4	20.6	16.2	14.8	15.5	10.0	9.6	9.9	8.3	7.5	7.9
14	20.6	20.1	20.5	14.9	14.6	14.7	9.7	9.3	9.5	8.1	7.5	7.9
15	20.3	19.9	20.1	14.8	14.2	14.4	9.6	9.3	9.4	8.2	7.8	8.0
16	19.9	18.7	19.4	14.4	14.2	14.3	9.6	9.3	9.4	8.2	7.6	7.9
17	18.8	18.4	18.7	15.0	14.4	14.7	9.4	9.1	9.2	8.3	8.0	8.2
18	18.7	18.3	18.4	15.2	14.7	14.9	9.1	8.8	9.0	8.3	7.8	8.2
19	18.7	17.8	18.3	15.3	14.8	15.0	8.8	8.4	8.7	7.8	7.0	7.5
20	18.8	18.1	18.5	15.3	14.8	15.1	8.6	8.2	8.4	7.0	6.6	6.8
21	18.9	18.6	18.7	15.4	15.0	15.2	8.5	8.1	8.3	6.8	6.5	6.6
22	18.8	18.3	18.5	15.2	15.0	15.1	8.7	8.2	8.4	6.8	6.4	6.7
23	18.8	18.1	18.5	15.3	15.0	15.1	8.8	8.5	8.7	6.7	6.4	6.5
24	18.7	18.2	18.4	15.1	14.2	14.7	8.6	8.2	8.5	6.8	6.4	6.6
25	18.5	18.3	18.4	14.5	13.8	14.1	8.4	8.0	8.2	6.9	6.5	6.7
26	18.3	17.6	18.0	14.2	13.6	13.9	8.1	7.9	8.0	7.4	6.8	7.1
27	18.0	17.4	17.6	13.8	13.3	13.6	8.3	7.8	8.0	7.4	7.0	7.3
28	17.5	17.1	17.3	13.5	12.7	13.3	8.3	7.9	8.1	7.0	6.4	6.7
29	17.4	16.9	17.1	12.9	12.4	12.7	8.5	8.2	8.3	6.6	6.2	6.4
30	17.2	16.8	17.0	12.4	12.0	12.2	8.6	8.2	8.4	6.4	6.1	6.3
31	17.4	16.9	17.1	---	---	---	8.6	8.2	8.4	6.4	5.9	6.1
MONTH	21.4	16.8	19.2	18.2	12.0	15.4	12.3	7.8	9.6	10.6	5.9	7.8
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	5.7	6.1	8.5	8.1	8.4	13.0	12.6	12.8	16.6	16.0	16.4
2	6.4	6.3	6.4	8.8	8.4	8.6	12.9	12.3	12.6	16.5	15.8	16.3
3	6.4	6.1	6.3	8.8	8.6	8.7	13.5	12.1	12.8	16.2	15.6	15.9
4	6.4	5.9	6.2	9.3	8.6	9.0	12.9	12.2	12.6	16.4	15.8	16.1
5	6.5	6.0	6.3	10.0	9.3	9.7	13.1	12.2	12.7	17.0	15.9	16.5
6	6.8	6.5	6.6	10.4	9.8	10.1	13.5	12.5	13.0	17.4	16.4	16.9
7	6.5	6.1	6.2	10.6	10.4	10.5	13.8	12.8	13.3	18.0	16.8	17.4
8	6.7	6.2	6.4	10.7	10.2	10.4	14.3	13.3	13.8	18.4	17.1	17.8
9	6.7	6.5	6.5	10.4	10.2	10.3	14.2	13.1	13.7	18.6	17.9	18.3
10	6.8	6.6	6.7	10.3	10.0	10.1	14.3	14.0	14.2	18.7	18.1	18.3
11	7.2	6.6	6.9	10.0	9.8	9.9	14.1	13.8	14.0	19.1	18.3	18.6
12	7.3	6.9	7.0	10.2	9.6	9.9	13.8	13.3	13.6	19.0	18.2	18.6
13	7.5	6.8	7.0	10.0	9.6	9.8	13.3	12.4	12.9	18.9	18.6	18.7
14	7.1	6.8	6.9	9.8	9.6	9.8	12.4	12.0	12.2	19.0	18.5	18.8
15	7.0	6.5	6.8	9.6	9.4	9.5	12.3	11.8	12.0	18.9	18.5	18.7
16	7.0	6.4	6.6	9.6	9.2	9.4	13.0	12.1	12.5	19.2	18.5	18.8
17	6.9	6.5	6.7	9.6	9.1	9.4	13.5	12.8	13.2	20.1	19.1	19.6
18	7.1	6.6	6.8	10.0	9.3	9.7	14.2	13.2	13.7	20.3	19.2	19.7
19	7.3	6.8	7.1	10.4	9.6	10.1	14.5	13.9	14.2	21.2	16.7	19.6
20	7.5	7.2	7.3	10.8	10.3	10.6	14.9	14.2	14.6	20.9	18.7	19.7
21	7.5	7.3	7.4	10.9	10.3	10.7	15.2	14.7	14.9	21.8	18.4	20.1
22	7.6	7.0	7.3	10.7	10.1	10.3	15.0	14.6	14.8	21.4	19.0	20.1
23	7.6	7.2	7.4	10.5	9.9	10.2	15.1	14.8	14.9	21.6	20.1	20.9
24	7.9	7.5	7.7	10.8	10.2	10.5	15.5	14.9	15.2	22.2	20.5	21.3
25	8.1	7.6	7.8	11.5	10.6	11.1	15.6	15.4	15.5	22.0	20.7	21.2
26	8.0	7.6	7.8	12.0	11.3	11.8	15.9	15.3	15.6	21.9	20.3	21.1
27	7.9	7.3	7.6	12.6	12.0	12.3	16.3	15.0	15.7	21.7	20.7	21.2
28	8.1	7.3	7.7	13.3	12.4	12.8	16.4	14.9	15.8	22.9	20.8	21.6
29	8.4	7.8	8.1	13.2	12.4	12.9	16.5	15.8	16.1	22.2	20.5	21.6
30	---	---	---	13.3	12.2	12.8	16.4	15.9	16.2	23.3	22.1	22.8
31	---	---	---	13.1	12.7	12.9	---	---	---	23.2	22.4	22.7
MONTH	8.4	5.7	7.0	13.3	8.1	10.4	16.5	11.8	14.0	23.3	15.6	19.2

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.1	22.4	22.8	21.9	21.1	21.5	23.9	22.9	23.4	23.6	22.5	23.0
2	23.0	21.8	22.6	21.8	21.0	21.4	24.2	23.2	23.8	23.4	23.0	23.2
3	22.1	21.0	21.7	21.8	20.7	21.2	24.1	23.4	23.8	23.3	22.8	23.1
4	22.1	20.7	21.5	22.4	21.3	22.0	24.2	23.7	24.0	23.3	22.4	23.0
5	22.8	20.8	22.0	21.3	20.8	21.1	24.1	23.2	23.6	23.5	22.2	22.9
6	22.7	21.8	22.4	21.5	20.6	21.1	24.0	22.6	23.4	23.6	22.2	23.0
7	23.1	21.4	22.5	22.0	20.9	21.4	24.3	22.8	23.6	23.4	22.6	23.0
8	23.7	22.9	23.3	22.0	21.1	21.3	24.0	23.5	23.8	22.9	22.3	22.6
9	23.6	22.8	23.2	22.3	21.2	21.8	24.1	23.3	23.7	23.8	22.4	23.2
10	23.5	23.1	23.2	22.3	21.6	22.0	23.8	23.0	23.4	24.3	23.1	23.6
11	23.6	23.2	23.4	22.6	21.6	22.3	23.2	22.8	22.9	24.2	23.1	23.6
12	23.6	22.9	23.3	23.0	21.4	22.4	23.2	22.4	22.7	23.7	22.5	23.2
13	23.6	22.6	23.1	23.4	22.0	22.7	22.9	22.1	22.5	23.2	22.3	22.7
14	24.0	23.2	23.4	23.5	22.0	22.6	22.7	22.0	22.4	23.8	22.8	23.3
15	23.6	22.8	23.1	23.9	21.8	22.9	22.6	21.7	22.1	24.0	23.3	23.6
16	23.3	22.8	23.0	23.5	22.2	22.9	22.7	21.8	22.2	24.0	22.8	23.6
17	23.2	21.9	22.8	23.6	22.4	23.1	23.0	22.0	22.5	23.0	22.5	22.6
18	22.6	21.5	22.2	23.6	22.5	23.0	22.9	22.2	22.6	22.7	22.2	22.4
19	22.6	21.0	21.8	23.8	22.4	23.2	23.1	22.6	22.9	22.2	21.8	22.1
20	22.9	20.7	21.8	23.7	22.8	23.3	22.9	22.5	22.7	22.4	21.5	21.9
21	23.1	21.8	22.5	23.6	23.0	23.4	22.7	21.9	22.5	22.5	21.4	22.0
22	22.8	21.6	22.1	23.7	23.2	23.5	22.8	21.6	22.2	22.4	21.4	22.0
23	22.6	21.0	21.9	23.8	22.7	23.2	22.6	22.2	22.4	22.6	21.7	22.1
24	22.7	20.6	21.9	23.7	23.1	23.5	22.6	22.2	22.4	22.3	21.8	22.1
25	23.0	21.6	22.1	23.9	23.4	23.7	22.5	22.1	22.3	22.7	22.0	22.3
26	22.7	21.6	22.2	23.8	22.6	23.4	22.7	22.1	22.4	22.6	21.9	22.3
27	22.9	22.0	22.4	23.7	22.8	23.2	22.8	22.4	22.6	22.5	21.8	22.1
28	23.2	22.3	22.8	23.5	22.6	23.0	22.8	22.3	22.6	22.0	21.5	21.7
29	22.8	21.9	22.4	24.0	23.1	23.5	23.1	22.3	22.7	21.7	21.1	21.4
30	22.3	21.6	21.9	23.4	22.7	23.0	23.0	22.2	22.6	21.5	20.7	21.1
31	---	---	---	24.0	23.0	23.5	22.7	22.1	22.4	---	---	---
MONTH	24.0	20.6	22.5	24.0	20.6	22.6	24.3	21.6	22.9	24.3	20.7	22.6

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.5	8.6	9.0	10.0	9.7	9.9	11.9	11.7	11.8
2	---	---	---	9.4	8.8	9.2	9.8	9.6	9.7	11.9	11.5	11.7
3	---	---	---	9.9	8.6	9.1	9.9	9.6	9.8	11.6	11.3	11.5
4	---	---	---	9.8	7.8	8.9	10.0	9.7	9.9	11.5	11.2	11.3
5	10.0	8.3	9.1	9.3	7.1	8.2	10.0	9.6	9.9	11.4	11.2	11.3
6	10.8	9.2	10.0	8.5	6.1	7.8	10.2	9.9	10.0	11.4	11.1	11.3
7	10.6	9.1	9.9	9.5	7.3	8.3	10.2	9.8	10.1	11.6	11.3	11.4
8	10.8	9.0	10.0	9.8	7.9	8.9	10.1	9.8	9.9	11.4	11.2	11.3
9	9.4	8.5	9.1	10.2	6.8	8.7	10.1	9.8	9.9	11.5	11.2	11.3
10	8.8	8.1	8.4	10.3	7.4	9.1	10.2	9.8	10.0	11.8	11.2	11.5
11	9.2	7.5	8.3	9.8	7.0	8.7	10.2	10.1	10.1	11.8	11.4	11.7
12	8.3	7.7	8.0	9.8	7.4	8.7	10.5	10.2	10.4	12.1	11.4	11.7
13	8.3	7.0	7.7	10.6	8.4	9.6	10.5	10.3	10.4	11.8	11.5	11.6
14	8.0	7.2	7.6	10.4	8.3	9.5	10.5	10.2	10.3	12.0	11.5	11.8
15	---	---	---	10.7	8.9	9.8	10.6	10.3	10.5	12.3	11.5	11.8
16	8.2	7.4	8.0	10.8	8.9	9.9	10.6	10.3	10.4	12.3	11.6	12.0
17	8.2	7.0	7.5	10.5	8.2	9.6	10.6	10.3	10.5	12.0	11.6	11.8
18	8.4	6.6	7.7	10.4	7.3	9.0	10.8	10.4	10.6	11.9	11.6	11.7
19	8.7	7.7	8.3	9.9	7.9	9.2	10.8	10.2	10.5	11.8	11.5	11.7
20	8.9	7.2	8.4	9.9	8.6	9.3	10.8	10.2	10.6	12.0	11.8	11.9
21	9.2	6.9	8.1	9.9	8.6	9.2	11.2	10.4	10.8	12.4	11.5	11.8
22	8.8	6.9	7.9	9.9	8.4	9.3	11.1	10.8	10.9	12.0	11.6	11.9
23	9.1	6.8	8.1	9.9	7.8	9.0	11.2	10.7	11.0	12.3	11.8	12.0
24	9.2	7.6	8.4	9.9	8.0	9.1	11.4	10.6	11.1	12.6	12.0	12.4
25	9.3	8.0	8.8	9.9	7.6	8.9	11.6	11.0	11.3	12.5	11.9	12.3
26	9.3	8.4	8.9	9.3	8.4	9.0	11.7	11.2	11.4	12.2	12.0	12.1
27	9.4	8.3	8.9	9.3	9.1	9.2	12.0	11.3	11.6	---	---	---
28	9.2	7.9	8.6	9.6	9.1	9.4	11.9	11.2	11.6	---	---	---
29	9.6	8.4	8.9	9.8	9.5	9.6	12.3	11.4	11.7	---	---	---
30	9.6	8.4	9.0	10.0	9.4	9.7	12.0	11.4	11.7	12.3	12.1	12.2
31	9.3	8.4	8.9	---	---	---	11.9	11.7	11.8	12.7	12.1	12.4
MONTH	10.8	6.6	8.6	10.8	6.1	9.1	12.3	9.6	10.6	12.7	11.1	11.8
		FEBRUARY			MARCH			APRIL			MAY	
1	12.7	11.8	12.4	13.7	13.4	13.6	13.1	12.5	12.8	12.5	11.6	12.2
2	12.5	11.4	12.3	13.8	13.2	13.6	13.1	12.3	12.8	12.2	10.9	11.4
3	12.9	12.3	12.6	14.2	13.5	13.7	13.7	12.4	13.1	11.0	10.3	10.7
4	13.2	12.4	12.8	14.2	13.5	13.8	13.7	12.6	13.2	10.7	10.3	10.5
5	13.4	12.4	12.7	13.9	13.3	13.6	13.8	12.8	13.4	10.7	9.9	10.3
6	13.5	13.3	13.4	13.7	13.0	13.4	14.1	13.1	13.7	10.6	9.7	10.3
7	13.4	13.3	13.4	13.6	13.1	13.4	14.0	13.1	13.6	10.8	10.0	10.4
8	13.5	13.0	13.3	13.1	12.1	12.7	14.1	13.2	13.7	11.4	10.4	10.9
9	13.1	12.8	13.0	12.3	12.0	12.2	13.7	12.7	13.2	11.2	10.5	10.8
10	12.8	12.2	12.5	12.5	12.0	12.2	13.6	12.6	13.3	10.8	10.0	10.4
11	12.3	11.4	12.0	12.9	12.5	12.7	13.8	13.0	13.3	11.0	9.3	10.4
12	12.3	11.5	11.8	12.8	12.3	12.5	13.0	12.2	12.5	10.8	9.2	10.3
13	12.2	12.0	12.2	12.5	12.2	12.4	12.3	11.9	12.1	10.5	8.8	9.8
14	12.3	12.2	12.3	12.7	12.4	12.5	13.2	12.2	12.7	10.2	9.5	9.9
15	12.5	12.2	12.3	13.2	12.7	13.0	13.1	12.8	13.0	9.8	9.2	9.5
16	12.7	12.4	12.6	13.8	13.0	13.3	12.8	12.3	12.5	9.7	9.1	9.5
17	12.7	12.3	12.4	13.7	13.2	13.4	12.4	12.1	12.3	9.8	7.4	9.1
18	12.6	11.3	12.4	13.8	13.2	13.5	12.6	11.8	12.3	9.2	5.6	7.8
19	12.3	11.3	11.9	13.9	13.3	13.7	13.0	12.2	12.6	10.3	7.0	9.4
20	12.3	11.5	12.0	13.8	13.6	13.7	13.4	12.5	12.9	10.0	7.8	8.8
21	12.4	12.0	12.2	13.8	13.3	13.6	13.2	12.1	12.9	10.0	6.8	9.2
22	12.3	11.0	11.8	14.2	13.4	13.8	12.1	11.3	11.7	9.9	8.3	9.1
23	12.5	11.8	12.3	14.2	13.6	13.9	11.9	11.2	11.5	9.8	8.2	9.0
24	13.0	11.8	12.4	14.3	13.6	14.0	11.8	10.6	11.3	9.0	7.6	8.5
25	13.2	12.3	12.6	14.2	13.8	14.0	10.9	10.5	10.7	9.1	6.8	8.2
26	12.9	12.2	12.5	13.9	13.4	13.8	10.9	9.9	10.5	9.6	6.3	8.0
27	13.3	12.4	12.8	14.2	13.6	13.9	12.2	10.3	11.2	7.9	6.1	7.4
28	13.5	12.6	13.0	14.4	13.6	14.1	12.6	10.4	11.6	---	---	---
29	13.8	13.0	13.4	14.0	13.2	13.7	12.8	11.6	12.2	---	---	---
30	---	---	---	13.6	12.9	13.3	12.4	11.4	12.0	---	---	---
31	---	---	---	13.2	12.7	13.0	---	---	---	---	---	---
MONTH	13.8	11.0	12.5	14.4	12.0	13.4	14.1	9.9	12.5	12.5	5.6	9.7

03431091 CUMBERLAND RIVER AT OMOHUNDRO WATER PLANT AT NASHVILLE, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	9.5	8.1	8.8	9.9	8.3	9.1	8.9	7.1	8.2
2	---	---	---	9.7	8.0	8.8	10.1	9.1	9.6	8.6	7.8	8.3
3	---	---	---	9.5	7.6	8.7	9.6	8.1	8.8	8.4	7.7	8.1
4	---	---	---	9.9	9.0	9.5	9.5	8.3	8.8	8.2	6.7	7.7
5	---	---	---	9.0	7.8	8.6	9.4	7.8	8.5	8.1	6.5	7.3
6	---	---	---	9.2	8.3	8.7	9.2	6.7	8.1	8.3	6.1	7.2
7	9.9	8.5	9.1	9.3	8.1	8.6	9.6	7.3	8.6	8.3	5.9	6.9
8	10.3	9.1	9.7	9.1	7.7	8.1	9.6	8.4	9.1	7.5	6.8	7.1
9	10.3	8.9	9.6	9.8	8.0	9.0	9.7	8.5	9.1	8.0	7.2	7.6
10	9.6	9.2	9.5	9.9	8.4	9.3	9.7	8.5	9.1	8.8	7.5	8.2
11	9.6	9.1	9.5	9.7	8.5	9.5	9.8	8.5	9.1	9.0	7.4	8.0
12	9.3	8.3	8.9	9.8	7.4	8.9	9.8	8.6	9.2	8.0	7.1	7.7
13	8.5	7.9	8.2	9.6	7.5	8.7	9.9	7.9	9.1	7.7	6.2	7.3
14	9.0	8.4	8.8	9.7	6.8	8.1	10.3	8.7	9.5	8.4	7.1	7.7
15	9.3	8.7	9.0	9.8	6.4	8.3	10.2	8.7	9.5	8.7	7.8	8.3
16	8.9	8.6	8.8	9.5	7.2	8.4	10.4	8.6	9.5	9.0	7.6	8.3
17	8.7	8.1	8.3	9.4	7.1	8.4	10.0	8.7	9.5	7.6	6.5	7.0
18	---	---	---	9.6	6.2	8.7	9.9	8.9	9.4	8.5	6.9	7.7
19	---	---	---	9.9	8.0	9.0	10.1	8.8	9.4	9.5	7.9	8.8
20	---	---	---	10.0	8.3	9.1	9.4	8.7	8.9	9.0	8.2	8.6
21	9.0	7.8	8.6	10.2	8.9	9.6	9.0	8.3	8.7	9.4	5.9	8.1
22	8.4	6.7	7.6	10.2	9.5	9.8	9.5	7.9	8.7	10.1	6.4	8.7
23	7.8	5.7	7.2	9.7	8.7	9.2	9.4	8.5	8.9	10.5	8.0	9.6
24	7.9	5.8	7.2	9.4	8.3	8.9	9.7	8.7	9.1	10.0	7.9	9.4
25	8.2	6.1	7.2	9.2	8.3	8.8	9.7	8.4	9.2	9.8	7.8	9.3
26	8.0	6.9	7.6	8.7	7.9	8.3	9.7	8.9	9.2	9.9	7.5	8.8
27	8.6	7.7	8.1	8.5	7.8	8.2	9.1	8.3	8.6	9.7	7.6	8.9
28	9.5	8.3	8.8	9.5	6.8	8.3	9.4	8.3	8.9	9.1	6.5	8.0
29	9.3	8.4	8.9	10.3	8.5	9.5	9.3	7.8	8.5	9.0	8.0	8.6
30	9.8	8.2	8.8	9.5	8.0	8.9	8.6	6.7	7.7	9.6	7.4	8.7
31	---	---	---	9.4	8.2	8.8	8.2	6.0	6.9	---	---	---
MONTH	10.3	5.7	8.5	10.3	6.2	8.8	10.4	6.0	8.9	10.5	5.9	8.1

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03431300 BROWNS CREEK AT STATE FAIRGROUNDS AT NASHVILLE, TN

LOCATION.--Lat 36°07'47", long 86°45'39", Davidson County, Hydrologic Unit 05130202, near center of span on downstream side of bridge on access road to pit area of the race track at State Fairgrounds, 300 ft west of Craighead Street, 0.3 mi upstream from bridge on U.S. Highway 31A and 41A, and 2.8 mi southwest of the State Capitol in Nashville.

DRAINAGE AREA.--11.8 mi^2.

PERIOD OF RECORD.--December 1963 to September 1975. August 1993 to current year.

REVISED RECORDS.--WDR TN-94-1: 1975 (p).

GAGE.--Data collection platform. Datum of gage is 439.81 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Periodic observations of water temperature and specfic conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 18	1350	1,030	5.85	May 31	0105	1,380	6.73
Feb 5	1220	*1,580	*7.14	Jun 12	1655	1,020	5.83
Feb 5	1955	1,090	6.02	Aug 5	0210	1,200	6.31
Apr 22	0550	1,350	6.66	Sep 12	1435	1,340	6.65

Minimum discharge, 2.4 ft^3/s, Aug. 4.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	4.7	14	19	17	91	18	37	21	11	3.1	2.7
2	6.1	4.5	13	54	33	50	15	66	19	5.6	2.8	60
3	5.7	4.3	14	25	42	32	13	47	15	4.8	2.6	19
4	5.3	4.3	20	23	27	26	12	32	11	5.4	2.7	7.8
5	6.3	21	14	26	685	116	11	25	9.0	4.5	135	5.9
6	5.4	5.9	12	19	287	104	10	20	7.6	7.3	11	5.0
7	4.8	4.9	11	17	134	61	9.7	17	6.8	19	6.9	4.5
8	4.5	4.5	10	16	82	44	8.9	15	23	5.8	5.6	4.0
9	4.3	4.3	9.7	16	58	35	8.1	13	8.7	4.9	4.8	3.7
10	5.5	4.1	35	14	46	28	7.6	13	6.6	7.3	4.3	3.4
11	4.4	3.9	16	13	35	24	7.4	12	6.0	7.5	4.2	3.2
12	4.1	15	14	e13	35	20	85	9.8	68	4.7	5.0	92
13	3.9	5.7	18	e13	26	18	113	13	28	6.7	3.8	31
14	15	4.8	22	e12	22	16	60	30	13	6.4	3.5	12
15	5.1	7.8	16	e12	19	15	41	252	10	4.3	3.3	7.7
16	4.5	17	26	12	17	19	31	71	8.6	4.0	3.2	50
17	4.2	8.7	19	14	15	14	25	41	8.7	3.7	3.0	46
18	3.9	110	18	96	14	16	20	33	7.5	3.5	3.4	15
19	3.6	45	15	41	13	12	17	24	6.7	3.3	3.0	10
20	3.6	25	14	32	12	29	15	19	6.2	3.2	16	7.9
21	3.6	18	12	26	11	18	33	15	5.8	3.1	12	6.4
22	3.5	14	11	23	10	14	323	13	6.0	3.0	4.3	5.6
23	3.5	14	33	19	9.7	13	194	11	5.4	2.8	3.7	5.0
24	3.5	64	21	17	9.6	11	150	9.5	5.3	2.8	13	4.5
25	3.5	25	17	154	9.3	10	89	8.4	7.5	3.0	7.7	4.2
26	36	19	15	58	11	9.6	61	7.7	5.1	4.9	4.4	4.0
27	9.3	18	14	44	8.9	8.9	43	6.9	4.6	3.3	3.8	3.7
28	6.6	36	13	32	8.4	8.4	32	7.5	4.3	3.0	3.5	3.6
29	5.7	20	36	27	7.9	45	25	6.3	4.1	2.8	3.2	3.6
30	5.2	17	28	23	---	21	24	8.7	12	2.7	3.0	3.5
31	4.8	---	23	19	---	30	---	162	---	5.7	2.9	---
TOTAL	192.7	550.4	553.7	929	1,704.8	958.9	1,501.7	1,045.8	350.5	160.0	288.7	434.9
MEAN	6.22	18.3	17.9	30.0	58.8	30.9	50.1	33.7	11.7	5.16	9.31	14.5
MAX	36	110	36	154	685	116	323	252	68	19	135	92
MIN	3.5	3.9	9.7	12	7.9	8.4	7.4	6.3	4.1	2.7	2.6	2.7
CFSM	0.53	1.55	1.51	2.54	4.98	2.62	4.24	2.86	0.99	0.44	0.79	1.23

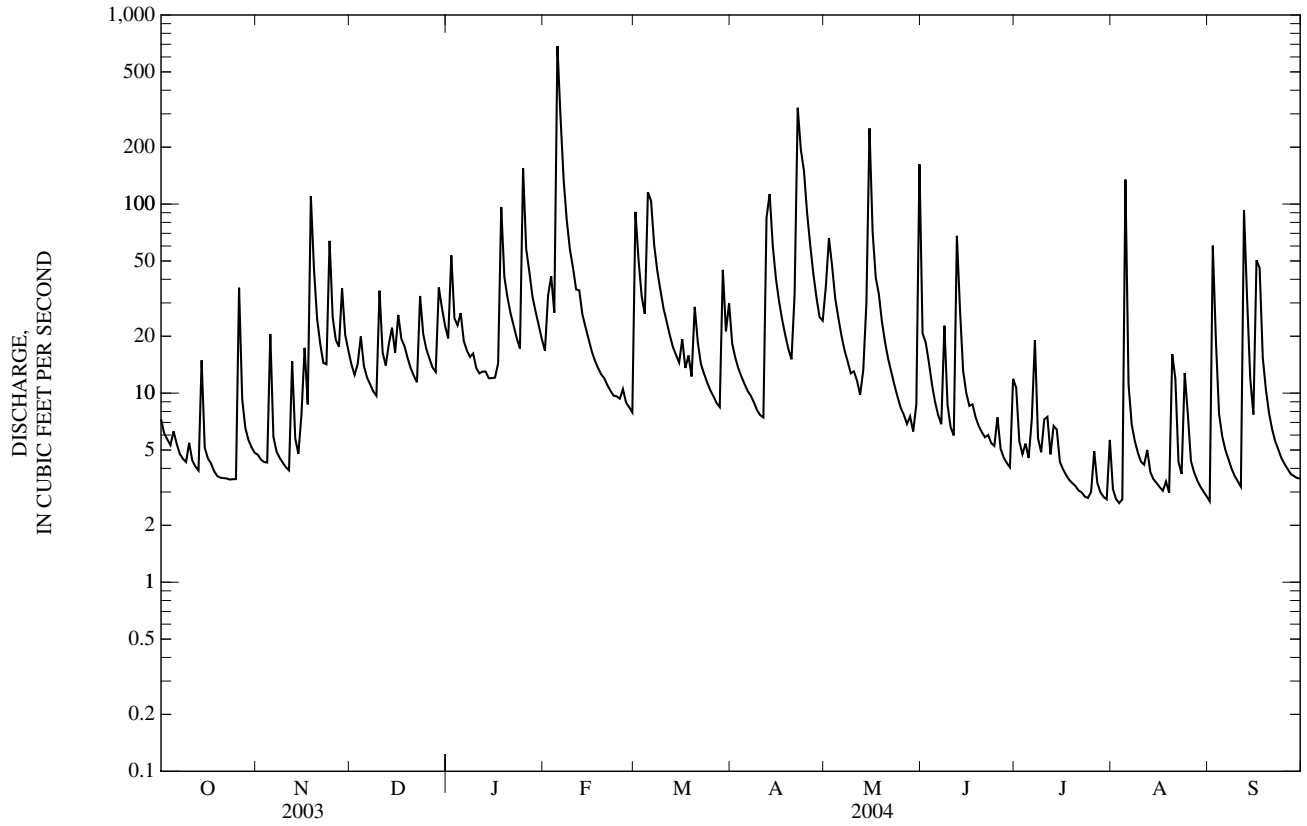
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	6.04	13.3	21.3	26.1	29.9	36.3	24.5	22.4	14.3	7.33	6.57	7.58
MAX	24.5	34.8	63.8	86.5	88.9	102	50.3	81.8	61.0	19.8	23.2	28.0
(WY)	(1996)	(1974)	(1973)	(1974)	(2003)	(1975)	(1973)	(2003)	(1998)	(1967)	(1971)	(2003)
MIN	0.71	1.36	1.28	5.79	5.87	9.70	4.36	5.42	1.71	0.96	1.65	0.92
(WY)	(1966)	(1966)	(1966)	(1966)	(1967)	(1966)	(1967)	(1971)	(1966)	(1964)	(1968)	(1965)

03431300 BROWNS CREEK AT STATE FAIRGROUNDS AT NASHVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	9,999.1		8,671.1			
ANNUAL MEAN	27.4		23.7		18.1	
HIGHEST ANNUAL MEAN					30.2	2003
LOWEST ANNUAL MEAN					6.67	1966
HIGHEST DAILY MEAN	638	May 5	685	Feb 5	696	Mar 12, 1975
LOWEST DAILY MEAN	3.2	Aug 26	2.6	Aug 3	0.29	Sep 5, 1973
ANNUAL SEVEN-DAY MINIMUM	3.5	Oct 19	3.0	Jul 19	0.36	Sep 2, 1973
MAXIMUM PEAK FLOW			1,580	Feb 5	2,210	Nov 27, 1994
MAXIMUM PEAK STAGE			7.14	Feb 5	8.20	Nov 27, 1994
INSTANTANEOUS LOW FLOW			2.4	Aug 4	0.15	Sep 5, 1973
ANNUAL RUNOFF (CFSM)	2.32		2.01		1.54	
10 PERCENT EXCEEDS	44		45		39	
50 PERCENT EXCEEDS	11		12		6.9	
90 PERCENT EXCEEDS	4.2		3.6		1.4	

e Estimated



034315005 CUMBERLAND RIVER AT WOODLAND STREET AT NASHVILLE, TN

LOCATION.--Lat 36°10'02", long 86°46'35", Davidson County, Hydrologic Unit 05130202, on left bank at northwest corner of Woodland Street Bridge, at Nashville, 3.5 mi downstream from Mill Creek, and at mile 190.9.

DRAINAGE AREA.--12,860 mi^2, approximately.

PERIOD OF RECORD.--May 1992 to current year. October 1892 to September 1954, monthly and yearly discharges published in WSP 1306 and 1726, October 1986 to September 1991, gage height, published as "at Nashville." Gage height record collected in this vicinity since 1873 are contained in reports of U.S. Weather Bureau.

GAGE.--Data collection platform and acoustic velocity meter. Datum of gage is 368.17 ft above NGVD of 1929. Prior to fall of 1922 inclined and vertical staff gage at site 350 ft downstream and from fall of 1922 to Apr. 9, 1940, staff gage at site 400 ft downstream, both gages at same datum. Nov. 1, 1930, to Sept. 30, 1954, upper staff gage at former lock 1, 2.7 mi downstream was used as auxiliary gage. Prior to May 1992 at site 0.2 mi upstream at same datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 203,000 ft^3/s, Jan. 1, 1927, gage height 56.2 ft; minimum gage height observed after first filling of pool at dam 1, 6.1 ft, Oct. 19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 133,000 ft^3/s, May 8, maximum gage height, 35.80 ft, Feb. 6, minimum daily discharge, 7,390 ft^3/s, Nov. 11; minimum gage height, unknown.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,400	19,800	57,800	36,600	18,300	26,200	26,600	26,100	33,200	26,400	28,400	18,500
2	13,600	18,200	39,700	39,700	18,900	44,200	29,100	24,500	35,000	25,700	29,000	21,400
3	18,000	17,100	32,200	45,800	24,200	50,400	19,400	27,200	25,600	18,800	17,100	17,300
4	15,300	17,800	36,500	37,300	35,200	35,900	21,600	33,700	22,300	14,200	16,400	17,800
5	13,700	15,000	34,500	35,000	68,000	29,000	18,700	22,200	26,400	15,300	21,000	14,300
6	16,600	13,500	29,600	35,800	121,000	70,800	19,400	18,800	30,800	15,000	19,700	13,900
7	18,100	15,300	27,900	46,200	119,000	84,600	18,400	21,400	22,400	21,800	17,300	11,900
8	19,700	14,400	28,200	36,100	115,000	69,200	21,900	31,700	19,600	30,100	15,800	9,920
9	20,700	14,200	30,100	26,800	108,000	61,500	22,700	29,700	21,000	27,500	14,500	11,300
10	20,700	9,190	29,600	23,200	91,000	56,900	23,000	21,900	22,100	25,800	16,000	11,200
11	19,900	7,390	26,400	22,200	70,400	55,300	18,000	21,300	23,000	22,800	19,400	12,000
12	16,500	7,760	28,500	20,200	65,300	55,600	14,600	23,100	18,800	20,700	21,100	10,600
13	14,800	10,300	25,600	20,500	70,000	56,600	30,300	19,900	19,000	20,400	21,800	11,000
14	20,100	13,600	23,500	22,400	71,000	55,700	59,500	17,900	24,000	21,500	21,700	11,300
15	21,400	10,300	27,400	23,100	69,700	54,900	57,800	27,000	22,200	23,600	21,600	16,000
16	21,500	9,570	23,800	24,300	70,300	51,200	38,300	27,000	20,500	23,500	20,500	19,400
17	22,000	9,430	21,800	24,600	62,700	53,300	29,000	16,700	22,500	22,200	20,200	30,200
18	17,900	12,100	25,000	27,800	51,600	43,300	29,200	12,300	22,300	22,000	20,400	41,000
19	15,900	29,200	28,300	44,100	45,700	43,500	29,500	11,400	24,700	21,400	21,400	38,700
20	16,200	36,400	25,400	48,400	52,000	34,600	27,000	16,300	22,800	21,600	21,900	18,400
21	20,200	34,600	25,600	42,000	45,800	28,400	30,200	13,300	20,000	22,500	22,300	15,200
22	19,100	30,700	29,700	30,900	30,900	44,000	41,300	12,200	18,200	23,100	22,400	18,200
23	19,600	22,200	30,500	33,500	33,500	40,600	56,600	9,460	15,300	20,200	21,000	22,700
24	21,100	19,900	27,500	33,000	38,200	33,700	61,700	8,690	14,100	17,400	22,200	21,200
25	22,100	26,400	33,100	30,600	37,000	30,100	41,100	9,700	15,200	18,800	22,200	22,500
26	16,100	27,900	34,000	44,100	29,400	32,900	26,900	11,200	16,500	17,700	21,700	21,500
27	16,200	32,400	26,100	46,700	26,300	29,400	24,100	11,500	20,100	14,200	22,100	22,200
28	22,000	32,200	24,500	40,800	31,100	23,000	30,200	14,000	28,200	16,900	19,700	19,700
29	23,300	44,600	28,100	37,200	29,800	18,200	27,400	15,100	29,500	20,100	16,400	19,100
30	22,000	58,400	29,800	35,900	---	20,600	26,900	13,200	26,400	16,600	14,400	18,200
31	19,800	---	34,100	31,400	---	23,600	---	21,200	---	16,300	13,400	---
TOTAL	578,500	629,840	924,800	1,046,200	1,649,300	1,357,200	920,400	589,650	681,700	644,100	623,000	556,620
MEAN	18,660	20,990	29,830	33,750	56,870	43,780	30,680	19,020	22,720	20,780	20,100	18,550
MAX	23,300	58,400	57,800	48,400	121,000	84,600	61,700	33,700	35,000	30,100	29,000	41,000
MIN	13,600	7,390	21,800	20,200	18,300	18,200	14,600	8,690	14,100	14,200	13,400	9,920

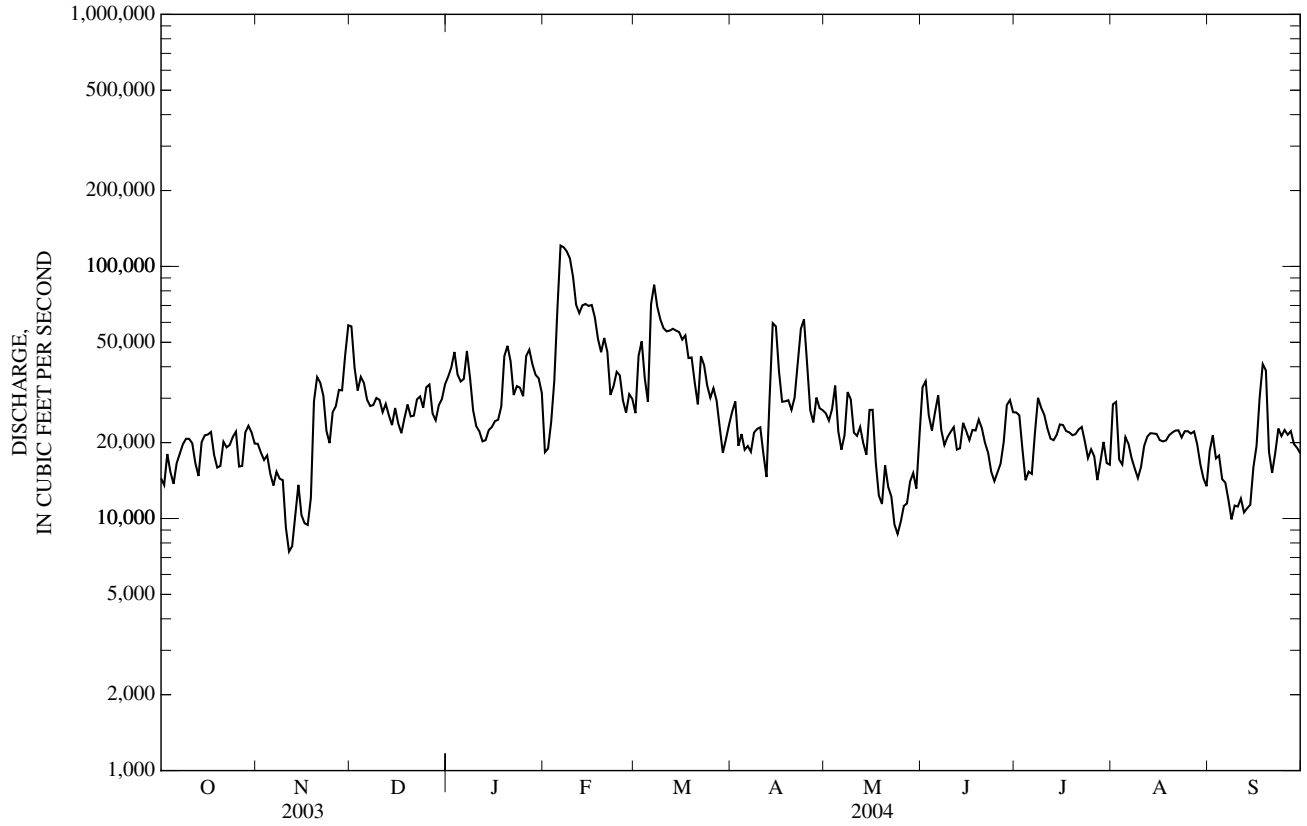
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	10,570	12,980	21,160	28,510	35,430	38,640	32,990	24,800	20,330	14,530	14,750	12,100
MAX	18,660	22,670	40,930	43,570	71,760	82,050	92,860	60,530	50,810	20,780	22,190	18,820
(WY)	(2004)	(1996)	(1997)	(1994)	(1994)	(1994)	(1994)	(2003)	(1997)	(2004)	(2003)	(1992)
MIN	6,062	6,813	7,084	6,978	10,950	13,280	10,680	6,530	8,523	10,440	10,300	8,176
(WY)	(2001)	(2000)	(2000)	(2000)	(2000)	(2000)	(1995)	(2001)	(2001)	(2000)	(2002)	(1993)

034315005 CUMBERLAND RIVER AT WOODLAND STREET AT NASHVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1992 - 2004	
ANNUAL TOTAL	11,720,030		10,201,310			
ANNUAL MEAN	32,110		27,870		22,210	
HIGHEST ANNUAL MEAN					34,940	1994
LOWEST ANNUAL MEAN					11,150	2000
HIGHEST DAILY MEAN	131,000	May 8	121,000	Feb 6	131,000	May 8, 2003
LOWEST DAILY MEAN	7,390	Nov 11	7,390	Nov 11	3,220	May 20, 2001
ANNUAL SEVEN-DAY MINIMUM	9,730	Nov 10	9,730	Nov 10	5,020	Dec 27, 1999
MAXIMUM PEAK FLOW			133,000	Feb 6	144,000	May 9, 2003
MAXIMUM PEAK STAGE			35.80	Feb 6	39.26	Mar 4, 1997
10 PERCENT EXCEEDS	61,400		46,400		45,500	
50 PERCENT EXCEEDS	23,200		22,500		15,300	
90 PERCENT EXCEEDS	13,700		14,200		7,130	

* Period of daily discharge only.



03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°10'59", long 86°49'56", Davidson County, Hydrologic Unit 05130202, on center pier of Nashville to Ashland City Railroad Bridge, 0.8 mi south of Bordeaux, 2.6 mi upstream of Whites Creek, and at mile 185.2.

DRAINAGE AREA.--12,862 mi^2, approximately.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1996 to current year.
pH: November 1996 to current year.
WATER TEMPERATURE: November 1996 to current year.
DISSOLVED OXYGEN: November 1996 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1996.

REMARKS.--Flow regulated by Old Hickory Dam and other reservoirs above station. Periods of missing record were due to instrument malfunctions. Records for water temperature are excellent, for specific conductance are good, for pH are good and dissolved oxygen are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 303 microsiemens, March 14, 2000; minimum, 171 microsiemens, June 4, 1998.
pH: Maximum, 9.0 units, Feb. 11, 2001; minimum, 6.6 units, Nov. 30, 1997, June 11, 1997.
WATER TEMPERATURE: Maximum, 27.8°C, July 14, 2000; minimum, 4.4°C, Feb. 3, 2000.
DISSOLVED OXYGEN: Maximum, 17.8 mg/L, Feb. 8, 2003; minimum, 3.7 mg/L, Oct. 7, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 265 microsiemens, Feb. 1; minimum, 181 microsiemens, Feb. 7, July 7, 8, 9.
pH: Maximum, 8.6 units, July 4; minimum, 7.4 units, many days.
WATER TEMPERATURE: Maximum, 24.6°C, Aug. 4; minimum, 5.9°C, Jan. 31.
DISSOLVED OXYGEN: Maximum, 13.0 mg/L, Feb. 6-7; minimum, 4.3 mg/L, Oct. 2.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	225	204	214	207	196	199	236	230	232	246	234	240
2	239	208	218	198	196	197	237	233	235	245	233	238
3	225	210	218	199	197	198	240	237	239	247	233	239
4	227	213	219	214	198	205	239	237	238	249	238	241
5	218	213	216	216	200	206	240	237	238	250	236	243
6	218	209	214	217	200	206	241	235	239	249	237	244
7	212	205	208	215	199	204	239	231	235	247	234	241
8	208	203	205	212	202	207	231	217	225	248	234	240
9	215	203	207	213	202	208	227	216	220	254	238	245
10	206	203	204	215	202	206	230	218	223	250	237	242
11	206	203	204	228	207	216	235	221	227	250	238	243
12	207	203	205	222	208	216	233	222	227	256	241	247
13	207	203	204	231	210	220	235	221	226	256	240	247
14	221	202	206	224	204	212	234	223	226	253	240	245
15	216	201	206	221	206	213	238	223	230	250	237	242
16	213	195	204	215	206	209	241	225	230	250	237	243
17	210	196	203	214	207	210	247	229	237	248	236	241
18	211	195	202	220	207	210	245	233	238	241	235	238
19	197	193	194	220	209	212	243	232	236	247	231	237
20	196	194	195	231	207	212	244	230	235	239	227	231
21	214	194	203	220	208	214	245	229	233	244	229	238
22	212	196	205	219	209	213	240	227	230	252	227	238
23	212	196	204	228	210	218	239	228	231	248	227	238
24	210	196	204	244	225	231	248	233	240	248	234	241
25	208	196	199	241	228	233	248	230	236	248	232	238
26	201	194	197	239	229	233	243	228	234	246	229	235
27	203	199	201	237	229	232	243	230	234	246	226	235
28	217	199	205	242	229	235	240	230	232	249	229	240
29	209	196	200	241	230	236	246	232	237	245	229	240
30	208	196	200	239	234	237	255	238	246	247	226	237
31	209	196	199	---	---	---	251	239	246	255	245	248
MONTH	239	193	205	244	196	215	255	216	233	256	226	240

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	265	235	251	209	202	204	209	205	207	219	203	209
2	257	234	244	218	201	205	209	207	208	205	202	203
3	260	232	245	214	200	206	211	204	207	216	199	202
4	249	227	237	222	206	212	225	202	208	204	191	194
5	244	203	223	231	210	220	206	203	204	212	192	199
6	230	208	223	229	207	213	206	201	205	211	194	202
7	224	181	195	228	207	216	203	199	200	204	193	198
8	207	185	195	228	210	217	204	199	200	196	192	194
9	211	202	206	216	211	213	199	197	198	200	194	197
10	210	198	202	223	216	220	198	196	197	203	199	201
11	214	210	212	224	222	223	200	196	197	212	198	202
12	212	206	211	222	206	214	212	199	203	210	195	199
13	218	209	213	207	205	206	216	201	209	197	193	195
14	223	218	220	205	202	203	205	195	198	209	195	198
15	225	223	224	211	203	206	206	194	197	206	190	200
16	224	222	223	213	207	211	224	198	206	208	200	204
17	225	221	223	210	198	207	213	207	209	213	206	209
18	228	216	223	212	199	207	225	207	214	235	208	220
19	216	211	214	210	190	199	229	210	217	220	204	213
20	212	209	210	197	190	194	230	216	222	236	203	218
21	214	199	208	200	194	198	228	217	221	224	203	215
22	219	206	215	206	190	193	228	209	216	227	206	218
23	219	202	213	214	195	202	213	204	210	214	205	209
24	211	199	207	214	198	202	211	204	208	225	204	211
25	216	200	208	218	199	205	222	206	212	215	203	208
26	216	200	207	205	202	203	230	208	215	235	203	210
27	215	201	207	209	204	206	231	208	216	231	207	214
28	213	200	207	210	206	208	230	205	213	223	205	211
29	209	200	202	215	210	212	221	205	212	221	202	209
30	---	---	---	222	210	213	225	207	213	204	200	201
31	---	---	---	219	205	210	---	---	---	208	195	201
MONTH	265	181	216	231	190	208	231	194	208	236	190	205
		JUNE			JULY			AUGUST			SEPTEMBER	
1	201	197	198	205	188	199	193	188	191	197	193	195
2	212	197	200	206	187	198	191	188	189	196	190	194
3	216	202	210	212	185	202	196	191	194	206	193	196
4	221	203	215	187	184	185	197	193	195	---	---	---
5	219	198	209	186	183	185	200	188	194	---	---	---
6	213	198	202	184	182	183	218	196	205	---	---	---
7	219	200	207	186	181	184	215	195	202	228	211	222
8	209	202	203	203	181	197	200	196	198	212	201	204
9	205	201	202	201	181	192	200	197	198	207	197	202
10	201	199	200	201	183	190	202	199	200	204	197	200
11	200	198	199	204	186	191	200	197	198	203	197	200
12	203	198	200	208	186	194	199	195	196	205	189	198
13	209	201	204	213	188	196	196	192	195	205	196	202
14	203	198	199	214	190	203	196	193	194	208	202	206
15	199	196	198	213	192	201	193	189	191	203	199	201
16	198	195	196	213	194	202	196	190	192	203	197	199
17	195	193	194	218	194	203	198	192	194	234	201	221
18	225	193	202	215	194	200	201	193	196	220	209	216
19	213	193	203	199	195	196	198	194	196	210	200	206
20	212	192	202	202	196	199	201	194	197	209	204	206
21	212	193	203	205	195	202	200	196	197	236	205	216
22	215	193	207	195	183	189	199	196	198	230	200	209
23	214	193	207	188	183	186	198	194	196	216	199	203
24	218	192	204	190	185	187	198	193	195	218	201	206
25	216	189	198	189	186	187	200	196	198	223	205	211
26	209	189	197	208	187	190	200	194	196	226	210	214
27	193	189	190	208	190	193	195	194	195	225	210	214
28	203	187	194	205	189	194	198	195	197	229	206	214
29	201	187	193	196	188	190	202	195	197	214	204	209
30	205	187	198	203	189	194	200	194	196	217	202	207
31	---	---	---	208	190	197	197	196	196	---	---	---
MONTH	225	187	201	218	181	194	218	188	196	236	189	206

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.8	20.4	20.6	17.6	17.0	17.3	12.2	12.0	12.1	8.7	8.4	8.5
2	20.4	19.9	20.2	17.7	17.3	17.5	12.1	11.8	11.9	9.2	8.7	8.9
3	19.9	19.5	19.7	18.1	17.6	17.8	11.8	11.5	11.7	9.8	9.2	9.5
4	20.0	19.5	19.7	18.0	17.8	17.9	11.5	11.3	11.4	10.6	9.8	10.3
5	19.7	19.1	19.4	18.3	17.8	18.0	11.4	11.1	11.2	10.6	10.2	10.4
6	19.3	19.0	19.2	18.1	17.5	17.9	11.1	10.6	10.9	10.2	9.5	9.8
7	19.6	19.2	19.4	17.5	16.8	17.2	10.7	10.5	10.6	9.5	8.9	9.1
8	19.7	19.3	19.5	16.8	16.2	16.7	10.6	10.4	10.5	9.1	8.6	8.8
9	19.7	19.5	19.6	16.3	15.9	16.2	10.9	10.6	10.7	8.7	8.3	8.5
10	19.8	19.6	19.7	15.9	15.8	15.9	11.0	10.7	10.9	8.5	8.1	8.3
11	19.9	19.5	19.7	16.1	15.8	15.9	10.7	10.5	10.6	8.1	7.8	7.9
12	19.9	19.7	19.8	16.3	16.0	16.2	10.6	10.1	10.3	8.0	7.8	7.9
13	19.8	19.5	19.7	16.2	15.5	15.9	10.1	9.7	9.9	8.1	7.8	7.9
14	19.6	19.4	19.5	15.5	14.6	14.9	9.7	9.4	9.6	8.0	7.8	7.9
15	19.4	19.0	19.1	14.8	14.4	14.6	9.5	9.2	9.4	8.1	7.9	8.0
16	19.1	18.6	18.9	14.4	14.3	14.4	9.5	9.3	9.4	8.0	7.8	7.9
17	18.9	18.6	18.8	14.8	14.3	14.6	9.5	9.2	9.3	8.3	8.0	8.2
18	18.7	18.3	18.5	15.3	14.8	15.0	9.2	8.9	9.0	8.4	8.0	8.3
19	18.4	18.1	18.3	15.3	14.9	15.1	8.9	8.6	8.8	8.0	7.2	7.6
20	18.7	18.2	18.5	15.3	14.8	15.0	8.6	8.3	8.4	7.2	6.8	6.9
21	18.9	18.5	18.7	15.4	15.1	15.3	8.3	8.1	8.2	6.8	6.5	6.6
22	18.8	18.4	18.6	15.3	15.1	15.2	8.6	8.3	8.4	6.7	6.5	6.6
23	18.6	18.4	18.5	15.2	15.0	15.1	8.8	8.6	8.7	6.7	6.4	6.5
24	18.6	18.4	18.5	15.2	14.4	14.8	8.7	8.3	8.5	6.7	6.4	6.6
25	18.5	18.3	18.4	14.4	13.9	14.1	8.3	8.0	8.2	6.9	6.6	6.7
26	18.4	17.9	18.2	14.0	13.6	13.7	8.1	7.8	8.0	7.4	6.6	7.1
27	17.9	17.5	17.7	13.6	13.4	13.5	8.2	7.8	8.0	7.4	7.0	7.2
28	17.5	17.2	17.4	13.4	12.9	13.2	8.3	8.0	8.1	7.0	6.6	6.8
29	17.4	17.0	17.2	12.9	12.5	12.7	8.5	8.2	8.4	6.6	6.2	6.4
30	17.1	16.8	17.0	12.5	12.2	12.3	8.6	8.3	8.4	6.4	6.2	6.3
31	17.4	16.9	17.1	---	---	---	8.5	8.2	8.4	6.3	5.9	6.1
MONTH	20.8	16.8	18.9	18.3	12.2	15.5	12.2	7.8	9.6	10.6	5.9	7.9
		FEBRUARY			MARCH			APRIL			MAY	
1	6.4	6.0	6.1	8.8	8.2	8.4	12.8	12.6	12.8	16.7	16.1	16.4
2	6.5	6.1	6.4	8.9	8.6	8.7	12.8	12.4	12.7	16.6	16.0	16.5
3	6.5	6.3	6.4	8.9	8.7	8.7	12.9	12.3	12.6	16.1	15.7	15.9
4	6.4	6.0	6.2	9.4	8.8	9.1	12.9	12.4	12.7	16.4	15.9	16.1
5	6.4	6.0	6.2	10.2	9.4	9.7	12.8	12.6	12.7	16.8	16.2	16.5
6	6.8	6.4	6.7	10.6	10.0	10.4	13.3	12.8	13.0	17.2	16.8	17.0
7	6.6	6.2	6.3	10.7	10.4	10.6	13.5	13.1	13.3	17.9	17.2	17.5
8	6.7	6.2	6.4	10.7	10.2	10.4	14.2	13.4	13.8	18.3	17.2	17.8
9	6.7	6.5	6.6	10.5	10.2	10.3	14.0	13.4	13.7	18.6	18.1	18.4
10	6.9	6.6	6.8	10.3	10.1	10.2	14.3	14.0	14.2	18.7	18.3	18.5
11	7.0	6.7	6.9	10.2	9.8	9.9	14.2	14.0	14.1	19.1	18.3	18.7
12	7.2	6.9	7.0	10.1	9.6	9.9	14.0	13.4	13.7	19.2	18.4	18.7
13	7.2	6.9	7.1	10.0	9.6	9.8	13.4	12.5	12.9	19.1	18.6	18.8
14	7.0	6.9	7.0	9.9	9.8	9.8	12.5	12.1	12.3	19.0	18.6	18.8
15	6.9	6.7	6.9	9.8	9.5	9.5	12.3	11.8	12.1	19.2	18.5	18.9
16	6.7	6.6	6.6	9.7	9.4	9.5	13.0	12.2	12.6	19.2	18.6	18.8
17	6.9	6.6	6.7	9.6	9.2	9.4	13.6	12.9	13.2	20.0	19.1	19.5
18	7.1	6.6	6.8	10.0	9.4	9.7	14.2	13.3	13.7	20.4	19.5	19.8
19	7.3	6.9	7.1	10.4	9.9	10.1	14.6	14.0	14.3	20.5	19.8	20.1
20	7.5	7.2	7.3	10.9	10.4	10.6	15.0	14.3	14.6	20.7	19.4	20.1
21	7.5	7.3	7.4	11.0	10.6	10.8	15.2	14.8	15.0	20.5	19.5	19.9
22	7.5	7.1	7.3	10.6	10.2	10.4	15.1	14.8	14.9	20.7	19.5	20.0
23	7.6	7.3	7.4	10.4	10.1	10.3	15.2	14.9	15.0	21.1	20.6	20.8
24	7.9	7.5	7.7	10.8	10.3	10.5	15.6	15.0	15.2	21.6	21.1	21.4
25	7.9	7.6	7.8	11.4	10.6	11.1	15.7	15.4	15.6	21.9	21.3	21.6
26	7.9	7.6	7.7	12.0	11.4	11.8	15.8	15.5	15.7	21.7	20.6	21.3
27	7.8	7.4	7.6	12.6	12.0	12.3	16.1	15.3	15.7	21.8	20.6	21.3
28	7.8	7.3	7.6	13.1	12.4	12.8	16.3	15.2	15.9	22.0	20.8	21.4
29	8.2	7.8	8.0	13.2	12.9	13.1	16.5	15.8	16.2	22.2	20.7	21.4
30	---	---	---	13.1	12.5	12.8	16.6	16.1	16.3	23.2	21.9	22.5
31	---	---	---	13.1	12.7	13.0	---	---	---	23.4	22.4	22.8
MONTH	8.2	6.0	7.0	13.2	8.2	10.4	16.6	11.8	14.0	23.4	15.7	19.3

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	22.6	22.8	21.9	21.2	21.6	23.9	23.1	23.4	23.4	22.2	22.8
2	23.0	22.4	22.9	21.9	21.1	21.4	24.2	23.4	23.8	23.5	23.1	23.3
3	22.4	21.5	21.8	21.7	21.1	21.3	24.1	23.7	23.9	23.3	23.1	23.2
4	22.0	20.9	21.4	22.9	21.1	22.0	24.6	23.6	24.1	---	---	---
5	22.8	21.2	21.9	21.8	20.9	21.4	24.0	23.1	23.7	---	---	---
6	22.8	21.9	22.5	21.7	20.9	21.1	23.7	23.0	23.4	---	---	---
7	22.9	21.5	22.4	21.7	20.8	21.3	23.9	23.1	23.6	23.5	22.7	23.0
8	23.6	22.9	23.3	21.9	21.2	21.5	24.1	23.7	23.9	22.8	22.3	22.6
9	23.5	23.0	23.2	22.2	21.3	21.7	24.1	23.6	23.8	23.3	22.1	22.6
10	23.5	23.0	23.2	22.4	21.7	22.0	24.0	23.4	23.6	23.8	23.2	23.4
11	23.7	23.1	23.5	22.7	21.7	22.2	23.4	22.7	23.1	23.9	23.5	23.6
12	23.8	23.2	23.5	22.9	21.7	22.3	22.9	22.4	22.7	23.7	23.0	23.3
13	23.4	23.0	23.2	23.2	22.2	22.8	22.9	22.3	22.6	23.0	22.6	22.8
14	24.1	23.2	23.5	23.2	22.4	22.7	22.6	22.3	22.4	23.5	22.6	23.1
15	23.6	22.9	23.2	23.7	22.2	22.9	22.5	22.0	22.2	23.8	23.2	23.5
16	23.3	22.8	23.0	23.7	22.4	22.9	22.5	22.1	22.3	23.8	22.9	23.6
17	23.3	22.8	23.0	23.3	22.5	23.0	22.8	22.4	22.6	22.9	22.4	22.6
18	22.9	21.7	22.5	23.4	22.7	23.0	22.9	22.5	22.7	22.6	22.2	22.4
19	22.7	21.4	22.1	23.6	22.7	23.1	23.1	22.7	23.0	22.4	21.9	22.1
20	22.7	20.8	21.6	23.6	23.1	23.3	23.1	22.6	22.8	22.0	21.6	21.8
21	23.0	21.9	22.5	23.6	23.4	23.5	22.8	22.3	22.6	22.0	21.8	21.9
22	22.8	22.0	22.3	23.8	23.3	23.5	22.6	21.8	22.2	22.0	21.8	21.9
23	22.4	21.8	22.1	23.5	23.0	23.3	22.6	22.3	22.5	22.2	21.7	22.0
24	22.5	21.4	21.8	23.8	23.2	23.6	22.7	22.3	22.5	22.2	21.8	22.0
25	22.7	21.9	22.2	23.8	23.0	23.6	22.6	22.3	22.4	22.5	21.9	22.2
26	22.7	21.7	22.1	23.6	23.4	23.5	22.9	22.2	22.5	22.3	22.0	22.2
27	22.8	22.0	22.4	23.7	22.6	23.2	23.0	22.4	22.7	22.4	21.8	22.1
28	23.3	22.2	22.8	23.3	22.8	23.1	22.7	22.5	22.6	22.1	21.5	21.8
29	22.7	22.2	22.5	23.9	23.1	23.5	22.9	22.5	22.7	21.6	21.1	21.5
30	22.2	21.6	21.9	23.8	22.8	23.4	22.8	22.5	22.6	21.3	21.0	21.1
31	---	---	---	24.2	22.8	23.4	22.6	22.2	22.4	---	---	---
MONTH	24.1	20.8	22.6	24.2	20.8	22.6	24.6	21.8	22.9	23.9	21.0	22.5

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.7	5.6	7.2	9.1	8.5	8.7	9.7	9.6	9.6	11.2	10.5	10.8
2	9.0	4.3	7.6	9.2	8.5	8.9	9.6	9.3	9.5	11.6	10.4	10.8
3	9.2	6.7	7.9	9.4	8.8	9.1	9.7	9.5	9.6	10.9	10.2	10.6
4	9.6	6.9	8.6	9.3	8.4	8.9	9.8	9.6	9.7	10.9	10.4	10.7
5	9.7	8.9	9.3	9.8	8.1	8.8	9.8	9.6	9.7	10.9	10.6	10.8
6	9.8	8.0	9.2	8.6	7.8	8.3	10.0	9.7	9.8	11.2	10.6	10.9
7	10.2	9.5	9.9	8.5	7.7	8.2	10.1	9.8	9.9	11.2	10.7	11.0
8	10.7	9.5	10.1	8.9	8.0	8.3	10.0	9.7	9.9	11.2	10.5	10.9
9	10.0	9.1	9.6	9.2	8.2	8.7	10.0	9.7	9.8	11.3	10.6	11.0
10	9.7	9.0	9.4	9.6	8.5	9.1	10.0	9.7	9.9	11.4	10.7	11.1
11	9.7	8.7	9.1	9.3	8.5	8.9	10.2	9.9	10.1	11.5	10.8	11.2
12	9.2	7.9	8.8	9.3	8.5	8.9	10.6	10.1	10.3	11.7	10.9	11.3
13	8.9	7.8	8.5	9.3	8.3	8.9	10.6	10.2	10.4	11.9	10.8	11.4
14	8.7	6.2	8.0	9.3	8.6	9.0	10.7	10.2	10.4	11.8	11.1	11.5
15	8.2	6.4	7.4	9.3	8.8	9.0	10.8	10.4	10.6	12.0	11.2	11.7
16	8.2	6.4	7.6	9.3	9.2	9.3	10.8	10.4	10.6	12.2	11.3	11.7
17	8.2	6.8	7.7	9.3	9.1	9.2	10.8	10.3	10.6	12.4	11.3	11.8
18	7.9	6.6	7.4	9.2	8.5	9.0	11.1	10.6	10.8	12.1	11.3	11.7
19	8.3	7.9	8.1	9.0	8.5	8.8	11.2	10.8	11.0	12.3	11.3	11.9
20	8.4	8.0	8.1	9.1	8.5	8.8	11.4	10.9	11.1	12.7	11.5	12.0
21	8.6	6.6	7.7	8.9	8.6	8.7	11.5	11.0	11.3	12.7	11.5	12.1
22	8.5	6.6	7.5	9.2	8.6	8.8	11.6	11.0	11.3	12.7	11.9	12.1
23	8.4	6.6	7.6	9.2	8.7	8.9	11.4	10.6	11.1	12.3	11.9	12.0
24	8.7	7.3	8.1	9.0	8.8	8.9	11.2	10.2	10.7	12.3	12.0	12.2
25	9.0	7.9	8.6	8.9	8.6	8.8	10.9	10.1	10.4	12.2	12.0	12.1
26	8.7	8.4	8.6	9.1	8.8	9.0	10.8	10.1	10.6	12.2	12.0	12.1
27	8.6	8.2	8.3	9.1	8.9	9.0	10.8	10.2	10.6	12.7	11.9	12.1
28	8.7	7.8	8.3	9.4	9.0	9.2	11.1	10.1	10.5	12.6	11.8	12.2
29	8.7	7.9	8.4	9.6	9.2	9.4	10.8	10.1	10.6	12.2	12.0	12.2
30	8.8	8.2	8.6	9.7	9.1	9.3	10.9	10.2	10.6	12.2	12.0	12.0
31	9.1	8.6	8.7	---	---	---	11.1	10.2	10.8	12.4	12.1	12.2
MONTH	10.7	4.3	8.4	9.8	7.7	8.9	11.6	9.3	10.4	12.7	10.2	11.6
		FEBRUARY			MARCH			APRIL			MAY	
1	12.6	12.3	12.4	12.6	12.1	12.4	11.5	11.2	11.4	11.7	10.6	11.2
2	12.6	12.3	12.4	12.4	12.0	12.2	11.6	11.1	11.4	11.3	10.2	10.9
3	12.5	12.2	12.3	12.5	12.1	12.3	11.9	11.3	11.6	10.4	9.9	10.1
4	12.7	12.4	12.5	12.6	12.1	12.3	12.1	11.5	11.8	10.2	9.9	10.1
5	12.6	12.2	12.3	12.5	11.8	12.1	12.1	11.7	11.9	10.2	9.7	9.9
6	13.0	12.6	12.9	12.0	11.4	11.7	12.6	11.9	12.2	10.2	9.6	9.9
7	13.0	12.9	12.9	12.0	11.7	11.9	12.5	12.1	12.4	10.5	9.7	10.2
8	13.0	12.6	12.9	11.7	11.1	11.5	12.7	12.2	12.4	11.2	10.2	10.7
9	12.7	12.5	12.6	11.3	11.0	11.2	12.5	11.9	12.1	11.0	10.4	10.7
10	12.5	11.8	12.2	11.3	10.9	11.1	12.3	12.0	12.2	10.4	9.6	10
11	11.9	11.6	11.8	11.3	11.0	11.2	12.2	11.8	12.1	9.8	9.0	9.5
12	12.0	11.4	11.5	11.2	10.7	11.0	12.0	11.0	11.4	9.1	8.2	8.8
13	11.8	11.5	11.7	10.8	10.2	10.6	11.1	10.9	11.0	8.6	7.8	8.2
14	11.9	11.8	11.9	10.6	9.7	10.2	11.6	11.0	11.2	8.0	7.3	7.7
15	12.0	11.9	12.0	10.8	10.5	10.7	11.5	11.3	11.4	7.9	7.0	7.5
16	12.2	12.0	12.1	11.2	10.7	10.9	11.4	10.8	11.1	8.3	7.8	8.0
17	12.2	12.0	12.1	11.2	10.8	11.0	11.1	10.7	10.8	8.2	7.7	7.9
18	12.4	11.8	12.1	11.3	10.9	11.1	11.0	10.6	10.8	8.1	7.3	7.8
19	12.3	11.8	12.1	11.5	11.1	11.2	11.4	10.8	11.1	8.4	6.9	7.7
20	12.4	12.3	12.3	11.5	11.2	11.4	11.8	10.9	11.3	8.9	7.2	7.9
21	12.3	12.2	12.3	11.4	11.1	11.3	11.8	11.0	11.4	8.8	7.3	8.1
22	12.3	12.2	12.2	11.8	11.2	11.5	11.0	9.9	10.3	9.3	7.4	8.2
23	12.2	12.1	12.1	11.9	11.4	11.7	10.4	9.9	10.2	8.9	8.0	8.5
24	12.5	11.9	12.1	12.0	11.6	11.8	10.3	9.5	10.1	8.8	8.0	8.4
25	12.4	11.9	12.0	12.1	11.6	11.9	9.7	9.4	9.6	8.3	7.7	8.0
26	12.1	11.9	12.0	11.9	11.6	11.8	9.6	9.0	9.3	8.8	7.2	7.8
27	12.3	12.0	12.2	12.2	11.7	11.9	10.3	9.3	9.8	8.4	7.2	7.8
28	12.5	12.0	12.3	12.5	11.9	12.2	11.2	9.6	10.4	8.6	6.9	7.7
29	12.8	12.3	12.5	12.4	11.7	12.1	11.5	10.4	11.1	8.6	7.2	7.9
30	---	---	---	11.7	11.4	11.5	11.5	10.4	11.0	8.9	7.7	8.3
31	---	---	---	11.7	11.3	11.5	---	---	---	8.6	7.3	7.8
MONTH	13.0	11.4	12.2	12.6	9.7	11.5	12.7	9.0	11.2	11.7	6.9	8.8

03431514 CUMBERLAND RIVER NEAR BORDEAUX, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.9	7.8	8.4	9.7	8.3	9.0	9.9	8.7	9.3	8.8	7.4	8.1
2	8.8	8.2	8.4	10.0	8.3	9.0	10.2	9.4	9.8	8.9	8.1	8.5
3	8.3	7.6	7.9	9.7	8.2	8.7	9.7	9.0	9.3	8.6	8.0	8.2
4	8.3	7.1	7.7	10.6	9.0	9.8	10.1	8.4	9.5	---	---	---
5	9.2	7.5	8.2	9.4	8.3	8.9	9.3	8.5	8.8	---	---	---
6	8.9	8.2	8.5	9.6	8.6	8.8	9.3	8.0	8.7	---	---	---
7	8.4	7.2	7.9	9.1	8.6	8.8	9.6	8.2	9.1	8.8	7.0	7.5
8	9.7	8.4	9.0	9.2	8.2	8.5	10.1	9.4	9.7	9.2	7.7	8.4
9	9.4	8.3	8.8	9.9	8.2	8.9	10.4	9.4	9.8	9.3	7.8	8.5
10	9.0	8.1	8.6	9.8	8.4	9.2	10.5	9.1	9.7	10.4	8.9	9.5
11	8.6	8.0	8.3	9.9	8.2	9.3	10.1	9.3	9.7	10.3	9.4	9.9
12	8.3	7.6	8.0	9.7	7.7	8.9	9.9	9.4	9.6	10.0	9.0	9.3
13	7.7	7.2	7.4	9.6	7.7	8.9	10.1	9.4	9.7	9.2	8.5	8.8
14	8.6	7.6	8.1	9.4	7.6	8.4	10.4	9.5	9.9	9.6	8.5	9.0
15	8.5	7.9	8.2	9.6	7.3	8.6	10.4	9.8	10.2	10.5	8.5	9.6
16	8.9	8.0	8.4	9.6	7.6	8.7	10.5	9.7	10.1	10.7	9.5	10.3
17	8.6	8.3	8.5	9.5	7.6	8.7	10.8	10.0	10.4	9.5	8.4	8.8
18	8.9	7.2	8.3	9.5	7.9	8.9	10.6	9.9	10.3	10.2	8.6	9.2
19	9.8	8.0	8.9	9.9	8.8	9.3	10.3	9.7	10.1	11.6	9.8	10.7
20	9.8	7.9	8.7	10.5	9.0	9.7	10.0	9.5	9.7	11.3	10.2	10.7
21	10.2	8.4	9.3	10.4	8.4	9.4	---	---	---	11.1	8.4	10.1
22	9.7	8.4	9.0	---	---	---	---	---	---	12.0	9.0	10.8
23	9.3	8.4	8.7	---	---	---	---	---	---	12.8	10.0	12.0
24	9.3	7.9	8.5	---	---	---	---	---	---	12.8	10.3	11.9
25	9.2	8.2	8.6	---	---	---	---	---	---	12.7	9.9	11.7
26	9.0	8.0	8.5	---	---	---	10.0	8.7	9.0	12.0	10.0	11.2
27	9.6	8.5	9.0	10.2	8.2	8.7	9.1	8.5	8.8	12.1	9.9	11.3
28	10.4	8.7	9.6	9.0	8.3	8.6	9.0	8.3	8.7	11.9	9.2	10.9
29	10.2	9.0	9.7	10.2	8.9	9.6	9.1	8.4	8.7	11.6	10.4	11.1
30	9.9	8.6	9.1	10.0	9.0	9.4	8.9	8.1	8.5	12.0	10.3	11.1
31	---	---	---	9.7	8.5	9.2	8.5	7.4	7.8	---	---	---
MONTH	10.4	7.1	8.5	10.6	7.3	9.0	10.8	7.4	9.4	12.8	7.0	9.9

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03431599 WHITES CREEK NEAR BORDEAUX, TN

LOCATION.--Lat 36°13'03", long 86°49'12", Davidson County, Hydrologic Unit 05130202, on right bank on downstream side of bridge on Buena Vista Pike, 0.4 mi downstream from Ewing Creek, 1.8 mi northeast of Bordeaux, 2.1 mi above Drakes Branch, and at mile 6.1.

DRAINAGE AREA.--51.3 mi^2.

PERIOD OF RECORD.--October 1964 to April 1975 (published as at Tucker Road, near Bordeaux), August 1993 to current year. Occasional low-flow measurements, water years 1962-64.

GAGE.--Data collection platform. Datum of gage is 402.87 ft above NGVD of 1929. October 1964 to April 1975 at site 0.4 mi downstream at datum 1.23 ft lower, August 1993 to September 1995 at datum 3.85 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Peak discharge of 12,200 ft^3/s, Feb. 23, 1975, gage height 17.06 ft, occurred at Tucker Road near Bordeaux site. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1400	7,420	15.95	Apr 23	1530	3,700	11.74
Apr 22	0645	*7,820	*16.34	Aug 5	0300	3,190	11.05

Minimum discharge, 1.6 ft^3/s, Aug. 17, 18, 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.2	20	84	39	436	72	67	e64	5.5	20	4.3
2	12	7.9	15	259	91	378	57	243	e39	5.4	11	13
3	9.3	8.1	12	153	315	212	47	269	e37	5.1	7.9	12
4	7.9	8.0	18	108	156	152	41	200	e32	6.9	9.3	7.7
5	7.7	24	17	132	3,000	474	36	131	e28	5.7	685	5.7
6	9.3	17	15	103	874	683	31	90	e25	10	38	4.6
7	7.6	13	12	81	394	289	29	65	e21	34	14	3.9
8	6.6	10	10	61	240	199	28	55	e17	e12	8.0	3.5
9	6.3	8.0	9.3	55	188	147	27	51	12	e6.0	5.6	3.0
10	7.4	7.6	55	41	155	103	26	49	12	4.0	4.6	3.0
11	8.0	7.4	47	29	120	81	26	48	11	16	3.7	2.6
12	7.0	10	32	26	115	64	256	47	20	11	3.6	2.8
13	6.5	14	26	22	95	53	624	47	28	6.9	3.1	4.8
14	28	12	213	19	82	46	413	48	18	17	2.7	5.5
15	22	15	102	17	73	41	236	742	13	7.4	2.3	3.6
16	12	31	132	15	58	42	167	235	10	5.2	2.0	12
17	9.5	25	118	14	49	36	115	144	9.6	4.3	1.8	31
18	8.1	375	86	229	42	33	85	97	13	3.7	1.9	10
19	7.2	198	67	132	37	30	64	67	11	3.1	2.0	6.0
20	6.5	84	49	89	36	72	51	57	7.8	3.3	23	4.2
21	6.0	47	33	62	33	113	209	52	6.5	2.8	83	3.8
22	6.0	26	24	48	29	69	2,240	50	6.2	3.0	15	4.0
23	5.9	17	104	32	27	52	1,080	48	6.6	3.0	11	3.9
24	6.2	161	159	25	25	43	551	46	6.3	2.9	36	3.7
25	5.8	70	97	710	25	37	310	45	6.7	5.2	28	3.7
26	40	42	64	331	25	34	249	43	7.4	12	19	3.6
27	21	35	47	185	24	32	181	42	6.1	8.7	10	3.6
28	14	58	32	115	23	28	123	41	5.6	6.1	8.4	3.8
29	11	40	169	87	21	76	91	41	5.3	4.5	6.2	3.7
30	9.3	27	261	67	---	88	77	39	5.2	3.9	10	3.6
31	8.7	---	127	51	---	92	---	315	---	86	5.7	---
TOTAL	335.8	1,406.2	2,172.3	3,382	6,391	4,235	7,542	3,514	490.3	310.6	1,081.8	180.6
MEAN	10.8	46.9	70.1	109	220	137	251	113	16.3	10.0	34.9	6.02
MAX	40	375	261	710	3,000	683	2,240	742	64	86	685	31
MIN	5.8	7.4	9.3	14	21	28	26	39	5.2	2.8	1.8	2.6
CFSM	0.21	0.91	1.37	2.13	4.30	2.66	4.90	2.21	0.32	0.20	0.68	0.12
IN.	0.24	1.02	1.58	2.45	4.63	3.07	5.47	2.55	0.36	0.23	0.78	0.13

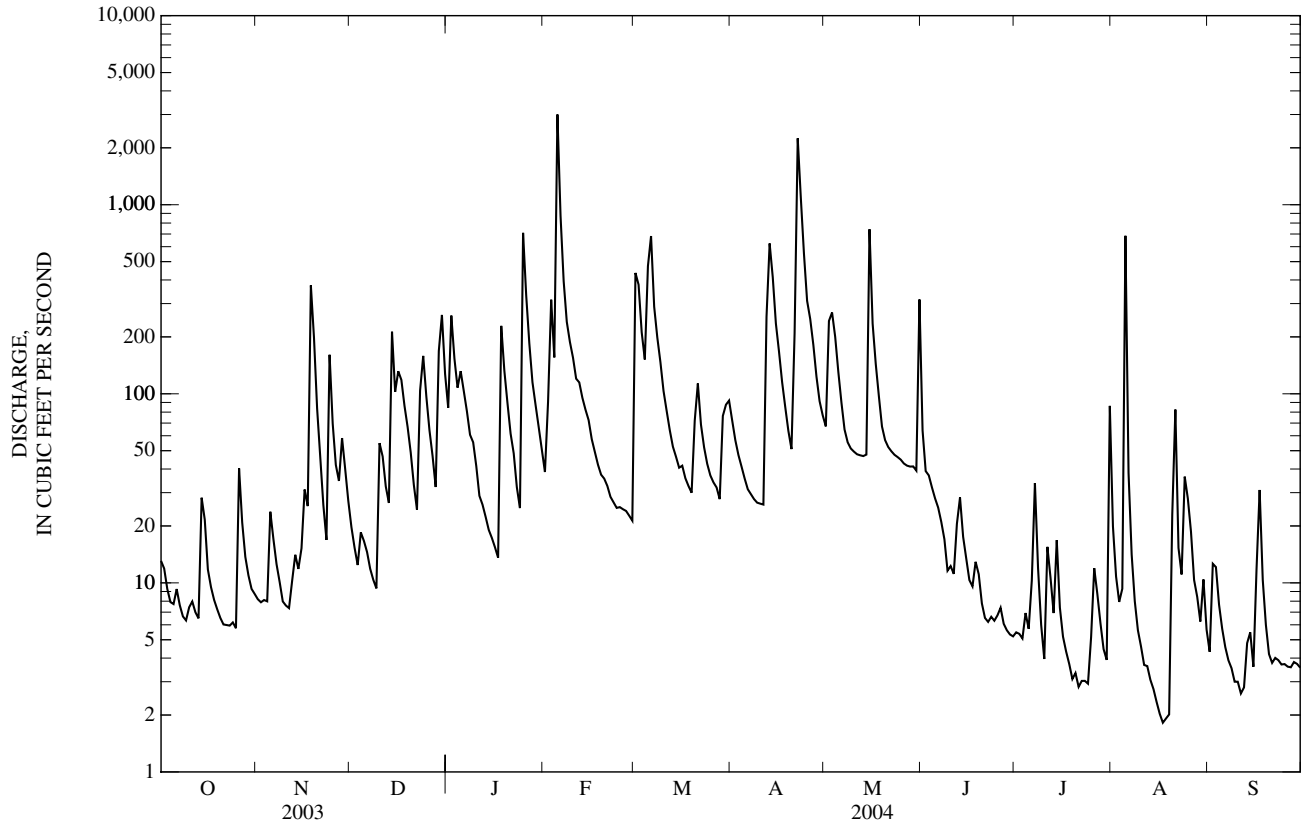
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	17.2	58.3	106	129	164	182	134	96.6	47.4	16.5	16.8	23.3
MAX	68.5	151	286	288	427	530	286	277	264	48.3	87.2	122
(WY)	(2003)	(2002)	(1973)	(1999)	(2003)	(1975)	(1994)	(1995)	(1998)	(1967)	(1972)	(1974)
MIN	2.05	6.30	8.18	25.2	36.3	46.0	18.8	20.1	4.70	1.11	1.79	0.98
(WY)	(1970)	(1999)	(1966)	(1966)	(1968)	(1966)	(1967)	(2001)	(1966)	(1966)	(1999)	(1999)

03431599 WHITES CREEK NEAR BORDEAUX, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL TOTAL	36,098.1		31,041.6			
ANNUAL MEAN	98.9		84.8		79.8	
HIGHEST ANNUAL MEAN					129	1994
LOWEST ANNUAL MEAN					35.2	1966
HIGHEST DAILY MEAN	2,820	May 7	3,000	Feb 5	5,100	Feb 23, 1975
LOWEST DAILY MEAN	3.7	Aug 26	1.8	Aug 17	0.19	Sep 12, 1999
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 20	2.3	Aug 13	0.30	Sep 7, 1999
MAXIMUM PEAK FLOW			7,820	Apr 22	a12,200	Feb 23, 1975
MAXIMUM PEAK STAGE			16.34	Apr 22	b19.18	Mar 17, 2002
INSTANTANEOUS LOW FLOW			c1.6	Aug 17	d0.07	Sep 10, 1999
ANNUAL RUNOFF (CFSM)	1.93		1.65		1.55	
ANNUAL RUNOFF (INCHES)	26.18		22.51		21.12	
10 PERCENT EXCEEDS	164		198		172	
50 PERCENT EXCEEDS	28		27		22	
90 PERCENT EXCEEDS	7.1		4.3		2.6	

a From rating curve extended above 6,900 ft^3/s on basis of contracted opening measurement of peak flow, see REMARKS.
b Current site and datum.
c Also occurred Aug. 18, 20.
d Also occurred Sept. 11, 1999.
e Estimated



03431700 RICHLAND CREEK AT CHARLOTTE AVENUE AT NASHVILLE, TN

LOCATION.--Lat 36°09'04", long 86°51'15", Davidson County, Hydrologic Unit 05130202, near right 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 3.7.

DRAINAGE AREA.--24.3 mi^2.

PERIOD OF RECORD.--July 1964 to September 1990, August 1993 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 409.56 ft above NGVD of 1929.

REMARKS.--Records good, except for discharges below 5 ft^3/s, which are fair. Diversions above station used for irrigation of golf courses. Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1300	*2,960	*8.64	Apr 23	1500	2,200	7.43
Feb 5	2015	1,800	6.71	May 31	0200	1,910	6.92
Apr 22	0545	2,830	8.45	Aug 5	0315	2,290	7.59

Minimum discharge, 4.5 ft^3/s, July 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

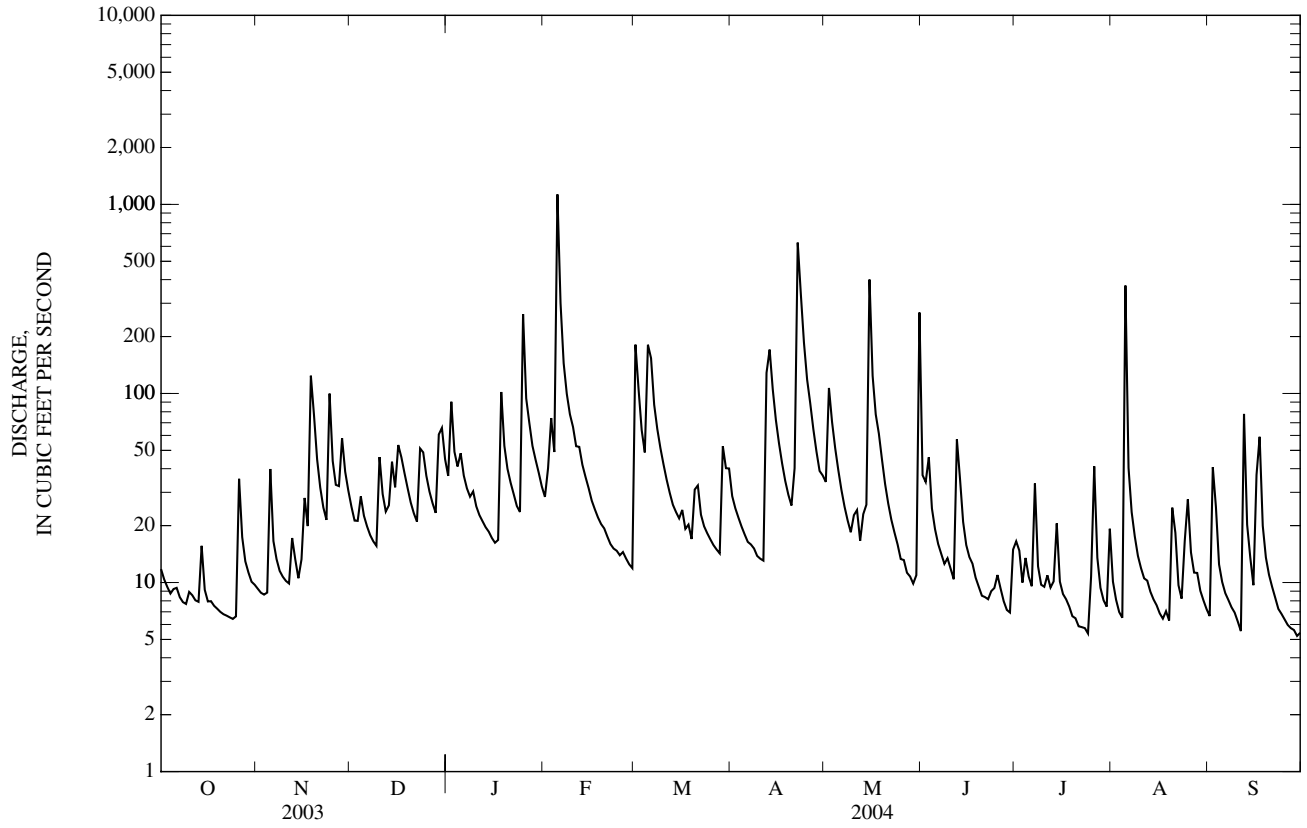
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.3	25	37	28	181	29	34	37	17	10	6.7
2	10	8.8	21	90	40	105	25	107	34	15	8.1	41
3	9.5	8.6	21	49	74	64	22	71	46	10	7.0	25
4	8.7	8.8	29	41	49	49	20	51	25	13	6.5	12
5	9.2	40	23	48	1,130	181	18	39	19	11	372	10
6	9.4	17	20	37	300	154	16	31	16	9.6	40	8.8
7	8.4	13	18	31	145	87	16	25	14	33	24	8.1
8	7.9	12	17	28	100	65	15	21	13	12	18	7.4
9	7.7	11	16	30	78	51	14	18	13	9.7	14	6.9
10	8.9	10	46	25	66	42	13	23	12	9.5	12	6.2
11	8.6	9.9	29	23	53	35	13	24	10	11	11	5.5
12	8.1	17	24	21	52	30	129	17	57	9.4	10	78
13	7.9	13	26	20	42	26	171	23	35	10	8.9	20
14	16	11	44	19	36	24	105	26	21	21	8.1	14
15	9.2	13	32	17	32	22	72	400	16	10	7.6	9.7
16	7.9	28	53	16	27	24	54	124	14	8.7	6.9	37
17	8.0	20	46	17	24	19	43	77	13	8.2	6.4	59
18	7.5	124	38	102	22	20	34	61	11	7.5	7.1	20
19	7.3	77	32	53	20	17	29	45	9.5	6.6	6.3	14
20	7.0	45	26	40	19	31	26	33	8.5	6.5	25	11
21	6.8	32	23	34	18	33	40	26	8.4	5.9	18	9.5
22	6.7	25	21	29	16	23	628	21	8.2	5.8	9.7	8.3
23	6.5	21	51	25	15	20	334	18	9.0	5.7	8.2	7.3
24	6.4	100	49	24	15	18	186	16	9.4	5.4	17	6.8
25	6.6	44	37	263	14	17	119	13	11	11	28	6.4
26	35	33	30	94	14	16	89	13	9.3	41	14	6.0
27	17	32	26	70	13	15	65	11	8.0	14	11	5.7
28	13	58	23	53	12	14	49	11	7.2	9.4	11	5.6
29	11	39	61	45	12	53	39	9.9	6.9	8.1	9.0	5.2
30	10	31	66	38	---	40	37	11	15	7.5	8.0	5.4
31	9.7	---	45	32	---	40	---	268	---	19	7.2	---
TOTAL	307.9	911.4	1,018	1,451	2,466	1,516	2,450	1,667.9	516.4	371.5	750.0	466.5
MEAN	9.93	30.4	32.8	46.8	85.0	48.9	81.7	53.8	17.2	12.0	24.2	15.6
MAX	35	124	66	263	1,130	181	628	400	57	41	372	78
MIN	6.4	8.6	16	16	12	14	13	9.9	6.9	5.4	6.3	5.2
CFSM	0.41	1.25	1.35	1.93	3.50	2.01	3.36	2.21	0.71	0.49	1.00	0.64
IN.	0.47	1.40	1.56	2.22	3.78	2.32	3.75	2.55	0.79	0.57	1.15	0.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	11.9	31.7	53.3	50.8	58.7	62.9	44.9	40.0	21.8	11.4	8.43	13.8
MAX	53.0	89.8	247	151	205	208	146	131	107	42.0	24.6	127
(WY)	(1976)	(1987)	(1965)	(1974)	(1989)	(1975)	(1979)	(1984)	(1998)	(1979)	(1994)	(1979)
MIN	0.41	1.79	2.57	3.96	10.3	18.2	5.76	5.06	1.33	1.34	1.18	0.92
(WY)	(1966)	(1972)	(1966)	(1986)	(1968)	(1966)	(1986)	(1977)	(1988)	(1966)	(1980)	(1980)

03431700 RICHLAND CREEK AT CHARLOTTE AVENUE AT NASHVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	16,247.3		13,892.6			
ANNUAL MEAN	44.5		38.0		34.1	
HIGHEST ANNUAL MEAN					71.3	1979
LOWEST ANNUAL MEAN					13.6	1966
HIGHEST DAILY MEAN	1,110	May 5	1,130	Feb 5	7,020	Nov 2, 1990
LOWEST DAILY MEAN	4.8	Aug 26	5.2	Sep 29	0.05	Oct 8, 1980
ANNUAL SEVEN-DAY MINIMUM	5.8	Aug 20	5.9	Sep 24	0.23	Oct 8, 1965
MAXIMUM PEAK FLOW			2,960	Feb 5	9,470	Sep 13, 1979
MAXIMUM PEAK STAGE			8.64	Feb 5	15.13	Sep 13, 1979
INSTANTANEOUS LOW FLOW			4.5	Jul 25	0.05	Oct 7, 1980
ANNUAL RUNOFF (CFSM)	1.83		1.56		1.40	
ANNUAL RUNOFF (INCHES)	24.87		21.27		19.06	
10 PERCENT EXCEEDS	76		67		74	
50 PERCENT EXCEEDS	19		19		12	
90 PERCENT EXCEEDS	7.6		7.5		1.7	



03432350 HARPETH RIVER AT FRANKLIN, TN

LOCATION.--Lat 35°55'14", long 86°51'55", Williamson County, Hydrologic Unit 05130204, on left bank 15 ft downstream from State Highway 96 bridge, 0.4 mi southeast of the courthouse in Franklin, and at mile 88.1.

DRAINAGE AREA.--191 mi^2, includes 15 mi^2 without surface drainage.

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

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 604.42 ft above NGVD of 1929.

REMARKS.--No estimated daily discharge. Records good. 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 2.7 mi below gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	1230	3,270	14.22	Mar 6	0830	5,080	19.30
Feb 6	0700	*12,900	*29.26	Apr 13	2230	3,010	13.44
Mar 2	0700	3,090	13.68				

Minimum daily discharge, 9.9 ft^3/s, July 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

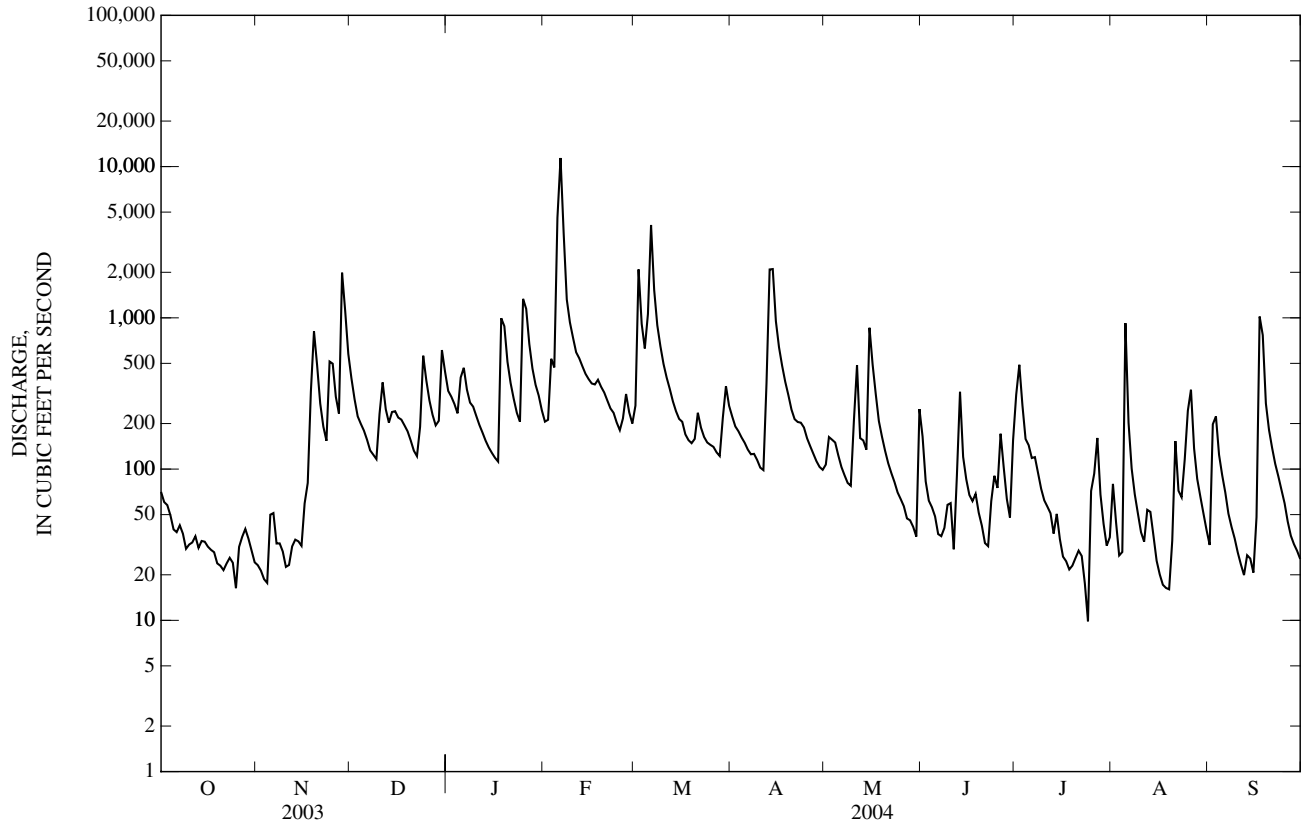
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	23	399	329	206	263	223	107	164	310	80	31
2	61	21	290	301	212	2,090	191	163	83	489	44	198
3	58	19	223	269	536	913	178	156	62	264	27	223
4	49	18	199	234	470	627	162	150	56	158	28	124
5	40	50	180	403	4,590	1,060	149	123	49	144	923	91
6	38	51	156	468	11,400	4,110	135	103	37	118	203	70
7	43	32	133	335	3,630	1,530	125	91	36	120	101	51
8	37	32	124	275	1,320	893	126	81	41	94	68	41
9	30	29	116	259	934	649	115	78	58	74	51	35
10	32	23	232	225	739	495	102	209	60	62	38	28
11	33	23	374	196	592	403	98	487	29	56	33	23
12	36	31	249	174	540	339	371	160	90	51	54	20
13	30	34	203	154	479	281	2,090	155	324	37	52	27
14	33	33	239	139	426	241	2,100	134	120	51	36	26
15	33	31	241	128	394	215	951	860	86	34	25	21
16	31	59	219	119	368	205	640	491	67	26	20	48
17	29	81	212	112	363	170	483	314	61	25	17	1,020
18	28	325	195	993	390	155	378	208	69	22	16	768
19	24	815	178	880	350	148	309	164	51	23	16	272
20	23	486	154	512	321	158	248	132	42	26	34	182
21	21	271	132	371	284	236	214	109	32	29	153	138
22	24	191	122	292	252	188	205	94	31	27	72	108
23	26	154	190	236	236	163	203	82	61	17	65	89
24	24	514	562	206	203	150	188	70	90	9.9	116	73
25	16	498	385	1,330	181	145	160	63	75	72	243	59
26	31	301	284	1,150	216	140	142	57	171	93	335	45
27	36	233	228	671	314	129	126	47	103	161	137	36
28	40	1,990	195	462	237	122	113	46	63	68	86	32
29	35	1,110	209	361	200	219	103	41	48	43	66	29
30	29	577	612	306	---	354	99	36	155	31	51	25
31	24	---	439	245	---	262	---	249	---	35	39	---
TOTAL	1,065	8,055	7,674	12,135	30,383	17,053	10,727	5,260	2,414	2,769.9	3,229	3,933
MEAN	34.4	268	248	391	1,048	550	358	170	80.5	89.4	104	131
MAX	71	1,990	612	1,330	11,400	4,110	2,100	860	324	489	923	1,020
MIN	16	18	116	112	181	122	98	36	29	9.9	16	20
CFSM	0.18	1.41	1.30	2.05	5.49	2.88	1.87	0.89	0.42	0.47	0.55	0.69
IN.	0.21	1.57	1.49	2.36	5.92	3.32	2.09	1.02	0.47	0.54	0.63	0.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	91.9	259	463	519	592	647	354	325	132	61.6	40.9	76.6
MAX	610	778	1,172	1,472	1,575	1,945	1,066	1,489	574	431	208	971
(WY)	(1976)	(1980)	(1991)	(1979)	(2003)	(1975)	(1979)	(1984)	(1997)	(1989)	(1998)	(1979)
MIN	0.52	4.08	16.2	14.4	139	159	62.2	21.8	1.25	1.44	1.58	1.17
(WY)	(1981)	(1981)	(1981)	(1986)	(1978)	(1985)	(1986)	(1988)	(1988)	(1988)	(1988)	(1980)

03432350 HARPETH RIVER AT FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	141,922.2		104,697.9			
ANNUAL MEAN	389		286		296	
HIGHEST ANNUAL MEAN					522	1979
LOWEST ANNUAL MEAN					68.7	1981
HIGHEST DAILY MEAN	9,280	Feb 16	11,400	Feb 6	18,500	Mar 13, 1975
LOWEST DAILY MEAN	5.2	Sep 20	9.9	Jul 24	0.30	Oct 14, 1980
ANNUAL SEVEN-DAY MINIMUM	5.7	Aug 24	22	Jul 18	0.32	Oct 20, 1980
MAXIMUM PEAK FLOW			12,900	Feb 6	20,200	Mar 13, 1975
MAXIMUM PEAK STAGE			29.26	Feb 6	33.65	Mar 13, 1975
INSTANTANEOUS LOW FLOW			9.2	Jul 24	0.30	Oct 14, 1980
ANNUAL RUNOFF (CFSM)	2.04		1.50		1.55	
ANNUAL RUNOFF (INCHES)	27.64		20.39		21.03	
10 PERCENT EXCEEDS	801		521		648	
50 PERCENT EXCEEDS	124		134		94	
90 PERCENT EXCEEDS	16		28		3.2	



034323531 HARPETH RIVER TRIBUTARY AT MACK HATCHER PARKWAY NEAR FRANKLIN, TN

LOCATION.--Lat 35°55'20", long 86°50'34", Williamson County, Hydrologic Unit 05130204, on downstream left abutment on highway bridge on Mack Hatcher Parkway 0.5 north of Hwy 96 and Mack Hatcher intersection.

DRAINAGE AREA.--0.91 mi^2.

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Data logger.

REMARKS.--No estimated daily discharges. Records poor. Periodic observations of water temperature and specific conductance are published in the report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1215	160	4.55	Aug 5	0330	*180	*4.72

Minimum discharge, 0.00 ft^3/s, on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.55	0.00	1.4	1.5	0.61	5.5	1.1	0.88	0.54	4.8	0.09	0.15
2	0.39	0.00	0.97	2.2	2.1	3.1	0.86	0.82	0.34	1.7	0.08	2.8
3	0.30	0.00	0.78	1.1	2.5	2.0	0.70	0.27	0.31	0.92	0.07	0.84
4	0.21	0.00	0.82	0.80	1.5	1.6	0.55	0.11	0.27	1.5	1.1	0.47
5	0.22	0.15	0.50	2.0	61	12	0.44	0.04	0.23	0.67	17	0.37
6	0.32	0.00	0.36	0.95	26	8.7	0.32	0.01	0.21	0.89	1.7	0.31
7	0.12	0.00	0.27	0.78	13	5.1	0.24	0.00	0.19	0.90	0.99	0.27
8	0.08	0.00	0.19	0.65	7.4	3.5	0.20	0.00	0.82	0.44	0.71	0.25
9	0.05	0.00	0.12	0.74	5.0	2.7	0.12	0.00	1.7	0.32	0.56	0.22
10	0.62	0.00	3.6	0.46	3.3	2.0	0.08	2.6	1.0	1.2	0.46	0.18
11	0.18	0.00	0.90	0.34	2.3	1.6	0.06	0.24	0.36	1.0	0.78	0.16
12	0.09	0.72	0.62	0.23	2.1	1.4	4.9	0.02	7.3	0.45	0.84	0.15
13	0.05	0.11	0.74	0.17	1.5	1.1	7.8	0.34	2.8	0.36	0.44	0.36
14	1.5	0.00	1.5	0.11	1.2	0.87	4.2	0.16	1.1	0.90	0.36	0.28
15	0.29	0.00	0.81	0.07	1.0	0.69	3.0	4.0	0.73	0.27	0.29	0.16
16	0.11	1.3	1.1	0.04	0.81	0.69	2.1	0.80	0.46	0.21	0.25	5.9
17	0.07	0.07	0.76	0.06	0.65	0.53	1.6	0.38	0.77	0.17	0.20	3.6
18	0.05	9.2	0.56	8.2	0.51	0.52	1.2	0.18	0.41	0.12	0.24	0.90
19	0.02	2.7	0.43	2.8	0.39	0.28	0.91	0.08	0.26	0.09	0.17	0.59
20	0.01	1.4	0.34	2.0	0.39	4.2	0.67	0.03	0.18	0.09	2.5	0.46
21	0.00	0.89	0.25	1.5	0.32	2.0	0.61	0.01	0.14	0.08	0.67	0.34
22	0.00	0.56	0.18	1.1	0.21	1.2	1.5	0.00	0.14	0.08	0.41	0.28
23	0.00	0.34	4.2	0.79	0.17	0.98	1.8	0.00	0.13	0.07	0.73	0.16
24	0.00	6.7	2.0	0.55	0.14	0.79	0.75	0.00	0.11	0.07	0.46	0.10
25	0.00	2.2	1.5	9.9	0.10	0.60	0.46	0.00	0.12	0.49	0.53	0.07
26	1.5	1.6	1.2	3.3	0.46	0.45	0.34	0.00	0.11	0.26	0.38	0.05
27	0.26	1.5	0.90	2.6	0.17	0.38	0.25	0.00	0.10	0.12	0.29	0.05
28	0.08	5.1	0.73	1.9	0.11	0.32	0.11	0.00	0.10	0.08	0.25	0.05
29	0.04	2.4	4.2	1.4	0.08	3.7	0.00	0.00	0.15	0.07	0.22	0.04
30	0.01	1.9	2.9	1.1	---	1.9	0.10	0.00	4.7	0.07	0.19	0.03
31	0.00	---	2.0	0.85	---	1.4	---	7.8	---	0.29	0.17	---
TOTAL	7.12	38.84	36.83	50.19	135.02	71.80	36.97	18.77	25.78	18.68	33.13	19.59
MEAN	0.23	1.29	1.19	1.62	4.66	2.32	1.23	0.61	0.86	0.60	1.07	0.65
MAX	1.5	9.2	4.2	9.9	61	12	7.8	7.8	7.3	4.8	17	5.9
MIN	0.00	0.00	0.12	0.04	0.08	0.28	0.00	0.00	0.10	0.07	0.07	0.03
CFSM	0.25	1.42	1.31	1.78	5.12	2.55	1.35	0.67	0.94	0.66	1.17	0.72
IN.	0.29	1.59	1.51	2.05	5.52	2.94	1.51	0.77	1.05	0.76	1.35	0.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	0.80	1.49	2.90	2.64	3.20	2.71	2.42	2.48	1.30	0.79	0.72	1.10
MAX	2.66	3.25	7.01	7.34	7.47	10.2	6.00	4.85	3.34	1.96	1.19	3.13
(WY)	(2003)	(2002)	(2002)	(2002)	(2003)	(2002)	(2000)	(2003)	(1998)	(1999)	(1998)	(2003)
MIN	0.03	0.38	0.58	0.62	0.57	0.24	0.45	0.50	0.21	0.06	0.17	0.40
(WY)	(2001)	(2000)	(1998)	(1997)	(1997)	(2003)	(1997)	(2001)	(2002)	(2000)	(2000)	(2001)

034323531 HARPETH RIVER TRIBUTARY AT MACK HATCHER PARKWAY NEAR FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	716.97		492.72			
ANNUAL MEAN	1.96		1.35		1.91	
HIGHEST ANNUAL MEAN					3.50	2002
LOWEST ANNUAL MEAN					1.26	2001
HIGHEST DAILY MEAN	54	Feb 15	61	Feb 5	120	Jan 24, 2002
LOWEST DAILY MEAN	0.00	Mar 14	0.00	Oct 21	0.00	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 20	0.00	May 22	0.00	Oct 1, 1999
MAXIMUM PEAK FLOW			180	Feb 5	454	May 25, 2000
MAXIMUM PEAK STAGE			4.72	Feb 5	6.47	May 25, 2000
INSTANTANEOUS LOW FLOW			a0.00	Oct 20	a0.00	Oct 1, 2000
ANNUAL RUNOFF (CFSM)	2.16		1.48		2.10	
ANNUAL RUNOFF (INCHES)	29.31		20.14		28.58	
10 PERCENT EXCEEDS	3.6		2.8		4.3	
50 PERCENT EXCEEDS	0.38		0.44		0.55	
90 PERCENT EXCEEDS	0.00		0.02		0.00	

a Many days most years.

03432376 HARPETH RIVER TRIB AT MT. HOPE ROAD AT FRANKLIN, TN

LOCATION.--Lat 35°55'39", long 86°52'30", Williamson County, Hydrologic Unit 05130204, on downstream side of culvert on Mt. Hope Road.

DRAINAGE AREA.--2.50 mi^2.

PERIOD OF RECORD.--August 2002 to current year.

GAGE.--Data logger.

REMARKS.--Records good except for estimated daily discharges and periods of backwater, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, gage height, 16.91 ft, Feb. 6, due to backwater from Harpeth River; minimum daily discharge, .71 ft^3/s, July 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.6	3.9	4.2	3.2	e2.7	3.4	3.2	3.5	11	1.0	1.1
2	2.5	1.5	3.2	6.2	5.0	e15	2.9	5.5	2.9	5.6	0.95	4.4
3	1.9	1.5	3.0	4.5	5.8	e6.5	2.7	4.6	2.4	4.6	0.84	1.8
4	1.6	1.5	2.9	3.6	4.0	e4.5	2.5	3.5	1.9	5.3	0.98	1.7
5	1.6	2.3	2.7	5.5	e33	e7.0	2.2	2.9	1.5	4.3	25	1.4
6	1.5	1.7	2.2	4.0	e9.0	e35	2.1	2.5	1.4	4.6	3.1	1.1
7	1.4	1.6	2.1	3.6	e6.5	e20	2.1	2.2	1.3	3.5	2.3	0.99
8	1.4	1.6	2.2	3.1	e4.9	e17	2.0	1.9	1.2	2.3	2.3	0.91
9	1.3	1.5	2.0	3.2	e4.5	e11	1.9	1.7	5.2	2.0	2.5	0.93
10	1.7	1.5	5.7	3.0	e4.0	e8.5	1.8	8.4	2.5	2.3	2.0	0.95
11	1.4	1.5	2.5	2.7	e3.6	e7.2	1.9	3.1	1.8	3.2	2.0	0.89
12	1.3	2.7	2.3	3.1	e3.4	e6.0	11	3.4	7.7	1.9	2.4	0.81
13	1.3	1.6	2.8	2.6	e3.3	e5.1	11	3.9	4.6	2.6	1.6	3.3
14	2.6	1.6	3.3	2.3	e3.2	e4.5	7.5	3.5	3.4	2.6	1.5	1.4
15	1.5	1.6	3.1	2.1	e3.10	e4.0	5.8	18	2.9	1.7	1.3	1.1
16	1.4	3.4	3.9	2.1	e3.00	e10	4.8	8.8	2.2	1.5	1.1	7.5
17	1.4	2.0	2.8	2.4	e2.9	e5.5	3.9	7.3	3.2	1.4	0.98	4.9
18	1.3	17	2.9	12	e4.0	e4.4	3.4	6.0	2.3	1.2	1.3	2.8
19	1.2	6.8	2.7	4.8	e3.8	e3.6	2.8	4.6	2.1	1.0	1.0	2.2
20	1.2	3.8	2.4	4.3	e3.60	e3.2	2.8	3.5	1.8	0.99	4.0	2.1
21	1.2	3.3	2.3	3.8	e3.5	e12	2.9	3.2	2.0	0.84	2.1	1.8
22	1.3	2.9	2.1	3.6	e3.4	e6.5	4.8	2.8	1.8	0.85	1.7	1.5
23	1.3	3.5	6.7	3.4	e3.3	e5.2	5.9	2.5	1.5	0.77	2.0	1.4
24	1.3	9.7	4.0	3.0	e3.20	e4.3	3.5	2.3	1.4	0.71	1.8	1.2
25	1.3	4.4	4.1	16	e3.00	e3.9	3.0	2.1	1.8	2.0	2.4	1.2
26	3.1	3.8	4.5	7.5	e3.50	e3.7	2.6	2.1	1.4	2.0	1.6	1.2
27	1.7	3.6	3.4	7.2	e4.5	e3.5	2.5	1.7	1.1	1.6	1.6	1.0
28	1.6	6.4	2.8	5.6	e3.7	e3.3	2.2	1.5	0.99	1.1	1.5	0.86
29	1.4	5.3	8.3	4.8	e2.8	e3.1	2.1	1.2	0.93	1.0	1.5	0.86
30	1.4	4.4	5.5	4.6	---	e8.0	2.6	1.4	6.5	0.94	1.8	0.95
31	1.5	---	4.4	3.8	---	e3.9	---	17	---	1.8	1.4	---
MEAN	1.60	3.52	3.44	4.60	4.99	7.68	3.69	4.40	2.51	2.49	2.50	1.81
MAX	3.1	17	8.3	16	33	35	11	18	7.7	11	25	7.5
MIN	1.2	1.5	2.0	2.1	2.8	2.7	1.8	1.2	0.93	0.71	0.84	0.81

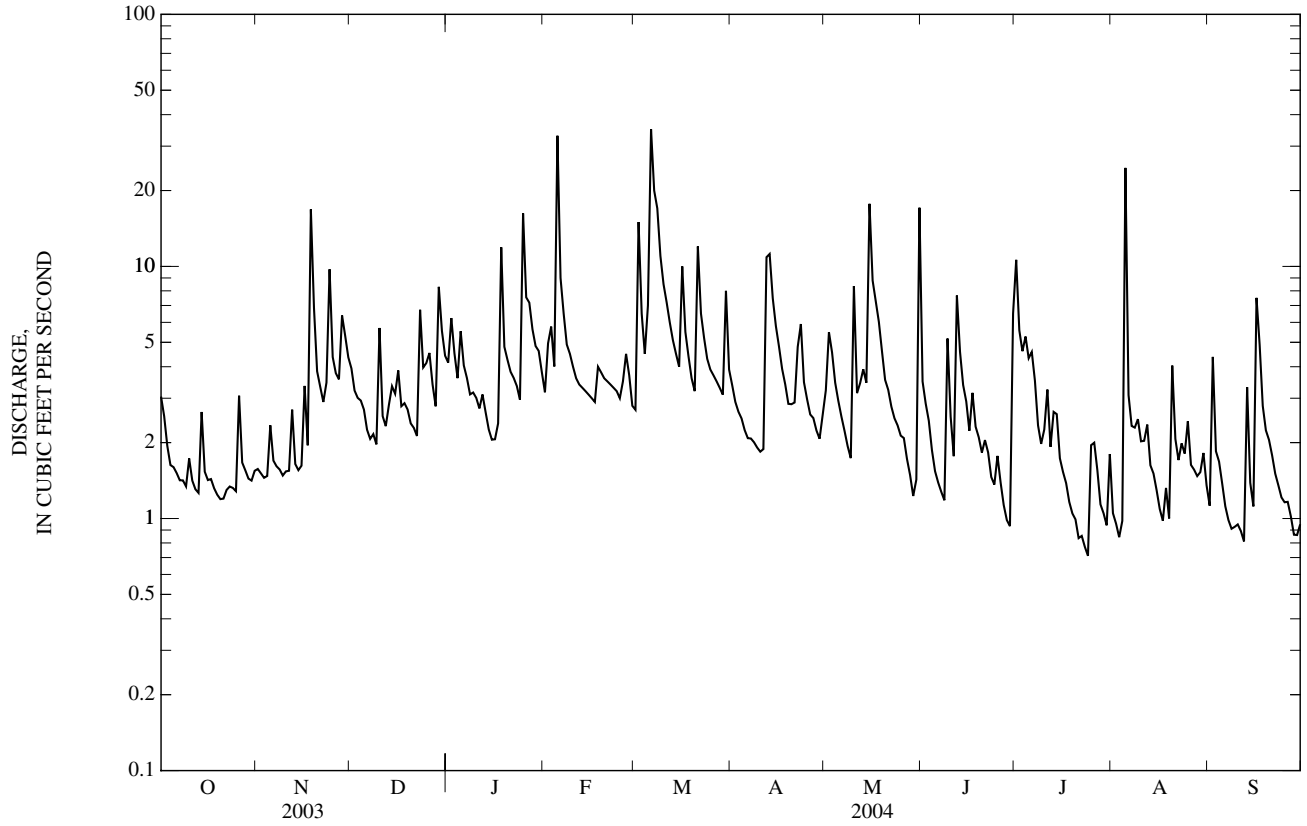
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	3.02	3.93	5.42	4.29	10.2	6.26	3.87	7.91	4.96	2.08	1.55	3.09
MAX	4.45	4.35	7.39	4.60	15.6	7.68	4.05	11.4	7.42	2.49	2.50	4.78
(WY)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)	(2003)	(2003)	(2003)	(2004)	(2004)	(2003)
MIN	1.60	3.52	3.44	3.98	4.99	4.83	3.69	4.40	2.51	1.67	0.35	1.81
(WY)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2004)	(2003)	(2002)	(2004)

03432376 HARPETH RIVER TRIB AT MT. HOPE ROAD AT FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL MEAN	5.26		3.60		4.75	
HIGHEST ANNUAL MEAN					5.91	2003
LOWEST ANNUAL MEAN					3.60	2004
HIGHEST DAILY MEAN	69	Feb 15	35	Mar 6	69	Feb 15, 2003
LOWEST DAILY MEAN	0.71	Jul 27	0.71	Jul 24	0.12	Sep 12, 2002
ANNUAL SEVEN-DAY MINIMUM	0.99	Jul 21	0.91	Jul 18	0.13	Sep 7, 2002
MAXIMUM PEAK STAGE			16.91	Feb 6	a16.91	Feb 6, 2004
INSTANTANEOUS LOW FLOW			0.60	Jul 24	0.11	Sep 13, 2002
10 PERCENT EXCEEDS	9.5		6.5		8.5	
50 PERCENT EXCEEDS	3.3		2.7		3.2	
90 PERCENT EXCEEDS	1.3		1.2		1.3	

a From high water mark in gage house, resulting from backwater from the Harpeth River.
e Estimated



03432387 SOUTH PRONG SPENCER CREEK NEAR FRANKLIN, TN

LOCATION.--Lat 35°56'38", long 86°49'35", Williamson County, Hydrologic Unit 05130204, on left upstream side of the bridge on Cool Spring Blvd., 1.7 miles northeast of Franklin, Tennessee.

DRAINAGE AREA.--2.66 mi^2.

PERIOD OF RECORD.--June 2000 to current year.

GAGE.--Data logger.

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 CURRENT YEAR.--Maximum discharge, 310 ft^3/s, Aug. 5, gage height, 10.06 ft; minimum daily discharge, 0.39 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	0.65	3.7	4.4	5.7	12	3.7	5.6	2.8	25	1.5	1.2
2	1.3	0.60	3.2	5.6	9.0	14	3.1	12	2.4	7.0	1.5	2.7
3	1.2	0.59	3.0	3.8	12	7.5	2.8	6.4	2.3	3.8	1.4	1.6
4	1.1	0.59	2.9	3.5	9.3	4.9	2.6	3.7	2.0	4.7	5.2	1.3
5	1.1	0.96	2.5	6.0	160	32	2.4	3.0	1.9	3.0	49	1.3
6	1.0	0.61	2.3	4.3	64	32	2.3	2.6	1.8	3.4	3.9	1.2
7	0.93	0.53	2.1	3.7	30	18	2.2	2.3	1.7	4.5	2.7	1.2
8	0.86	0.49	2.0	3.5	20	11	2.1	2.1	5.7	2.8	2.3	1.2
9	0.83	0.46	1.9	3.5	15	7.6	2.0	1.9	2.4	2.4	2.1	1.2
10	2.1	0.42	6.9	3.0	11	5.3	1.9	9.2	2.0	2.8	1.9	1.1
11	1.1	0.40	3.5	2.7	7.8	4.0	1.9	6.1	1.9	3.8	2.3	1.1
12	0.92	2.0	3.1	2.5	7.7	3.4	16	3.3	17	2.3	2.3	1.1
13	0.86	0.80	3.6	2.4	5.4	3.1	30	4.5	11	2.7	1.9	1.4
14	2.6	0.59	4.1	2.2	4.4	2.9	19	4.9	4.7	2.3	1.7	1.1
15	1.1	0.61	3.2	2.1	3.8	2.7	11	27	3.4	1.9	1.6	1.0
16	0.93	1.9	3.9	2.0	3.3	2.7	7.0	12	2.9	1.8	1.6	8.2
17	0.91	0.96	3.2	2.2	3.0	2.4	4.8	7.2	3.7	1.7	1.5	2.8
18	0.83	20	2.9	17	2.7	2.5	3.6	4.6	2.7	1.6	1.5	0.97
19	0.79	7.1	2.7	8.7	2.5	2.1	3.1	3.5	2.4	1.6	1.4	0.79
20	0.79	3.7	2.6	6.1	2.4	10	2.8	3.0	2.2	1.6	4.1	0.66
21	0.76	2.7	2.4	4.6	2.2	8.3	2.9	2.6	2.0	1.5	2.0	0.57
22	0.75	2.2	2.2	3.8	2.0	4.4	4.5	2.4	2.1	1.4	1.7	0.49
23	0.73	2.0	9.1	3.3	1.9	3.3	6.3	2.2	1.9	1.4	2.1	0.45
24	0.70	14	6.0	3.0	1.9	2.9	3.1	2.0	1.8	1.4	1.7	0.42
25	0.71	5.9	4.8	24	1.8	2.7	2.6	1.9	1.9	1.9	1.7	0.41
26	2.2	4.3	3.9	15	2.8	2.4	2.3	1.8	1.8	2.0	1.5	0.41
27	1.1	4.3	3.4	12	2.0	2.3	2.1	1.7	1.7	1.7	1.4	0.40
28	0.84	11	3.1	9.2	1.8	2.2	1.9	1.7	1.7	1.6	1.4	0.40
29	0.80	6.1	8.5	7.8	1.8	11	1.8	1.6	2.2	1.5	1.3	0.40
30	0.77	4.6	7.4	6.9	---	6.1	2.4	1.7	9.9	1.4	1.3	0.39
31	0.71	---	5.3	6.2	---	5.5	---	22	---	2.4	1.2	---
TOTAL	32.82	101.06	119.4	185.0	397.2	231.2	154.2	166.5	103.9	98.9	108.7	37.46
MEAN	1.06	3.37	3.85	5.97	13.7	7.46	5.14	5.37	3.46	3.19	3.51	1.25
MAX	2.6	20	9.1	24	160	32	30	27	17	25	49	8.2
MIN	0.70	0.40	1.9	2.0	1.8	2.1	1.8	1.6	1.7	1.4	1.2	0.39
CFSM	0.40	1.27	1.45	2.24	5.15	2.80	1.93	2.02	1.30	1.20	1.32	0.47
IN.	0.46	1.41	1.67	2.59	5.55	3.23	2.16	2.33	1.45	1.38	1.52	0.52

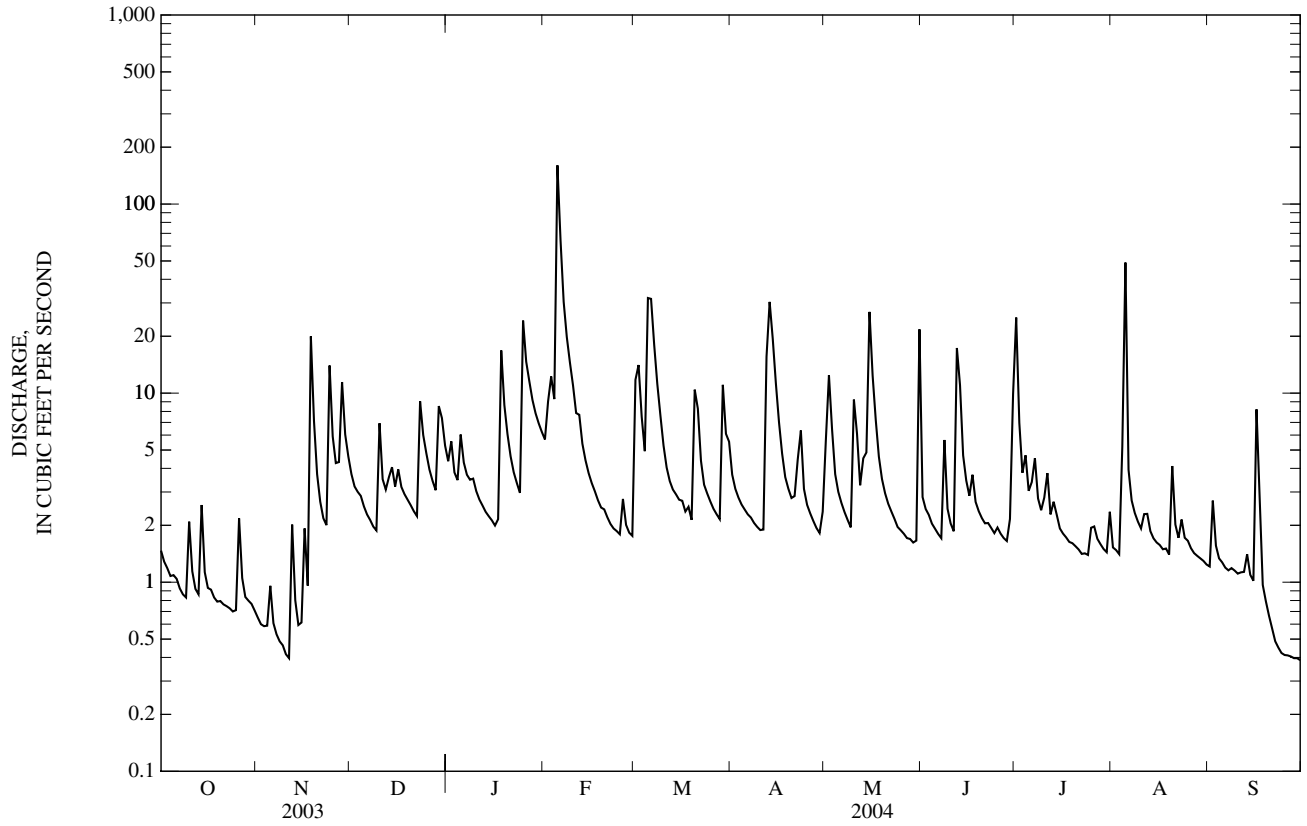
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	1.37	3.39	5.50	5.25	13.3	7.61	4.11	7.27	3.33	1.23	1.22	1.96
MAX	2.78	3.69	7.21	8.63	20.1	14.8	5.68	13.3	6.23	3.19	3.51	5.36
(WY)	(2003)	(2002)	(2003)	(2002)	(2003)	(2002)	(2002)	(2003)	(2003)	(2004)	(2004)	(2003)
MIN	0.06	2.87	3.85	2.58	4.41	3.85	1.51	2.18	0.95	0.16	0.27	0.30
(WY)	(2001)	(2003)	(2004)	(2003)	(2002)	(2003)	(2001)	(2001)	(2000)	(2000)	(2000)	(2000)

03432387 SOUTH PRONG SPENCER CREEK NEAR FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	1,956.09		1,736.34			
ANNUAL MEAN	5.36		4.74		4.70	
HIGHEST ANNUAL MEAN					5.75	2003
LOWEST ANNUAL MEAN					3.25	2001
HIGHEST DAILY MEAN	135	Feb 15	160	Feb 5	160	Feb 5, 2004
LOWEST DAILY MEAN	0.33	Sep 1	0.39	Sep 30	a0.01	Aug 23, 2000
ANNUAL SEVEN-DAY MINIMUM	0.37	Aug 26	0.40	Sep 24	0.01	Oct 28, 2000
MAXIMUM PEAK FLOW			310	Aug 5	315	May 5, 2003
MAXIMUM PEAK STAGE			10.06	Aug 5	10.19	May 5, 2003
ANNUAL RUNOFF (CFSM)	2.01		1.78		1.77	
ANNUAL RUNOFF (INCHES)	27.36		24.28		24.02	
10 PERCENT EXCEEDS	8.7		9.2		9.6	
50 PERCENT EXCEEDS	2.4		2.4		2.1	
90 PERCENT EXCEEDS	0.58		0.83		0.36	

a Many days in 2000 and 2001 water year.



03432390 SPENCER CREEK NEAR FRANKLIN, TN

LOCATION.--Lat 35°56'36", long 86°51'16", Williamson County, Hydrologic Unit 05130204, on right downstream side of bridge on U.S. Highway 31, 1.5 mi northeast of Franklin.

DRAINAGE AREA.--10.3 mi^2.

PERIOD OF RECORD.--April 1999 to current year. Occasional low-flow measurements, water year 1959, 1975.

GAGE.--Data collection platform and crest-stage gage.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 517 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 18	1445	642	8.72	May 31	0230	635	8.70
Feb 5	1345	*1,940	*10.88	Jul 1	1430	711	8.92
Mar 5	1845	673	8.81	Aug 5	0530	1,650	10.60

Minimum discharge, 3.5 ft^3/s, on several days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.2	16	18	18	62	20	24	14	99	5.1	3.9
2	8.9	6.0	14	22	29	48	18	40	11	25	4.2	21
3	8.3	5.8	14	17	34	30	16	26	12	16	3.7	9.3
4	8.0	5.8	15	16	25	25	14	20	9.3	18	28	7.0
5	7.8	11	13	24	695	131	13	17	7.9	13	233	6.0
6	8.6	8.1	13	17	566	101	13	16	7.0	13	20	5.2
7	7.4	7.1	11	15	80	49	13	14	6.4	20	12	4.8
8	7.2	6.4	10	15	52	35	12	13	20	11	10	4.5
9	7.3	5.9	9.5	16	41	28	11	12	11	9.3	8.8	3.9
10	14	5.7	33	13	34	23	11	59	9.1	9.1	7.9	3.7
11	10	5.4	16	12	28	21	10	39	7.4	13	11	3.6
12	8.1	14	14	12	30	19	66	20	61	8.5	13	3.7
13	7.3	8.5	16	11	24	17	100	30	32	7.4	7.8	6.5
14	18	6.5	20	10	22	17	52	26	17	12	6.6	5.3
15	9.5	7.5	15	9.7	20	16	35	118	13	6.8	5.5	4.5
16	7.9	20	19	9.2	18	18	27	46	11	6.0	5.0	48
17	7.8	11	16	10	17	15	23	32	16	5.5	4.6	36
18	7.0	94	15	61	16	16	20	26	11	5.0	5.2	12
19	6.4	39	13	26	15	13	18	21	9.3	4.5	4.9	9.6
20	6.1	23	12	21	15	45	17	19	7.8	4.4	22	8.2
21	5.9	18	11	18	14	30	17	17	7.0	4.2	16	7.0
22	5.7	15	11	16	13	21	38	15	7.1	3.7	7.7	6.1
23	5.5	14	35	14	12	19	47	13	6.9	3.9	9.1	5.6
24	5.3	56	22	13	12	17	28	12	6.3	3.7	7.1	5.3
25	5.3	22	19	91	11	16	22	11	7.7	6.1	7.5	5.1
26	17	18	16	38	18	15	20	10	7.3	9.7	6.7	4.8
27	10	18	16	30	14	14	17	9.8	5.9	6.3	5.7	4.5
28	8.1	40	14	25	12	13	15	9.8	5.4	4.8	5.0	4.0
29	7.4	22	35	22	12	47	14	9.3	15	4.2	4.6	3.9
30	7.1	19	27	20	---	26	16	11	41	3.8	4.3	3.8
31	6.7	---	21	18	---	26	---	88	---	11	4.1	---
MEAN	8.41	18.0	17.1	21.3	65.4	31.4	24.8	26.6	13.4	11.9	16.0	8.56
MAX	18	94	35	91	695	131	100	118	61	99	233	48
MIN	5.3	5.4	9.5	9.2	11	13	10	9.3	5.4	3.7	3.7	3.6

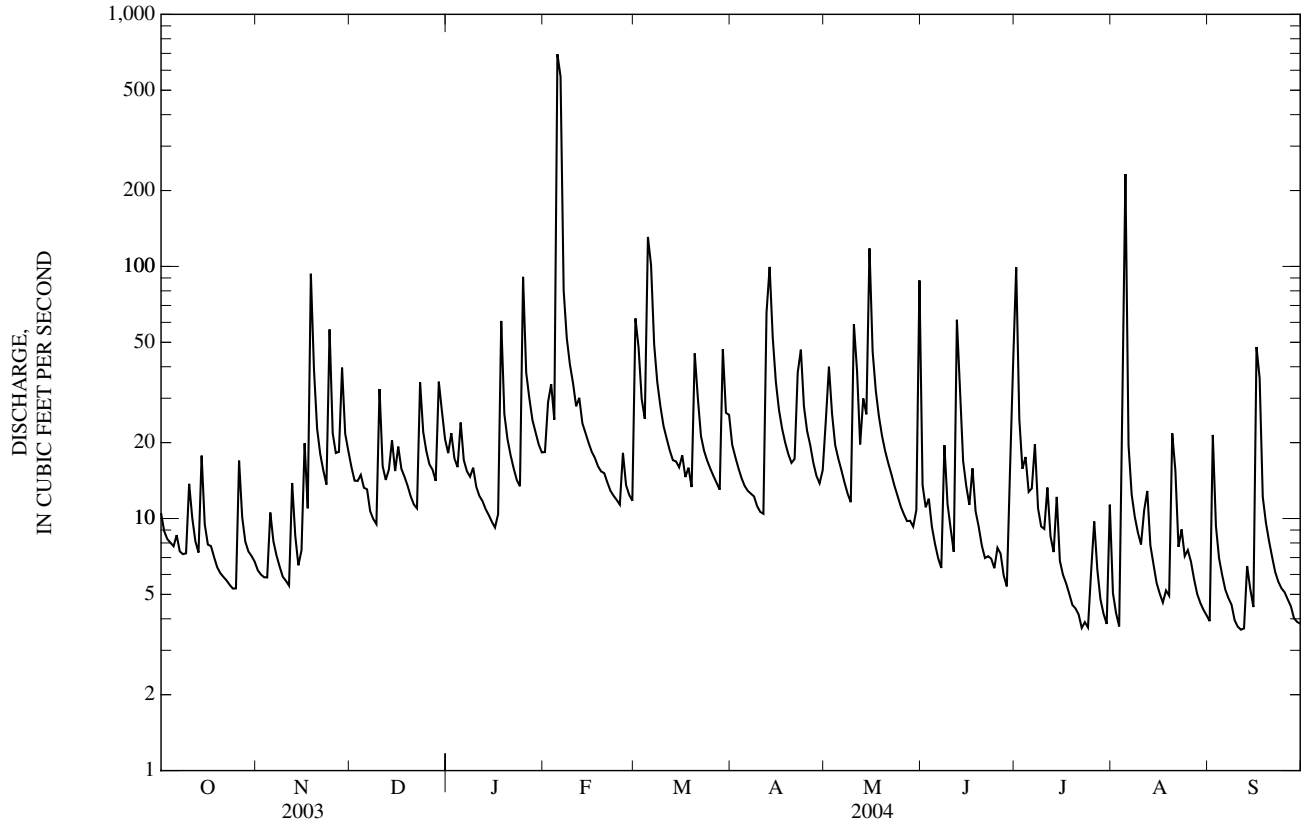
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	8.80	16.6	21.9	20.2	52.5	29.0	18.9	29.3	10.6	6.90	7.55	10.7
MAX	16.3	22.4	32.0	35.1	95.1	54.9	29.9	60.2	21.0	11.9	16.0	27.8
(WY)	(2003)	(2001)	(2003)	(2002)	(2003)	(2002)	(2000)	(2003)	(2003)	(2004)	(2004)	(2003)
MIN	1.80	7.77	9.54	11.0	15.0	18.4	9.83	13.1	3.53	3.42	2.73	2.44
(WY)	(2001)	(2000)	(2000)	(2003)	(2002)	(2003)	(2001)	(1999)	(2002)	(2000)	(1999)	(1999)

03432390 SPENCER CREEK NEAR FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL MEAN	25.7		21.7		19.9	
HIGHEST ANNUAL MEAN					27.3	2003
LOWEST ANNUAL MEAN					14.5	2000
HIGHEST DAILY MEAN	685	Feb 15	695	Feb 5	695	Feb 5, 2004
LOWEST DAILY MEAN	2.7	Jul 21	3.6	Sep 11	0.78	Sep 18, 1999
ANNUAL SEVEN-DAY MINIMUM	3.8	Jul 15	4.2	Jul 18	0.99	Sep 6, 1999
MAXIMUM PEAK FLOW			1,940	Feb 5	3,910	May 5, 2003
MAXIMUM PEAK STAGE			10.88	Feb 5	12.04	May 5, 2003
INSTANTANEOUS LOW FLOW			a3.5	Jul 22	0.77	Jun 30, 2000
10 PERCENT EXCEEDS	39		35		37	
50 PERCENT EXCEEDS	12		13		8.7	
90 PERCENT EXCEEDS	5.4		5.3		2.8	

a Also occurred several days.



03432400 HARPETH RIVER BELOW FRANKLIN, TN

LOCATION.--Lat 35°56'53", long 86°52'54", Williamson County, Hydrologic Unit 05130204, on right bank 0.1 mi below bridge on U.S. Highway 431, 1.2 mi downstream from Spence Creek, 1.8 mi northwest of the courthouse in Franklin, and at mile 84.3.

DRAINAGE AREA.--210 mi^2, includes 15 mi^2 without surface drainage.

PERIOD OF RECORD.--August 1988 to September 1999, discharge for gage height of 6.00 ft and below only. October 1999 to current year.

GAGE.--Data collection platform.

REMARKS.--Records good. Flow is affected by Franklin sewage treatment plant outflow 1.1 mi upstream. Periodic observations of water temperature and specific conductance are published in the report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum gage height, 28.97 ft, Feb. 4, 1990; minimum discharge, 3.0 ft^3/s, Aug. 19, 1988, Sept. 12, 18, 1999; minimum daily, 4.1 ft^3/s, Aug. 18, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0915	*13,300	*28.11	Mar 6	0945	5,130	19.07

Minimum discharge, 24 ft^3/s, July 24, 25.
Minimum daily discharge, 30 ft^3/s, July 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	40	463	392	259	335	271	115	218	422	88	65
2	87	37	341	367	271	1,890	230	215	112	538	66	220
3	79	36	267	324	579	928	199	179	91	309	51	287
4	72	34	240	281	534	673	176	162	82	206	63	162
5	63	58	213	441	4,600	1,010	159	134	75	178	1,140	120
6	63	68	186	536	12,100	4,190	146	112	64	151	286	98
7	62	47	154	394	4,440	1,540	135	100	61	159	150	81
8	60	44	142	322	1,340	934	136	90	77	115	106	73
9	49	43	132	304	981	716	127	83	76	94	87	67
10	57	34	274	266	808	577	113	186	111	84	75	61
11	58	34	437	228	669	478	109	604	62	87	72	57
12	56	47	298	201	615	407	416	188	151	77	94	53
13	54	53	243	176	542	343	1,900	194	424	65	86	72
14	69	44	291	155	477	296	2,020	163	176	87	73	68
15	59	43	291	145	433	259	951	955	117	67	62	58
16	53	80	272	133	404	254	668	608	96	56	56	119
17	50	85	259	127	393	222	513	401	94	54	51	958
18	50	422	236	929	413	203	408	276	93	50	50	820
19	42	836	214	922	373	189	330	218	78	47	49	304
20	41	556	184	581	345	247	265	170	69	45	91	193
21	37	326	156	428	313	333	225	140	62	48	190	142
22	36	226	141	341	275	266	254	119	58	46	109	112
23	40	173	239	280	255	219	263	104	76	39	94	94
24	40	560	615	241	229	194	219	93	101	30	150	78
25	32	566	456	1,250	204	177	176	84	93	66	200	69
26	63	353	343	1,160	241	167	153	80	172	90	419	60
27	55	272	276	725	331	153	133	71	115	178	176	54
28	58	1,750	233	531	270	139	118	69	77	84	115	49
29	51	1,130	273	419	225	282	108	67	77	64	93	47
30	48	641	656	365	---	424	108	63	223	55	82	45
31	43	---	516	303	---	324	---	384	---	65	72	---
TOTAL	1,727	8,638	9,041	13,267	32,919	18,369	11,029	6,427	3,381	3,656	4,496	4,686
MEAN	55.7	288	292	428	1,135	593	368	207	113	118	145	156
MAX	100	1,750	656	1,250	12,100	4,190	2,020	955	424	538	1,140	958
MIN	32	34	132	127	204	139	108	63	58	30	49	45

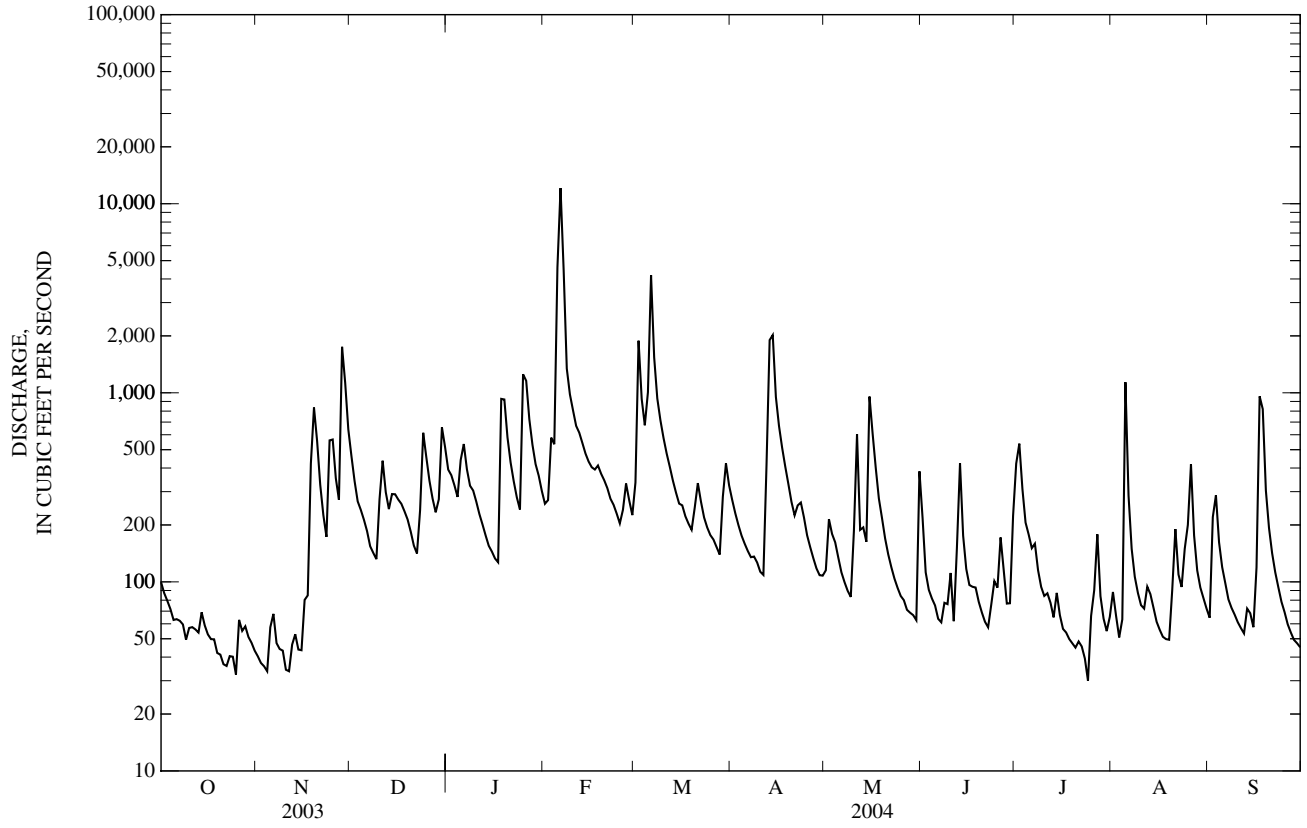
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	58.0	185	448	420	996	591	311	392	121	45.9	40.7	68.2
MAX	231	487	757	923	1,764	1,017	748	1,248	591	118	145	369
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2000)	(2003)	(2003)	(2004)	(2004)	(2003)
MIN	7.68	16.7	115	173	306	382	110	66.8	32.0	17.8	8.22	10.0
(WY)	(1994)	(1999)	(2000)	(2000)	(2002)	(2003)	(1999)	(2001)	(2002)	(2000)	(1988)	(1993)

03432400 HARPETH RIVER BELOW FRANKLIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	164,462		117,636			
ANNUAL MEAN	451		321		334	
HIGHEST ANNUAL MEAN					521	2003
LOWEST ANNUAL MEAN					207	2000
HIGHEST DAILY MEAN	9,930	Feb 16	12,100	Feb 6	12,100	Feb 6, 2004
LOWEST DAILY MEAN	18	Aug 26	30	Jul 24	4.1	Aug 18, 1988
ANNUAL SEVEN-DAY MINIMUM	19	Aug 26	38	Oct 19	4.4	Aug 12, 1988
MAXIMUM PEAK FLOW			13,300	Feb 6		
MAXIMUM PEAK STAGE			28.11	Feb 6	28.97	Feb 4, 1990
INSTANTANEOUS LOW FLOW			a24	Jul 24	3.0	Aug 19, 1988
10 PERCENT EXCEEDS	884		605		675	
50 PERCENT EXCEEDS	159		158		113	
90 PERCENT EXCEEDS	32		51		15	

a Also occurred July 25.



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 mi^2, includes 15 mi^2 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.--Data collection platform. Datum of gage is 541.04 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Apr. 11, 1920, to Oct. 31, 1929, Jan. 1, 1932, to Sept. 30, 1933, nonrecording gage at site 2.8 mi downstream at datum 7.85 ft lower.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1300	*20,100	*20.04	Mar 6	1130	8,330	13.06

Minimum discharge, 41 ft^3/s, July 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	87	758	764	515	635	561	293	513	692	91	85
2	212	83	586	788	493	2,970	478	548	314	1,130	103	114
3	188	78	480	686	1,000	1,760	413	522	288	641	71	412
4	172	77	458	590	1,040	1,180	365	453	218	427	54	287
5	154	85	433	607	7,700	1,360	326	386	188	346	1,740	209
6	149	133	395	817	18,400	7,150	303	321	151	293	630	150
7	142	137	359	668	11,900	3,260	281	276	134	351	301	114
8	136	102	338	570	2,730	1,710	272	241	126	289	206	94
9	125	91	322	538	1,810	1,240	261	216	148	234	158	80
10	118	87	495	494	1,440	995	237	207	186	198	127	69
11	129	77	792	428	1,170	835	226	803	142	205	105	61
12	123	79	637	390	1,060	721	645	403	124	269	119	62
13	118	101	522	351	964	616	2,380	368	596	206	131	72
14	123	105	590	324	855	546	3,420	350	452	213	115	385
15	151	107	617	302	779	490	1,680	2,800	299	198	85	140
16	126	171	608	281	712	479	1,130	1,680	266	157	64	117
17	112	218	662	274	667	432	887	1,070	215	135	59	885
18	106	486	590	990	654	390	725	819	223	118	52	1,240
19	100	1,410	526	1,600	613	362	604	667	188	98	50	561
20	90	967	447	1,000	569	381	510	519	139	84	61	372
21	85	629	376	789	526	707	455	426	113	74	172	287
22	76	451	371	658	465	549	1,250	e400	99	71	199	232
23	73	359	445	541	422	451	1,010	e350	99	59	123	197
24	75	708	987	476	398	399	968	e280	135	55	217	170
25	75	943	877	2,050	368	361	687	226	162	66	225	143
26	98	653	686	2,490	377	340	549	212	176	229	454	124
27	147	513	540	1,440	485	317	441	195	228	285	282	107
28	128	1,480	464	1,060	460	295	367	176	139	189	e190	90
29	119	1,880	483	864	394	386	318	163	104	122	e150	80
30	103	992	1,120	744	---	876	300	155	289	86	e120	74
31	93	---	979	602	---	672	---	947	---	75	100	---
TOTAL	3,881	13,289	17,943	24,176	58,966	32,865	22,049	16,472	6,454	7,595	6,554	7,013
MEAN	125	443	579	780	2,033	1,060	735	531	215	245	211	234
MAX	235	1,880	1,120	2,490	18,400	7,150	3,420	2,800	596	1,130	1,740	1,240
MIN	73	77	322	274	368	295	226	155	99	55	50	61
CFSM	0.31	1.09	1.42	1.91	4.98	2.60	1.80	1.30	0.53	0.60	0.52	0.57
IN.	0.35	1.21	1.64	2.20	5.38	3.00	2.01	1.50	0.59	0.69	0.60	0.64

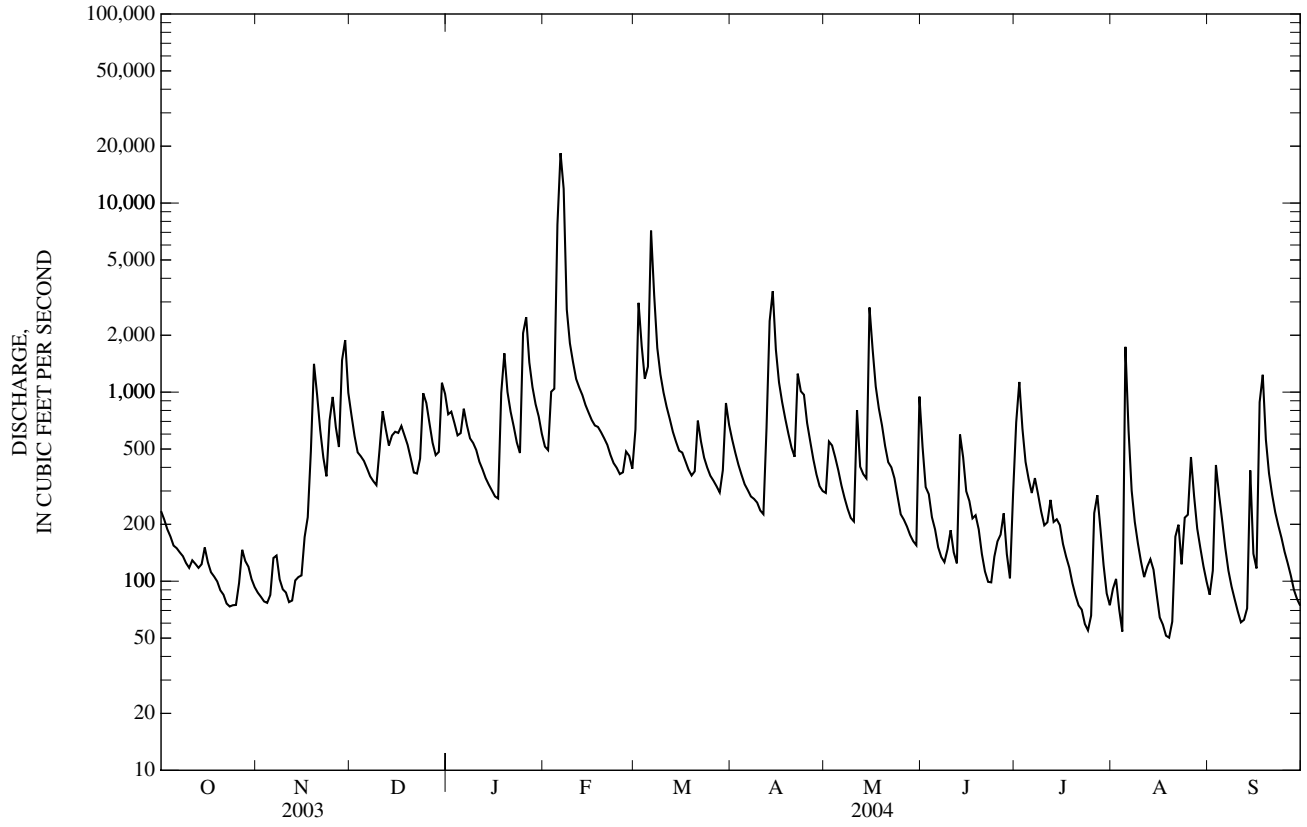
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)

MEAN	117	370	834	1,151	1,314	1,328	867	587	287	144	114	125
MAX	953	1,678	3,952	4,305	3,606	4,263	2,579	3,232	1,834	827	663	1,685
(WY)	(1976)	(1987)	(1927)	(1937)	(1950)	(1975)	(1927)	(1984)	(1928)	(1989)	(1926)	(1979)
MIN	1.90	10.4	32.3	40.5	90.2	167	138	38.7	13.1	15.6	5.76	1.28
(WY)	(1932)	(1940)	(1940)	(1940)	(1941)	(1941)	(1967)	(1941)	(1988)	(1954)	(1954)	(1948)

03433500 HARPETH RIVER AT BELLEVUE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1920 - 2004	
ANNUAL TOTAL	301,150		217,257			
ANNUAL MEAN	825		594		600	
HIGHEST ANNUAL MEAN					1,157	1973
LOWEST ANNUAL MEAN					137	1941
HIGHEST DAILY MEAN	17,600	Feb 16	18,400	Feb 6	32,400	Mar 13, 1975
LOWEST DAILY MEAN	39	Sep 21	50	Aug 19	0.00	Oct 5, 1922
ANNUAL SEVEN-DAY MINIMUM	44	Aug 27	69	Aug 14	0.07	Oct 4, 1922
MAXIMUM PEAK FLOW			20,100	Feb 6	40,000	Feb 13, 1948
MAXIMUM PEAK STAGE			20.04	Feb 6	a24.34	Feb 13, 1948
INSTANTANEOUS LOW FLOW			41	Jul 25	b0.00	Oct 5, 1922
ANNUAL RUNOFF (CFSM)	2.02		1.45		1.47	
ANNUAL RUNOFF (INCHES)	27.46		19.81		19.97	
10 PERCENT EXCEEDS	1,470		1,050		1,380	
50 PERCENT EXCEEDS	338		343		195	
90 PERCENT EXCEEDS	75		87		17	

a From floodmarks.
b Also occurred Oct. 6-10, 1922.
e Estimated



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 mi^2, includes 15 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

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.--Data collection platform. Datum of gage is 447.04 ft above NGVD of 1929. July 8, 1925, to Jan. 22, 1939, nonrecording gage at site 150 ft downstream, and Jan. 22, 1939, to July 26, 1988, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	2300	*24,100	*23.54	Apr 22	1230	14,800	18.06

Minimum discharge, 90 ft^3/s, July 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	164	1,160	1,390	887	1,030	1,010	720	1,270	733	189	240
2	318	158	912	1,420	842	4,420	860	1,270	753	1,400	155	351
3	289	151	748	1,310	1,460	3,460	739	1,360	639	996	156	887
4	265	146	681	1,120	1,780	2,170	639	1,130	480	650	123	706
5	247	204	657	1,060	10,600	2,170	552	954	399	499	2,560	476
6	237	282	599	1,210	19,300	8,700	494	801	347	430	1,740	373
7	230	240	533	1,120	17,900	6,140	457	673	295	576	720	314
8	216	221	473	963	6,180	3,030	432	561	260	534	467	270
9	207	187	441	907	3,140	2,180	409	470	243	381	361	237
10	208	171	609	840	2,550	1,710	378	421	285	373	297	216
11	209	166	1,080	730	2,110	1,420	351	881	300	372	251	193
12	206	162	1,010	658	1,860	1,230	991	878	411	298	233	300
13	198	195	814	598	1,720	1,060	3,280	709	621	304	240	273
14	204	195	1,110	547	1,540	931	5,170	649	857	491	249	348
15	228	233	1,070	505	1,420	844	3,090	4,910	495	326	223	464
16	224	388	1,020	465	1,290	804	1,980	3,570	380	252	196	281
17	202	442	1,200	436	1,180	752	1,500	2,080	322	216	180	537
18	194	969	1,060	929	1,110	666	1,210	1,520	317	190	179	1,710
19	181	2,680	917	2,420	1,080	613	997	1,280	314	164	171	1,100
20	172	2,100	782	1,640	1,010	608	847	975	264	143	185	650
21	158	1,390	665	1,250	942	1,260	878	782	221	127	242	491
22	152	989	583	1,040	840	1,080	8,220	648	198	115	336	399
23	143	761	756	885	743	861	4,590	546	186	111	333	340
24	138	1,310	1,520	777	696	737	4,120	464	182	102	331	298
25	137	1,740	1,550	2,630	637	646	2,520	412	308	95	438	261
26	206	1,340	1,200	4,390	595	576	1,790	367	290	401	455	227
27	251	1,060	991	2,560	680	529	1,340	338	289	356	613	203
28	242	1,070	846	1,830	758	490	1,050	311	274	339	624	185
29	214	2,910	890	1,440	649	588	877	289	207	219	465	174
30	196	1,580	1,910	1,230	---	1,400	792	273	261	161	331	166
31	177	---	1,820	1,040	---	1,250	---	3,030	---	201	281	---
TOTAL	6,602	23,604	29,607	39,340	85,499	53,355	51,563	33,272	11,668	11,555	13,324	12,670
MEAN	213	787	955	1,269	2,948	1,721	1,719	1,073	389	373	430	422
MAX	353	2,910	1,910	4,390	19,300	8,700	8,220	4,910	1,270	1,400	2,560	1,710
MIN	137	146	441	436	595	490	351	273	182	95	123	166
MED	207	335	912	1,060	1,180	1,060	994	720	304	326	281	307
CFSM	0.31	1.16	1.40	1.86	4.33	2.53	2.52	1.58	0.57	0.55	0.63	0.62
IN.	0.36	1.29	1.62	2.15	4.67	2.91	2.82	1.82	0.64	0.63	0.73	0.69

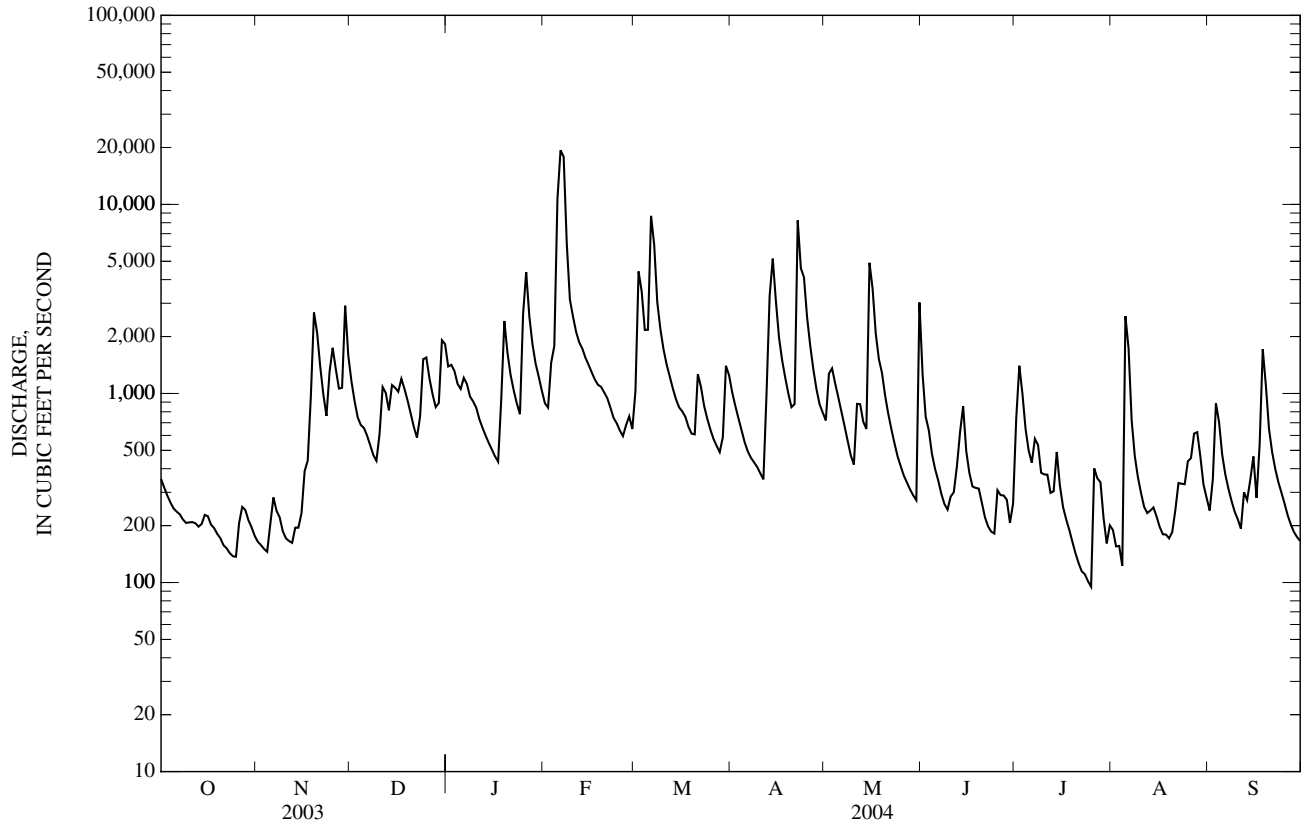
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	233	623	1,306	1,844	2,097	2,140	1,473	1,051	528	272	213	226
MAX	1,516	2,761	6,274	6,975	6,078	6,806	3,942	5,107	2,849	1,071	1,099	2,530
(WY)	(1976)	(1980)	(1927)	(1937)	(1950)	(1975)	(1927)	(1984)	(1928)	(1989)	(1926)	(1979)
MIN	28.9	63.2	94.9	116	187	279	269	99.3	59.0	62.7	38.5	25.0
(WY)	(1932)	(1955)	(1936)	(1940)	(1941)	(1941)	(1967)	(1941)	(1988)	(1954)	(1954)	(1939)

03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	465,266		372,059			
ANNUAL MEAN	1,275		1,017		996	
HIGHEST ANNUAL MEAN					2,000	1973
LOWEST ANNUAL MEAN					249	1941
HIGHEST DAILY MEAN	24,000	Feb 16	19,300	Feb 6	43,100	Feb 14, 1948
LOWEST DAILY MEAN	116	Aug 27	95	Jul 25	16	Sep 28, 1939
ANNUAL SEVEN-DAY MINIMUM	127	Aug 24	122	Jul 19	18	Sep 22, 1939
MAXIMUM PEAK FLOW			24,100	Feb 5	60,000	Jan 7, 1946
MAXIMUM PEAK STAGE			23.54	Feb 5	a32.20	Jan 7, 1946
INSTANTANEOUS LOW FLOW			90	Jul 25	12	Sep 18, 1939
ANNUAL RUNOFF (CFSM)	1.87		1.49		1.46	
ANNUAL RUNOFF (INCHES)	25.42		20.32		19.87	
10 PERCENT EXCEEDS	2,150		1,880		2,240	
50 PERCENT EXCEEDS	591		598		356	
90 PERCENT EXCEEDS	162		188		72	

a From high-water mark in gage house.



03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC 04...	0815	670	400	8.5	6
APR 21...	1200	827	310	15.0	9
AUG 12...	1040	235	372	22.5	20

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03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 36°19'22", long 87°13'42", Cheatham County, Hydrologic Unit 05130205, on left bank 0.4 mi downstream from Cheatham Dam, 2.0 mi southwest of Neptune, 2.6 mi upstream from Half Pone Creek, 9.7 mi west of Ashland City, and at mile 148.4.

DRAINAGE AREA.--14,163 mi^2.

PERIOD OF RECORD.--February 1993 to September 1997, October 1998 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1993 to September 1997, October 1998 to September 2004 (discontinued).
pH: February 1993 to September 1997, October 1998 to September 2004 (discontinued).
WATER TEMPERATURE: February 1993 to September 1997, October 1998 to September 2004 (discontinued).
DISSOLVED OXYGEN: February 1993 to September 1997, October 1998 to September 2004 (discontinued).

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Cheatham Dam and other reservoirs above station. Interruptions in the record were due to instrument malfunctions. Records for water temperature are rated excellent, for specific conductance and pH are rated good and for dissolved oxygen rated fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 298 microsiemens, May 4, 1995; minimum, 152 microsiemens, Jan. 23, 1999.
pH: Maximum, 9.0 units, March 11, 13, 2002; minimum, 6.0 units, June 13, 1993.
WATER TEMPERATURE: Maximum, 28.4°C, Aug. 2, 3, 1995; minimum, 2.3°C, Feb. 6, 1996.
DISSOLVED OXYGEN: Maximum, 16.0 mg/L, Jan. 16, 2001; minimum, 3.7 mg/L, June 29, 1994.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 265 microsiemens, Feb. 3; minimum, 175 microsiemens, Feb. 8.
pH: Maximum, 8.5 units, Oct. 3, 4, April 8, July 21, 22; minimum, 7.3 units, Sept. 9.
WATER TEMPERATURE: Maximum, 26.0°C, Aug. 4; minimum, 5.5°C, Feb. 1.
DISSOLVED OXYGEN: Maximum, 13.1 mg/L, Feb. 29, March 1, 26; minimum, 6.9 mg/L, Oct. 23, 24.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	236	217	228	201	190	195	241	232	237	255	247	251
2	241	220	230	199	189	193	235	230	233	247	239	244
3	244	225	233	194	187	191	238	235	238	244	237	240
4	243	223	230	208	188	203	243	238	240	246	237	240
5	246	229	237	212	206	208	242	239	240	249	240	244
6	237	224	231	225	211	217	242	239	241	252	240	245
7	230	221	225	228	214	220	244	240	242	249	240	245
8	223	215	219	227	217	222	242	237	240	247	238	244
9	215	211	213	228	217	223	239	228	233	247	236	241
10	214	209	210	229	221	225	230	224	227	252	240	248
11	216	210	212	231	219	226	232	227	230	249	241	245
12	211	209	210	230	223	226	236	231	234	250	241	244
13	213	209	211	224	211	219	240	231	235	250	242	246
14	215	202	213	224	211	217	237	230	234	251	247	248
15	217	202	212	231	220	225	241	233	237	253	247	250
16	224	204	214	228	222	226	240	235	237	256	246	251
17	220	210	215	227	216	223	243	234	239	254	245	249
18	224	207	213	229	196	221	248	241	243	254	244	248
19	220	197	214	229	213	221	249	244	247	252	245	248
20	218	203	212	225	217	221	246	240	243	252	239	246
21	216	192	199	222	210	216	244	239	241	243	232	236
22	200	193	195	218	210	214	244	234	239	247	236	242
23	208	197	203	221	212	216	243	230	236	253	238	245
24	215	204	210	225	214	220	242	236	239	249	234	241
25	217	206	211	245	224	234	248	239	244	250	240	246
26	217	206	212	246	239	243	250	239	244	244	231	236
27	217	208	212	244	238	242	247	236	240	242	227	233
28	213	207	210	244	237	241	246	238	241	234	222	228
29	219	208	212	247	239	242	244	232	238	249	229	239
30	219	200	208	247	238	242	246	235	242	248	235	242
31	203	194	198	---	---	---	252	243	248	244	229	237
MONTH	246	192	215	247	187	221	252	224	239	256	222	243

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	252	244	246	216	204	210	224	218	221	222	208	214
2	260	251	255	221	206	214	221	215	217	218	209	212
3	265	250	260	217	207	212	224	217	220	214	207	211
4	264	253	257	221	205	213	223	215	218	208	201	205
5	256	194	232	226	217	221	228	218	220	209	196	201
6	194	178	186	227	215	222	231	209	217	203	195	200
7	201	177	191	220	207	211	217	211	214	208	199	205
8	195	175	185	234	219	227	217	210	213	208	200	205
9	212	195	206	230	221	225	212	207	210	207	201	204
10	209	200	206	228	222	225	212	206	209	209	204	207
11	218	206	213	233	228	231	211	206	208	214	208	210
12	219	215	217	234	228	232	212	203	207	218	211	214
13	219	213	216	228	215	221	220	204	211	219	212	215
14	227	217	221	217	211	215	218	207	213	219	210	214
15	226	222	224	214	209	212	207	201	203	211	196	205
16	227	223	225	218	212	215	212	198	206	214	203	208
17	226	221	224	221	212	216	220	208	213	219	213	216
18	227	221	225	217	208	213	228	216	222	231	219	226
19	236	224	228	218	207	214	228	216	221	247	229	233
20	225	216	220	210	199	204	232	215	224	239	229	234
21	218	214	216	209	199	203	233	220	226	248	235	244
22	221	209	215	209	202	206	226	181	205	248	223	232
23	225	218	222	208	196	201	199	179	191	248	225	233
24	224	211	218	213	199	206	206	195	200	244	225	234
25	216	206	213	217	205	210	215	204	210	243	229	235
26	219	207	212	217	204	211	225	210	217	239	225	232
27	217	209	212	210	204	208	228	214	217	225	220	224
28	217	208	213	213	209	211	229	215	223	226	220	222
29	216	208	212	217	210	213	226	210	217	237	220	225
30	---	---	---	220	212	217	219	209	212	231	218	226
31	---	---	---	224	217	221	---	---	---	230	192	210
MONTH	265	175	220	234	196	215	233	179	214	248	192	218
		JUNE			JULY			AUGUST			SEPTEMBER	
1	204	194	197	214	200	207	202	188	197	208	198	202
2	200	192	195	217	205	212	204	191	195	208	197	201
3	202	192	195	220	206	213	196	190	192	205	196	199
4	206	194	201	215	203	208	196	192	193	209	201	205
5	213	196	204	223	204	215	205	178	195	209	203	206
6	212	195	204	213	198	202	202	190	197	210	201	206
7	205	194	198	208	197	200	210	197	204	225	203	209
8	212	195	200	203	188	194	222	207	214	225	212	219
9	211	200	204	207	186	197	213	201	208	228	209	217
10	204	198	201	206	196	202	212	200	205	222	203	214
11	204	199	201	203	185	194	206	199	202	224	208	215
12	203	197	201	202	185	193	204	199	202	210	205	207
13	211	198	205	198	186	188	206	198	200	216	204	211
14	211	203	206	200	190	194	205	194	198	218	203	207
15	209	199	204	206	189	196	203	193	197	208	198	203
16	204	199	202	205	188	196	206	194	195	213	203	207
17	205	200	202	208	188	197	206	193	197	205	198	201
18	201	197	199	208	189	197	206	193	198	226	201	216
19	214	195	202	207	187	195	207	197	200	227	213	219
20	205	192	198	203	191	196	204	198	200	233	217	224
21	208	195	200	191	189	190	211	198	202	229	206	220
22	206	192	198	193	189	191	211	203	206	229	209	218
23	210	198	204	193	192	192	210	200	204	228	211	218
24	214	198	206	194	191	192	205	197	201	222	205	214
25	217	199	207	195	191	193	206	198	201	214	205	210
26	216	201	209	197	193	194	208	200	203	222	208	214
27	218	199	207	200	193	196	209	201	203	220	215	218
28	212	198	204	199	195	197	213	197	204	222	211	215
29	210	196	202	203	195	198	215	197	204	223	214	218
30	210	197	205	203	194	198	208	201	204	225	210	217
31	---	---	---	200	185	193	210	201	206	---	---	---
MONTH	218	192	202	223	185	198	222	178	201	233	196	212

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.8	20.4	20.7	17.3	17.2	17.3	12.2	11.6	11.9	8.4	8.1	8.2
2	20.4	20.1	20.3	17.6	17.2	17.4	11.8	11.5	11.6	8.9	8.4	8.6
3	20.1	19.8	19.9	17.8	17.3	17.6	11.6	11.4	11.4	9.8	8.9	9.4
4	20.0	19.7	19.8	17.7	17.5	17.6	11.4	11.3	11.3	10.4	9.8	10.2
5	19.7	19.4	19.6	18.0	17.7	17.9	11.3	10.8	11.0	10.5	10.3	10.4
6	19.7	19.2	19.5	18.0	17.5	17.8	10.8	10.6	10.7	10.3	9.5	9.9
7	19.6	19.4	19.5	17.5	17.2	17.3	10.7	10.4	10.6	9.5	9.0	9.2
8	19.7	19.3	19.5	17.2	16.6	16.9	10.4	10.2	10.3	9.0	8.4	8.6
9	19.8	19.6	19.7	16.6	16.2	16.4	10.5	10.2	10.4	8.5	8.0	8.2
10	19.8	19.7	19.7	16.2	15.9	16.1	10.6	10.4	10.5	8.1	7.8	7.9
11	20.0	19.6	19.8	16.4	16.1	16.2	10.4	10.2	10.3	7.9	7.6	7.7
12	20.0	19.9	19.9	16.2	15.7	16.1	10.2	10.0	10.1	7.8	7.6	7.7
13	20.0	19.8	19.9	15.9	15.2	15.7	10.0	9.6	9.8	7.8	7.5	7.6
14	20.0	19.4	19.8	15.2	14.9	15.1	9.6	9.1	9.4	7.7	7.5	7.6
15	19.4	19.2	19.3	15.0	14.7	14.9	9.2	9.0	9.1	7.8	7.6	7.7
16	19.3	19.0	19.1	15.0	14.7	14.8	9.0	8.9	8.9	7.8	7.5	7.6
17	19.1	18.7	18.9	14.8	14.5	14.7	8.9	8.8	8.8	8.0	7.8	7.9
18	18.7	18.5	18.6	14.9	14.6	14.7	8.9	8.7	8.8	8.0	7.8	7.9
19	18.7	18.4	18.6	14.9	14.5	14.7	8.7	8.3	8.6	7.8	7.2	7.7
20	18.8	18.4	18.6	15.0	14.8	14.9	8.3	8.0	8.2	7.2	6.7	7.0
21	18.7	18.5	18.6	15.0	14.6	14.8	8.0	7.8	7.9	6.7	6.4	6.6
22	18.7	18.4	18.5	15.3	15.0	15.1	8.2	7.9	8.0	6.4	6.1	6.2
23	18.6	18.4	18.6	15.3	15.2	15.3	8.4	8.0	8.2	6.3	6.0	6.2
24	18.5	18.4	18.4	15.2	14.3	14.7	8.2	8.1	8.2	6.5	6.2	6.3
25	18.6	18.3	18.4	14.3	13.8	14.1	8.1	7.9	8.0	6.5	6.2	6.4
26	18.6	18.0	18.3	13.8	13.3	13.5	8.0	7.7	7.8	7.3	6.4	6.9
27	18.1	17.8	17.9	13.4	13.3	13.4	7.7	7.4	7.6	7.3	7.1	7.3
28	17.8	17.4	17.6	13.3	12.7	13.0	7.9	7.5	7.7	7.1	6.8	6.9
29	17.4	17.1	17.2	12.7	12.2	12.4	8.2	7.9	8.1	6.8	6.5	6.6
30	17.4	17.0	17.2	12.3	12.0	12.2	8.3	8.0	8.1	6.5	6.0	6.2
31	17.4	17.2	17.3	---	---	---	8.3	8.1	8.2	6.0	5.8	5.9
MONTH	20.8	17.0	19.0	18.0	12.0	15.4	12.2	7.4	9.3	10.5	5.8	7.7
		FEBRUARY			MARCH			APRIL			MAY	
1	5.8	5.5	5.7	8.4	8.0	8.2	13.1	12.7	12.9	17.1	16.8	16.9
2	6.1	5.8	5.9	9.4	8.3	8.9	13.0	12.6	12.8	17.0	16.7	16.9
3	6.1	5.9	6.0	9.4	9.3	9.3	13.1	12.8	12.9	16.9	16.5	16.7
4	6.2	6.0	6.1	9.7	9.3	9.5	13.1	12.8	13.0	16.5	15.8	16.1
5	6.2	5.8	6.0	10.2	9.7	9.9	13.2	12.8	13.0	17.0	16.3	16.6
6	6.6	6.0	6.3	11.3	10.2	10.8	13.3	12.8	13.1	17.7	16.9	17.2
7	6.6	6.1	6.3	11.1	10.9	11.0	13.5	13.2	13.3	18.2	17.4	17.8
8	6.4	6.1	6.2	10.9	10.6	10.7	14.0	13.5	13.8	18.6	17.8	18.2
9	6.6	6.4	6.5	10.6	10.2	10.5	14.5	13.9	14.2	18.9	18.2	18.5
10	6.8	6.5	6.7	10.4	9.9	10.2	14.4	14.2	14.4	19.6	18.9	19.2
11	7.0	6.8	6.9	10.3	10.0	10.2	14.5	13.8	14.1	19.8	19.1	19.4
12	7.1	6.9	7.0	10.0	9.7	9.9	14.5	14.0	14.2	19.8	19.4	19.6
13	7.1	6.9	7.0	10.2	9.6	9.9	14.0	12.3	13.2	19.9	19.6	19.7
14	7.2	7.0	7.0	10.1	9.9	10.0	12.3	11.9	12.2	19.7	19.5	19.6
15	7.0	6.7	6.9	10.0	9.8	9.9	12.5	12.0	12.2	19.7	19.3	19.5
16	6.8	6.6	6.7	9.9	9.8	9.8	13.0	12.3	12.6	19.5	19.0	19.2
17	6.8	6.6	6.7	9.9	9.7	9.8	13.8	12.9	13.3	19.8	19.0	19.3
18	7.0	6.6	6.8	10.2	9.7	9.9	14.5	13.8	14.1	20.5	19.7	20.0
19	7.3	6.7	7.0	10.6	10.0	10.3	15.0	14.2	14.6	21.3	20.4	20.7
20	7.5	7.2	7.3	11.0	10.5	10.6	15.6	14.8	15.1	21.8	21.0	21.4
21	7.6	7.3	7.5	11.1	10.8	10.9	15.4	15.1	15.2	21.9	21.3	21.6
22	7.7	7.5	7.6	11.1	10.8	10.9	15.6	15.2	15.3	22.1	21.6	21.8
23	7.7	7.5	7.5	10.8	10.4	10.6	15.5	15.3	15.4	22.6	21.5	21.9
24	7.8	7.5	7.7	10.9	10.6	10.8	15.8	15.4	15.6	22.6	21.9	22.1
25	7.8	7.6	7.7	11.4	10.9	11.1	16.2	15.7	16.0	22.5	22.1	22.3
26	7.9	7.7	7.8	12.1	11.4	11.7	16.4	16.0	16.2	22.9	22.1	22.4
27	8.0	7.6	7.8	12.8	12.0	12.4	16.4	16.0	16.2	23.2	22.6	22.8
28	8.0	7.6	7.9	13.4	12.7	13.0	16.3	15.9	16.1	23.0	22.5	22.8
29	8.1	7.8	7.9	13.4	13.2	13.2	16.6	16.1	16.4	22.5	22.3	22.4
30	---	---	---	13.6	13.1	13.4	17.1	16.6	16.8	23.1	22.0	22.4
31	---	---	---	13.4	12.9	13.2	---	---	---	23.7	23.1	23.5
MONTH	8.1	5.5	6.9	13.6	8.0	10.7	17.1	11.9	14.3	23.7	15.8	20.0

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.3	23.5	23.9	23.3	22.6	23.0	25.4	24.7	25.1	24.1	23.7	23.9
2	24.1	23.7	24.0	22.8	22.4	22.6	25.2	24.6	24.9	24.0	23.6	23.7
3	24.1	23.6	24.0	22.9	22.6	22.7	25.7	24.8	25.3	24.4	23.7	24.0
4	23.6	22.9	23.3	23.2	22.7	22.9	26.0	25.4	25.7	24.5	24.2	24.4
5	23.0	22.6	22.9	23.1	22.8	22.9	25.9	24.9	25.4	24.7	24.4	24.5
6	23.2	22.6	22.8	23.9	22.6	23.1	25.0	24.7	24.9	24.8	24.4	24.6
7	24.0	23.2	23.6	23.9	22.4	23.1	24.8	24.4	24.6	24.8	24.2	24.6
8	24.3	23.8	24.0	24.6	22.1	22.4	24.7	24.3	24.5	24.4	24.0	24.2
9	24.8	23.7	24.3	23.0	21.9	22.6	25.2	24.6	25.0	24.3	24.0	24.2
10	25.1	24.6	24.8	22.9	22.2	22.5	25.8	25.0	25.4	24.5	24.0	24.2
11	25.1	24.5	24.8	23.0	22.7	22.9	25.5	25.2	25.3	24.4	23.8	24.0
12	25.1	24.7	24.9	23.4	22.8	23.1	25.2	24.3	24.8	23.9	23.6	23.8
13	25.1	24.8	25.0	23.9	23.3	23.6	24.3	23.6	23.9	24.5	23.9	24.2
14	25.1	24.6	24.8	24.4	23.3	23.9	23.8	23.0	23.4	25.2	24.3	24.5
15	24.7	24.3	24.4	24.2	23.6	23.9	23.8	23.1	23.5	24.4	24.2	24.3
16	25.0	24.3	24.7	24.0	23.2	23.6	23.8	23.2	23.5	24.2	23.8	24.0
17	25.0	24.4	24.6	24.1	23.0	23.5	23.8	23.2	23.5	24.1	23.9	24.0
18	24.8	24.3	24.5	24.1	23.3	23.6	24.1	23.4	23.7	24.1	23.1	23.4
19	24.6	23.6	24.1	24.3	23.6	23.9	24.5	23.9	24.2	23.1	22.7	22.9
20	23.7	23.4	23.5	---	23.7	23.8	24.4	24.0	24.2	22.9	22.5	22.7
21	23.5	22.9	23.3	---	23.8	24.5	24.3	23.9	24.1	22.8	22.6	22.7
22	24.1	22.7	23.2	25.6	24.7	25.2	24.0	23.6	23.8	22.6	22.4	22.5
23	24.1	23.5	23.8	25.6	25.0	25.3	23.9	23.5	23.8	22.7	22.4	22.5
24	24.1	23.6	23.8	25.5	25.3	25.4	24.1	23.3	23.7	22.8	22.4	22.6
25	23.7	23.3	23.5	25.4	24.7	25.0	24.0	23.7	23.9	22.9	22.6	22.8
26	23.3	22.7	23.0	25.1	24.5	24.9	24.2	23.8	24.0	22.8	22.5	22.7
27	23.5	22.9	23.2	25.0	24.3	24.7	24.3	23.9	24.1	22.8	22.6	22.7
28	23.6	22.8	23.2	25.1	24.8	24.9	24.4	24.0	24.2	22.6	22.2	22.5
29	24.0	23.2	23.6	25.0	24.6	24.8	24.3	23.8	24.1	22.5	22.1	22.2
30	23.7	23.1	23.3	24.9	24.6	24.7	23.8	23.6	23.7	22.2	21.7	21.9
31	---	---	---	25.4	24.8	25.1	23.9	23.5	23.7	---	---	---
MONTH	25.1	22.6	23.9	25.6	21.9	23.8	26.0	23.0	24.3	25.2	21.7	23.5

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	8.7	8.1	8.5	9.9	9.4	9.6	12.0	11.8	11.9
2	---	---	---	8.9	8.5	8.7	9.9	9.8	9.9	12.0	11.7	11.8
3	---	---	---	9.0	8.4	8.7	9.8	9.6	9.7	11.7	11.5	11.7
4	---	---	---	8.9	8.6	8.8	9.8	9.7	9.7	11.5	11.2	11.4
5	---	---	---	8.8	8.6	8.7	9.9	9.7	9.8	11.2	11.1	11.2
6	8.9	8.0	8.6	10.1	8.2	8.8	10.0	9.9	10	11.3	11.1	11.2
7	9.6	8.4	9.0	8.7	7.8	8.3	10.1	10.0	10.0	11.6	11.3	11.5
8	---	---	---	8.4	7.7	8.1	10.2	10.0	10.1	11.7	11.4	11.6
9	---	---	---	8.7	8.0	8.4	10.1	10.0	10.1	11.7	11.5	11.6
10	10.0	9.4	9.7	8.8	8.3	8.5	10.1	9.9	10.0	11.7	11.5	11.6
11	9.9	9.4	9.6	9.1	8.6	8.8	10.2	10.0	10.1	11.8	11.6	11.7
12	9.9	9.5	9.6	9.3	8.6	9.0	10.4	10.2	10.3	12.0	11.7	11.9
13	9.8	9.4	9.6	9.9	9.1	9.4	10.6	10.4	10.5	12.0	11.9	11.9
14	9.7	9.2	9.5	9.9	9.4	9.6	10.7	10.6	10.7	12.2	11.8	12.0
15	9.5	9.2	9.3	9.8	9.4	9.7	10.8	10.7	10.7	12.1	11.8	11.9
16	9.5	8.2	8.9	9.8	9.4	9.6	10.8	10.7	10.8	12.2	11.9	12.0
17	8.5	7.6	8.0	9.8	9.4	9.6	11.1	10.8	10.9	12.3	12.0	12.2
18	---	---	---	9.7	9.4	9.5	11.0	10.8	10.9	12.3	12.1	12.2
19	---	---	---	9.8	9.6	9.7	11.1	10.9	11.0	12.1	11.9	12.0
20	---	---	---	9.6	8.6	9.2	11.2	11.0	11.1	12.4	12.1	12.2
21	8.4	8.1	8.2	9.6	9.2	9.4	11.3	11.1	11.2	12.7	12.4	12.5
22	8.3	7.9	8.1	9.4	9.2	9.3	11.8	10.7	11.4	12.8	12.6	12.7
23	8.8	6.9	7.8	9.4	9.0	9.2	11.8	11.7	11.8	12.9	12.6	12.7
24	8.1	6.9	7.6	9.6	9.4	9.5	11.8	11.6	11.7	12.6	12.4	12.5
25	8.3	7.0	7.8	11.4	9.1	9.5	11.8	11.5	11.6	12.8	12.5	12.6
26	8.3	7.4	7.8	9.2	9.0	9.1	12.1	11.8	12.0	12.5	11.7	12.0
27	8.9	7.8	8.2	9.3	9.1	9.3	12.2	12.0	12.1	12.1	11.7	11.9
28	8.2	7.9	8.1	9.7	9.3	9.5	12.2	12.1	12.1	12.6	11.9	12.2
29	8.2	7.7	8.0	9.7	9.5	9.6	12.1	11.8	11.9	13.1	12.0	12.3
30	8.4	7.7	8.1	9.7	9.4	9.6	11.9	11.7	11.8	---	---	---
31	8.6	8.2	8.4	---	---	---	11.8	11.6	11.7	---	---	---
MONTH	10.0	6.9	8.6	11.4	7.7	9.1	12.2	9.4	10.8	13.1	11.1	12.0
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	13.2	13.0	13.1	12.0	11.6	11.8	11.4	11.0	11.2
2	---	---	---	13.0	12.2	12.7	12.2	11.6	11.9	11.1	10.7	10.9
3	---	---	---	12.5	12.0	12.2	12.1	11.7	11.9	11.1	10.6	10.8
4	12.3	12.2	12.3	12.5	12.3	12.4	12.3	11.6	12.0	11.0	10.0	10.3
5	12.7	11.9	12.4	12.6	12.3	12.4	12.9	12.0	12.4	10.5	10.0	10.3
6	12.3	11.7	12.0	12.3	11.3	11.9	13.2	12.4	12.7	10.4	9.6	10.0
7	12.3	12.3	12.3	12.3	11.8	12.1	13.2	12.8	13.0	10.3	9.5	10.0
8	12.6	12.3	12.4	12.5	11.9	12.2	13.2	12.7	13.0	10.5	9.9	10.2
9	12.6	12.4	12.5	11.9	11.3	11.6	13.2	12.5	12.9	10.6	10.0	10.3
10	12.6	12.3	12.5	11.4	11.2	11.3	12.9	12.1	12.5	10.7	10.2	10.5
11	12.5	11.8	12.2	11.6	11.2	11.4	12.1	11.6	11.8	10.6	10.1	10.4
12	12.0	11.6	11.8	12.0	11.6	11.8	11.7	11.0	11.3	10.5	9.9	10.1
13	11.9	11.6	11.7	11.9	11.5	11.7	11.1	10.7	10.9	10.2	9.2	9.8
14	12.0	11.8	11.9	11.6	11.4	11.5	11.0	10.4	10.7	9.8	8.7	9.4
15	12.2	12.0	12.1	11.7	11.5	11.6	11.6	10.9	11.3	9.6	8.9	9.3
16	12.3	12.2	12.3	12.1	11.7	11.9	11.7	11.4	11.5	8.9	8.3	8.5
17	12.5	12.3	12.4	12.6	12.0	12.3	11.6	11.2	11.4	9.0	8.3	8.5
18	12.5	12.3	12.4	12.6	12.2	12.4	11.3	10.8	11.1	9.5	8.7	9.0
19	12.8	12.4	12.5	12.8	12.4	12.5	11.2	10.7	11.0	9.8	9.1	9.4
20	12.5	12.3	12.3	12.6	12.3	12.4	11.4	10.8	11.1	10.0	9.6	9.8
21	12.4	12.3	12.3	12.6	12.2	12.4	11.4	10.9	11.1	9.9	9.4	9.6
22	12.5	12.3	12.4	12.6	12.2	12.4	11.1	9.5	10.3	10.0	9.4	9.7
23	12.6	12.4	12.5	13.1	12.4	12.7	10.3	9.2	9.6	9.9	9.3	9.5
24	13.0	12.5	12.6	13.1	12.7	12.9	10.6	9.8	10.2	9.9	9.2	9.4
25	12.9	12.6	12.7	13.2	12.8	13.0	10.6	9.4	10	9.7	9.0	9.3
26	13.0	12.7	12.8	13.5	12.8	13.1	9.7	9.1	9.4	9.6	9.1	9.3
27	12.9	12.7	12.8	13.0	12.7	12.8	9.7	9.4	9.5	9.3	8.9	9.1
28	13.2	12.8	12.9	12.9	12.4	12.6	10.2	9.3	9.8	8.9	8.2	8.7
29	13.2	13.0	13.1	12.7	12.1	12.4	10.9	10.1	10.5	8.7	8.2	8.4
30	---	---	---	12.5	12.0	12.3	11.3	10.8	11.1	8.3	7.7	8.0
31	---	---	---	12.2	11.8	12.0	---	---	---	11.4	8.1	10.6
MONTH	13.2	11.6	12.4	13.5	11.2	12.3	13.2	9.1	11.3	11.4	7.7	9.7

03435000 CUMBERLAND RIVER BELOW CHEATHAM DAM, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.3	9.3	9.9	10.8	9.9	10.3	10.6	10.2	10.4	11.8	8.5	10.6
2	10.4	9.3	10	10.3	9.0	9.7	10.5	10.0	10.2	11.0	7.5	10.3
3	10.4	9.8	10.1	10.0	9.2	9.6	10.9	10.3	10.6	10.9	10.4	10.7
4	10.0	9.0	9.6	11.0	9.1	10.1	11.3	10.5	10.9	10.9	10.0	10.6
5	10.1	9.1	9.7	10.7	8.2	9.8	11.1	10.5	10.7	10.7	9.8	10.3
6	10.7	9.5	10.1	11.7	9.9	10.5	10.5	9.8	10.1	11.1	10.4	10.7
7	11.1	8.6	10.3	10.5	9.3	9.9	10.2	9.3	9.6	11.1	9.0	10.4
8	11.3	9.2	10.3	10.0	9.5	9.8	10.5	9.7	10.0	10.1	8.7	9.4
9	11.4	8.6	10.1	9.9	9.4	9.7	10.7	10.3	10.5	11.2	7.2	9.3
10	12.1	7.5	10.7	9.9	9.1	9.4	11.1	10.4	10.7	11.0	8.9	10
11	11.8	10.0	11.3	10.1	9.4	9.8	11.1	10.5	10.8	10.6	9.2	10.2
12	11.3	10.7	11.0	9.8	9.4	9.7	11.1	10.5	10.8	10.4	9.6	10.1
13	10.7	10.1	10.5	10.3	9.5	9.8	11.1	10.5	10.9	9.7	8.4	9.1
14	10.5	9.7	10	10.0	9.0	9.5	11.2	10.5	10.8	10.2	8.2	9.0
15	10.2	9.1	9.8	9.7	8.6	9.1	11.3	10.7	11.0	9.9	8.1	9.2
16	11.0	9.0	10.2	9.2	8.0	8.7	11.7	10.8	11.2	10.3	8.7	9.6
17	11.1	8.8	10.4	9.0	8.0	8.5	12.0	11.2	11.5	10.5	9.4	10.0
18	11.5	9.7	10.9	9.2	7.8	8.6	12.0	11.3	11.7	10.4	8.5	9.2
19	11.4	10.6	11.1	9.5	7.6	8.7	12.1	11.4	11.7	9.6	8.2	8.8
20	11.3	10.8	11.0	9.3	8.1	8.7	11.8	11.2	11.4	9.4	8.3	8.9
21	11.4	10.1	11.1	10.1	9.2	9.8	11.3	10.2	10.8	10.7	8.3	9.7
22	11.7	10.0	10.9	10.4	9.1	9.8	10.8	10.2	10.5	10.6	8.6	9.9
23	11.5	10.5	11.0	10.6	9.8	10.1	10.8	10.2	10.5	10.6	8.7	9.9
24	11.3	10.1	10.7	11.2	9.8	10.3	11.0	10.2	10.6	10.8	7.3	9.7
25	10.5	8.7	10.0	11.2	9.7	10.4	11.1	10.5	10.8	10.7	7.9	9.8
26	10.1	9.6	9.9	10.0	9.6	9.8	11.2	10.4	10.9	10.1	7.3	9.1
27	10.3	9.6	10.1	9.7	9.2	9.5	11.3	10.4	11.0	9.4	8.2	9.1
28	10.7	9.6	10.2	10.0	9.2	9.7	11.1	10.4	10.7	10.9	8.4	9.6
29	10.6	9.6	10.2	10.3	9.8	10.1	10.8	10.2	10.5	10.5	8.7	9.8
30	10.9	9.7	10.2	10.4	9.9	10.2	10.5	7.5	9.0	10.1	8.6	9.5
31	---	---	---	10.4	10.1	10.2	11.0	10.1	10.5	---	---	---
MONTH	12.1	7.5	10.4	11.7	7.6	9.7	12.1	7.5	10.7	11.8	7.2	9.8

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03435305 RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAINS, TN

LOCATION.--Lat 36°38'32", long 86°59'18", Robertson County, Hydrologic Unit 05130206, on left bank in pump house of Springfield water plant, 0.2 mi south of Kentucky-Tennessee state line, 0.7 mi below Highway 161 bridge, 4.8 mi northwest of Barren Plains.

DRAINAGE AREA.--549 mi^2, includes 246 mi^2 without surface drainage.

PERIOD OF RECORD.--October 1994 to current year. Occasional low-flow measurements, water years 1966-1967 at site 1.8 mi upstream.

GAGE.-- Data collection platform. Datum of gage is 440.00 ft above NGVD of 1929 (levels based on information provided by City of Springfield).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0530	*11,000	*16.98	May 15	1945	5,930	12.07
Apr 22	2315	9,830	15.65	May 31	1545	6,880	12.90
Apr 23	2115	9,210	15.01	Jul 31	1900	4,670	10.99

Minimum discharge, 107 ft^3/s, Sept. 11, 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	492	233	818	1,280	757	396	547	1,240	3,130	412	1,470	142
2	450	222	703	1,660	726	615	508	1,730	1,840	472	615	135
3	412	223	628	2,060	1,450	591	475	2,000	1,450	373	424	188
4	390	215	604	1,550	1,480	504	446	2,040	1,250	359	348	167
5	366	226	605	1,680	2,920	531	418	1,600	1,100	403	393	184
6	344	251	566	1,670	8,040	2,430	398	1,350	958	494	467	147
7	327	285	508	1,330	3,460	1,660	385	1,160	856	782	347	131
8	311	283	474	1,200	2,490	1,190	378	1,030	767	760	279	127
9	300	260	450	1,130	2,040	1,010	363	927	770	577	250	120
10	293	248	450	1,020	1,780	865	343	849	685	622	224	114
11	288	241	768	900	1,560	758	331	781	623	514	222	114
12	276	247	604	827	1,370	684	358	726	582	542	213	419
13	263	248	512	767	1,210	620	1,330	684	688	469	190	1,290
14	275	267	859	703	1,090	571	2,210	648	622	497	179	547
15	275	284	1,130	659	1,020	544	1,450	2,460	533	508	166	373
16	272	321	938	607	915	537	1,100	2,740	518	448	160	302
17	269	443	1,020	564	824	543	912	1,570	528	408	148	272
18	262	536	944	651	755	556	775	1,510	610	376	148	280
19	252	2,950	839	1,250	710	716	677	1,210	613	352	140	243
20	249	1,690	758	910	679	589	607	999	533	327	160	207
21	240	1,100	663	766	646	1,100	591	869	477	312	375	196
22	234	869	614	705	586	952	4,410	782	453	296	337	181
23	233	718	671	650	544	785	7,710	709	442	284	227	170
24	226	1,030	1,650	608	519	694	5,630	653	497	276	366	162
25	224	1,380	1,340	886	496	624	3,150	601	429	265	302	156
26	236	1,010	1,100	2,240	462	573	2,560	651	394	265	248	148
27	326	863	970	1,520	441	534	1,980	1,700	374	260	208	139
28	335	1,220	879	1,190	415	507	1,630	1,400	346	249	225	140
29	281	1,100	844	1,030	400	502	1,390	1,220	336	236	196	131
30	256	930	1,890	951	---	640	1,250	1,050	320	233	168	130
31	236	---	1,580	851	---	614	---	4,490	---	1,890	156	---
TOTAL	9,193	19,893	26,379	33,815	39,785	23,435	44,312	41,379	22,724	14,261	9,351	7,055
MEAN	297	663	851	1,091	1,372	756	1,477	1,335	757	460	302	235
MAX	492	2,950	1,890	2,240	8,040	2,430	7,710	4,490	3,130	1,890	1,470	1,290
MIN	224	215	450	564	400	396	331	601	320	233	140	114
CFSM	0.54	1.21	1.55	1.99	2.50	1.38	2.69	2.43	1.38	0.84	0.55	0.43
IN.	0.62	1.35	1.79	2.29	2.70	1.59	3.00	2.80	1.54	0.97	0.63	0.48

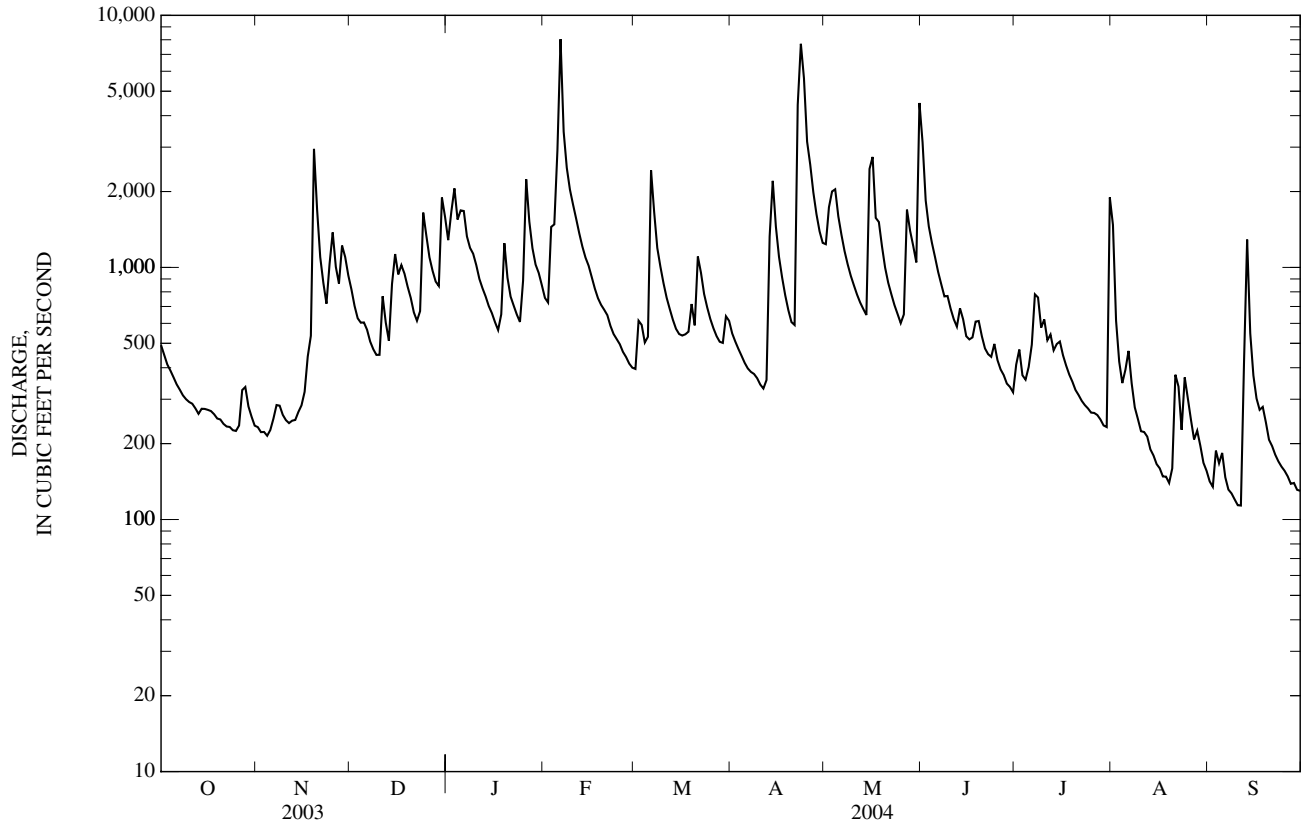
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	263	467	838	1,030	1,288	1,333	951	1,126	847	322	254	268
MAX	1,096	1,237	2,335	2,718	2,805	4,219	1,594	1,810	3,219	655	507	811
(WY)	(2003)	(2003)	(1997)	(1999)	(2003)	(1997)	(1998)	(2002)	(1998)	(1998)	(1998)	(2003)
MIN	47.3	48.4	166	121	525	406	333	355	200	110	77.1	42.3
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2001)	(2001)	(1999)	(2000)	(1999)	(1999)

03435305 RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAINS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	333,300		291,582			
ANNUAL MEAN	913		797		746	
HIGHEST ANNUAL MEAN					1,170	1997
LOWEST ANNUAL MEAN					286	2000
HIGHEST DAILY MEAN	13,400	Feb 16	8,040	Feb 6	19,800	Mar 3, 1997
LOWEST DAILY MEAN	172	Aug 30	114	Sep 10	30	Oct 26, 1999
ANNUAL SEVEN-DAY MINIMUM	204	Aug 26	134	Sep 5	31	Oct 26, 1999
MAXIMUM PEAK FLOW			11,000	Feb 6	22,100	Mar 2, 1997
MAXIMUM PEAK STAGE			16.98	Feb 6	28.49	Mar 2, 1997
INSTANTANEOUS LOW FLOW			a107	Sep 11	23	Oct 5, 2001
ANNUAL RUNOFF (CFSM)	1.66		1.45		1.36	
ANNUAL RUNOFF (INCHES)	22.58		19.76		18.47	
10 PERCENT EXCEEDS	1,730		1,590		1,640	
50 PERCENT EXCEEDS	577		568		394	
90 PERCENT EXCEEDS	247		220		76	

a Also occurred Sept. 12.



03435970 MILLERS CREEK AT TURNERSVILLE, TN

LOCATION.--Lat 36°29'15", long 87°02'22", Robertson County, Hydrologic Unit 05130206, on Maxie road, at the confluence of Honey Run Creek and Millers Creek, at Turnersville.

DRAINAGE AREA.--20.5 mi^2.

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Data collection platform and crest-stage gage.

REMARKS.--No estimated daily discharges. Records good except discharges above 800 ft^3/s, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 22	0900	*3,540	*8.49	Jul 31	0530	1,240	5.96
Apr 23	0430	2,320	7.32				

Minimum daily discharge, 3.8 ft^3/s, Nov. 21, 22, 23, 24, 25, 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

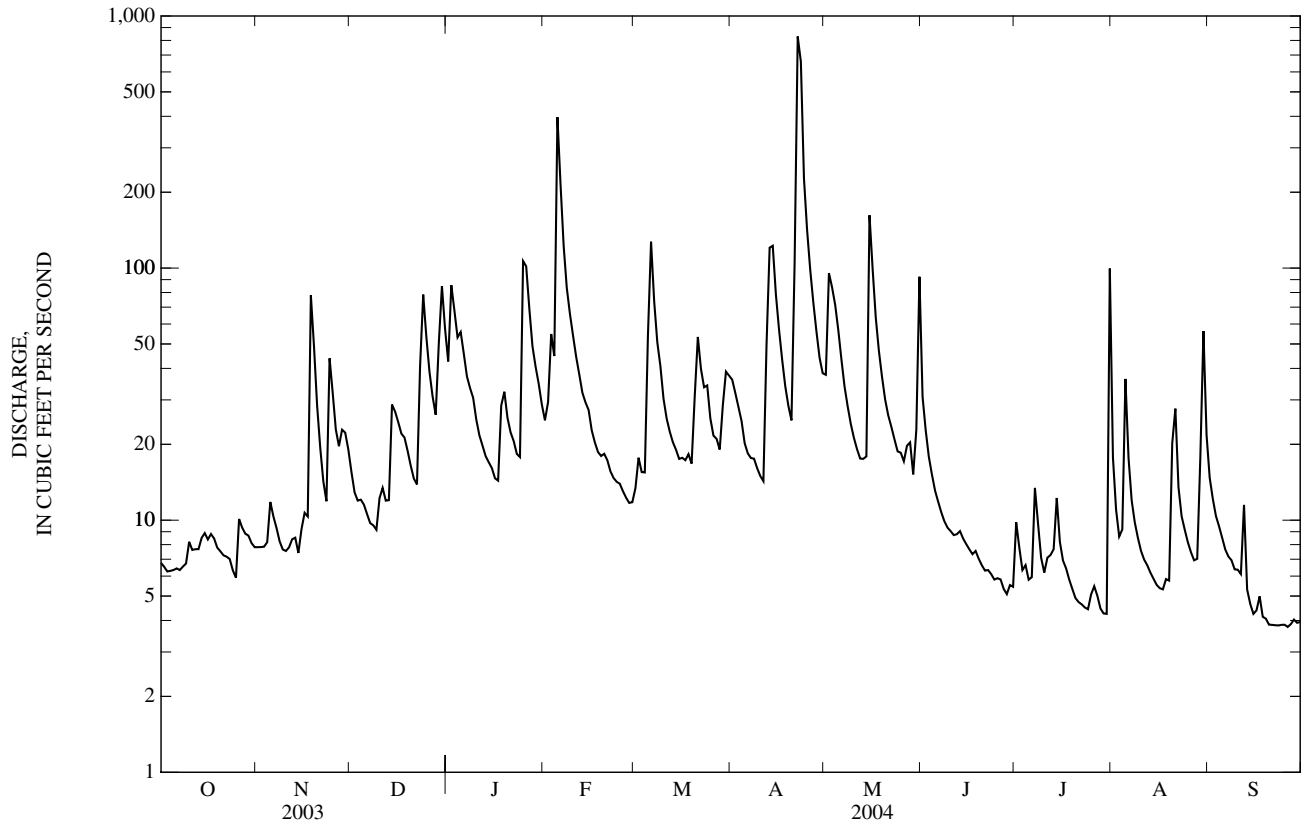
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	7.8	16	43	25	13	36	38	31	9.8	18	15
2	6.5	7.8	13	86	29	18	32	96	23	7.8	11	12
3	6.3	7.8	12	68	55	16	28	84	18	6.3	8.6	10
4	6.3	8.2	12	53	45	15	25	71	15	6.6	9.2	9.5
5	6.3	12	12	56	397	54	20	57	13	5.8	36	8.5
6	6.4	10	11	46	215	127	18	43	12	5.9	18	7.6
7	6.3	9.3	9.7	37	122	74	18	34	11	13	12	7.2
8	6.5	8.2	9.5	33	83	51	18	28	9.9	9.7	9.8	6.9
9	6.7	7.7	9.2	31	66	41	16	24	9.3	7.1	8.5	6.4
10	8.2	7.5	12	25	54	30	15	21	9.0	6.2	7.6	6.4
11	7.6	7.8	13	22	45	25	14	19	8.7	7.1	7.0	6.1
12	7.7	8.4	12	20	38	22	49	18	8.8	7.3	6.6	11
13	7.7	8.5	12	18	32	20	120	18	9.0	7.7	6.2	5.3
14	8.5	7.4	29	17	29	19	123	18	8.5	12	5.9	4.7
15	8.9	9.2	27	16	27	18	79	162	8.0	8.2	5.5	4.2
16	8.4	11	24	15	23	18	57	99	7.7	6.9	5.4	4.4
17	8.8	10	22	14	20	17	43	64	7.3	6.4	5.3	5.0
18	8.5	78	21	28	19	18	34	47	7.6	5.8	5.8	4.1
19	7.8	49	19	32	18	17	28	37	7.0	5.3	5.8	4.1
20	7.5	29	16	25	18	31	25	30	6.6	4.9	20	3.9
21	7.3	19	15	22	17	53	104	26	6.3	4.7	28	3.8
22	7.2	14	14	21	16	40	829	23	6.3	4.6	13	3.8
23	7.0	12	41	18	15	34	659	21	6.1	4.5	10	3.8
24	6.3	44	78	18	14	34	227	19	5.8	4.4	9.2	3.8
25	5.9	32	54	107	14	25	141	19	5.9	5.1	8.2	3.8
26	10	23	39	102	13	22	98	17	5.8	5.5	7.5	3.8
27	9.3	20	31	69	12	21	73	20	5.3	5.0	6.9	3.9
28	8.8	23	26	49	12	19	56	20	5.1	4.5	7.0	4.0
29	8.7	22	50	41	12	29	44	15	5.5	4.3	18	3.9
30	8.1	19	85	35	---	39	38	23	5.4	4.2	56	3.9
31	7.8	---	57	29	---	37	---	92	---	100	22	---
TOTAL	234.1	532.6	801.4	1,196	1,485	997	3,067	1,303	287.9	296.6	398.0	180.8
MEAN	7.55	17.8	25.9	38.6	51.2	32.2	102	42.0	9.60	9.57	12.8	6.03
MAX	10	78	85	107	397	127	829	162	31	100	56	15
MIN	5.9	7.4	9.2	14	12	13	14	15	5.1	4.2	5.3	3.8
CFSM	0.37	0.87	1.26	1.88	2.50	1.57	4.99	2.05	0.47	0.47	0.63	0.29
IN.	0.42	0.97	1.45	2.17	2.69	1.81	5.57	2.36	0.52	0.54	0.72	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	13.5	22.4	53.1	27.5	64.3	35.4	47.2	44.2	14.3	5.04	6.99	8.18
MAX	30.6	35.0	126	39.9	129	89.7	102	76.6	37.8	9.57	15.3	19.3
(WY)	(2003)	(2002)	(2002)	(2002)	(2003)	(2002)	(2004)	(2002)	(2003)	(2004)	(2003)	(2002)
MIN	3.98	4.71	6.93	8.71	26.4	10.1	12.3	5.82	5.58	2.75	1.26	0.78
(WY)	(2001)	(2001)	(2001)	(2001)	(2002)	(2000)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)

03435970 MILLERS CREEK AT TURNERSVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	11,480.9		10,779.4			
ANNUAL MEAN	31.5		29.5		29.5	
HIGHEST ANNUAL MEAN					41.5	2002
LOWEST ANNUAL MEAN					10.3	2001
HIGHEST DAILY MEAN	588	Feb 15	829	Apr 22	829	Apr 22, 2004
LOWEST DAILY MEAN	3.6	Jul 26	3.8	Sep 21	0.41	Sep 15, 2001
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 24	3.8	Sep 20	0.54	Sep 28, 2001
MAXIMUM PEAK FLOW			3,540	Apr 22	4,010	Dec 13, 2001
MAXIMUM PEAK STAGE			8.49	Apr 22	8.89	Dec 13, 2001
ANNUAL RUNOFF (CFSM)	1.53		1.44		1.44	
ANNUAL RUNOFF (INCHES)	20.83		19.56		19.57	
10 PERCENT EXCEEDS	63		56		69	
50 PERCENT EXCEEDS	14		15		11	
90 PERCENT EXCEEDS	6.2		5.5		2.5	



03436100 RED RIVER AT PORT ROYAL, TN

LOCATION.--Lat 36°33'14", 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 mi^2 includes 437 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to September 1991. October 1991 to September 1996, crest-stage partial record station. October 1997 to current year.

GAGE.--Data collection platform, crest-stage gage and satellite telemeter at station. Datum of gage is 376.25 ft above NGVD of 1929. July 13, 1961, to Oct. 9, 1963, nonrecording gage and crest-stage gage at same site and datum.

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

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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1200	15,000	26.27	Apr 23	1130	*15,300	*26.61

Minimum discharge, 182 ft^3/s, Nov. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	217	1,380	2,270	1,310	648	1,060	2,170	5,410	476	2,960	365
2	589	205	1,190	2,640	1,240	886	954	2,940	3,000	673	1,140	326
3	540	195	1,030	3,690	2,030	1,080	868	3,590	2,350	562	834	458
4	501	188	984	2,800	2,600	856	806	3,730	1,900	514	697	450
5	462	191	959	2,760	4,840	896	751	2,970	1,700	549	1,150	399
6	427	255	902	3,000	13,700	4,080	708	2,450	1,460	710	1,050	367
7	401	285	815	2,340	7,550	3,350	682	2,060	1,290	1,030	852	322
8	374	286	753	2,060	4,600	2,240	670	1,780	1,160	1,210	659	297
9	350	260	719	1,930	3,640	1,800	644	1,580	1,090	883	570	274
10	344	230	722	1,710	3,100	1,530	613	1,440	1,020	763	510	260
11	333	221	1,030	1,510	2,700	1,330	586	1,330	926	743	482	247
12	311	219	1,020	1,380	2,350	1,180	753	1,220	864	718	457	483
13	298	236	839	1,280	2,050	1,060	2,230	1,170	892	673	428	1,710
14	297	243	1,140	1,160	1,820	960	4,230	1,130	988	713	397	989
15	299	278	1,910	1,080	1,680	907	2,970	3,380	798	756	365	675
16	286	318	1,570	998	1,520	880	2,120	5,680	747	654	343	540
17	281	462	1,580	918	1,370	874	1,690	3,130	759	566	329	487
18	263	900	1,560	1,090	1,250	943	1,430	2,570	759	518	324	478
19	252	4,150	1,390	1,890	1,160	1,130	1,230	2,250	866	473	311	440
20	242	3,130	1,240	1,590	1,120	1,040	1,080	1,770	782	432	366	381
21	234	1,920	1,080	1,320	1,070	1,950	1,210	1,510	683	407	613	347
22	226	1,460	984	1,190	965	1,850	7,500	1,350	646	377	749	322
23	217	1,200	1,140	1,090	886	1,500	14,900	1,220	630	362	504	303
24	216	1,660	2,710	1,010	841	1,310	12,400	1,120	679	346	461	288
25	207	2,450	2,550	1,780	798	1,160	6,310	1,030	614	326	696	276
26	230	1,760	1,970	3,880	751	1,040	4,660	963	575	335	516	258
27	313	1,470	1,670	2,930	715	947	3,740	1,960	532	326	484	248
28	400	1,860	1,490	2,190	681	881	3,050	2,010	493	309	426	236
29	319	1,860	1,440	1,800	655	882	2,560	1,870	469	283	449	227
30	268	1,560	2,970	1,640	---	1,160	2,260	1,520	464	267	610	220
31	240	---	2,960	1,470	---	1,200	---	5,040	---	1,770	435	---
TOTAL	10,364	29,669	43,697	58,396	68,992	41,550	84,665	67,933	34,546	18,724	20,167	12,673
MEAN	334	989	1,410	1,884	2,379	1,340	2,822	2,191	1,152	604	651	422
MAX	644	4,150	2,970	3,880	13,700	4,080	14,900	5,680	5,410	1,770	2,960	1,710
MIN	207	188	719	918	655	648	586	963	464	267	311	220
CFSM	0.36	1.06	1.51	2.01	2.54	1.43	3.02	2.34	1.23	0.65	0.70	0.45
IN.	0.41	1.18	1.74	2.32	2.74	1.65	3.37	2.70	1.37	0.74	0.80	0.50

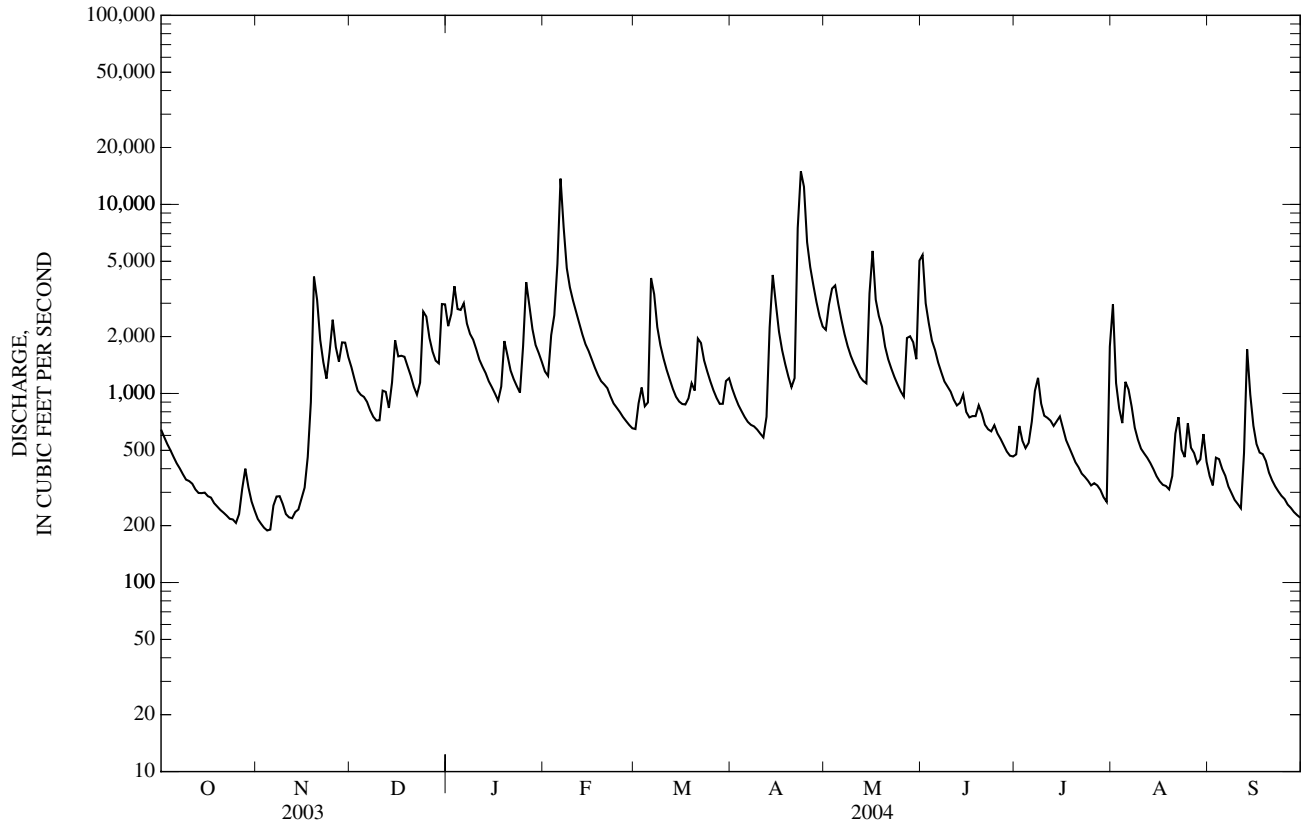
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

MEAN	305	693	1,724	1,966	2,497	2,570	2,035	1,666	1,078	577	322	395
MAX	1,989	3,610	5,054	5,984	7,429	9,874	6,482	7,183	5,467	2,858	809	3,939
(WY)	(2003)	(1980)	(1991)	(1974)	(1989)	(1975)	(1979)	(1983)	(1998)	(1989)	(1998)	(1979)
MIN	68.2	74.4	73.4	91.7	562	724	490	270	140	143	130	83.4
(WY)	(1964)	(1964)	(1964)	(1981)	(1964)	(2000)	(1986)	(1988)	(1988)	(1988)	(1988)	(1999)

03436100 RED RIVER AT PORT ROYAL, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	577,039		491,376			
ANNUAL MEAN	1,581		1,343		1,329	
HIGHEST ANNUAL MEAN					2,594	1979
LOWEST ANNUAL MEAN					514	2000
HIGHEST DAILY MEAN	22,100	Feb 16	14,900	Apr 23	56,600	Mar 13, 1975
LOWEST DAILY MEAN	188	Nov 4	188	Nov 4	52	Sep 14, 2002
ANNUAL SEVEN-DAY MINIMUM	213	Oct 31	213	Oct 31	58	Sep 12, 1964
MAXIMUM PEAK FLOW			15,300	Apr 23	60,300	Mar 13, 1975
MAXIMUM PEAK STAGE			26.61	Apr 23	48.26	Mar 13, 1975
INSTANTANEOUS LOW FLOW			a182	Nov 4	50	Sep 14, 2002
ANNUAL RUNOFF (CFSM)	1.69		1.44		1.42	
ANNUAL RUNOFF (INCHES)	22.96		19.55		19.31	
10 PERCENT EXCEEDS	3,050		2,840		2,990	
50 PERCENT EXCEEDS	1,030		922		613	
90 PERCENT EXCEEDS	295		284		124	

a Also occurred Nov. 5.



03436100 RED RIVER AT PORT ROYAL, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC 09...	1050	708	396	11.0	21
APR 08...	0900	677	330	17.0	49
AUG 11...	1140	484	410	24.0	19

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03436690 YELLOW CREEK AT ELLIS MILLS, TN

LOCATION.--Lat 36°18'38", long 87°33'14", 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 mi^2.

PERIOD OF RECORD.--October 1980 to September 1991. October 1991 to September 1997, crest-stage partial record station. October 2000 to current year.

GAGE.--Data collection platform, crest-stage gage and satellite telemeter at station. Elevation of gage is 417 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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, 14,400 ft^3/s May 6, 1984, gage height, 18.47 ft recorded, 18.95 ft, from floodmarks, from rating curve extended above 9,500 ft^3/s on basis of regression formula and peak discharge at Station No. 03436700 Yellow Creek near Shiloh, TN; minimum, 7.2 ft^3/s Oct. 14, 1986, result of upstream regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1730	3,170	10.18	May 15	1130	2,310	8.96
Apr 23	0530	*4,230	*11.45	Aug 28	1200	2,300	8.94

Minimum discharge, 34 ft^3/s, Nov. 8, 9, 10, 11, 12, 14, 15.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	39	149	210	185	95	145	260	185	66	80	131
2	73	38	133	299	176	113	140	393	144	65	59	125
3	68	38	124	363	178	110	134	429	133	62	50	161
4	65	37	119	323	169	110	127	433	123	61	46	141
5	62	38	112	294	1,460	125	119	369	112	59	536	120
6	61	37	104	258	1,270	527	113	301	104	58	174	105
7	57	36	96	229	679	410	109	251	98	103	115	93
8	54	36	92	214	465	316	107	217	91	78	90	85
9	52	35	89	204	369	268	101	192	85	68	76	77
10	54	35	102	183	313	225	95	176	82	62	68	70
11	51	34	125	165	271	197	91	169	78	61	65	65
12	48	36	121	154	243	178	145	154	85	62	59	83
13	47	36	119	143	216	161	415	149	191	57	54	111
14	49	34	137	134	199	151	746	145	130	56	51	88
15	49	37	146	128	189	141	553	1,150	112	53	48	74
16	47	42	150	121	171	137	414	824	105	51	45	68
17	46	42	148	116	158	128	322	666	93	51	43	66
18	45	94	143	137	146	121	261	475	106	50	49	61
19	43	338	137	151	140	112	223	356	122	47	47	56
20	42	262	127	145	138	113	199	281	115	46	100	53
21	41	196	118	141	132	141	230	232	103	44	131	50
22	40	160	112	138	122	140	2,140	202	95	43	102	48
23	39	137	149	132	116	138	3,220	180	91	42	81	47
24	38	197	282	129	111	135	1,550	161	84	41	73	46
25	38	227	265	394	106	131	1,000	147	79	49	76	44
26	46	196	225	574	101	124	723	135	76	45	75	43
27	49	176	196	420	96	120	532	127	71	43	66	42
28	45	173	176	316	91	116	410	122	67	40	474	41
29	43	170	173	267	87	123	329	114	65	39	301	40
30	41	163	237	237	---	144	289	108	67	38	207	39
31	40	---	228	207	---	146	---	293	---	89	160	---
TOTAL	1,552	3,119	4,634	6,926	8,097	5,196	14,982	9,211	3,092	1,729	3,601	2,273
MEAN	50.1	104	149	223	279	168	499	297	103	55.8	116	75.8
MAX	79	338	282	574	1,460	527	3,220	1,150	191	103	536	161
MIN	38	34	89	116	87	95	91	108	65	38	43	39
CFSM	0.49	1.01	1.45	2.17	2.71	1.63	4.85	2.88	1.00	0.54	1.13	0.74
IN.	0.56	1.13	1.67	2.50	2.92	1.88	5.41	3.33	1.12	0.62	1.30	0.82

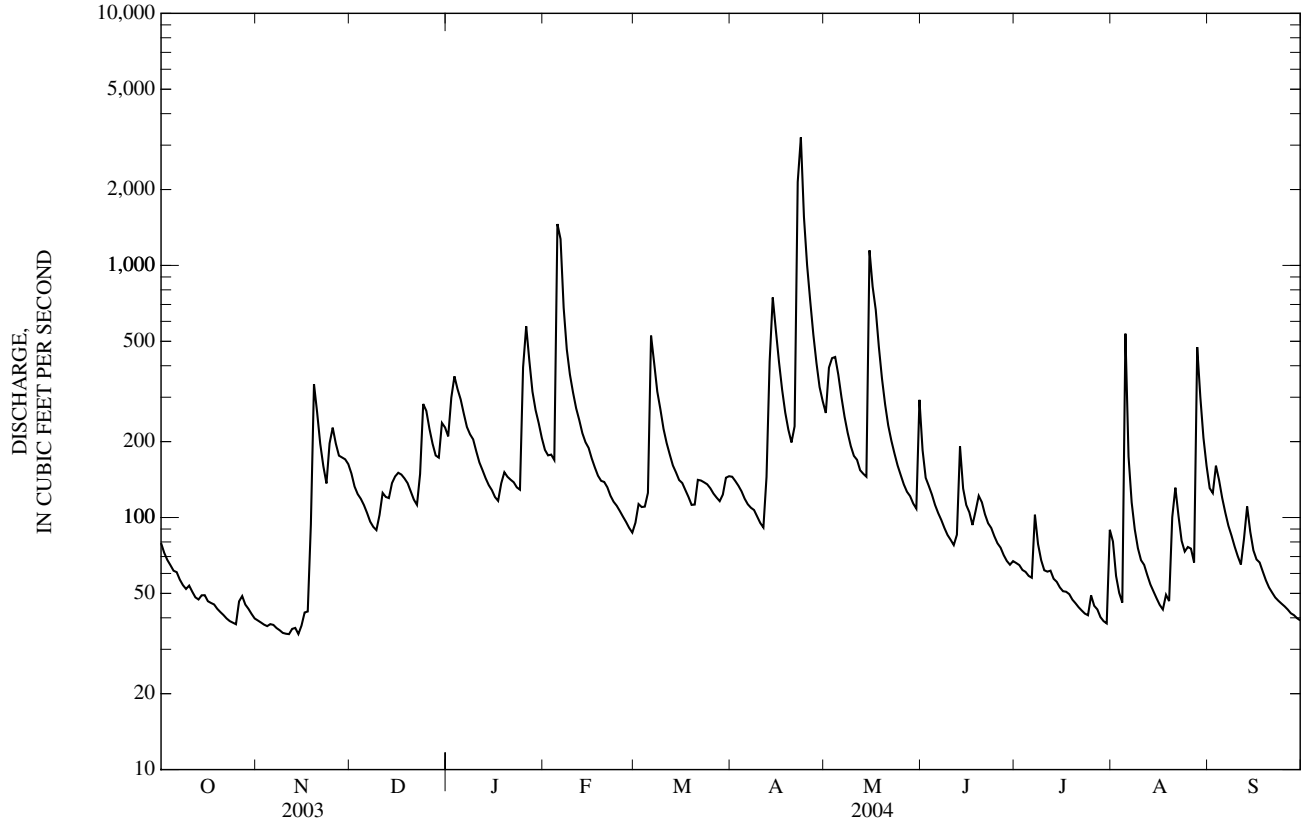
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2004, BY WATER YEAR (WY)

MEAN	53.4	102	226	185	352	243	251	253	126	58.8	41.3	47.0
MAX	181	272	499	490	845	477	609	795	437	173	116	138
(WY)	(2003)	(2002)	(1991)	(1989)	(1989)	(1989)	(1983)	(1984)	(1981)	(1989)	(2004)	(2003)
MIN	16.2	27.2	34.1	22.9	101	124	78.5	46.8	30.0	26.1	19.2	16.4
(WY)	(1988)	(1988)	(1981)	(1981)	(1984)	(1981)	(1986)	(1986)	(1988)	(1988)	(1987)	(1987)

03436690 YELLOW CREEK AT ELLIS MILLS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1981 - 2004	
ANNUAL TOTAL	68,218		64,412			
ANNUAL MEAN	187		176		161	
HIGHEST ANNUAL MEAN					270	1989
LOWEST ANNUAL MEAN					82.1	2001
HIGHEST DAILY MEAN	3,180	May 6	3,220	Apr 23	5,530	Feb 3, 1990
LOWEST DAILY MEAN	34	Nov 11	34	Nov 11	14	Aug 24, 1987
ANNUAL SEVEN-DAY MINIMUM	35	Nov 8	35	Nov 8	14	Oct 2, 1987
MAXIMUM PEAK FLOW			4,230	Apr 23	14,400	May 6, 1984
MAXIMUM PEAK STAGE			11.45	Apr 23	18.47	May 6, 1984
INSTANTANEOUS LOW FLOW			a34	Nov 8	7.2	Oct 14, 1986
ANNUAL RUNOFF (CFSM)	1.81		1.71		1.56	
ANNUAL RUNOFF (INCHES)	24.64		23.26		21.18	
10 PERCENT EXCEEDS	285		322		316	
50 PERCENT EXCEEDS	119		118		79	
90 PERCENT EXCEEDS	43		43		24	

a Also occurred Nov. 9, 10, 11, 12, 14, 15.



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 mi^2. 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 taintor gates, each 37 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, first filling, 934,400 cfs-days, Jan. 1, 1956, elevation, 673.01 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,169,000 cfs-days, Feb. 10, elevation, 729.01 ft; minimum, 1,432,500 cfs-days, Nov. 5, elevation, 698.19 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 mi^2. 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 taintor 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, Mar. 15, 1975, elevation, 660.98 ft; minimum, first filling, 428,000 cfs-days, Sept. 11, 1944, elevation, 630.63 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 701,600 cfs-days, May 3, elevation, 652.37 ft; minimum, 533,400 cfs-days, Nov. 16, elevation, 639.67 ft.

03418400 CORDELL HULL RESERVOIR.--Lat 36°17'23", long 85°56'39", Smith County, Hydrologic Unit 05130108, at Cordell Hull Dam Cumberland River, 2.7 mi north of Carthage, and at mile 313.5. DRAINAGE AREA, 8,095 mi^2. PERIOD OF RECORD, October 1972 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete gravity dam with earth embankment. Spillway is equipped with five 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 surcharge 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, 141,700 cfs-days, Feb. 6, elevation, 505.76 ft; minimum, 103,400 cfs-days, Jan. 7, elevation, 499.02 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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)
	03413500 LAKE CUMBERLAND			03416500 DALE HOLLOW LAKE			03418400 CORDELL HULL RESERVOIR		
Sept. 30...	713.14	1,771,700	-	645.76	611,100	-	504.21	131,900	-
Oct. 31...	699.29	1,456,400	-315,300	641.42	555,200	-55,900	502.08	119,500	-12,400
Nov. 30...	703.82	1,556,400	+100,000	642.81	572,800	+17,600	499.93	108,000	-11,500
Dec. 31...	704.67	1,575,500	+19,100	643.72	584,500	+11,700	500.82	112,600	+4,600
CAL YR 2003	-	-	-274,600	-	-	-35,300	-	-	+2,600
Jan. 31...	712.60	1,758,900	+183,400	645.20	603,700	+19,200	500.44	110,600	-2,000
Feb. 29...	720.08	1,940,600	+181,700	648.43	646,900	+43,200	500.56	111,200	+600
Mar. 31...	721.64	1,979,600	+39,000	650.50	675,400	+28,500	500.26	109,700	-1,500
Apr. 30...	724.82	2,060,200	+80,600	652.11	697,900	+22,500	504.09	131,200	+21,500
May 31...	725.13	2,068,200	+8,000	649.82	665,900	-32,000	504.57	134,100	+2,900
June 30...	721.79	1,983,400	-84,800	650.62	677,000	+11,100	503.96	130,400	-3,700
July 31...	714.22	1,797,500	-185,900	648.60	649,200	-27,800	504.72	135,100	+4,700
Aug. 31...	702.34	1,523,400	-274,100	645.13	602,800	-46,400	503.93	130,200	-4,900
Sept. 30...	712.39	1,753,900	+230,500	645.02	601,400	-1,400	503.99	130,600	+400
WTR YR 2004	-	-	-17,800	-	-	-9,700	-	-	-1,300

RESERVOIRS IN CUMBERLAND RIVER BASIN--CONTINUED

03422000 GREAT FALLS LAKE.--Lat 35°48'21", long 85°38'09", Warren County, Hydrologic Unit 05130108, at pen-stock 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 mi^2. PERIOD OF RECORD, January 1917 to current year. GAGE, remote indicator gage. Datum of gage is sea level. 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, 24,900 cfs-days, Mar. 12, elevation, 804.92 ft; minimum, 9,820 cfs-days, Oct. 26, elevation, 784.80 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 mi^2. 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, 735,500 cfs-days, Mar. 8, elevation, 654.92 ft; minimum, 526,300 cfs-days, Nov. 9, elevation, 631.40 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 mi^2. PERIOD OF RECORD, June 1954 to current year. GAGE, water-stage recorder. Datum of gage is sea level; 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, 259,000 cfs-days, Feb. 7, elevation, 448.85 ft, minimum, 198,400 cfs-days, Nov. 23, elevation, 443.80 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	03422000 GREAT FALLS LAKE Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	03424000 CENTER HILL LAKE Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)	03426300 OLD HICKORY LAKE Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
Sept. 30...	798.76	19,400	-	639.43	593,900	-	444.47	205,700	-
Oct. 31...	785.29	10,100	-9,300	633.11	540,400	-53,500	444.62	207,400	+1,700
Nov. 30...	795.21	16,600	+6,500	635.52	560,500	+20,100	445.75	220,300	+12,900
Dec. 31...	802.49	22,600	+6,000	636.40	567,900	+7,400	445.26	214,600	-5,700
CAL YEAR 2003	-	-	-1,500	-	-	-81,900	-	-	+6,900
Jan. 31...	796.62	17,700	-4,900	636.78	571,100	+3,200	444.85	209,900	-4,700
Feb. 29...	799.16	19,800	+2,100	645.68	649,100	+78,000	444.75	208,800	-1,100
Mar. 31...	800.58	21,000	+1,200	645.67	649,100	0	445.15	213,300	+4,500
Apr. 30...	792.52	14,600	-6,400	648.09	671,100	+22,000	444.60	207,100	-6,200
May 31...	799.62	20,200	+5,600	646.26	654,400	-16,700	445.81	221,000	+13,900
June 30...	803.50	23,500	+3,300	648.50	674,900	+20,500	444.72	208,500	-12,500
July 31...	799.81	20,300	-3,200	645.45	647,100	-27,800	444.80	209,400	+900
Aug. 31...	800.58	21,000	700	639.17	591,600	-55,500	445.13	213,100	+3,700
Sept. 30...	799.55	20,100	-900	639.64	595,700	+4,100	444.50	206,000	-7,100
WTR YR 2004	-	-	+700	-	-	+1,800	-	-	+300

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 mi^2. PERIOD OF RECORD, September 1967 to current year. GAGE, water-stage recorder. Datum of gage is sea level. 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, 238,300 cfs-days, Feb. 8, elevation, 495.30 ft, minimum, 148,200 cfs-days, Jan. 17, elevation, 482.32 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 mi^2.

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 mi^2. PERIOD OF RECORD, July 1964 to current year. GAGE, water-stage recorder. Datum of gage is sea level, (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, 516,200 cfs-days, June 10, elevation, 361.55 ft; minimum content, 295,400 cfs-days, Nov. 13, minimum, 353.45 ft. Contents based on backwater profile.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-day)	Elevation (feet)	Contents (cfs-days)	Change in contents (cfs-days)
	03430050 J. PERCY PRIEST LAKE			*03438210 LAKE BARKLEY		
Sept. 30.....	490.58	201,900	-	355.15	334,700	-
Oct. 31.....	487.27	178,800	-23,100	354.85	327,400	-7,300
Nov. 30.....	486.90	176,400	-2,400	356.75	375,400	+48,000
Dec. 31.....	483.55	155,500	-20,900	354.40	316,800	-58,600
CAL YR 2003	-	-	-4,100	-	-	-2,300
Jan. 31.....	483.35	154,400	-1,100	356.55	370,100	+53,300
Feb. 29.....	482.90	151,700	-2,700	354.25	313,400	-56,700
Mar. 31.....	484.70	162,500	+10,800	355.35	339,600	+26,200
Apr. 30.....	489.90	196,900	+34,400	359.65	457,300	+117,700
May 31.....	490.52	201,400	+4,500	359.10	441,000	-16,300
June 30.....	490.55	201,600	+200	359.75	460,300	+19,300
July 31.....	490.10	198,400	-3,200	358.00	409,500	-50,800
Aug. 31.....	490.38	200,400	+2,000	356.40	366,200	-43,300
Sept. 30.....	489.80	196,200	-4,200	355.75	349,500	-16,700
WTR YR 2004	-	-	-5,700	-	-	+14,800

* Contents based on backwater profile.

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03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN

LOCATION.--Lat 35°58'53", long 83°09'40", Cocke County, Hydrologic Unit 06010105, on left bank, 200 ft upstream from bridge on U.S. Highway 321, 1.0 mi northeast of Newport city limits, 3.7 mi upstream from Pigeon River, and at mile 77.5.

DRAINAGE AREA.--1,858 mi^2.

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 September 1994, October 1996 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 NGVD of 1929. See WSP 1910 for history of changes prior to Mar. 31, 1934.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diurnal fluctuation during low flow caused by powerplants above station.

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 ft^3/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 ft^3/s; and July 17, 1916, gage height, 22.5 ft present datum, discharge estimated 97,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1730	27,400	11.35	Sep 17	1230	*64,800	*18.10
Feb 7	0015	20,400	9.42	Sep 20	1000	16,400	8.18
Sep 9	0415	46,800	15.27	Sep 28	1600	17,200	8.45

Minimum discharge, 1,310 ft^3/s, July 23, Aug. 20, 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,670	3,190	2,950	2,080	2,630	3,500	2,160	3,810	2,790	3,700	2,400
2	1,730	1,610	2,960	2,770	2,080	2,920	3,310	2,250	2,640	3,140	3,170	2,990
3	1,660	1,570	2,770	2,700	2,880	3,240	3,000	2,750	2,130	3,960	4,520	5,530
4	1,600	1,500	2,720	2,650	3,970	3,080	2,830	2,840	2,130	3,780	3,150	3,760
5	1,580	1,550	2,860	2,790	3,630	2,920	2,660	2,380	2,330	3,230	2,630	2,650
6	1,550	2,190	3,250	3,620	6,500	3,810	2,490	2,280	2,100	3,940	2,440	2,220
7	1,530	3,940	3,120	3,290	16,300	4,380	2,370	2,130	1,880	3,010	2,120	2,090
8	1,530	3,250	2,860	2,940	11,100	3,890	2,370	2,030	1,760	2,440	1,880	26,500
9	1,510	2,500	2,750	2,800	8,620	3,430	2,370	1,970	1,810	2,090	1,690	39,000
10	1,790	2,180	2,700	2,680	6,050	3,170	2,350	2,060	2,160	1,970	1,620	e25,000
11	2,010	2,000	5,190	2,500	4,680	2,940	2,250	1,940	2,070	1,910	1,550	e15,000
12	1,890	1,920	6,210	2,430	4,330	2,780	2,240	1,830	1,960	2,200	1,970	e8,000
13	1,950	1,880	5,340	2,380	4,650	2,650	4,380	1,860	2,600	2,270	2,420	e6,000
14	1,770	1,780	4,270	2,320	4,450	2,530	7,000	1,980	3,390	2,080	2,120	e5,000
15	1,700	1,670	4,360	2,320	4,190	2,460	5,060	2,570	2,570	1,930	1,770	4,320
16	1,660	1,640	4,040	2,260	4,270	2,690	3,690	2,310	5,220	1,700	1,660	3,950
17	1,560	1,650	4,000	2,190	4,130	2,750	3,220	2,040	4,260	1,580	1,570	38,500
18	1,520	1,660	4,240	2,300	3,840	2,930	2,830	2,250	3,660	1,990	1,550	32,900
19	1,490	14,400	4,130	2,620	3,580	4,090	2,570	2,400	2,930	2,060	1,780	21,700
20	1,470	13,300	3,760	2,580	3,400	3,560	2,430	2,290	2,350	1,780	1,510	15,700
21	1,460	9,150	3,370	2,370	3,300	3,350	2,350	2,120	2,130	1,630	1,550	10,800
22	1,430	7,650	3,220	2,270	3,170	3,090	2,320	2,160	2,980	1,550	1,620	8,100
23	1,390	5,650	3,260	2,200	2,990	2,840	2,190	2,370	3,990	1,520	1,580	6,100
24	1,380	4,050	4,240	2,140	2,890	2,660	1,930	2,640	4,020	1,580	1,520	5,100
25	1,370	3,610	4,680	2,200	2,850	2,540	1,940	2,260	3,590	1,520	1,960	4,640
26	1,370	3,460	3,980	2,270	2,790	2,440	2,240	2,080	4,810	1,940	1,720	4,330
27	1,870	3,140	3,480	2,340	2,760	2,360	3,570	2,430	4,680	5,350	1,650	4,090
28	3,140	3,050	3,210	2,350	2,770	2,300	3,000	2,230	3,680	4,130	1,510	10,600
29	2,420	3,400	3,040	2,300	2,770	2,260	2,540	2,230	3,210	3,500	1,720	12,300
30	1,960	3,580	3,110	2,230	---	2,250	2,250	2,070	2,890	2,480	2,190	10,100
31	1,770	---	3,090	2,160	---	2,530	---	3,320	---	2,740	2,390	---
TOTAL	52,860	110,600	113,400	77,920	131,020	91,470	87,250	70,230	89,740	77,790	64,230	339,370
MEAN	1,705	3,687	3,658	2,514	4,518	2,951	2,908	2,265	2,991	2,509	2,072	11,310
MAX	3,140	14,400	6,210	3,620	16,300	4,380	7,000	3,320	5,220	5,350	4,520	39,000
MIN	1,370	1,500	2,700	2,140	2,080	2,250	1,930	1,830	1,760	1,520	1,510	2,090
CFSM	0.92	1.98	1.97	1.35	2.43	1.59	1.57	1.22	1.61	1.35	1.12	6.09
IN.	1.06	2.21	2.27	1.56	2.62	1.83	1.75	1.41	1.80	1.56	1.29	6.79

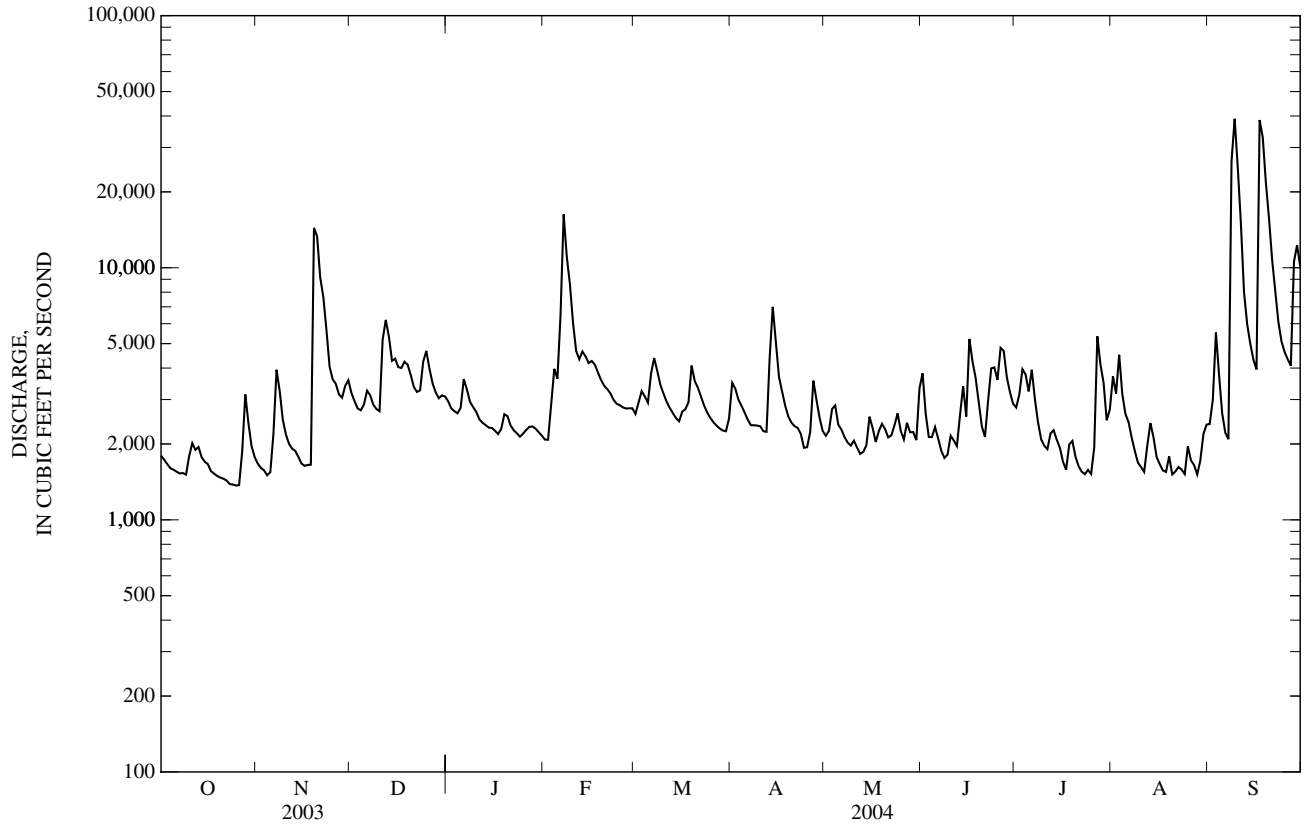
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2004, BY WATER YEAR (WY)

MEAN	1,857	2,132	2,835	3,512	4,204	4,799	4,306	3,356	2,600	2,237	2,278	1,845
MAX	9,875	7,249	7,478	9,533	8,814	12,710	11,650	9,448	6,148	7,620	14,640	11,310
(WY)	(1965)	(1980)	(1962)	(1937)	(1990)	(1903)	(1903)	(1901)	(1901)	(1905)	(1901)	(2004)
MIN	508	713	819	968	1,450	1,399	1,362	1,252	722	711	380	421
(WY)	(1955)	(1932)	(1940)	(1956)	(1941)	(1988)	(1986)	(1941)	(1988)	(1986)	(1925)	(1925)

03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1901 - 2004	
ANNUAL TOTAL	1,425,020		1,305,880			
ANNUAL MEAN	3,904		3,568		2,941	
HIGHEST ANNUAL MEAN					4,641	1973
LOWEST ANNUAL MEAN					1,348	1988
HIGHEST DAILY MEAN	28,400	May 7	39,000	Sep 9	62,200	Apr 8, 1903
LOWEST DAILY MEAN	1,370	Oct 25	1,370	Oct 25	240	Sep 9, 1925
ANNUAL SEVEN-DAY MINIMUM	1,410	Oct 20	1,410	Oct 20	276	Aug 25, 1925
MAXIMUM PEAK FLOW			64,800	Sep 17	76,300	Aug 30, 1940
MAXIMUM PEAK STAGE			18.10	Sep 17	19.25	Aug 30, 1940
INSTANTANEOUS LOW FLOW			a1,310	Jul 23	208	Oct 23, 1952
ANNUAL RUNOFF (CFSM)	2.10		1.92		1.58	
ANNUAL RUNOFF (INCHES)	28.53		26.15		21.51	
10 PERCENT EXCEEDS	6,200		4,870		5,370	
50 PERCENT EXCEEDS	3,310		2,590		2,250	
90 PERCENT EXCEEDS	1,740		1,640		956	

a Also occurred on Aug. 20, 24.
e Estimated



03461500 PIGEON RIVER AT NEWPORT, TN

LOCATION.--Lat 35°57'38", long 83°10'28", Cocke County, Hydrologic Unit 06010106, on left bank 100 ft upstream from bridge on U.S. Highway 25 and 70 at Newport, 0.6 mi downstream from Morell Branch, and at mile 6.8

DRAINAGE AREA.--666 mi^2.

PERIOD OF RECORD.-- September 1900 to September 1929, October 1944 to September 1946, August 1948 to February 1982, October 1996 to current year. Monthly discharge only for some peiods, published in WSP 1306. Published as "near Newport" 1945-46.

REVISED RECORDS.--WSP 1143: Drainage area. WSP 1306: 1901, 1904-10. WSP 1336: 1903, 1917(M), 1919-20(M), 1921, 1924(M), 1927-29(M), 1948-52 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 1,038.76 ft NGVD of 1929. Prior to Oct. 1, 1929, nonrecording gage at present site at datum 2.00 ft higher. May 8, 1945, to July 22, 1946, water-stage recorder at site 4.8 mi downstream at datum 35.85 ft lower. August 13, 1948, to Sept. 30, 1970, at present site at datum 2.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data. Considerable regulation by Lakes Junaluska, Logan, and Walters for periods of low flow, combined usable capacity of reservoirs about 12,500 cfs-days. The largest of these, Lake Walters, usable capacity, 10,400 cfs-days was completed in 1929.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Mar. 7, 1867, and June 17, 1876, reached a stage of 23 ft present datum, under present conditions about 21.1 ft, due to removal of mill dam in 1945, discharge, 48,000 ft^3/s, and flood of August 30, 1940, reached a stage of 19.3 ft present datum, discharge 36,000 ft^3/s, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1730	19,200	12.19	Sep 17	1545	*48,800	*20.05
Sep 8	1000	40,300	18.08	Sep 28	1430	13,800	10.27
Sep 11	1445	7,500	7.72				

Minimum discharge, 227 ft^3/s, Nov. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	621	309	1,500	1,090	693	790	1,030	577	1,620	1,490	2,420	729
2	533	290	1,650	976	1,300	1,150	903	648	1,270	1,540	1,430	721
3	819	407	1,160	537	1,720	1,380	685	1,520	1,170	2,860	2,770	1,440
4	505	640	1,440	529	927	1,560	547	1,460	1,400	2,800	1,540	1,530
5	496	502	1,240	2,140	1,700	1,880	883	1,040	954	2,000	1,730	636
6	403	955	1,310	2,760	4,070	2,430	1,360	876	589	3,860	1,310	755
7	506	1,680	1,050	1,740	4,630	2,160	901	906	812	2,150	1,070	1,640
8	965	726	1,500	1,130	3,330	2,110	1,150	1,370	801	1,700	832	29,100
9	904	550	933	1,860	2,950	1,610	562	1,150	836	1,280	868	10,700
10	726	643	1,460	733	2,790	1,240	777	1,440	766	979	979	5,240
11	264	623	2,700	882	2,020	1,260	598	1,050	1,010	471	907	3,860
12	302	494	1,710	1,370	2,030	1,430	997	1,370	730	833	1,490	2,800
13	704	588	1,640	1,300	2,230	1,530	2,560	838	941	1,100	1,060	2,310
14	675	907	1,600	1,260	1,310	906	2,990	1,220	792	1,100	1,020	2,440
15	584	634	1,610	486	946	1,540	1,760	1,180	1,030	1,010	502	2,740
16	625	324	1,600	1,510	1,660	1,700	2,060	950	1,550	625	531	2,460
17	382	408	1,670	739	1,680	1,540	1,220	1,240	1,100	729	1,070	27,700
18	372	860	1,890	489	1,540	2,070	1,230	1,180	1,840	678	820	13,000
19	375	9,060	1,880	1,010	1,350	1,440	1,690	1,280	1,230	628	917	6,150
20	588	5,040	1,190	1,630	1,360	1,860	1,210	911	740	771	894	4,210
21	536	2,960	927	1,070	1,340	1,800	1,360	910	679	774	995	3,310
22	530	2,710	1,110	1,350	1,260	1,540	1,270	829	1,340	837	469	2,790
23	362	1,940	1,600	1,010	1,240	1,840	1,120	1,010	1,440	710	376	2,790
24	512	2,060	1,440	588	1,450	1,280	1,220	1,100	1,730	739	649	2,160
25	625	1,730	1,710	1,000	1,350	1,390	589	1,010	1,470	578	869	2,130
26	666	1,260	1,450	1,550	1,800	1,430	1,700	1,050	2,200	1,000	898	2,190
27	676	1,400	1,280	1,190	1,060	602	1,380	1,440	1,430	2,830	597	2,140
28	1,240	916	1,150	1,110	730	463	1,300	764	1,290	e1,200	603	5,700
29	693	1,510	1,640	1,230	505	1,210	1,240	756	1,430	e1,200	618	4,480
30	442	1,000	1,430	597	---	1,400	1,100	549	1,200	1,240	620	3,110
31	523	---	1,940	1,080	---	1,220	---	1,840	---	2,480	810	---
TOTAL	18,154	43,126	46,410	35,946	50,971	45,761	37,392	33,464	35,390	42,192	31,664	150,961
MEAN	586	1,438	1,497	1,160	1,758	1,476	1,246	1,079	1,180	1,361	1,021	5,032
MAX	1,240	9,060	2,700	2,760	4,630	2,430	2,990	1,840	2,200	3,860	2,770	29,100
MIN	264	290	927	486	505	463	547	549	589	471	376	636
CFSM	0.88	2.16	2.25	1.74	2.64	2.22	1.87	1.62	1.77	2.04	1.53	7.56
IN.	1.01	2.41	2.59	2.01	2.85	2.56	2.09	1.87	1.98	2.36	1.77	8.43

03461500 PIGEON RIVER AT NEWPORT, TN—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

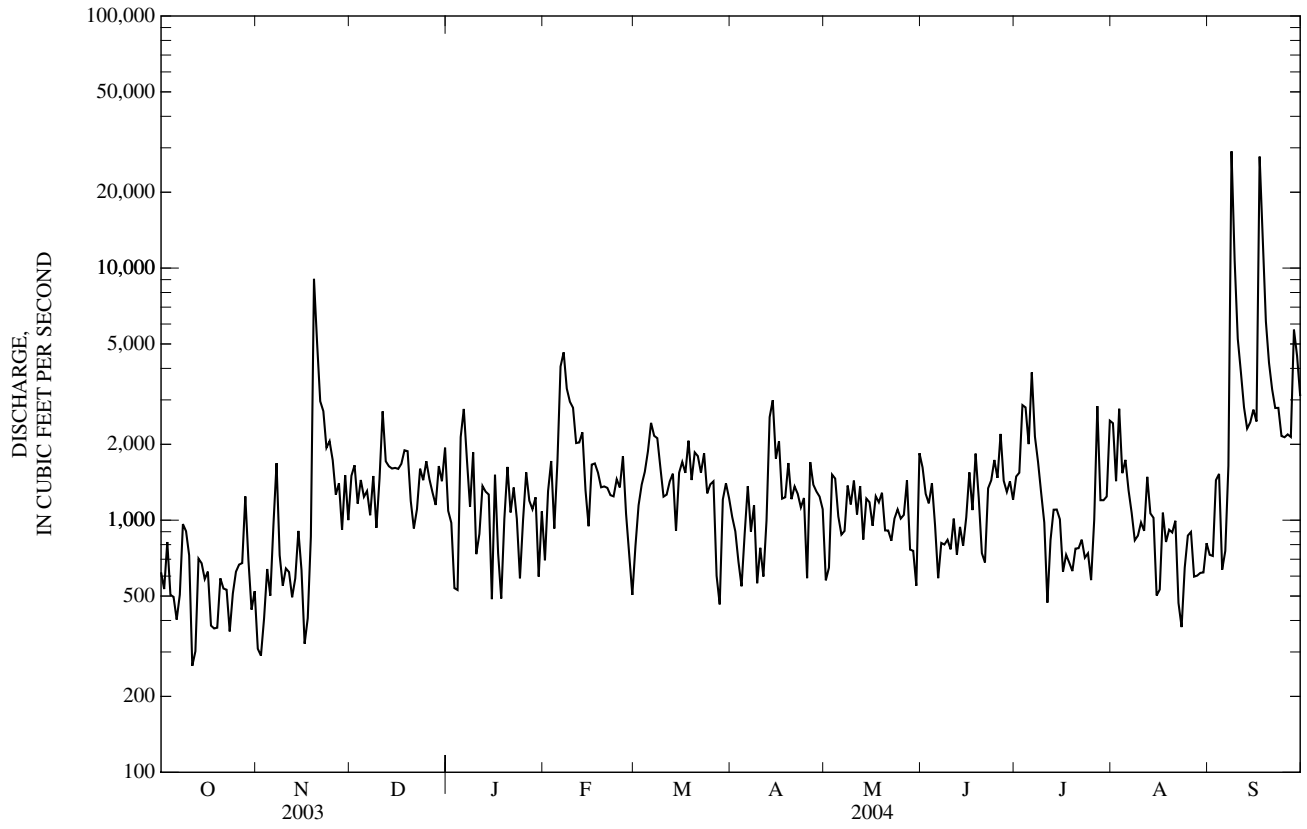
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2004, BY WATER YEAR (WY)

MEAN	623	773	1,238	1,582	1,821	2,165	1,803	1,340	1,065	916	774	671
MAX	2,263	2,265	3,271	3,407	4,762	5,136	4,270	3,470	2,436	2,498	2,229	5,032
(WY)	(1965)	(1980)	(1962)	(1974)	(1957)	(1963)	(1903)	(2003)	(1967)	(1916)	(1928)	(2004)
MIN	148	234	391	369	853	907	716	651	457	328	158	145
(WY)	(1979)	(1954)	(1904)	(1981)	(1904)	(1915)	(1967)	(1914)	(1925)	(1925)	(1925)	(1953)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1901 - 2004	
ANNUAL TOTAL	584,410		571,431			
ANNUAL MEAN	1,601		1,561		1,224	
HIGHEST ANNUAL MEAN					1,761	1909
LOWEST ANNUAL MEAN					644	1914
HIGHEST DAILY MEAN	23,300	May 6	29,100	Sep 8	31,000	Apr 2, 1920
LOWEST DAILY MEAN	216	Sep 21	264	Oct 11	48	Sep 21, 1953
ANNUAL SEVEN-DAY MINIMUM	243	Sep 16	445	Oct 30	65	Nov 7, 1980
MAXIMUM PEAK FLOW			48,800	Sep 17	50,000	Feb 28, 1902
MAXIMUM PEAK STAGE			20.05	Sep 17	a23.40	Feb 28, 1902
INSTANTANEOUS LOW FLOW			b227	Nov 1	38	Oct 5, 1952
ANNUAL RUNOFF (CFSM)	2.40		2.34		1.84	
ANNUAL RUNOFF (INCHES)	32.64		31.92		24.97	
10 PERCENT EXCEEDS	2,700		2,450		2,410	
50 PERCENT EXCEEDS	1,310		1,200		925	
90 PERCENT EXCEEDS	520		550		328	

a Present datum, under present conditions the stage for this flood would be about 1.9 ft lower, due to removal of dam 1.3 mi downstream in 1945, from reports of Tennessee Valley Authority.
b Also occurred on Nov. 2.
e Estimated



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 mi^2.

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: 192l-24, 193l(M).

GAGE.--Data collection platform. Datum of gage is 1,519.30 ft above NGVD 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 observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 21, 1901, reached a stage of 24 ft, discharge, 120,000 ft^3/s, present site and datum, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1615	33,200	10.08	Sep 17	1200	*64,100	*15.55
Feb 7	0145	12,000	5.65	Sep 28	1130	13,800	6.07
Sep 8	0945	60,200	14.92				

Minimum discharge, 433 ft^3/s, Aug. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711	567	1,210	1,300	771	1,160	2,110	1,290	2,140	976	946	686
2	670	550	1,110	1,240	809	1,260	1,970	1,310	1,310	1,040	1,020	2,150
3	626	540	1,040	1,210	1,170	1,640	1,790	1,350	995	1,350	1,270	2,330
4	590	537	1,100	1,250	1,360	1,620	1,730	1,220	962	1,250	904	1,240
5	564	573	1,450	1,420	1,180	1,560	1,600	1,120	1,240	1,340	773	917
6	533	983	1,490	1,830	3,780	2,170	1,430	1,060	941	1,410	763	748
7	503	1,130	1,310	1,460	7,980	2,700	1,360	997	802	1,210	657	2,010
8	484	902	1,180	1,270	3,670	2,190	1,340	936	748	982	583	42,500
9	476	737	1,100	1,290	2,570	1,850	1,300	1,100	792	838	542	14,300
10	1,080	669	1,170	1,190	2,130	1,660	1,210	1,230	1,200	747	524	6,040
11	1,280	635	2,900	1,050	1,870	1,480	1,130	1,110	993	720	498	3,840
12	965	623	2,080	1,040	1,740	1,370	1,200	1,120	825	830	719	2,840
13	819	600	1,700	1,020	1,710	1,260	4,520	1,030	2,050	975	859	2,270
14	735	564	1,640	972	1,610	1,180	5,720	985	1,430	810	700	1,950
15	728	549	1,660	959	1,610	1,140	3,410	897	1,110	688	561	1,720
16	719	560	1,470	910	1,680	1,340	2,660	852	1,690	614	543	1,590
17	646	588	1,720	859	1,540	1,380	2,230	868	1,320	596	521	33,700
18	614	592	1,880	1,040	1,440	1,430	1,930	931	1,060	1,640	494	19,400
19	582	17,200	1,730	1,320	1,360	2,060	1,710	1,000	919	1,060	472	8,090
20	557	8,720	1,540	1,120	1,300	1,770	1,570	894	841	762	447	5,000
21	534	3,730	1,310	985	1,390	1,760	1,460	779	902	648	448	3,730
22	524	2,540	1,310	969	1,470	1,660	1,350	734	1,380	585	512	2,990
23	513	1,990	1,410	911	1,340	1,440	1,250	845	1,280	561	590	2,550
24	497	1,730	2,840	873	1,280	1,350	1,190	1,090	1,230	583	618	2,250
25	489	1,610	2,920	936	1,260	1,270	1,130	820	1,810	739	847	2,010
26	501	1,380	2,110	986	1,210	1,200	1,560	721	3,440	1,100	627	1,810
27	803	1,260	1,740	989	1,210	1,140	2,410	1,300	2,250	2,730	523	1,690
28	1,000	1,320	1,550	960	1,200	1,090	1,740	1,110	1,600	1,970	490	7,310
29	740	1,480	1,410	830	1,160	1,050	1,480	964	1,300	1,310	488	4,480
30	643	1,290	1,510	923	---	1,050	1,350	864	1,080	1,030	966	2,960
31	599	---	1,460	846	---	1,500	---	2,070	---	984	665	---
TOTAL	20,725	56,149	50,050	33,958	52,800	46,730	56,840	32,597	39,640	32,078	20,570	185,101
MEAN	669	1,872	1,615	1,095	1,821	1,507	1,895	1,052	1,321	1,035	664	6,170
MAX	1,280	17,200	2,920	1,830	7,980	2,700	5,720	2,070	3,440	2,730	1,270	42,500
MIN	476	537	1,040	830	771	1,050	1,130	721	748	561	447	686
MED	614	820	1,490	1,020	1,390	1,430	1,570	1,000	1,220	976	590	2,440
CFSM	0.83	2.33	2.01	1.36	2.26	1.87	2.35	1.31	1.64	1.29	0.82	7.66
IN.	0.96	2.59	2.31	1.57	2.44	2.16	2.63	1.51	1.83	1.48	0.95	8.55

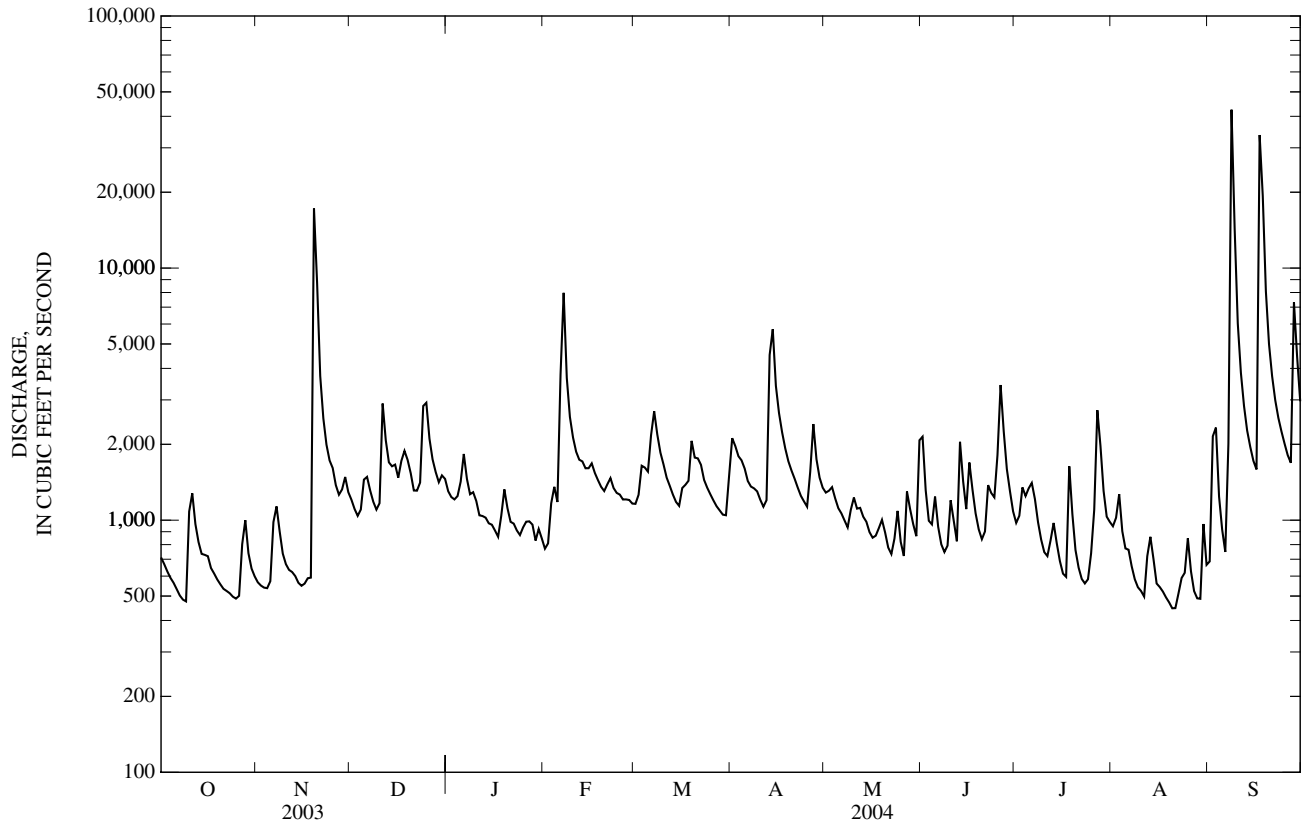
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)

MEAN	798	1,012	1,279	1,693	2,042	2,328	2,023	1,565	1,124	941	915	820
MAX	2,630	4,720	3,073	4,020	4,494	5,102	4,169	3,171	3,196	2,525	4,876	6,170
(WY)	(1930)	(1978)	(1962)	(1995)	(1957)	(1963)	(1983)	(1984)	(1992)	(1949)	(1940)	(2004)
MIN	246	294	353	382	635	649	699	586	376	351	182	187
(WY)	(1954)	(1940)	(1940)	(1940)	(1941)	(1988)	(1986)	(2001)	(1988)	(1988)	(1925)	(1925)

03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1920 - 2004	
ANNUAL TOTAL	650,607		627,238			
ANNUAL MEAN	1,782		1,714		1,374	
HIGHEST ANNUAL MEAN					1,948	1974
LOWEST ANNUAL MEAN					694	1988
HIGHEST DAILY MEAN	17,200	Nov 19	42,500	Sep 8	50,800	Nov 6, 1977
LOWEST DAILY MEAN	476	Oct 9	447	Aug 20	88	Sep 8, 1925
ANNUAL SEVEN-DAY MINIMUM	516	Oct 20	491	Aug 16	121	Sep 3, 1925
MAXIMUM PEAK FLOW			64,100	Sep 17	a110,000	Nov 6, 1977
MAXIMUM PEAK STAGE			15.55	Sep 17	21.52	Nov 6, 1977
INSTANTANEOUS LOW FLOW			c433	Aug 20	b85	Sep 8, 1925
ANNUAL RUNOFF (CFSM)	2.21		2.13		1.71	
ANNUAL RUNOFF (INCHES)	30.07		28.99		23.19	
10 PERCENT EXCEEDS	3,080		2,260		2,560	
50 PERCENT EXCEEDS	1,460		1,200		1,000	
90 PERCENT EXCEEDS	615		583		397	

a From rating curve extended above 48,000 ft^3/s on basis of contracted opening and slope-area measurements of peak flow.
b Also occurred on Sept. 9, 1925.
c Also occurred on Aug. 21.



03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN

LOCATION.--Lat 36°12'21", long 82°39'02", Greene County, Hydrologic Unit 06010108, on right bank, 0.6 mi above confluence with Nolichucky River, 1.8 mi southwest of Limestone, and at mile 0.6.

DRAINAGE AREA.--79.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1996 to February 2000, August 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,340 ft above NGVD of 1929, from topographic map.

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.--Maximum discharge, 10,400 ft^3/s, Aug. 4, 2001, gage height, 12.33 ft minimum discharge, 8.6 ft^3/s, Sept. 18, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,530 ft^3/s, Nov. 19, gage height, 6.75 ft; minimum discharge, 24 ft^3/s, Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	50	104	91	95	112	156	105	156	100	61	37
2	70	49	97	87	96	199	122	113	110	107	76	35
3	68	49	91	83	153	212	115	120	94	104	66	28
4	66	49	137	84	122	155	106	105	87	95	55	30
5	66	50	192	166	113	144	101	100	83	91	54	33
6	69	129	139	203	326	325	98	96	78	86	52	30
7	64	125	123	126	313	202	95	92	74	81	48	31
8	62	79	115	114	168	170	93	89	72	77	47	39
9	64	68	109	111	151	156	92	86	71	71	44	44
10	66	65	113	105	144	152	89	85	72	68	43	33
11	65	60	129	96	138	143	90	98	70	67	43	31
12	63	60	111	104	138	137	96	87	67	69	48	29
13	63	62	106	104	136	133	405	82	159	108	49	29
14	63	58	119	100	129	131	394	81	88	73	45	28
15	74	55	117	99	140	129	183	79	119	69	42	27
16	65	57	107	94	178	146	159	90	129	70	41	27
17	63	74	123	91	169	134	147	78	98	67	41	87
18	63	74	121	105	151	131	141	75	93	58	40	83
19	62	1,780	117	113	144	125	134	73	84	55	39	47
20	61	394	107	99	142	120	130	72	74	54	38	38
21	60	177	101	95	137	121	128	69	71	56	45	35
22	58	151	98	92	130	113	121	67	72	54	42	34
23	58	137	101	88	126	110	117	65	133	52	36	32
24	57	131	119	87	122	107	114	65	179	50	38	31
25	56	123	108	98	119	105	110	62	124	52	36	30
26	57	115	99	129	118	102	166	63	175	92	34	29
27	60	112	95	116	123	100	146	88	125	152	34	29
28	59	123	95	109	125	98	121	77	112	129	33	92
29	54	122	96	103	117	96	113	76	106	77	37	61
30	51	110	96	101	---	99	108	79	101	70	37	45
31	51	---	94	97	---	130	---	320	---	63	42	---
TOTAL	1,929	4,688	3,479	3,290	4,263	4,337	4,190	2,837	3,076	2,417	1,386	1,184
MEAN	62.2	156	112	106	147	140	140	91.5	103	78.0	44.7	39.5
MAX	74	1,780	192	203	326	325	405	320	179	152	76	92
MIN	51	49	91	83	95	96	89	62	67	50	33	27
CFSM	0.79	1.98	1.42	1.34	1.86	1.77	1.77	1.16	1.30	0.99	0.57	0.50
IN.	0.91	2.21	1.64	1.55	2.01	2.04	1.97	1.34	1.45	1.14	0.65	0.56

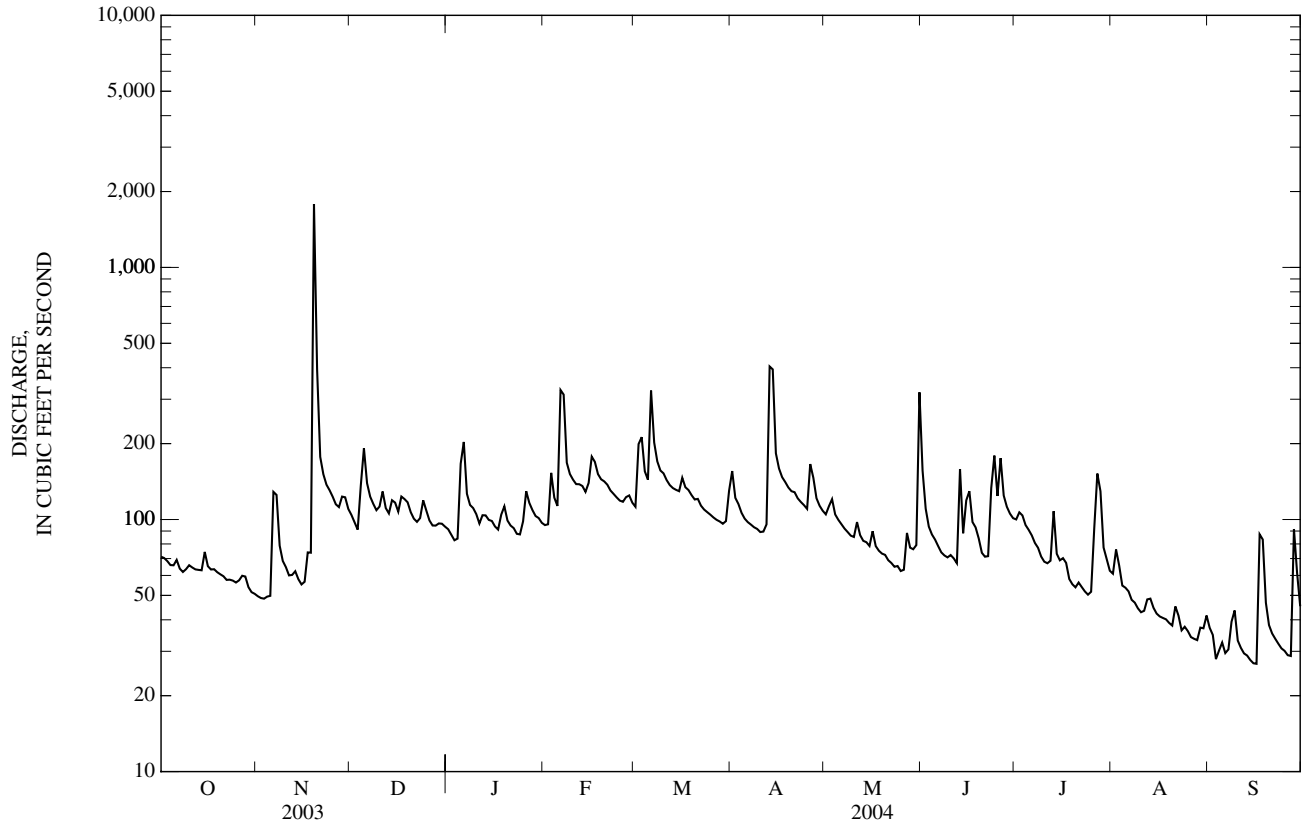
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	30.6	50.4	59.1	81.0	123	135	117	87.0	67.4	69.7	75.8	41.7
MAX	62.2	156	127	172	234	264	165	137	104	133	242	90.1
(WY)	(2004)	(2004)	(1997)	(1997)	(2003)	(1997)	(1998)	(1998)	(1998)	(2003)	(2001)	(2003)
MIN	16.0	19.0	17.1	26.7	41.6	93.2	73.9	39.7	31.4	19.2	14.4	13.8
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2001)	(1999)	(2001)	(2002)	(2002)	(2002)	(2002)

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	43,844		37,076			
ANNUAL MEAN	120		101		80.8	
HIGHEST ANNUAL MEAN					106	2003
LOWEST ANNUAL MEAN					51.6	1999
HIGHEST DAILY MEAN	1,780	Nov 19	1,780	Nov 19	3,790	Aug 4, 2001
LOWEST DAILY MEAN	49	Nov 2	27	Sep 15	9.6	Sep 19, 2002
ANNUAL SEVEN-DAY MINIMUM	50	Oct 30	29	Sep 10	10	Sep 13, 2002
MAXIMUM PEAK FLOW			3,530	Nov 19	a10,400	Aug 4, 2001
MAXIMUM PEAK STAGE			6.75	Nov 19	12.33	Aug 4, 2001
INSTANTANEOUS LOW FLOW			24	Sep 2	8.6	Sep 18, 2002
ANNUAL RUNOFF (CFSM)	1.52		1.28		1.02	
ANNUAL RUNOFF (INCHES)	20.65		17.46		13.90	
10 PERCENT EXCEEDS	175		146		146	
50 PERCENT EXCEEDS	97		94		66	
90 PERCENT EXCEEDS	57		42		21	

a From rating curve extended above 3,400 ft^3/s on basis on contracted-opening measurement of peak flow.



03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN—Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)
NOV													
05...	1530	39	6.0	726	9.0	109	8.3	451	22.5	209	255	--	6.75
DEC													
16...	1200	109	--	733	10.9	96	8.3	460	8.0	206	232	8	7.22
JAN													
22...	1115	93	--	--	11.3	--	8.3	463	5.0	219	252	7	7.38
FEB													
17...	1200	166	43	736	10.1	87	8.2	428	7.5	197	231	5	8.98
MAR													
25...	1045	106	11	738	9.5	92	8.3	422	12.5	214	251	5	7.50
APR													
20...	1115	130	28	728	7.1	76	8.2	447	16.0	206	245	--	6.80
MAY													
13...	1200	19	32	729	8.6	97	8.3	443	18.5	215	262	--	6.57
JUN													
10...	1115	61	34	725	8.2	95	8.3	454	20.0	214	261	--	6.93
JUL													
27...	1115	147	260	--	6.6	--	8.0	366	20.9	160	195	--	7.88
AUG													
18...	1115	39	27	726	8.6	98	8.1	440	19.5	211	257	--	6.43
SEP													
03...	1045	26	26	729	7.3	84	8.1	456	20.5	211	257	--	5.97

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	E coli, m-TEC MF, water, col/ 100 mL (31633)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)
NOV													
05...	8.4	<.04	1.42	.008	.046	.078	--	K1,500	<.006	E.031	<.006	<.005	<.005
DEC													
16...	10.9	<.04	2.57	.008	.040	.067	--	300	--	--	--	--	--
JAN													
22...	10.4	.04	2.29	.034	<.006	.043	210	--	<.006	E.021	<.006	<.005	<.005
FEB													
17...	12.6	.05	2.17	.019	.101	.22	6,500	--	--	--	--	--	--
MAR													
25...	8.5	<.04	2.09	.009	<.006	.048	250	--	<.006	E.024	<.006	<.005	<.005
APR													
20...	8.6	<.04	2.10	.012	.030	.081	750	--	<.006	E.023	<.006	<.005	<.005
MAY													
13...	--	E.02	1.97	.022	.048	.092	1,100	--	<.006	E.028	<.006	<.005	<.005
JUN													
10...	7.1	<.04	2.38	.030	.059	.098	1,000	--	<.006	E.043	<.006	<.005	<.005
JUL													
27...	10.2	.19	1.97	.054	.425	.79	69,000	--	<.006	E.038	.039	<.005	<.005
AUG													
18...	7.5	<.04	1.94	E.006	.054	.104	--	--	--	--	--	--	--
SEP													
03...	7.0	<.04	1.83	E.007	.076	.123	750	--	<.006	E.043	<.006	<.005	<.005

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

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)
NOV													
05...	.030	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
22...	.021	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
25...	.027	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
APR													
20...	.027	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
MAY													
13...	.064	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
JUN													
10...	.166	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
JUL													
27...	.100	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
03...	.045	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)
NOV													
05...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.009	<.006	<.003	<.007	<.003
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
22...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.021	<.006	<.003	<.007	<.003
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
25...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007	<.003
APR													
20...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.012	<.006	<.003	<.007	<.003
MAY													
13...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.029	<.006	<.003	<.007	<.003
JUN													
10...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.075	<.006	<.003	<.007	<.003
JUL													
27...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.097	<.006	<.003	<.007	<.003
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
03...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007	<.003

03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
NOV 05...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	E.01	<.034	<.02
DEC 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 22...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02
FEB 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 25...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.007	E.01	<.034	<.02
APR 20...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.006	E.01	<.034	<.02
MAY 13...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02
JUN 10...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.025	E.01	<.034	<.02
JUL 27...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	<.005	E.01	<.034	<.02
AUG 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02

Date	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)
NOV 05...	<.010	<.002	<.009	8
DEC 16...	--	--	--	68
JAN 22...	<.010	<.002	<.009	61
FEB 17...	--	--	--	41
MAR 25...	<.010	<.002	<.009	68
APR 20...	<.010	<.002	<.009	113
MAY 13...	<.010	<.002	<.009	66
JUN 10...	<.010	<.002	<.009	60
JUL 27...	<.010	<.002	<.009	220
AUG 18...	--	--	--	39
SEP 03...	<.010	<.002	<.009	32

E--Estimated

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03467000 LICK CREEK AT MOHAWK, TN

LOCATION.--Lat 36°12'05", long 83°02'52", Greene County, Hydrologic Unit 06010108, on left bank at county highway bridge, 0.25 mi east of Mohawk, 0.6 mi upstream from Riley Creek, and at mile 17.4.

DRAINAGE AREA.--220 mi^2.

PERIOD OF RECORD.--July 1946 to September 1971, October 2001 to September 2004.

GAGE.--Electronic data logger. Datum of gage is 1,060.59 ft above NGVD of 1929.

REMARKS.--Records good.

EXTREMES FOR WATER YEARS 2002-2004--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

WATER YEAR 2002

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 25	0300	5,460	14.52	Mar 18	1800	*unknown	*15.89

Minimum discharge, 7.1 ft^3/s, Aug. 10, 13, Sept. 10.

WATER YEAR 2003

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 17	0000	4,130	14.18	Apr 11	2015	3,770	14.05
Feb 23	0730	*6,360	14.71				

Minimum discharge, 11 ft^3/s, Oct. 6.

WATER YEAR 2004

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	1130	*unknown	*15.30	No other peak greater than base discharge.			

Minimum discharge, 31 ft^3/s, Sept. 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e59	46	44	53	183	71	759	e100	44	23	15	12
2	e58	46	44	61	169	68	603	e100	38	21	15	9.3
3	e57	47	42	42	152	72	305	e150	37	20	14	9.1
4	e57	47	39	43	142	74	235	e145	36	25	12	8.6
5	e55	44	38	41	131	68	197	e135	34	27	9.6	10
6	e53	42	37	39	122	65	176	e125	37	21	9.3	10
7	e57	42	37	43	161	67	161	e115	110	18	9.5	9.1
8	e56	41	38	48	277	66	149	e125	89	17	9.4	11
9	e55	41	44	57	246	62	144	e115	44	16	8.6	8.2
10	e54	44	52	48	175	62	142	e100	34	17	7.7	7.6
11	e52	43	80	45	150	62	132	e95	31	20	7.9	8.0
12	e51	40	90	49	134	60	122	e85	32	32	7.7	8.7
13	e51	39	182	48	123	64	116	e95	28	23	7.5	9.1
14	e50	39	339	43	115	68	114	e140	32	22	7.8	11
15	e51	39	135	41	109	67	133	e130	42	22	8.5	14
16	e50	39	79	39	104	62	137	e100	35	21	11	15
17	e49	38	75	40	97	800	111	e80	28	20	13	16
18	e49	39	144	40	92	e4,850	102	e75	26	18	12	19
19	e48	40	170	164	89	e3,170	95	e80	28	16	11	22
20	e47	44	99	182	93	1,810	89	e80	27	16	13	25
21	e48	42	74	138	100	910	88	e75	26	15	14	30
22	e47	38	63	139	97	459	85	e70	24	22	17	35
23	e47	37	56	763	88	332	85	e65	21	30	14	36
24	e46	39	60	3,420	81	281	80	63	20	398	12	39
25	47	43	64	3,960	78	248	113	58	21	62	11	36
26	e46	45	60	2,220	77	226	121	55	25	38	15	106
27	48	46	53	1,060	77	222	90	52	23	26	28	109
28	47	44	48	381	74	207	e90	50	52	21	359	63
29	44	42	46	279	---	182	e95	49	61	18	65	35
30	43	44	43	234	---	180	e90	49	33	16	23	21
31	45	---	40	203	---	422	---	46	---	16	15	---
TOTAL	1,567	1,260	2,415	13,963	3,536	15,357	4,959	2,802	1,118	1,077	782.5	752.7
MEAN	50.5	42.0	77.9	450	126	495	165	90.4	37.3	34.7	25.2	25.1
MAX	59	47	339	3,960	277	4,850	759	150	110	398	359	109
MIN	43	37	37	39	74	60	80	46	20	15	7.5	7.6
CFSM	0.23	0.19	0.35	2.05	0.57	2.25	0.75	0.41	0.17	0.16	0.11	0.11
IN.	0.26	0.21	0.41	2.36	0.60	2.60	0.84	0.47	0.19	0.18	0.13	0.13

03467000 LICK CREEK AT MOHAWK, TN—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)												
MEAN	58.4	110	238	404	547	499	336	210	119	126	92.8	40.1
MAX	421	466	732	1,173	1,354	1,305	834	881	369	687	434	171
(WY)	(1967)	(1960)	(1962)	(1947)	(1957)	(1963)	(1970)	(1958)	(1947)	(1949)	(1971)	(1966)
MIN	15.5	19.1	23.9	79.7	91.3	147	119	59.9	37.3	34.7	20.0	12.8
(WY)	(1955)	(1954)	(1966)	(1966)	(1954)	(1970)	(1963)	(1948)	(2002)	(2002)	(1954)	(1954)

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	49,589.2			
ANNUAL MEAN	136		230	
HIGHEST ANNUAL MEAN			363	1950
LOWEST ANNUAL MEAN			135	1969
HIGHEST DAILY MEAN	4,850	Mar 18	8,090	Jan 31, 1950
LOWEST DAILY MEAN	7.5	Aug 13	7.5	Aug 13, 2002
ANNUAL SEVEN-DAY MINIMUM	8.0	Aug 9	8.0	Aug 9, 2002
MAXIMUM PEAK FLOW			a12,200	Mar 12, 1963
MAXIMUM PEAK STAGE	15.89	Mar 18	a17.35	Mar 12, 1963
INSTANTANEOUS LOW FLOW	7.1	Aug 10	b7.1	Aug 10, 2002
ANNUAL RUNOFF (CFSM)	0.618		1.05	
ANNUAL RUNOFF (INCHES)	8.39		14.21	
10 PERCENT EXCEEDS	181		518	
50 PERCENT EXCEEDS	49		79	
90 PERCENT EXCEEDS	14		22	

a From datum then in place.
b Also occurred Aug. 13 and Sept. 10, 2002.
e Estimated

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	109	105	182	752	935	229	187	139	65	183	698
2	14	69	94	198	400	674	173	175	106	719	328	653
3	13	56	91	360	308	522	153	277	90	897	453	562
4	13	55	234	481	763	435	142	205	88	890	694	331
5	13	59	1,180	287	1,020	387	159	191	89	362	594	702
6	12	134	1,580	283	763	753	225	893	84	154	722	715
7	14	182	1,270	257	395	955	212	977	83	213	272	232
8	15	122	379	215	419	726	310	689	120	409	351	151
9	20	84	221	196	319	429	929	323	113	201	191	131
10	20	70	184	178	292	360	1,790	243	83	262	136	115
11	20	584	635	157	332	317	3,420	218	75	467	148	103
12	20	1,040	662	140	284	291	2,810	217	81	229	280	96
13	20	1,090	389	130	242	274	1,440	173	90	163	297	90
14	18	710	631	127	271	276	731	150	81	167	195	85
15	17	198	488	123	1,240	257	409	142	234	120	115	83
16	36	168	302	117	3,370	242	342	146	179	105	100	91
17	44	284	239	118	2,880	251	305	146	154	101	93	83
18	39	326	202	116	1,350	238	441	161	172	98	105	76
19	30	233	179	110	745	237	648	177	127	89	155	72
20	23	205	703	111	501	228	407	129	123	81	95	70
21	20	272	625	131	479	229	450	314	93	76	84	68
22	20	444	309	144	2,000	208	630	543	76	116	76	72
23	21	323	234	128	5,250	185	382	287	70	222	81	136
24	23	204	395	107	2,240	172	291	174	65	155	76	148
25	21	155	827	103	1,140	162	258	136	62	94	68	87
26	18	133	811	112	715	155	258	125	59	80	66	76
27	20	177	406	111	823	157	247	118	57	73	64	72
28	36	184	282	99	986	149	210	107	57	69	69	87
29	94	140	238	591	---	139	189	104	58	67	204	130
30	447	119	209	1,190	---	170	176	110	55	75	97	77
31	269	---	189	1,370	---	292	---	107	---	81	304	---
TOTAL	1,405	7,929	14,293	7,972	30,279	10,805	18,366	7,944	2,963	6,900	6,696	6,092
MEAN	45.3	264	461	257	1,081	349	612	256	98.8	223	216	203
MAX	447	1,090	1,580	1,370	5,250	955	3,420	977	234	897	722	715
MIN	12	55	91	99	242	139	142	104	55	65	64	68
CFSM	0.21	1.20	2.10	1.17	4.92	1.58	2.78	1.16	0.45	1.01	0.98	0.92
IN.	0.24	1.34	2.42	1.35	5.12	1.83	3.11	1.34	0.50	1.17	1.13	1.03

03467000 LICK CREEK AT MOHAWK, TN—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)												
MEAN	57.9	116	246	398	566	493	346	212	119	129	97.2	45.9
MAX	421	466	732	1,173	1,354	1,305	834	881	369	687	434	203
(WY)	(1967)	(1960)	(1962)	(1947)	(1957)	(1963)	(1970)	(1958)	(1947)	(1949)	(1971)	(2003)
MIN	15.5	19.1	23.9	79.7	91.3	147	119	59.9	37.3	34.7	20.0	12.8
(WY)	(1955)	(1954)	(1966)	(1966)	(1954)	(1970)	(1963)	(1948)	(2002)	(2002)	(1954)	(1954)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	67,974.2		121,644			
ANNUAL MEAN	186		333		234	
HIGHEST ANNUAL MEAN					363	1950
LOWEST ANNUAL MEAN					135	1969
HIGHEST DAILY MEAN	4,850	Mar 18	5,250	Feb 23	8,090	Jan 31, 1950
LOWEST DAILY MEAN	7.5	Aug 13	12	Oct 6	7.5	Aug 13, 2002
ANNUAL SEVEN-DAY MINIMUM	8.0	Aug 9	13	Oct 1	8.0	Aug 9, 2002
MAXIMUM PEAK FLOW			6,360	Feb 23	a12,200	Mar 12, 1963
MAXIMUM PEAK STAGE			14.71	Feb 23	a17.35	Mar 12, 1963
INSTANTANEOUS LOW FLOW			11	Oct 6	b7.1	Aug 10, 2002
ANNUAL RUNOFF (CFSM)	0.847		1.51		1.06	
ANNUAL RUNOFF (INCHES)	11.49		20.57		14.45	
10 PERCENT EXCEEDS	380		737		534	
50 PERCENT EXCEEDS	67		178		83	
90 PERCENT EXCEEDS	13		61		22	

a From datum then in place.
b Also occurred Aug. 13 and Sept. 10, 2002.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	41	247	217	172	255	697	141	883	217	122	50
2	61	40	199	193	169	521	583	144	682	212	100	48
3	59	38	172	184	602	978	299	209	233	169	81	41
4	57	37	250	177	747	975	245	174	257	157	96	40
5	56	41	817	637	374	456	207	137	186	156	70	37
6	55	188	893	1,130	769	1,010	184	125	143	139	66	35
7	53	687	475	1,360	1,440	1,440	171	116	119	124	63	35
8	50	430	303	632	1,580	1,260	163	108	108	116	59	49
9	48	143	251	326	708	534	154	103	102	108	56	83
10	47	102	403	300	384	420	143	99	107	100	54	97
11	46	89	611	266	328	372	141	101	95	102	54	58
12	43	80	397	243	316	318	161	105	129	174	141	45
13	41	74	266	240	369	283	698	94	737	140	105	40
14	43	85	274	223	303	260	1,100	90	883	153	73	38
15	50	80	448	206	406	248	1,260	86	780	108	57	35
16	66	72	333	193	946	295	624	129	786	88	49	32
17	59	85	474	175	963	357	303	147	705	81	47	360
18	50	131	575	229	573	321	255	118	239	79	47	518
19	48	1,350	385	499	393	325	225	98	170	78	46	201
20	45	e5,500	330	338	339	256	204	90	141	73	44	86
21	41	2,510	268	228	317	257	195	87	131	68	42	64
22	43	866	232	198	287	244	182	81	242	65	72	55
23	43	314	222	183	256	208	168	80	336	64	71	47
24	39	259	348	170	242	192	164	79	802	62	50	45
25	38	253	426	215	232	183	153	80	973	60	49	42
26	38	211	279	609	217	173	248	77	1,130	116	44	38
27	41	183	226	462	269	165	448	160	1,020	256	42	37
28	54	381	206	304	456	159	244	174	591	543	39	51
29	69	678	194	237	324	153	172	129	283	257	37	146
30	54	403	281	211	---	213	150	156	228	111	39	94
31	46	---	294	195	---	291	---	663	---	97	42	---
TOTAL	1,549	15,351	11,079	10,780	14,481	13,122	9,941	4,180	13,221	4,273	1,957	2,547
MEAN	50.0	512	357	348	499	423	331	135	441	138	63.1	84.9
MAX	69	5,500	893	1,360	1,580	1,440	1,260	663	1,130	543	141	518
MIN	38	37	172	170	169	153	141	77	95	60	37	32
CFSM	0.23	2.33	1.62	1.58	2.27	1.92	1.51	0.61	2.00	0.63	0.29	0.39
IN.	0.26	2.60	1.87	1.82	2.45	2.22	1.68	0.71	2.24	0.72	0.33	0.43

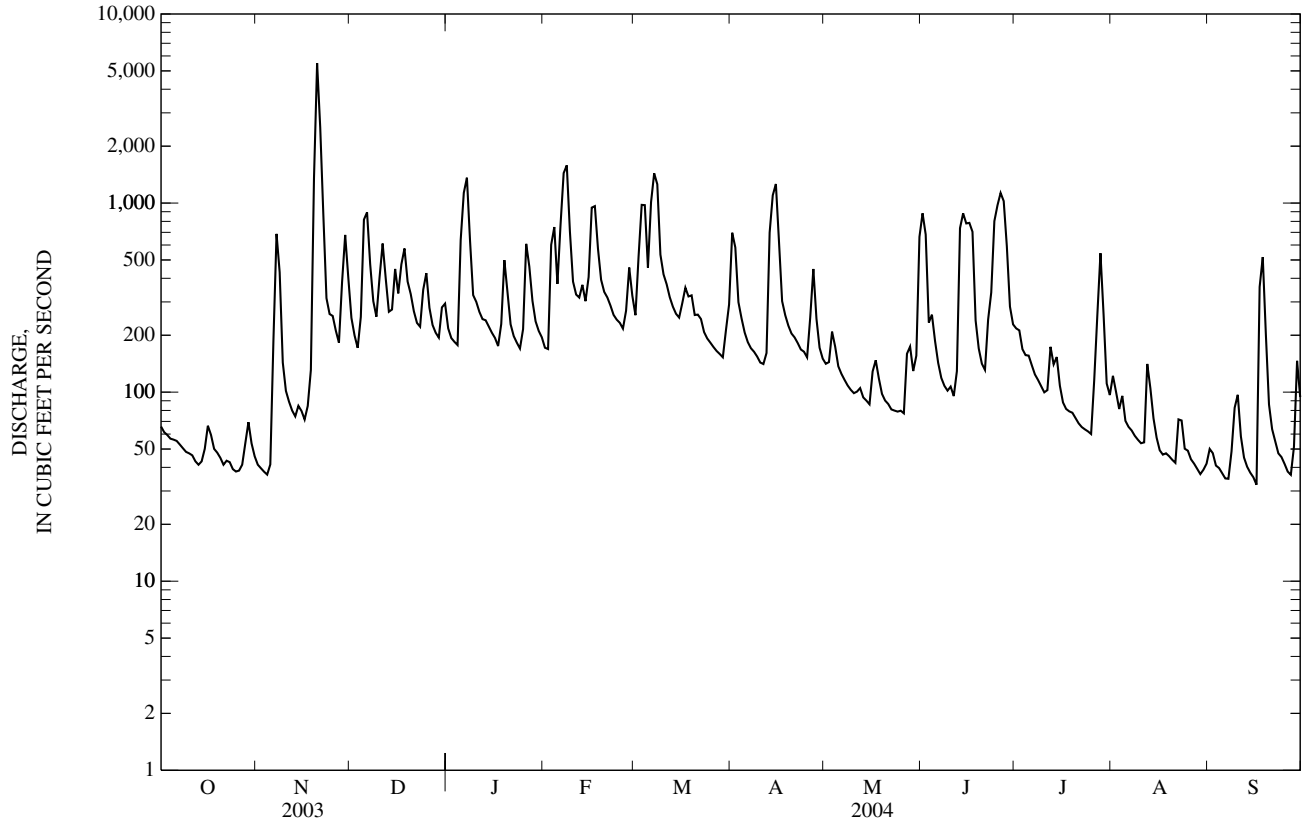
03467000 LICK CREEK AT MOHAWK, TN—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)												
MEAN	57.6	130	250	396	564	491	346	209	130	129	96.1	47.3
MAX	421	512	732	1,173	1,354	1,305	834	881	441	687	434	203
(WY)	(1967)	(2004)	(1962)	(1947)	(1957)	(1963)	(1970)	(1958)	(2004)	(1949)	(1971)	(2003)
MIN	15.5	19.1	23.9	79.7	91.3	147	119	59.9	37.3	34.7	20.0	12.8
(WY)	(1955)	(1954)	(1966)	(1966)	(1954)	(1970)	(1963)	(1948)	(2002)	(2002)	(1954)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1946 - 2004	
ANNUAL TOTAL	125,996		102,481			
ANNUAL MEAN	345		280		236	
HIGHEST ANNUAL MEAN					363	1950
LOWEST ANNUAL MEAN					135	1969
HIGHEST DAILY MEAN	5,500	Nov 20	5,500	Nov 20	8,090	Jan 31, 1950
LOWEST DAILY MEAN	37	Nov 4	32	Sep 16	7.5	Aug 13, 2002
ANNUAL SEVEN-DAY MINIMUM	40	Oct 21	40	Oct 21	8.0	Aug 9, 2002
MAXIMUM PEAK FLOW					a12,200	Mar 12, 1963
MAXIMUM PEAK STAGE			15.30	Nov 20	a17.35	Mar 12, 1963
INSTANTANEOUS LOW FLOW			31	Sep 16	b7.1	Aug 10, 2002
ANNUAL RUNOFF (CFSM)	1.57		1.27		1.07	
ANNUAL RUNOFF (INCHES)	21.30		17.33		14.55	
10 PERCENT EXCEEDS	728		679		537	
50 PERCENT EXCEEDS	178		172		85	
90 PERCENT EXCEEDS	59		45		22	

a From datum then in place.
b Also occurred Aug. 13 and Sept. 10, 2002.
e Estimated



03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN

LOCATION.--Lat 36°07'34", long 83°10'31", Cocke County, Hydrologic Unit 06010108, on left bank at Jones Bridge on Tennessee Highway 160, 2.85 mi southeast of Lowland, and at mile 10.3.

DRAINAGE AREA.-- 1,687 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Operated by Tennessee Valley Authority as stage-discharge site from March 1990 to April 2001. Not published by the USGS. Re-established as stage discharge recording station by USGS personnel October 2001 to current year. Operated as a water-quality site from March 1996 to February 1998 (destroyed by flood of February 1998). Re-established November 1998, discontinued as water quality site October 2000.

GAGE.--Data logger.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,000 ft^3/s, Sept. 9, gage height 26.17 ft; minimum discharge, 666 ft^3/s, Oct. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,100	927	2,380	2,450	1,680	2,260	3,550	2,210	4,660	1,970	1,750	1,210
2	1,000	869	2,150	2,220	1,610	3,440	4,010	2,140	3,810	1,860	1,680	1,030
3	949	849	2,000	2,130	2,480	4,460	3,340	2,360	2,490	1,910	1,620	2,250
4	902	835	2,010	2,070	3,010	4,110	2,980	2,400	2,130	2,090	1,870	2,560
5	848	848	2,880	3,380	2,800	3,600	2,810	2,150	1,890	1,950	1,560	1,670
6	839	1,350	3,420	4,400	4,830	6,340	2,600	1,980	1,940	2,190	1,370	1,330
7	817	2,380	3,100	4,200	9,810	6,300	2,390	1,880	1,670	2,130	1,300	1,170
8	774	2,240	2,490	3,800	9,400	5,790	2,290	1,770	1,490	1,870	1,170	5,850
9	747	1,550	2,220	2,660	6,230	4,690	2,240	1,650	1,390	1,640	1,090	37,300
10	763	1,230	2,480	2,480	4,160	3,560	2,150	1,820	1,490	1,460	1,040	12,800
11	1,090	1,120	3,010	2,260	3,510	3,190	2,020	2,440	1,850	1,660	977	5,780
12	1,480	1,060	4,110	2,070	3,230	2,870	2,020	1,860	1,670	2,060	1,040	3,930
13	1,180	1,020	3,080	2,020	3,250	2,660	3,780	1,810	2,940	1,690	1,120	3,070
14	1,080	983	2,680	1,970	3,040	2,450	8,400	1,670	3,410	1,800	1,370	2,570
15	967	973	2,780	1,880	3,090	2,350	7,390	1,640	3,720	1,500	1,180	2,230
16	938	929	2,730	1,820	4,380	2,510	5,580	1,610	2,850	1,280	1,010	2,000
17	962	982	2,960	1,740	4,080	2,920	4,000	1,620	3,050	1,200	957	4,380
18	894	1,070	3,300	1,820	3,610	3,150	3,370	1,560	2,290	1,180	930	36,900
19	819	7,110	3,250	2,370	3,020	3,320	3,000	1,580	1,960	1,840	893	17,900
20	800	24,900	2,950	2,550	2,800	3,480	2,730	1,640	1,610	1,600	871	7,490
21	779	12,000	2,590	2,140	2,680	3,340	2,550	1,520	1,840	1,270	870	5,150
22	751	7,040	2,310	1,920	2,640	2,970	2,400	1,400	2,250	1,120	1,000	4,040
23	727	4,140	2,270	1,840	2,640	2,660	2,250	1,300	2,280	1,050	984	3,360
24	711	3,150	2,730	1,770	2,480	2,410	2,120	1,380	2,830	1,010	1,140	2,930
25	700	2,840	4,600	1,800	2,380	2,290	2,010	1,600	3,310	1,010	1,050	2,620
26	681	2,600	4,050	2,350	2,330	2,190	2,290	1,440	5,020	2,640	1,240	2,360
27	753	2,320	3,190	2,430	2,370	2,090	3,400	1,630	5,550	4,510	1,090	2,200
28	944	2,490	2,750	2,130	2,650	2,000	3,540	2,130	3,990	5,140	955	2,580
29	1,330	3,020	2,520	1,960	2,480	1,950	2,730	1,930	2,710	3,320	869	8,190
30	1,130	2,870	2,600	1,780	---	1,990	2,390	1,720	2,250	2,230	874	4,720
31	992	---	2,660	1,800	---	2,370	---	3,230	---	1,820	1,480	---
TOTAL	28,447	95,695	88,250	72,210	102,670	99,710	96,330	57,070	80,340	60,000	36,350	191,570
MEAN	918	3,190	2,847	2,329	3,540	3,216	3,211	1,841	2,678	1,935	1,173	6,386
MAX	1,480	24,900	4,600	4,400	9,810	6,340	8,400	3,230	5,550	5,140	1,870	37,300
MIN	681	835	2,000	1,740	1,610	1,950	2,010	1,300	1,390	1,010	869	1,030

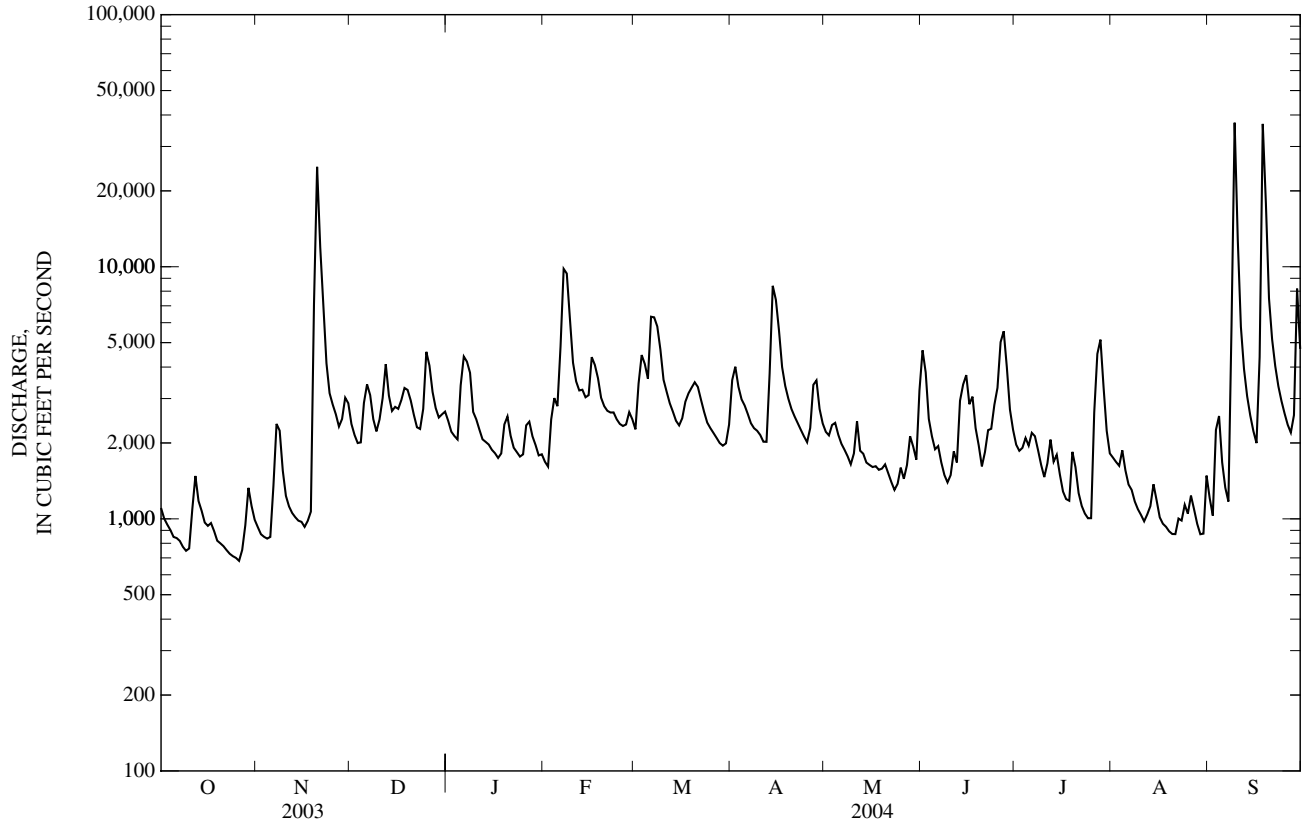
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	704	1,360	1,786	2,673	3,504	3,620	3,518	2,592	1,845	1,587	1,261	1,729
MAX	944	3,190	3,209	4,077	6,166	6,211	5,946	4,148	2,678	2,429	2,538	6,386
(WY)	(1997)	(2004)	(2003)	(1998)	(2003)	(1997)	(1998)	(1998)	(2004)	(2003)	(2003)	(2004)
MIN	458	535	653	1,268	1,784	2,515	1,673	1,398	775	679	422	556
(WY)	(2001)	(1999)	(2001)	(2001)	(2002)	(2000)	(1999)	(2002)	(2002)	(2002)	(2002)	(1998)

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	1,111,616		1,008,642			
ANNUAL MEAN	3,046		2,756		2,327	
HIGHEST ANNUAL MEAN					2,995	2003
LOWEST ANNUAL MEAN					1,441	2002
HIGHEST DAILY MEAN	24,900	Nov 20	37,300	Sep 9	37,300	Sep 9, 2004
LOWEST DAILY MEAN	681	Oct 26	681	Oct 26	212	Sep 16, 2002
ANNUAL SEVEN-DAY MINIMUM	729	Oct 21	729	Oct 21	231	Sep 11, 2002
MAXIMUM PEAK FLOW			48,000	Sep 9	48,000	Sep 9, 2004
MAXIMUM PEAK STAGE			26.17	Sep 9	26.17	Sep 9, 2004
INSTANTANEOUS LOW FLOW			666	Oct 26	a208	Sep 13, 2002
10 PERCENT EXCEEDS	5,690		4,170		4,450	
50 PERCENT EXCEEDS	2,500		2,220		1,700	
90 PERCENT EXCEEDS	988		971		586	

a Also occurred Sept. 15, 16, 2002.



03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN—Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 36°07'34", long 83°10'31", Cocke County, Hydrologic Unit 06010108, on left bank at Jones Bridge on Tennessee Highway 160, 2.85 mi southeast of Lowland, and at mile 10.3.

DRAINAGE AREA.--1,687 mi^2.

PERIOD OF RECORD.--March 1996 to February 1998 (destroyed by flood of February 1998). Re-established November 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)
NOV													
05...	1130	824	4.7	735	10.5	110	8.3	200	16.0	76	82	4	5.44
JAN													
23...	1200	1,820	--	741	13.9	105	8.2	241	2.5	87	106	--	7.03
FEB													
18...	1115	3,650	28	744	12.5	103	8.0	242	6.0	89	109	--	7.00
MAR													
24...	1100	2,180	6.5	746	11.2	101	8.0	210	10.0	82	100	--	6.64
APR													
19...	1115	2,950	25	741	9.2	96	7.9	181	16.0	69	84	--	4.93
MAY													
14...	1130	1,640	14	739	7.9	92	8.0	207	21.5	78	95	--	5.66
JUN													
09...	1145	1,340	17	738	8.8	104	8.2	203	22.0	82	100	--	5.59
JUL													
28...	1100	5,140	340	735	7.2	86	7.4	150	22.5	49	60	--	4.34

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	E coli, m-TEC MF, water, col/ 100 mL (31633)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)
NOV													
05...	9.1	<.04	.27	<.008	E.005	.019	--	K10	<.006	E.007	<.006	<.005	<.005
JAN													
23...	16.1	<.04	.86	<.008	<.006	.022	10	10	<.006	E.006	<.006	<.005	<.005
FEB													
18...	20.1	E.02	.84	E.005	.024	.083	200	--	--	--	--	--	--
MAR													
24...	12.9	<.04	.64	.022	<.006	.024	15	--	<.006	E.008	<.006	<.005	<.005
APR													
19...	10.1	<.04	.64	E.006	.007	.054	53	--	<.006	E.008	<.006	<.005	<.005
MAY													
14...	9.4	E.02	.68	.057	.015	.051	--	--	<.006	E.010	<.006	<.005	<.005
JUN													
09...	9.6	<.04	.77	E.006	.028	.062	56	--	<.006	E.010	<.006	<.005	<.005
JUL													
28...	8.3	E.03	.52	E.005	.070	.33	3,500	--	<.006	E.006	E.005	<.005	<.005

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

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)
NOV													
05...	.009	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
JAN													
23...	.008	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
24...	.009	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
APR													
19...	.028	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
MAY													
14...	.035	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02
JUN													
09...	.049	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.006	<.009	<.02
JUL													
28...	.032	<.050	<.010	<.004	E.025	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)
NOV													
05...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.007	<.006	<.003	<.007	<.003
JAN													
23...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.011	<.006	<.003	<.007	<.003
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
24...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.007	<.006	<.003	<.007	<.003
APR													
19...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.009	<.006	<.003	<.007	<.005
MAY													
14...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.016	<.006	<.003	<.007	<.003
JUN													
09...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.085	<.006	<.003	<.007	<.003
JUL													
28...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.020	.022	<.003	<.007	<.003

E--Estimated

03467609 NOLICHUCKY RIVER NEAR LOWLAND, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
NOV 05...	<.010	<.004	<.022	<.011	M	<.004	<.025	<.011	<.02	.006	<.02	<.034	<.02
JAN 23...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 24...	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.008	<.02	<.034	<.02
APR 19...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.009	E.01	<.034	<.02
MAY 14...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.017	E.01	<.034	<.02
JUN 09...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.025	<.02	<.034	<.02
JUL 28...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02

Date	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)
NOV 05...	<.010	<.002	<.009	13
JAN 23...	<.010	<.002	<.009	39
FEB 18...	--	--	--	30
MAR 24...	<.010	<.002	<.009	8
APR 19...	<.010	<.002	<.009	31
MAY 14...	<.010	<.002	<.009	19
JUN 09...	<.010	<.002	<.009	22
JUL 28...	<.010	<.002	<.009	247

E--Estimated

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03469175 LITTLE PIGEON RIVER ABOVE SEVIERVILLE, TN

LOCATION.--Lat 35°51'54", long 83°32'00", Sevier County, Hydrologic Unit 06010107, on left bank of county road, 1.2 mi downstream from East Fork, 1.2 mi upstream from West Prong, 0.8 mi east of Sevierville, and at mile 7.5.

DRAINAGE AREA.-- 184 mi^2.

PERIOD OF RECORD.--August 1988 to current year.

REVISED RECORD.--WDR TN-94-1: 1989-91 (M): 1992, 1993(P).

GAGE.--Data collection platform. Datum of gage is 898.08 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. The town of Sevierville diverts an average of about 1.5 ft^3/s (1.0 MGD) for municipal supply above gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	0930	*8,270	*11.73	Sep 17	2030	6,060	9.76

Minimum discharge, 51 ft^3/s, Oct. 26, Nov. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	60	330	301	196	180	442	217	762	489	950	162
2	96	58	273	277	194	473	365	333	408	658	666	163
3	90	56	238	290	390	690	309	692	309	891	1,180	133
4	87	55	286	334	329	470	300	473	426	613	469	123
5	82	60	357	999	299	402	274	369	331	513	363	113
6	79	750	317	1,140	2,000	1,850	249	307	255	1,430	637	101
7	77	563	277	582	1,850	1,160	246	261	217	661	398	102
8	74	263	248	437	860	663	275	229	194	443	313	954
9	72	184	226	377	568	494	296	213	184	339	259	2,020
10	69	147	568	316	460	456	256	251	207	352	223	626
11	70	126	667	268	387	384	236	333	224	643	197	374
12	69	115	409	253	387	355	230	479	175	374	249	304
13	66	145	332	248	383	319	1,220	254	788	383	301	244
14	65	127	335	236	352	293	922	212	616	377	254	203
15	73	113	319	229	349	289	589	184	419	301	222	173
16	76	108	278	210	350	490	486	166	452	247	198	162
17	69	111	494	198	309	434	406	173	337	252	182	3,880
18	66	113	431	294	290	552	343	234	280	406	170	2,160
19	63	3,700	373	554	272	729	299	237	244	250	151	850
20	61	1,610	316	384	261	553	268	180	214	213	139	493
21	58	673	270	316	260	527	249	154	191	186	156	358
22	56	430	250	276	239	424	227	152	482	162	233	286
23	57	323	243	245	222	356	207	317	526	161	189	239
24	56	318	418	226	217	319	193	206	725	138	185	207
25	56	341	419	246	212	288	181	166	902	160	247	185
26	56	269	355	303	207	262	417	151	1,800	220	232	168
27	64	240	309	287	210	243	494	265	899	819	179	155
28	96	648	280	268	197	231	328	216	568	431	153	438
29	76	620	257	240	185	218	269	239	452	287	150	389
30	66	413	447	231	---	232	236	227	370	238	159	256
31	61	---	360	213	---	272	---	1,440	---	463	312	---
TOTAL	2,207	12,739	10,682	10,778	12,435	14,608	10,812	9,330	13,957	13,100	9,716	16,021
MEAN	71.2	425	345	348	429	471	360	301	465	423	313	534
MAX	101	3,700	667	1,140	2,000	1,850	1,220	1,440	1,800	1,430	1,180	3,880
MIN	56	55	226	198	185	180	181	151	175	138	139	101
CFSM	0.39	2.31	1.87	1.89	2.33	2.56	1.96	1.64	2.53	2.30	1.70	2.90
IN.	0.45	2.58	2.16	2.18	2.51	2.95	2.19	1.89	2.82	2.65	1.96	3.24

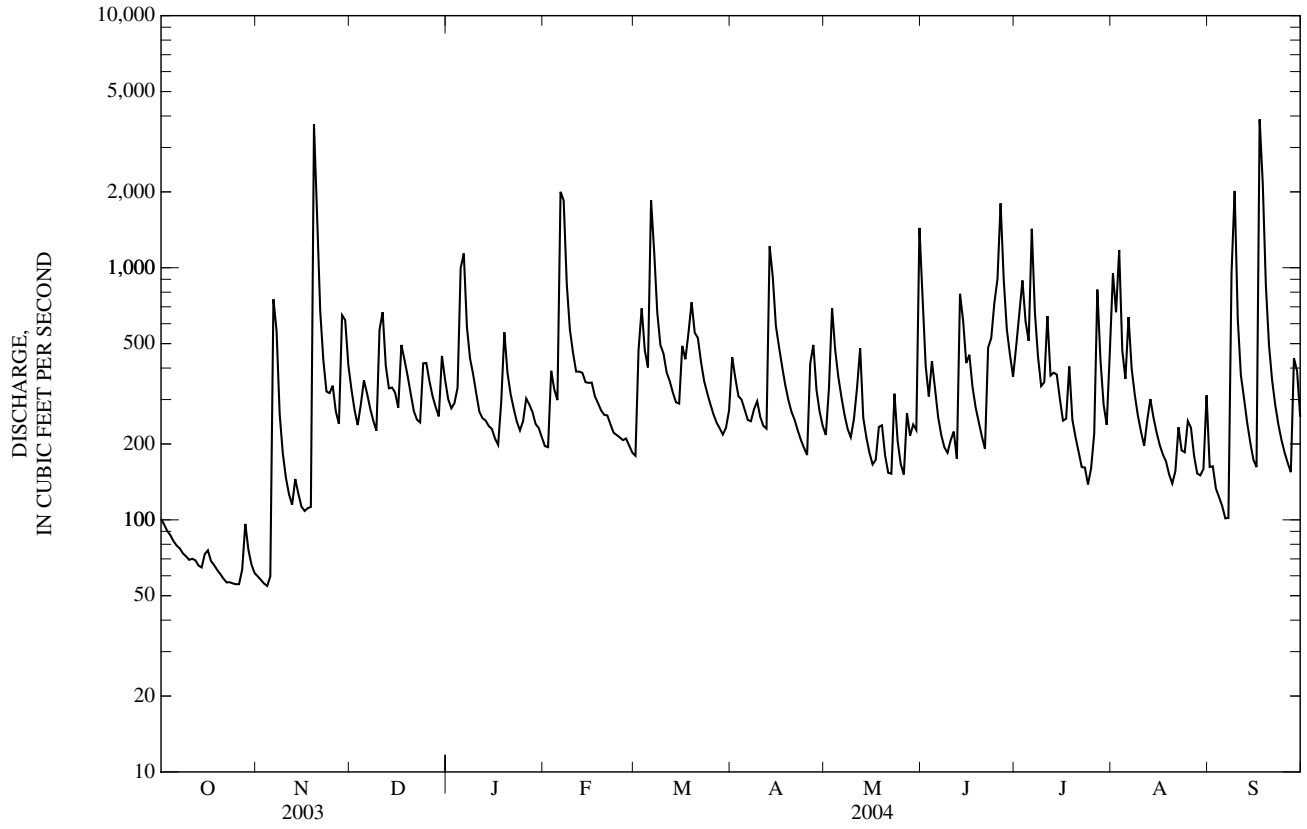
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	118	216	342	512	580	648	480	391	316	261	189	169
MAX	335	425	743	873	1,024	1,426	1,141	832	635	511	477	534
(WY)	(1990)	(2004)	(1992)	(1994)	(1994)	(1994)	(1994)	(2003)	(1997)	(2003)	(1996)	(2004)
MIN	32.5	51.4	105	245	169	301	124	151	75.3	90.7	46.1	29.8
(WY)	(1999)	(2002)	(2001)	(2001)	(2002)	(2001)	(1995)	(2001)	(2002)	(1993)	(2002)	(1998)

03469175 LITTLE PIGEON RIVER ABOVE SEVIERVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	159,733		136,385			
ANNUAL MEAN	438		373		351	
HIGHEST ANNUAL MEAN					573	1994
LOWEST ANNUAL MEAN					217	2001
HIGHEST DAILY MEAN	8,020	May 6	3,880	Sep 17	10,900	Mar 28, 1994
LOWEST DAILY MEAN	55	Nov 4	55	Nov 4	a18	Sep 12, 2002
ANNUAL SEVEN-DAY MINIMUM	57	Oct 20	57	Oct 20	20	Sep 14, 1998
MAXIMUM PEAK FLOW			8,270	Nov 19	19,700	Mar 28, 1994
MAXIMUM PEAK STAGE			11.73	Nov 19	17.50	Mar 28, 1994
INSTANTANEOUS LOW FLOW			b51	Oct 26	10	Sep 14, 2002
ANNUAL RUNOFF (CFSM)	2.38		2.03		1.91	
ANNUAL RUNOFF (INCHES)	32.29		27.57		25.94	
10 PERCENT EXCEEDS	819		662		740	
50 PERCENT EXCEEDS	257		272		212	
90 PERCENT EXCEEDS	94		101		57	

a Also occurred on Sept. 13, 2002.
b Also occurred on Nov. 4, 5.



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 mi^2 .

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.--Data collection platform and crest-stage gage. Datum of gage is 1,128.9 ft above NGVD 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.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 19	1415	*1,330	*4.84	No peaks greater than base discharge.			

Minimum discharge, 5.4 ft^3/s, Oct. 9, 22-25, Nov. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	6.3	61	43	47	42	88	48	98	28	11	12
2	7.4	5.9	49	44	46	55	74	48	48	26	11	8.7
3	7.1	5.7	43	51	195	89	63	54	51	30	9.5	7.4
4	6.7	5.6	49	50	144	76	55	42	124	25	8.7	7.1
5	7.3	5.8	115	537	104	67	47	38	191	25	8.3	6.8
6	7.6	325	109	344	529	570	43	35	81	23	9.2	6.3
7	6.5	140	86	174	371	252	40	32	53	21	9.2	6.5
8	6.2	58	69	127	189	160	38	30	41	18	8.0	14
9	5.5	36	57	105	141	129	35	28	34	16	7.2	35
10	5.9	26	79	85	115	127	32	27	29	15	7.0	17
11	6.1	21	161	72	95	108	32	65	49	14	6.7	11
12	6.4	18	97	63	84	96	42	39	32	15	7.6	9.1
13	6.0	21	75	57	73	82	420	31	26	19	13	8.1
14	6.9	16	70	52	64	74	266	27	23	19	9.7	7.4
15	11	15	68	50	62	65	142	25	152	14	8.3	7.1
16	14	17	60	45	73	98	104	24	81	13	7.1	7.1
17	9.2	20	78	41	88	103	85	27	57	12	6.6	139
18	7.5	20	82	63	84	86	72	27	45	12	6.2	108
19	6.9	763	75	110	95	74	64	23	35	13	6.3	40
20	7.5	298	64	78	95	64	58	23	30	11	6.0	25
21	6.3	138	55	63	94	66	55	20	26	10	8.9	18
22	5.7	93	51	56	79	57	50	19	23	9.3	18	14
23	5.4	70	48	49	69	51	46	18	27	9.3	11	12
24	5.6	62	71	45	62	48	45	17	26	8.9	8.2	11
25	5.7	58	80	51	56	45	40	17	49	8.3	7.4	9.7
26	5.9	48	65	91	52	42	106	18	136	10	9.7	9.5
27	7.7	43	57	85	50	39	122	29	62	41	9.6	9.1
28	15	90	51	77	47	38	76	27	44	24	7.8	11
29	11	118	46	66	44	35	61	28	36	15	6.9	13
30	8.4	78	52	61	---	61	52	22	31	12	6.4	11
31	7.2	---	48	53	---	86	---	214	---	12	21	---
TOTAL	233.4	2,621.3	2,171	2,888	3,247	2,985	2,453	1,122	1,740	528.8	281.5	600.9
MEAN	7.53	87.4	70.0	93.2	112	96.3	81.8	36.2	58.0	17.1	9.08	20.0
MAX	15	763	161	537	529	570	420	214	191	41	21	139
MIN	5.4	5.6	43	41	44	35	32	17	23	8.3	6.0	6.3
CFSM	0.16	1.85	1.48	1.97	2.37	2.04	1.73	0.77	1.23	0.36	0.19	0.42
IN.	0.18	2.06	1.71	2.27	2.55	2.35	1.93	0.88	1.37	0.42	0.22	0.47

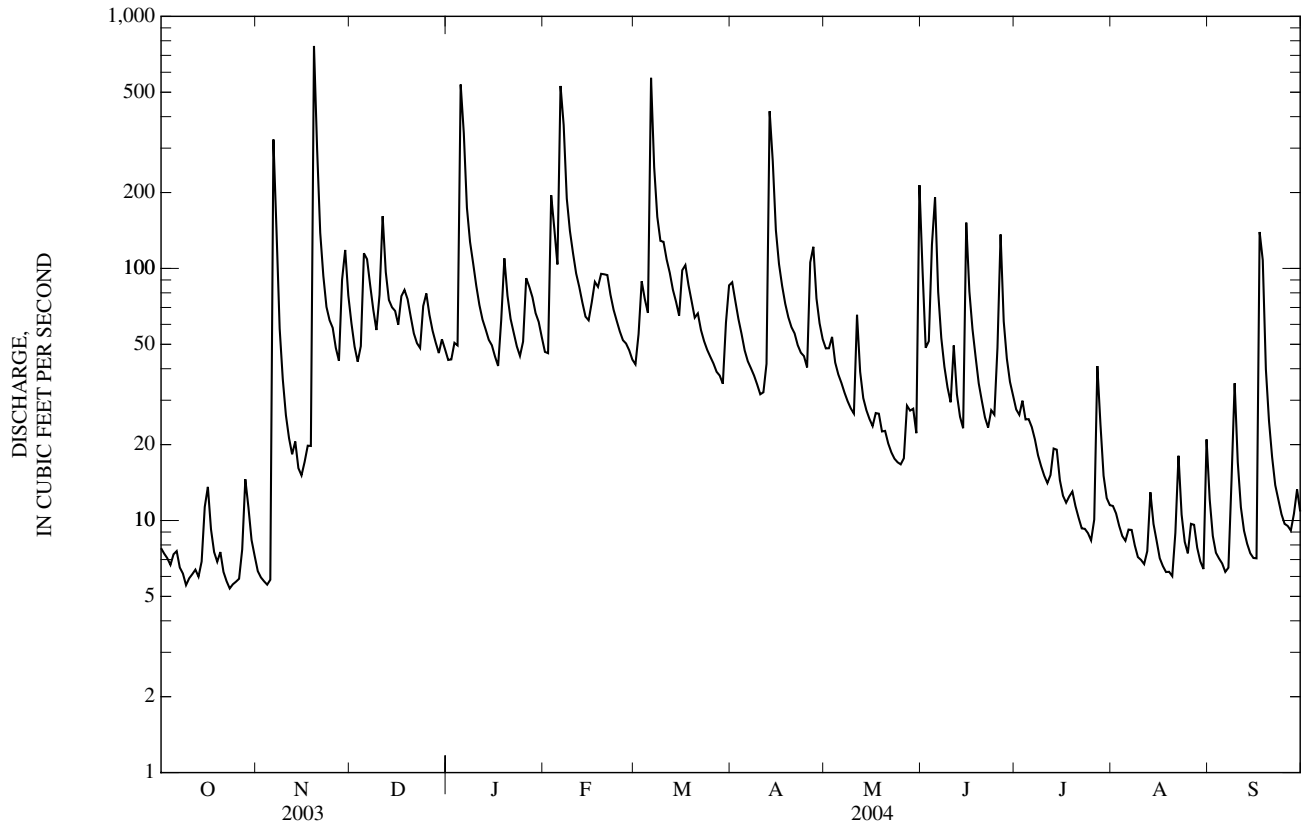
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

MEAN	13.9	30.9	70.1	102	132	128	89.6	56.3	30.2	23.6	16.6	11.8
MAX	109	124	258	331	472	366	342	206	150	96.5	67.1	58.7
(WY)	(1972)	(1974)	(1992)	(1974)	(1994)	(1963)	(1998)	(1958)	(1989)	(1960)	(1942)	(1989)
MIN	3.19	4.43	5.06	9.33	23.6	27.4	15.4	10.7	7.07	4.35	2.45	2.60
(WY)	(2001)	(1988)	(1966)	(1981)	(2002)	(1983)	(1986)	(1985)	(2002)	(1988)	(1988)	(1999)

03491000 BIG CREEK NEAR ROGERSVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1941 - 2004	
ANNUAL TOTAL	30,012.5		20,871.9			
ANNUAL MEAN	82.2		57.0		58.8	
HIGHEST ANNUAL MEAN					123	1994
LOWEST ANNUAL MEAN					20.1	2000
HIGHEST DAILY MEAN	2,500	Feb 16	763	Nov 19	4,000	Feb 11, 1994
LOWEST DAILY MEAN	5.4	Oct 23	5.4	Oct 23	1.1	Sep 11, 2002
ANNUAL SEVEN-DAY MINIMUM	6.0	Oct 20	6.0	Oct 20	1.3	Sep 7, 2002
MAXIMUM PEAK FLOW			1,330	Nov 19	a5,760	Mar 12, 1963
MAXIMUM PEAK STAGE			4.84	Nov 19	b12.21	Apr 17, 1998
INSTANTANEOUS LOW FLOW			c5.4	Oct 9	d1.1	Sep 8, 2002
ANNUAL RUNOFF (CFSM)	1.74		1.21		1.24	
ANNUAL RUNOFF (INCHES)	23.60		16.42		16.89	
10 PERCENT EXCEEDS	149		108		126	
50 PERCENT EXCEEDS	45		41		24	
90 PERCENT EXCEEDS	8.1		7.1		5.4	

a From rating curve extended above 3,000 ft^3/s on basis of contracted-opening measurement of peak flow.
b Due to backwater from debris.
c Also occurred on Oct. 22, 23, 24, 25 and Nov. 4, 5.
d Also occurred on Sept. 9, 10, 11, 12, 2002.



03497300 LITTLE RIVER ABOVE TOWNSEND, TN

LOCATION.--Lat 35°39'52", long 83°42'41", Blount County, Hydrologic Unit 06010201, in Great Smoky Mountains National Park, on left bank along Tennessee 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 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Data logger and crest-stage gage. Datum of gage is 1,106.92 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sep 17	0215	3,570	5.94	Sep 17	1815	*4,770	*6.79

Minimum discharge, 51 ft^3/s, Oct. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	57	340	322	258	169	242	205	479	357	265	106
2	82	56	298	329	424	429	227	302	328	320	246	102
3	77	55	449	361	360	417	231	348	275	374	335	94
4	75	54	527	916	344	348	246	293	277	335	237	90
5	73	85	455	818	1,380	316	233	277	228	339	235	84
6	72	464	382	588	1,260	1,310	226	253	199	733	286	78
7	71	323	335	479	779	862	229	227	181	483	219	116
8	69	211	301	420	585	612	237	208	168	361	193	918
9	67	167	579	351	487	503	235	219	167	290	173	1,400
10	66	143	687	306	408	426	217	201	189	278	158	655
11	69	127	541	284	386	368	207	195	155	230	146	421
12	66	117	448	263	358	340	211	202	140	213	299	362
13	64	136	451	245	343	307	731	176	207	191	259	288
14	65	108	394	237	318	286	586	164	186	226	222	241
15	84	e105	359	217	335	285	489	151	166	185	196	208
16	67	e105	441	207	320	400	446	141	165	159	177	215
17	63	e100	395	341	303	349	390	143	142	188	165	3,390
18	61	e120	381	401	288	413	341	134	139	239	152	1,930
19	59	e2,100	333	330	273	351	303	164	128	163	134	926
20	58	1,470	296	302	263	340	275	131	118	144	124	606
21	56	891	281	277	257	353	252	119	129	127	164	445
22	54	587	284	251	234	304	229	187	249	116	152	352
23	53	469	546	239	223	277	212	231	270	130	132	295
24	53	529	516	318	219	259	198	170	412	109	151	255
25	53	580	441	406	209	241	185	142	1,090	119	215	227
26	53	487	385	386	204	226	344	132	1,320	257	210	207
27	80	e440	343	342	195	213	291	212	717	1,100	156	190
28	95	e730	314	314	183	203	245	165	547	598	136	280
29	69	e720	449	296	175	192	227	158	438	421	134	218
30	62	e430	372	266	---	211	214	196	369	363	125	187
31	59	---	342	245	---	246	---	680	---	302	117	---
TOTAL	2,081	11,966	12,665	11,057	11,371	11,556	8,699	6,526	9,578	9,450	5,913	14,886
MEAN	67.1	399	409	357	392	373	290	211	319	305	191	496
MAX	95	2,100	687	916	1,380	1,310	731	680	1,320	1,100	335	3,390
MIN	53	54	281	207	175	169	185	119	118	109	117	78
CFSM	0.63	3.76	3.85	3.36	3.70	3.52	2.74	1.99	3.01	2.88	1.80	4.68
IN.	0.73	4.20	4.44	3.88	3.99	4.06	3.05	2.29	3.36	3.32	2.08	5.22

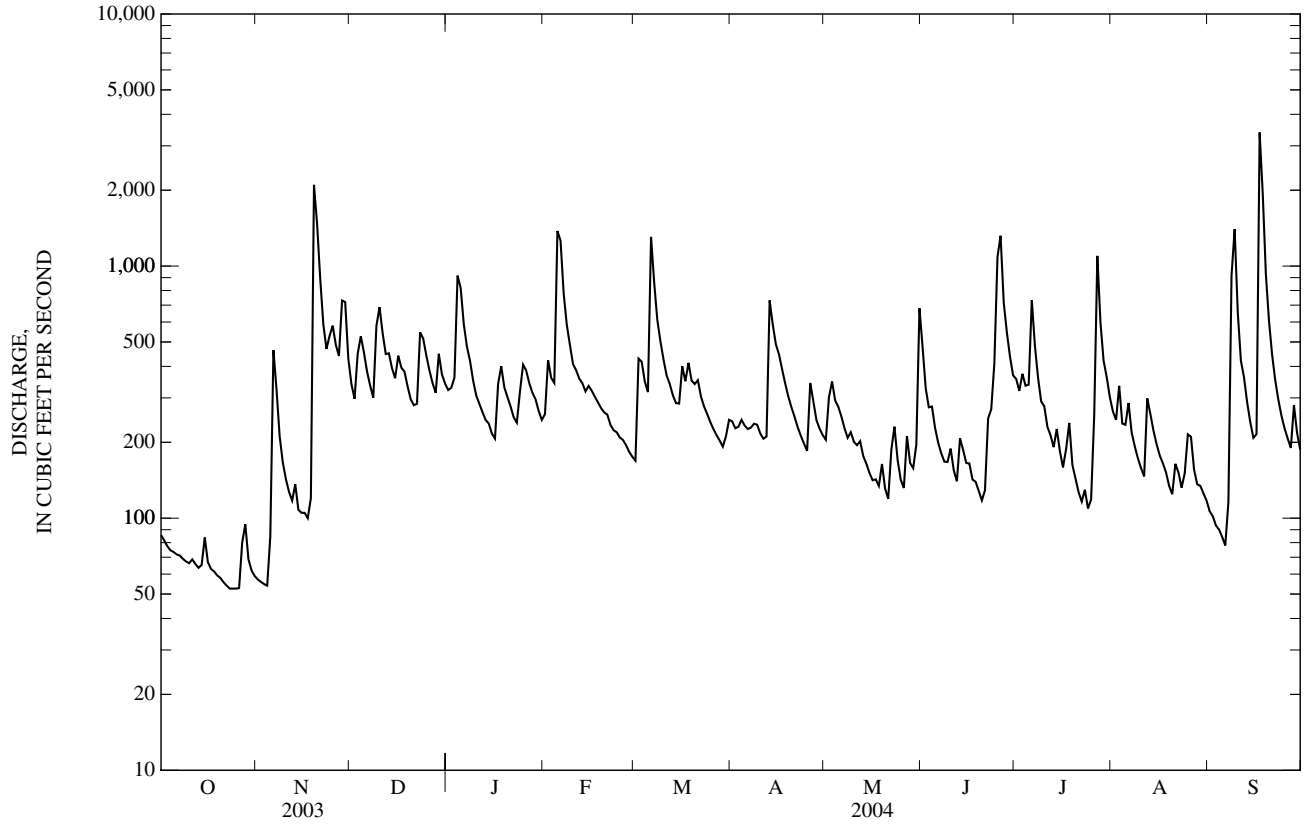
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	121	211	334	410	451	506	389	289	223	198	167	126
MAX	373	436	725	796	857	1,195	818	774	648	815	530	496
(WY)	(1973)	(1967)	(1992)	(1996)	(1990)	(1994)	(1998)	(1984)	(1989)	(1971)	(1966)	(2004)
MIN	28.9	36.0	58.8	72.7	191	185	141	124	50.4	63.8	40.5	31.9
(WY)	(1988)	(1988)	(1966)	(1981)	(1978)	(1988)	(1995)	(1986)	(1988)	(1993)	(1987)	(1998)

03497300 LITTLE RIVER ABOVE TOWNSEND, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	127,681		115,748			
ANNUAL MEAN	350		316		285	
HIGHEST ANNUAL MEAN					460	1994
LOWEST ANNUAL MEAN					141	1988
HIGHEST DAILY MEAN	6,920	May 6	3,390	Sep 17	9,000	Mar 28, 1994
LOWEST DAILY MEAN	53	Oct 23	53	Oct 23	22	Sep 15, 1998
ANNUAL SEVEN-DAY MINIMUM	54	Oct 20	54	Oct 20	23	Sep 12, 1998
MAXIMUM PEAK FLOW			4,770	Sep 17	27,100	Mar 27, 1994
MAXIMUM PEAK STAGE			6.79	Sep 17	a15.75	Mar 27, 1994
INSTANTANEOUS LOW FLOW			51	Oct 26	b21	Jan 18, 1981
ANNUAL RUNOFF (CFSM)	3.30		2.98		2.69	
ANNUAL RUNOFF (INCHES)	44.81		40.62		36.49	
10 PERCENT EXCEEDS	631		546		556	
50 PERCENT EXCEEDS	237		246		196	
90 PERCENT EXCEEDS	75		86		61	

a From flood mark in gage house.
b Results of freeze-up.
e Estimated



03497300 LITTLE RIVER ABOVE TOWNSEND, TN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1963 to April 1997. October 2003 to September 2004.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)
OCT													
21...	1030	56	24	11.9	--	--	--	--	--	--	--	--	--
21...	1425	--	--	--	9	2.31	.73	.66	.2	1.10	20	.5	3.17
NOV													
19...	0440	--	--	--	10	2.54	.82	--	--	--	--	.5	3.09
19...	0615	--	--	--	9	2.21	.79	--	--	--	--	.5	2.92
19...	0720	--	--	--	10	2.49	.93	--	--	--	--	.5	2.84
19...	0730	--	--	--	11	2.68	1.00	--	--	--	--	.5	2.80
19...	0835	--	--	--	9	2.19	.75	--	--	--	--	.5	2.77
19...	0900	--	--	--	9	2.36	.82	--	--	--	--	.5	2.77
19...	0925	--	--	--	11	2.81	1.02	--	--	--	--	.5	2.65
19...	0940	--	--	--	17	4.27	1.51	--	--	--	--	.5	2.70
19...	1125	--	--	--	34	8.27	3.25	--	--	--	--	.5	2.09
MAR													
11...	1045	370	16	5.0	--	--	--	--	--	--	--	--	--
JUN													
21...	1120	109	21	20.0	--	--	--	--	--	--	--	--	--
21...	1145	--	--	--	7	1.82	.55	--	--	--	--	.4	2.99
21...	1200	--	--	--	7	1.85	.56	--	--	--	--	.4	3.01
AUG													
13...	1105	258	16	16.2	--	--	--	--	--	--	--	--	--
SEP													
14...	0930	--	--	--	5	1.37	.40	--	--	--	--	.4	2.85
14...	0945	--	--	--	5	1.37	.40	--	--	--	--	.4	2.88

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, fltrd, mg/L as N (00618)	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)
OCT					
21...	1.8	<.028	<.03	1.2	<27
NOV					
19...	2.1	.465	.03	2.4	<27
19...	1.9	.409	.10	2.8	<27
19...	1.9	.564	.19	3.0	<27
19...	2.2	.419	.42	2.5	<27
19...	2.1	.497	.21	3.0	<27
19...	2.1	.485	.31	2.9	<27
19...	2.1	.335	.43	3.0	<27
19...	2.3	.567	.39	3.2	<27
19...	3.0	.194	.92	2.5	<27
JUN					
21...	1.5	<.028	.13	1.2	120
21...	1.5	<.028	.13	1.1	40
SEP					
14...	1.6	<.028	.09	1.0	<27
14...	1.6	<.028	.09	1.0	<27

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03498500 LITTLE RIVER NEAR MARYVILLE, TN

LOCATION.--Lat 35°47'07", long 83°53'04", Blount County, Hydrologic Unit 06010201, on left bank 200 ft above 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 mi^2.

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

GAGE.--Data-collection platform and crest-stage gage. Datum of gage is 850.00 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diurnal fluctuations of flow caused by small mills above station. The town of Maryville diverted an average of about 4.0 ft^3/s (2.6 MGD) for municipal supply 100 ft upstream from gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1875, reached a stage of 31 ft, discharge, 50,000 ft^3/s, and flood of April 1, 1896, reached a stage of 26 ft, discharge, 36,000 ft^3/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	1300	6,120	12.43	Sep 17	1945	*6,940	*12.96

Minimum discharge, 127 ft^3/s, Oct. 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	137	669	605	452	379	591	358	725	715	429	228
2	182	135	566	563	445	787	499	481	485	542	377	213
3	174	133	497	544	849	1,030	472	729	386	596	463	198
4	171	130	619	565	686	763	463	545	402	553	372	188
5	167	144	804	1,490	634	677	434	483	352	570	340	179
6	165	1,010	729	1,790	1,930	3,250	413	435	309	1,720	434	169
7	163	783	633	1,030	2,250	2,160	407	389	281	785	348	174
8	160	416	564	828	1,560	1,250	408	360	268	607	312	886
9	157	329	508	749	1,060	936	404	359	267	483	280	1,910
10	155	277	747	653	881	832	383	348	285	434	261	899
11	160	248	1,070	565	784	718	371	332	250	383	241	614
12	156	232	808	526	770	659	372	343	235	354	341	499
13	151	269	698	493	728	592	1,130	316	261	336	388	418
14	148	233	709	460	670	545	988	297	301	342	337	363
15	161	212	668	446	708	527	814	274	261	325	303	323
16	162	210	604	413	807	799	736	260	305	279	277	300
17	148	231	862	400	702	716	653	270	246	262	265	4,370
18	146	238	770	563	657	785	576	284	241	387	252	3,390
19	142	3,970	706	837	616	797	511	284	232	286	229	1,450
20	139	2,420	620	659	584	706	460	255	210	251	214	864
21	136	1,100	543	584	571	705	428	231	200	232	265	646
22	134	759	500	531	514	611	398	255	334	217	285	504
23	132	609	490	483	479	551	376	324	467	244	245	415
24	131	611	893	452	466	510	357	302	746	219	236	366
25	130	630	865	544	451	471	340	246	1,330	220	342	329
26	129	528	754	783	434	437	501	237	2,300	424	356	305
27	148	482	665	689	436	415	553	377	1,030	2,070	268	280
28	200	895	600	626	406	398	422	287	772	1,080	237	373
29	162	1,010	546	568	389	382	388	283	666	678	271	331
30	148	788	757	539	---	410	367	296	614	606	320	283
31	141	---	666	493	---	495	---	966	---	485	323	---
TOTAL	4,785	19,169	21,130	20,471	21,919	24,293	15,215	11,206	14,761	16,685	9,611	21,467
MEAN	154	639	682	660	756	784	507	361	492	538	310	716
MAX	200	3,970	1,070	1,790	2,250	3,250	1,130	966	2,300	2,070	463	4,370
MIN	129	130	490	400	389	379	340	231	200	217	214	169
CFSM	0.57	2.38	2.53	2.45	2.81	2.91	1.89	1.34	1.83	2.00	1.15	2.66
IN.	0.66	2.65	2.92	2.83	3.03	3.36	2.10	1.55	2.04	2.31	1.33	2.97

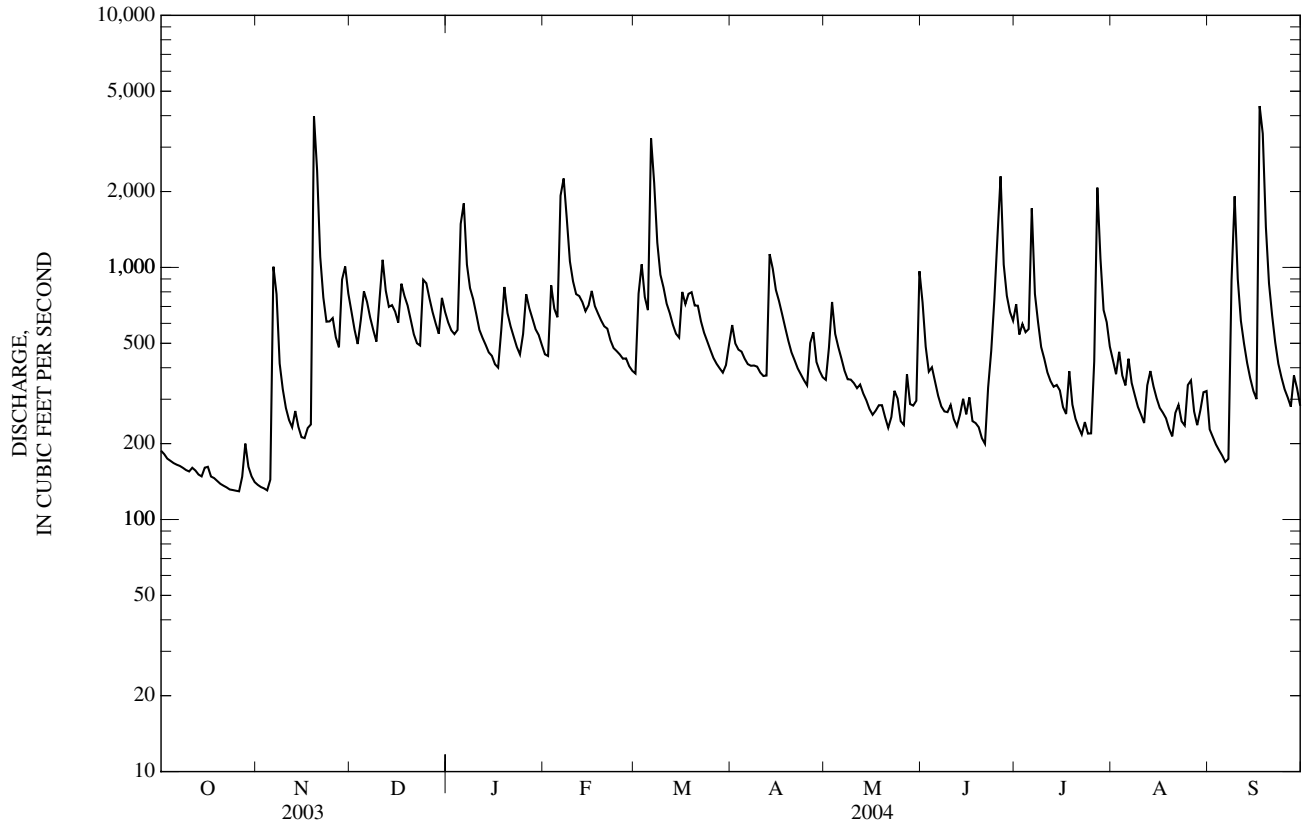
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	194	345	610	799	946	1,000	754	518	378	329	254	188
MAX	830	1,160	1,679	1,792	2,254	2,517	1,701	1,782	1,261	1,391	867	1,019
(WY)	(1973)	(1958)	(1962)	(1974)	(1957)	(1994)	(1994)	(1984)	(1989)	(1971)	(1971)	(1989)
MIN	50.7	65.4	103	121	308	385	224	208	86.1	100	78.1	55.6
(WY)	(1988)	(1988)	(1966)	(1981)	(1954)	(1988)	(1986)	(1986)	(1988)	(1952)	(1987)	(1954)

03498500 LITTLE RIVER NEAR MARYVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	267,694		200,712			
ANNUAL MEAN	733		548		524	
HIGHEST ANNUAL MEAN					862	1994
LOWEST ANNUAL MEAN					220	1988
HIGHEST DAILY MEAN	19,000	May 6	4,370	Sep 17	23,100	Mar 28, 1994
LOWEST DAILY MEAN	129	Oct 26	129	Oct 26	43	Oct 19, 1987
ANNUAL SEVEN-DAY MINIMUM	133	Oct 20	133	Oct 20	45	Oct 14, 1987
MAXIMUM PEAK FLOW			6,940	Sep 17	a42,100	Mar 28, 1994
MAXIMUM PEAK STAGE			12.96	Sep 17	27.95	Mar 28, 1994
INSTANTANEOUS LOW FLOW			127	Oct 26	32	Aug 27, 1956
ANNUAL RUNOFF (CFSM)	2.73		2.04		1.95	
ANNUAL RUNOFF (INCHES)	37.02		27.76		26.49	
10 PERCENT EXCEEDS	1,260		870		1,030	
50 PERCENT EXCEEDS	440		434		319	
90 PERCENT EXCEEDS	169		181		101	

a From rating curve extended above 14,800 ft^3/s on basis of a contracted opening measurement and road overflow computations.



03498850 LITTLE RIVER NEAR ALCOA, TN

LOCATION.--Lat 35°48'31", 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 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 814.22 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverts an average of about 4.0 ft^3/s (2.6 MGD) for municipal supply 7.6 mi upstream from gage and the town of Alcoa at the gage diverts about 17.2 ft^3/s (11.1 MGD). Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	2200	*6,100	*10.57	No other peak greater than base discharge.			

Minimum discharge, 89 ft^3/s, Oct. 26, Nov. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	99	710	635	506	421	641	392	820	829	511	246
2	139	95	617	597	489	696	561	479	554	616	452	225
3	132	93	542	578	875	1,070	535	765	433	673	514	207
4	129	91	614	592	708	786	523	593	445	634	435	191
5	124	109	847	1,300	639	699	502	537	395	677	382	183
6	121	875	770	1,780	2,920	3,250	481	499	334	1,850	492	167
7	117	876	677	1,080	3,390	2,210	472	444	299	907	402	169
8	115	433	614	867	1,560	1,280	471	400	279	702	337	742
9	111	312	564	778	1,120	996	467	390	278	574	303	1,700
10	106	258	678	686	944	885	443	378	287	514	288	978
11	111	224	1,130	608	823	763	426	361	259	454	264	685
12	110	208	843	572	793	704	426	370	234	409	331	563
13	109	236	726	543	767	647	983	339	247	386	451	482
14	110	214	724	514	700	611	1,020	321	305	367	374	408
15	114	183	703	494	732	590	830	292	261	371	332	350
16	125	180	638	462	875	806	747	296	304	310	297	323
17	107	195	866	443	740	762	675	279	243	287	279	3,470
18	106	205	803	553	694	805	613	312	244	414	271	3,430
19	103	3,380	738	881	655	840	563	296	234	315	245	1,410
20	99	2,670	657	688	628	739	522	276	200	271	219	943
21	96	1,160	585	618	614	735	494	241	190	248	278	735
22	92	815	545	573	567	659	458	253	319	232	324	609
23	93	663	532	533	534	610	431	328	532	254	270	520
24	92	641	863	499	519	577	399	328	803	235	250	457
25	92	694	898	557	505	548	376	255	1,180	468	389	403
26	91	583	775	821	486	519	485	243	2,310	595	407	366
27	103	538	687	705	492	497	617	425	1,140	1,970	300	331
28	156	803	628	653	460	476	484	309	855	1,220	259	425
29	129	1,070	582	596	436	457	443	303	751	788	286	415
30	110	830	760	581	---	478	410	293	646	687	282	334
31	101	---	697	544	---	537	---	938	---	572	402	---
TOTAL	3,488	18,733	22,013	21,331	25,171	25,653	16,498	11,935	15,381	18,829	10,626	21,467
MEAN	113	624	710	688	868	828	550	385	513	607	343	716
MAX	156	3,380	1,130	1,780	3,390	3,250	1,020	938	2,310	1,970	514	3,470
MIN	91	91	532	443	436	421	376	241	190	232	219	167

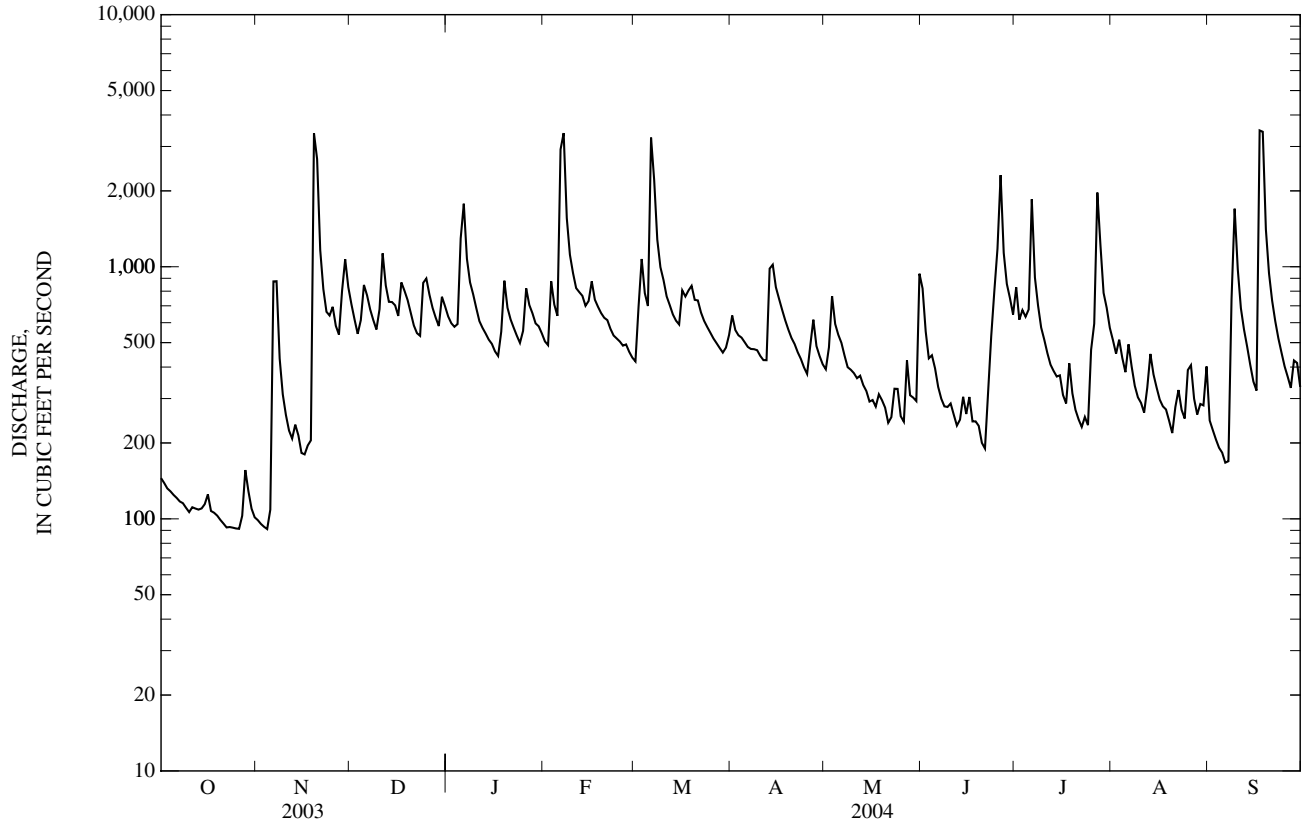
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

MEAN	180	333	600	849	1,004	1,036	787	575	452	355	243	236
MAX	779	783	1,624	1,410	1,980	2,764	2,008	1,445	1,335	782	586	1,123
(WY)	(1990)	(1990)	(1992)	(1996)	(1994)	(1994)	(1994)	(2003)	(1989)	(1999)	(1994)	(1989)
MIN	43.4	60.6	176	432	427	403	295	199	73.6	106	69.0	59.8
(WY)	(1988)	(1988)	(1988)	(1988)	(2002)	(1988)	(1995)	(1988)	(1988)	(1988)	(1987)	(1998)

03498850 LITTLE RIVER NEAR ALCOA, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004	
ANNUAL TOTAL	262,364		211,125			
ANNUAL MEAN	719		577		561	
HIGHEST ANNUAL MEAN					953	1994
LOWEST ANNUAL MEAN					220	1988
HIGHEST DAILY MEAN	9,700	May 7	3,470	Sep 17	28,000	Mar 28, 1994
LOWEST DAILY MEAN	91	Oct 26	91	Oct 26	28	Jul 10, 1988
ANNUAL SEVEN-DAY MINIMUM	94	Oct 20	94	Oct 20	35	Oct 14, 1987
MAXIMUM PEAK FLOW			6,100	Feb 6	30,000	Mar 28, 1994
MAXIMUM PEAK STAGE			10.57	Feb 6	25.63	Mar 28, 1994
INSTANTANEOUS LOW FLOW			a89	Oct 26	21	Sep 16, 1998
10 PERCENT EXCEEDS	1,250		882		1,080	
50 PERCENT EXCEEDS	502		496		359	
90 PERCENT EXCEEDS	129		164		92	

a Also occurred on Nov. 4, 5.



03518500 TELLICO RIVER AT TELLICO PLAINS, TN

LOCATION.--Lat 35°21'42", long 84°16'44", Monroe County, Hydrologic Unit 06010204, on right bank 1,300 ft upstream from birdge on Tellico Plains-Ballplay Road, 0.4 mi downstream from Laurel Creek, 0.8 mi east of Tellico Plains, and at mile 28.2.

DRAINAGE AREA.--118 mi^2.

PERIOD OF RECORD.--July 1925 to February 1982, December 2000 to current year. Published as "near Tellico Plains" October 1927 to September 1930.

REVISED RECORDS.--WSP 1336: 1927-28(M), 1936, 1940, 1944.

GAGE.--Data collection platform. Datum of gage is 846.64 ft NGVD of 1929. July 20, 1925 to Sept. 30, 1927, nonrecording gage at same site and datum. Oct. 1, 1927, to Sept. 30, 1930, nonrecording gage at site 0.5 mi upstream at datum 8.29 ft higher.

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

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood in May 1840 reached a stage of 15 ft, discharge, about 21,500 ft^3/s, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1530	3,870	7.77	Sep 17	0315	*5,680	*9.16
Mar 6	0900	4,490	8.32	Sep 17	1700	3,540	7.43

Minimum discharge, 79 ft^3/s, Sept. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	83	316	315	233	204	276	216	182	288	158	95
2	128	83	267	293	241	385	253	407	142	296	182	95
3	124	83	237	273	403	439	248	441	134	271	269	91
4	122	83	356	258	307	349	241	343	145	288	171	89
5	119	105	364	863	291	314	226	301	121	274	164	87
6	117	300	331	806	1,660	1,900	216	267	113	291	162	82
7	116	187	295	501	1,020	873	212	239	110	256	133	103
8	175	143	269	409	580	567	208	222	119	222	123	317
9	125	125	247	374	455	474	200	209	153	196	116	438
10	120	116	620	323	413	427	191	218	234	178	111	227
11	117	111	637	292	379	382	192	256	220	167	109	191
12	116	107	434	275	434	353	202	284	143	250	254	163
13	111	109	359	260	429	325	426	224	167	253	184	145
14	107	99	384	246	400	310	438	213	153	207	139	129
15	134	98	341	237	422	312	428	190	224	255	125	119
16	111	100	315	220	472	415	384	181	202	182	118	139
17	105	113	499	213	410	355	330	177	155	172	114	3,060
18	103	122	422	341	367	335	298	166	138	296	111	1,060
19	101	1,330	363	357	336	318	272	209	131	201	102	534
20	99	535	313	301	320	302	254	172	120	169	99	378
21	98	327	276	275	322	343	241	160	117	152	243	306
22	97	249	259	255	288	298	229	153	146	139	221	258
23	93	208	260	235	270	282	215	149	159	154	149	226
24	92	301	432	227	262	269	206	145	152	130	146	205
25	91	288	365	338	250	256	199	136	562	123	175	189
26	91	244	325	475	242	246	368	130	900	317	135	177
27	103	238	300	381	234	239	318	128	381	291	122	168
28	118	613	274	321	222	230	261	124	362	242	114	201
29	95	574	255	291	212	223	235	128	412	186	121	168
30	88	388	443	276	---	277	221	206	309	169	105	153
31	87	---	352	250	---	284	---	251	---	157	102	---
TOTAL	3,436	7,462	10,910	10,481	11,874	12,286	7,988	6,645	6,606	6,772	4,577	9,593
MEAN	111	249	352	338	409	396	266	214	220	218	148	320
MAX	175	1,330	637	863	1,660	1,900	438	441	900	317	269	3,060
MIN	87	83	237	213	212	204	191	124	110	123	99	82
CFSM	0.94	2.11	2.98	2.87	3.47	3.36	2.26	1.82	1.87	1.85	1.25	2.71
IN.	1.08	2.35	3.44	3.30	3.74	3.87	2.52	2.09	2.08	2.13	1.44	3.02

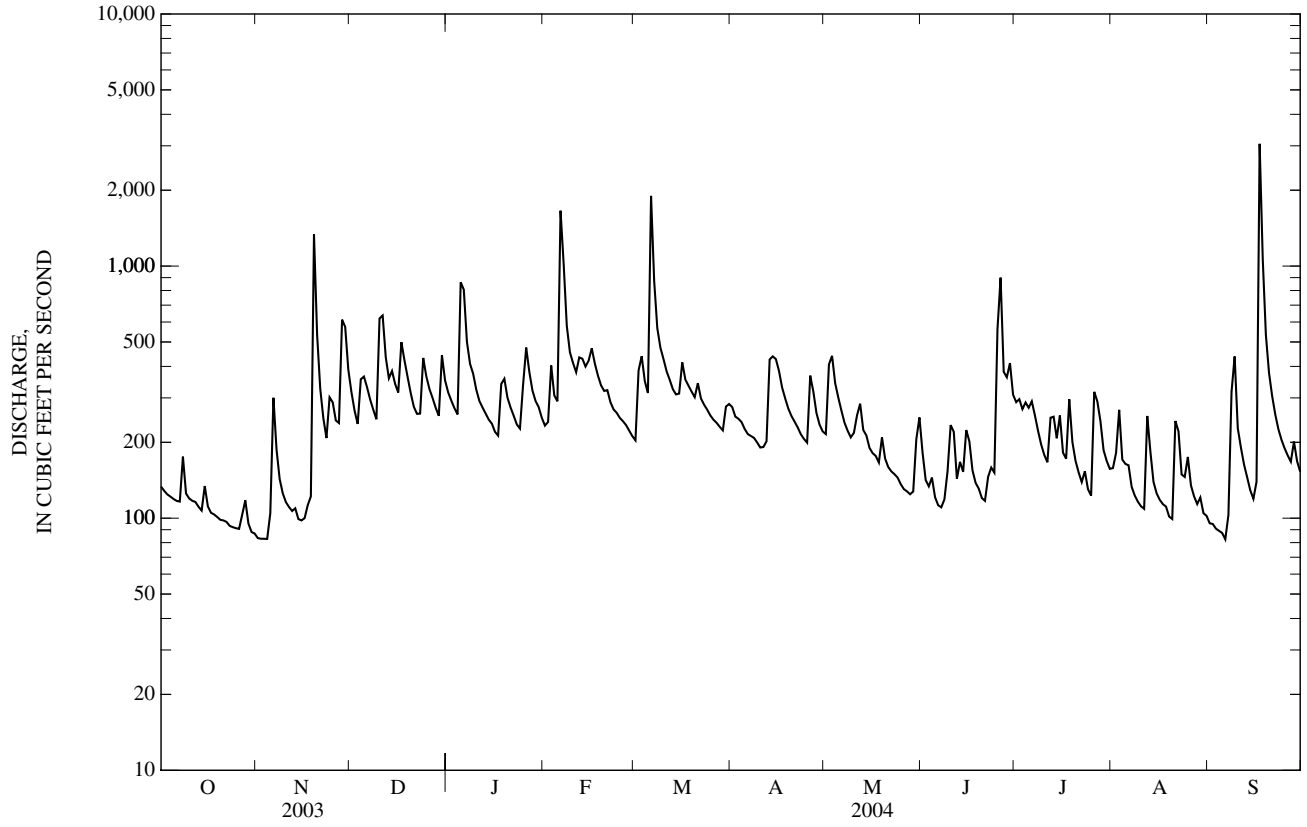
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	103	189	309	434	481	517	424	301	209	194	149	113
MAX	303	980	973	1,033	972	1,039	823	1,147	559	557	459	486
(WY)	(1973)	(1930)	(1927)	(1947)	(1957)	(1963)	(1964)	(2003)	(1957)	(1949)	(1938)	(1928)
MIN	28.4	37.7	60.8	67.7	115	206	161	106	75.0	61.0	28.6	22.4
(WY)	(1955)	(1940)	(1940)	(1981)	(1941)	(1981)	(1967)	(1941)	(1936)	(1944)	(1925)	(1925)

03518500 TELLICO RIVER AT TELLICO PLAINS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	145,340		98,630			
ANNUAL MEAN	398		269		285	
HIGHEST ANNUAL MEAN					474	1929
LOWEST ANNUAL MEAN					147	1940
HIGHEST DAILY MEAN	12,100	May 6	3,060	Sep 17	12,100	May 6, 2003
LOWEST DAILY MEAN	82	Sep 21	82	Sep 6	14	Sep 7, 1925
ANNUAL SEVEN-DAY MINIMUM	86	Oct 29	86	Oct 29	15	Sep 6, 1925
MAXIMUM PEAK FLOW			5,680	Sep 17	a19,900	Mar 16, 1973
MAXIMUM PEAK STAGE			9.16	Sep 17	b14.18	Mar 16, 1973
INSTANTANEOUS LOW FLOW			c79	Sep 6	46	Jan 3, 2001
ANNUAL RUNOFF (CFSM)	3.37		2.28		2.42	
ANNUAL RUNOFF (INCHES)	45.82		31.09		32.85	
10 PERCENT EXCEEDS	628		426		559	
50 PERCENT EXCEEDS	293		234		191	
90 PERCENT EXCEEDS	111		109		61	

a From rating curve extended above 12,000 ft^3/s on basis of slope-area measurement of peak flow.
b From dross line in well.
c Also occurred on Sept. 7.



03528000 CLINCH RIVER ABOVE TAZEWELL, 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 mi^2.

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.--Data collection platform. Datum of gage is 1,060.7 ft above NGVD of 1929. April 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.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	2230	*22,300	*12.59	Apr 15	0000	17,200	10.77
Jan 6	2200	16,000	10.33	Jun 1	1800	19,000	11.44

Minimum discharge, 312 ft^3/s, Oct. 26, 27.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	481	3,350	2,300	1,680	1,410	1,990	2,650	16,700	1,850	928	595
2	454	437	2,660	2,180	1,540	1,420	2,760	2,350	13,000	1,710	902	501
3	423	409	2,200	3,530	2,470	1,630	3,150	2,290	5,900	1,830	821	426
4	407	389	2,000	7,990	4,260	1,690	3,770	2,560	5,220	1,570	864	382
5	396	376	2,720	7,320	4,200	1,670	3,520	2,400	8,910	1,410	1,250	358
6	384	938	3,790	13,400	5,980	6,170	2,950	2,090	10,700	1,330	921	341
7	374	1,860	3,900	13,100	11,900	11,500	2,500	1,870	5,910	1,270	785	343
8	360	1,680	3,360	7,120	11,500	7,640	2,190	1,660	4,020	1,130	800	458
9	346	1,490	2,800	4,900	7,230	5,170	1,980	1,490	3,140	991	718	968
10	341	1,140	2,650	3,900	4,970	4,130	1,790	1,360	3,090	897	627	1,950
11	336	902	3,710	3,190	3,950	3,400	1,650	1,450	2,530	843	564	1,480
12	325	775	5,090	2,670	3,300	2,900	1,610	1,340	2,360	859	535	1,070
13	320	777	4,470	2,360	2,840	2,530	2,920	1,240	2,550	883	556	802
14	323	938	3,610	2,160	2,500	2,220	13,000	1,130	3,550	916	912	662
15	338	1,270	3,270	2,000	2,280	2,020	15,200	1,040	4,000	926	886	575
16	403	1,220	3,070	1,870	2,200	2,310	8,990	990	6,910	875	782	517
17	513	1,210	3,130	1,740	2,140	2,910	5,690	1,180	6,480	793	649	1,110
18	557	1,280	3,490	1,960	2,070	2,780	4,210	1,040	4,770	724	598	4,220
19	515	4,940	3,840	3,180	2,250	2,480	3,380	941	4,020	678	678	5,760
20	441	19,000	3,470	4,160	2,350	2,190	2,850	874	3,170	656	603	3,910
21	397	19,200	2,930	3,630	2,530	2,080	2,510	978	2,670	619	566	2,300
22	375	7,150	2,500	2,940	2,530	1,950	2,270	940	2,320	575	598	1,610
23	351	3,900	2,230	2,510	2,320	1,820	2,070	812	2,140	550	562	1,240
24	336	2,900	2,410	2,210	2,120	1,690	1,990	763	2,200	589	549	1,020
25	325	2,540	3,700	2,070	1,950	1,570	1,840	800	3,260	954	505	875
26	316	2,330	4,710	2,310	1,810	1,480	1,940	2,230	3,240	745	469	773
27	344	2,050	3,830	2,280	1,700	1,400	4,030	3,500	4,740	792	438	697
28	397	1,910	3,100	2,210	1,600	1,340	6,240	5,490	3,780	1,130	434	670
29	435	3,030	2,640	2,120	1,500	1,290	4,350	5,870	2,780	1,480	428	706
30	482	4,100	2,480	1,980	---	1,410	3,230	5,120	2,210	1,260	408	2,380
31	497	---	2,370	1,830	---	1,620	---	5,770	---	991	501	---
TOTAL	12,311	90,622	99,480	117,120	99,670	85,820	116,570	64,218	146,270	31,826	20,837	38,699
MEAN	397	3,021	3,209	3,778	3,437	2,768	3,886	2,072	4,876	1,027	672	1,290
MAX	557	19,200	5,090	13,400	11,900	11,500	15,200	5,870	16,700	1,850	1,250	5,760
MIN	316	376	2,000	1,740	1,500	1,290	1,610	763	2,140	550	408	341
MED	384	1,390	3,130	2,360	2,350	2,020	2,890	1,450	3,670	916	603	788
CFSM	0.27	2.05	2.18	2.56	2.33	1.88	2.64	1.41	3.31	0.70	0.46	0.88
IN.	0.31	2.29	2.51	2.96	2.52	2.17	2.94	1.62	3.69	0.80	0.53	0.98

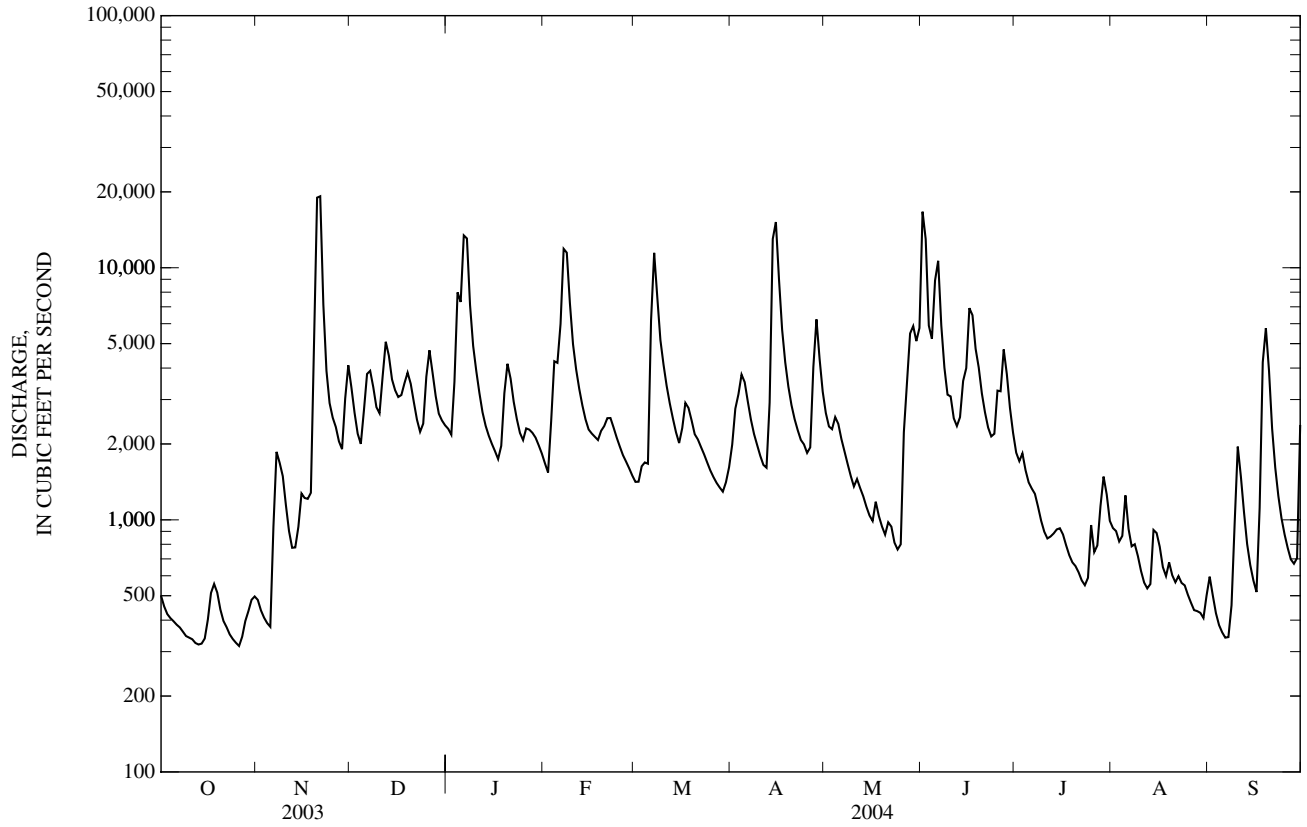
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2004, BY WATER YEAR (WY)

MEAN	637	1,118	2,307	3,404	4,113	4,235	3,116	2,278	1,337	981	869	535
MAX	2,871	4,794	9,107	9,500	9,426	11,950	8,860	6,382	4,876	3,251	4,411	2,939
(WY)	(1990)	(1978)	(1927)	(1937)	(1957)	(1963)	(1977)	(1929)	(2004)	(1938)	(1942)	(1989)
MIN	145	159	217	285	572	990	711	547	301	239	169	136
(WY)	(1964)	(1940)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1988)	(1988)	(1925)	(1955)

03528000 CLINCH RIVER ABOVE TAZEWELL, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1919 - 2004	
ANNUAL TOTAL	1,057,572		923,443			
ANNUAL MEAN	2,897		2,523		2,068	
HIGHEST ANNUAL MEAN					3,269	1927
LOWEST ANNUAL MEAN					850	1941
HIGHEST DAILY MEAN	37,400	Feb 17	19,200	Nov 21	83,300	Apr 5, 1977
LOWEST DAILY MEAN	316	Oct 26	316	Oct 26	108	Sep 11, 1925
ANNUAL SEVEN-DAY MINIMUM	333	Oct 9	333	Oct 9	116	Sep 17, 1955
MAXIMUM PEAK FLOW			22,300	Nov 20	98,100	Apr 5, 1977
MAXIMUM PEAK STAGE			12.59	Nov 20	a29.32	Apr 5, 1977
INSTANTANEOUS LOW FLOW			b312	Oct 26	108	Sep 11, 1925
ANNUAL RUNOFF (CFSM)	1.97		1.71		1.40	
ANNUAL RUNOFF (INCHES)	26.69		23.31		19.07	
10 PERCENT EXCEEDS	5,290		5,010		4,640	
50 PERCENT EXCEEDS	1,870		1,940		1,110	
90 PERCENT EXCEEDS	492		440		265	

a From floodmarks.
b Also occurred on Oct. 27.



03532000 POWELL RIVER NEAR ARTHUR, TN

LOCATION.--Lat 36°32'31", long 83°37'49", Claiborne County, Hydrologic Unit 06010206, on left bank, 500 ft upstream from bridge on U.S. Highway 25E, 2.3 mi east of Arthur, 2.4 mi downstream from Indian Creek, and at mile 65.4.

DRAINAGE AREA.--685 mi^2.

PERIOD OF RECORD.--October 1919 to February 1982, October 1996 to current year. Gage-height records collected at same site December 1892 to August 1893, September 1904 to March 1925 are in reports of U.S. Weather Bureau (published as "near Tazewell").

REVISED RECORDS.--WSP 1336: 1920, 1921(M), 1923.

GAGE.--Water-stage recorder. Datum of gage is 1,043.84 ft above NGVD of 1929, Tennessee River Survey datum. Prior to July 23, 1927, nonrecording gage, and July 23, 1927, to Sept. 30, 1970, water-stage recorder, at same site at datum 2.00 ft higher.

REMARKS.--No estimated daily dischargs. Records good. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1826 reached a stage of 29.5 ft present datum, discharge, 34,000 ft^3/s, and flood of Jan. 29, 1918, reached a stage of 29.2 ft present datum, discharge, 33,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 7	2115	9,540	13.99	Jun 1	2000	10,200	14.58
Mar 7	1430	*10,400	*14.81				

Minimum discharge, 148 ft^3/s, Oct. 26, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	218	1,170	1,120	996	680	1,060	961	8,090	748	364	194
2	231	200	959	1,200	919	713	1,020	917	5,470	694	359	187
3	205	181	808	2,070	1,870	832	1,020	900	2,510	663	348	178
4	192	171	730	2,770	2,530	841	1,030	875	2,330	684	305	170
5	188	170	879	3,430	2,440	811	1,030	794	3,720	683	299	163
6	179	392	1,280	5,740	5,410	5,490	978	723	3,920	608	288	156
7	171	803	1,430	4,580	8,690	9,420	914	679	2,450	560	292	165
8	170	846	1,300	2,840	6,890	5,450	864	636	1,750	538	324	695
9	167	629	1,100	2,160	3,700	3,210	821	596	1,400	502	279	863
10	167	442	1,090	1,770	2,690	2,450	771	561	1,350	461	252	1,640
11	165	355	1,690	1,470	2,150	1,960	732	543	1,140	438	243	1,010
12	159	316	2,000	1,250	1,800	1,670	749	910	1,050	436	354	659
13	157	363	1,680	1,120	1,560	1,450	1,590	984	940	508	317	484
14	180	351	1,460	1,050	1,370	1,280	3,220	749	913	576	264	392
15	273	423	1,390	974	1,240	1,160	3,470	636	1,710	468	263	343
16	244	413	1,350	902	1,180	1,450	2,290	578	1,540	419	243	318
17	277	494	1,540	844	1,110	1,910	1,750	599	1,420	414	223	1,230
18	288	617	1,760	1,220	1,070	1,890	1,440	595	1,350	484	212	2,690
19	226	2,550	1,700	1,980	1,140	1,640	1,240	568	1,450	411	203	2,890
20	196	5,180	1,510	2,120	1,150	1,440	1,100	501	1,090	404	196	1,560
21	181	3,810	1,290	1,720	1,140	1,380	1,010	532	911	357	214	1,020
22	171	1,960	1,120	1,450	1,090	1,280	934	625	815	327	243	771
23	163	1,330	1,030	1,250	1,010	1,170	902	518	844	312	259	635
24	168	1,060	1,350	1,110	945	1,070	915	458	936	296	262	546
25	153	1,020	1,940	1,090	886	994	937	430	892	354	268	470
26	155	1,070	2,180	1,230	836	935	926	430	1,270	376	239	417
27	177	952	1,720	1,310	797	884	1,030	573	1,560	349	215	384
28	208	873	1,410	1,250	751	842	1,580	1,750	1,250	343	199	371
29	219	845	1,200	1,200	712	811	1,330	2,100	990	410	231	359
30	251	1,280	1,210	1,130	---	858	1,090	1,600	840	389	217	359
31	251	---	1,210	1,070	---	1,000	---	2,560	---	348	195	---
TOTAL	6,214	29,314	42,486	54,420	58,072	56,971	37,743	25,881	55,901	14,560	8,170	21,319
MEAN	200	977	1,371	1,755	2,002	1,838	1,258	835	1,863	470	264	711
MAX	288	5,180	2,180	5,740	8,690	9,420	3,470	2,560	8,090	748	364	2,890
MIN	153	170	730	844	712	680	732	430	815	296	195	156
CFSM	0.29	1.43	2.00	2.56	2.92	2.68	1.84	1.22	2.72	0.69	0.38	1.04
IN.	0.34	1.59	2.31	2.96	3.15	3.09	2.05	1.41	3.04	0.79	0.44	1.16

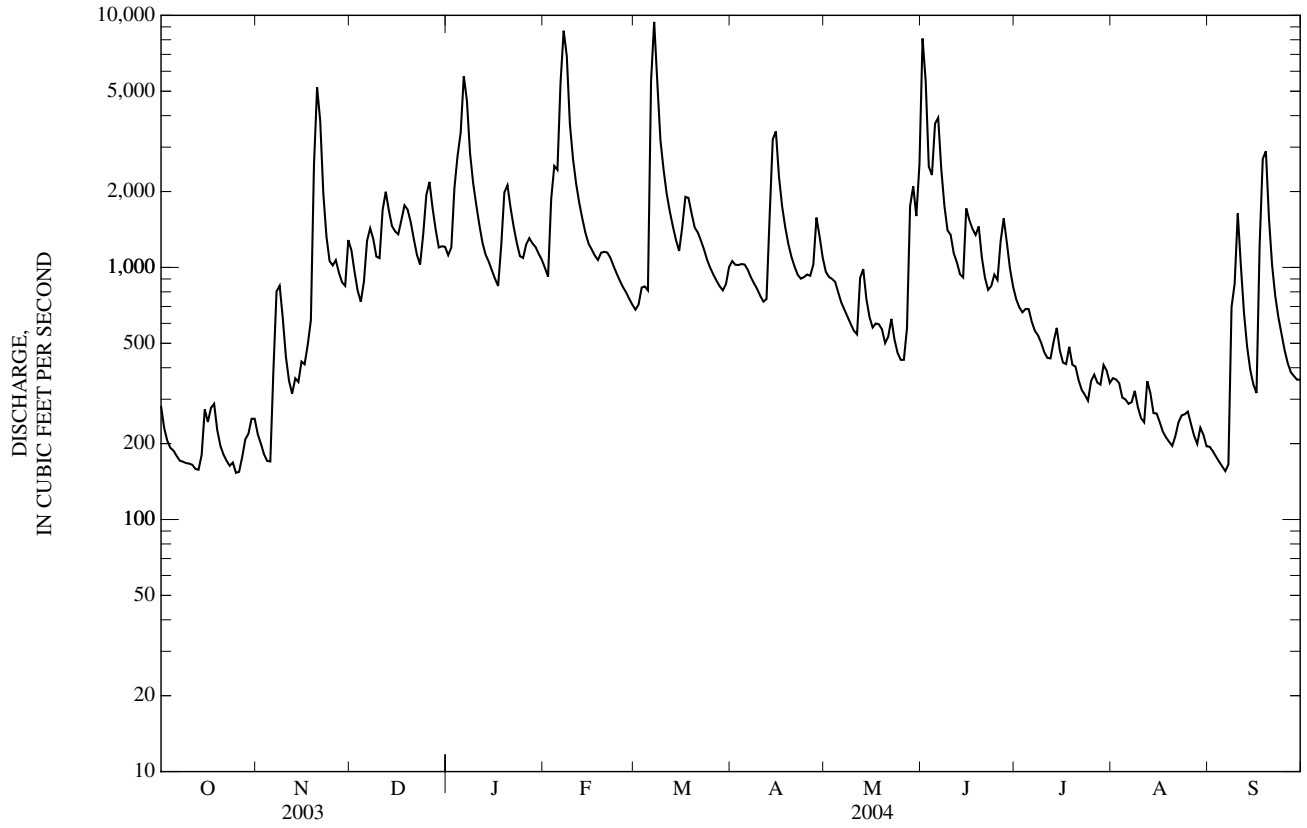
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)

MEAN	313	668	1,318	1,962	2,201	2,360	1,733	1,122	702	554	448	255
MAX	1,648	3,045	5,557	5,812	5,309	6,596	5,224	4,220	2,495	1,917	2,030	1,081
(WY)	(1978)	(1974)	(1927)	(1937)	(2003)	(1963)	(1977)	(1929)	(1928)	(1941)	(1942)	(1928)
MIN	75.5	96.4	117	143	268	887	477	268	168	137	117	79.7
(WY)	(1955)	(1940)	(1966)	(1940)	(1941)	(1931)	(1942)	(1941)	(1936)	(1944)	(1925)	(1955)

03532000 POWELL RIVER NEAR ARTHUR, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1920 - 2004	
ANNUAL TOTAL	537,527		411,051			
ANNUAL MEAN	1,473		1,123		1,129	
HIGHEST ANNUAL MEAN					1,858	1974
LOWEST ANNUAL MEAN					486	1941
HIGHEST DAILY MEAN	27,600	Feb 17	9,420	Mar 7	50,300	Apr 6, 1977
LOWEST DAILY MEAN	153	Oct 25	153	Oct 25	60	Sep 23, 1955
ANNUAL SEVEN-DAY MINIMUM	165	Oct 7	165	Oct 7	65	Sep 17, 1955
MAXIMUM PEAK FLOW			10,400	Mar 7	59,500	Apr 6, 1977
MAXIMUM PEAK STAGE			14.81	Mar 7	38.96	Apr 6, 1977
INSTANTANEOUS LOW FLOW			a148	Oct 26	47	Jan 6, 1940
ANNUAL RUNOFF (CFSM)	2.15		1.64		1.65	
ANNUAL RUNOFF (INCHES)	29.19		22.32		22.40	
10 PERCENT EXCEEDS	2,730		2,130		2,500	
50 PERCENT EXCEEDS	845		885		581	
90 PERCENT EXCEEDS	210		211		136	

a Also occurred Sept. 7.



03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN

LOCATION.--Lat 36°06'51", long 83°59'17", 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 mi^2.

PERIOD OF RECORD.--October 1957 to December 1986, October 2001 to September 2003.

GAGE.--Data logger. Datum of gate is 854.91 ft above NGVD of 1929.

REMARKS.--Records good. 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, 18,300 ft^3/s, April 4, 1977, gage height, 13.28 ft, from rating curve extended above 5,000 ft^3/s on basis of contracted-opening measurement of peak flow; minimum, 2.5 ft^3/s, Aug. 12, 1974, caused by regulation upstream of unknown origin.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 5	2100	1,820	8.84
Feb 6	1700	*2,960	*9.63
Mar 6	1300	2,850	9.57

Minimum discharge, 15 ft^3/s, July 17, 21, 22, 23, 24, 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	19	62	74	69	94	86	42	129	25	41	41
2	29	18	53	69	72	135	79	63	69	22	23	36
3	26	18	49	67	245	154	75	63	51	26	20	35
4	24	18	104	65	165	136	69	46	47	27	18	34
5	23	24	135	811	144	125	63	41	45	34	19	33
6	23	329	104	501	1,850	1,790	59	39	36	49	20	33
7	22	138	85	211	803	470	57	36	33	26	18	34
8	23	80	73	159	300	254	55	35	32	21	18	162
9	22	58	65	136	225	190	52	33	31	19	21	90
10	22	49	172	114	190	154	48	32	28	18	26	56
11	22	43	189	95	164	129	51	31	27	17	30	47
12	22	41	125	85	151	114	89	30	37	17	42	43
13	22	50	100	76	135	99	442	30	59	30	46	41
14	25	40	138	70	121	89	288	33	33	21	38	39
15	31	37	124	65	172	83	178	29	373	18	36	37
16	24	43	107	58	260	347	138	28	84	16	35	38
17	21	53	176	55	236	204	115	29	75	19	34	508
18	20	62	141	102	199	245	98	29	76	37	35	187
19	19	715	121	113	180	206	85	29	42	20	36	87
20	19	208	101	87	167	180	77	27	31	17	36	58
21	18	130	84	77	159	270	70	25	26	16	42	45
22	17	97	75	70	138	192	64	25	26	15	52	39
23	18	77	72	64	125	156	59	25	26	15	41	34
24	18	83	133	60	118	134	56	24	26	15	39	31
25	17	77	109	125	110	117	56	23	68	15	46	30
26	17	63	93	162	107	104	73	26	98	18	57	28
27	26	58	81	131	112	94	63	56	44	20	43	27
28	31	83	74	111	108	86	49	44	32	20	38	28
29	23	89	68	96	98	79	45	42	28	21	42	28
30	21	72	100	89	---	105	43	35	24	20	49	26
31	20	---	83	78	---	95	---	469	---	38	53	---
TOTAL	697	2,872	3,196	4,076	6,923	6,630	2,782	1,519	1,736	692	1,094	1,955
MEAN	22.5	95.7	103	131	239	214	92.7	49.0	57.9	22.3	35.3	65.2
MAX	32	715	189	811	1,850	1,790	442	469	373	49	57	508
MIN	17	18	49	55	69	79	43	23	24	15	18	26
CFSM	0.33	1.40	1.51	1.92	3.49	3.12	1.35	0.72	0.84	0.33	0.52	0.95
IN.	0.38	1.56	1.74	2.21	3.76	3.60	1.51	0.82	0.94	0.38	0.59	1.06

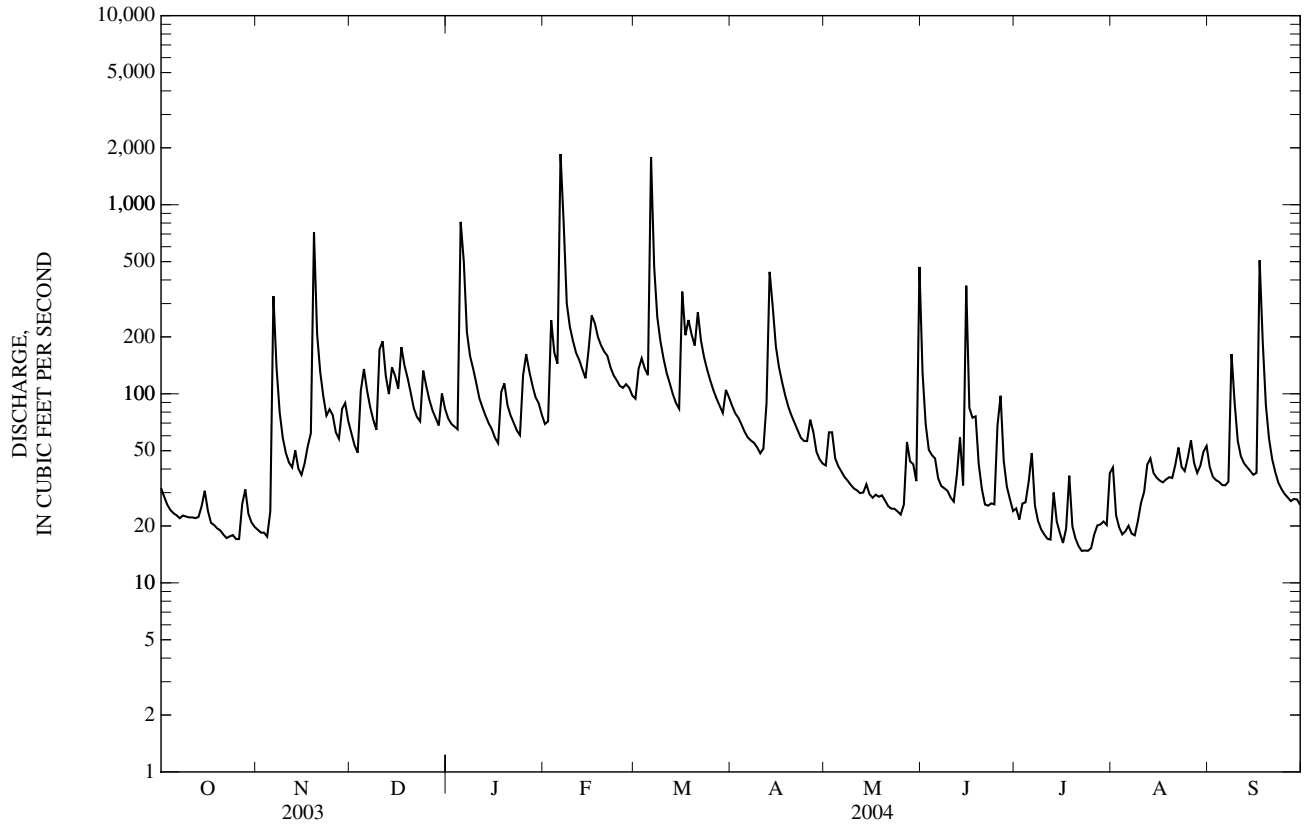
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

MEAN	26.6	68.9	128	155	176	205	156	110	60.7	46.7	28.5	22.8
MAX	73.9	322	365	454	589	561	532	575	163	343	76.1	65.2
(WY)	(1973)	(1958)	(1973)	(1974)	(2003)	(1975)	(1977)	(1984)	(1978)	(1967)	(1967)	(2004)
MIN	7.72	11.8	10.8	8.03	44.5	50.7	28.1	25.3	15.9	10.8	7.99	7.52
(WY)	(1964)	(1959)	(1966)	(1981)	(1977)	(1969)	(1986)	(1969)	(1966)	(1964)	(2002)	(1959)

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1958 - 2004	
ANNUAL TOTAL	51,938		34,172			
ANNUAL MEAN	142		93.4		98.6	
HIGHEST ANNUAL MEAN					185	1974
LOWEST ANNUAL MEAN					37.4	1986
HIGHEST DAILY MEAN	6,100	Feb 16	1,850	Feb 6	7,400	Apr 4, 1977
LOWEST DAILY MEAN	15	Sep 21	15	Jul 22	4.1	Sep 13, 1964
ANNUAL SEVEN-DAY MINIMUM	18	Sep 15	16	Jul 20	4.4	Sep 11, 1964
MAXIMUM PEAK FLOW			2,960	Feb 6	a18,300	Apr 4, 1977
MAXIMUM PEAK STAGE			9.63	Feb 6	13.28	Apr 4, 1977
INSTANTANEOUS LOW FLOW			b15	Jul 17	2.5	Aug 12, 1974
ANNUAL RUNOFF (CFSM)	2.08		1.36		1.44	
ANNUAL RUNOFF (INCHES)	28.21		18.56		19.55	
10 PERCENT EXCEEDS	227		173		193	
50 PERCENT EXCEEDS	70		53		42	
90 PERCENT EXCEEDS	24		20		9.7	

a From rating curve extended above 5,000 ft^3/s on basis of contracted-opening measurement of peak flow.
b Also occurred July 21, 22, 23, 24, and 25.



03535400 BEAVER CREEK AT SOLWAY, TN

LOCATION.--Lat 35°57'53", long 84°10'43", Knox County, Hydrologic Unit 06010207, at bridge on Solway Road, 1.1 mi southwest of Solway and 5.9 mi southeast of intersection of State Highways 95 and 62 in Oak Ridge.

DRAINAGE AREA.--86.8 mi^2.

PERIOD OF RECORD.--August 1961 to September 1964, low-flow partial-record site, August 1998 to April 1999, flood crest-stage partial-record site, April 1999 to current year.

GAGE.--Data logger.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conducatance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 7	1730	*1,960	*10.69				

Minimum discharge, 33 ft^3/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	41	129	127	126	132	163	e95	e250	e50	238	55
2	88	40	117	117	119	155	148	e120	e150	e45	130	54
3	77	41	108	113	204	196	135	e150	e120	e50	97	40
4	69	40	182	109	244	175	131	e120	e100	e60	82	39
5	66	43	279	290	186	157	125	e100	e95	e70	80	39
6	63	406	218	722	1,300	1,240	118	e80	e90	e80	87	37
7	59	444	171	618	1,820	1,450	115	e70	e80	e110	71	46
8	55	277	151	266	1,090	702	115	e65	e70	e130	62	214
9	52	137	137	217	503	393	109	e62	e70	e120	59	197
10	52	116	198	193	336	304	107	e60	e65	94	56	111
11	51	98	309	169	262	252	110	e58	e65	85	52	83
12	51	87	255	153	231	220	154	e56	e60	127	63	68
13	51	92	176	141	214	198	e450	e55	e120	136	69	60
14	51	86	222	130	189	184	e350	e70	e100	93	59	57
15	86	73	240	121	197	174	e250	e65	e600	90	50	53
16	81	75	191	114	336	283	e200	e60	e300	76	47	57
17	58	94	231	109	361	331	e170	e55	e180	82	46	869
18	50	110	245	149	240	261	e150	e60	e130	135	43	814
19	47	733	200	207	211	284	e140	e55	e100	90	41	364
20	47	800	176	164	191	239	e130	e50	e80	76	41	177
21	45	497	152	136	183	298	e120	e50	e70	67	55	143
22	41	204	141	125	164	292	e115	e48	e65	63	61	123
23	40	165	139	115	151	225	e110	e45	e65	61	51	105
24	42	175	178	108	144	202	e105	e45	e60	63	45	91
25	39	184	187	150	136	186	e100	e45	e170	58	42	82
26	41	152	154	262	137	173	e170	e55	e200	98	41	76
27	54	137	137	221	159	163	e150	e120	e120	110	40	71
28	68	151	127	181	166	157	e120	e110	e80	107	38	68
29	58	176	121	156	146	151	e110	e90	e70	73	47	66
30	48	149	134	145	---	159	e100	e80	e60	104	60	62
31	44	---	149	136	---	176	---	e500	---	219	54	---
TOTAL	1,776	5,823	5,554	5,964	9,746	9,512	4,570	2,694	3,785	2,822	2,007	4,321
MEAN	57.3	194	179	192	336	307	152	86.9	126	91.0	64.7	144
MAX	102	800	309	722	1,820	1,450	450	500	600	219	238	869
MIN	39	40	108	108	119	132	100	45	60	45	38	37
CFSM	0.66	2.24	2.06	2.22	3.87	3.54	1.75	1.00	1.45	1.05	0.75	1.66
IN.	0.76	2.50	2.38	2.56	4.18	4.08	1.96	1.15	1.62	1.21	0.86	1.85

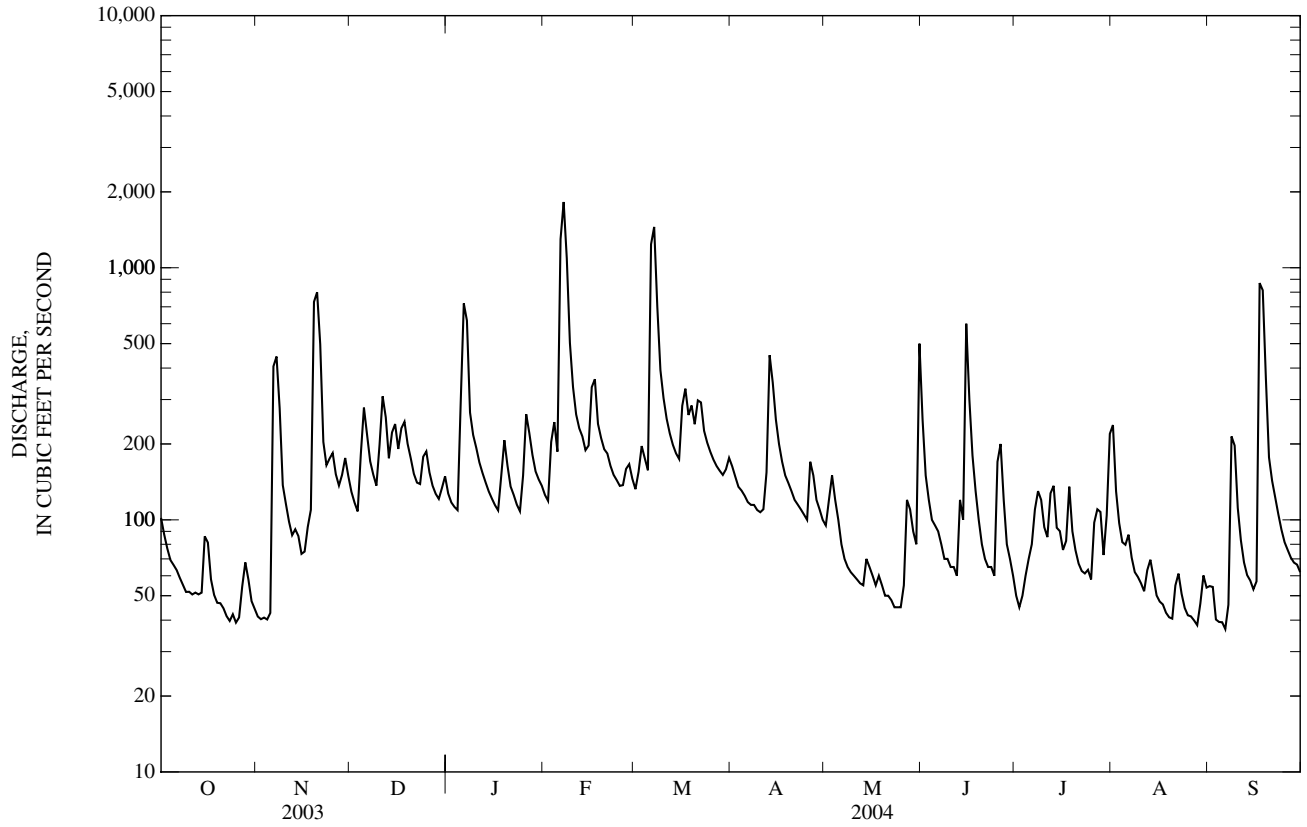
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	40.0	90.8	132	182	348	234	190	155	93.4	109	56.0	75.8
MAX	65.0	194	307	387	786	417	390	344	154	227	131	144
(WY)	(2003)	(2004)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)	(1999)	(1999)	(2003)	(2004)
MIN	20.6	24.5	34.9	98.1	126	113	84.4	43.5	40.1	37.8	27.0	25.6
(WY)	(2001)	(2002)	(2000)	(2000)	(2002)	(2001)	(2001)	(2001)	(2001)	(2000)	(2000)	(1999)

03535400 BEAVER CREEK AT SOLWAY, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	82,408		58,574			
ANNUAL MEAN	226		160		140	
HIGHEST ANNUAL MEAN					235	2003
LOWEST ANNUAL MEAN					84.5	2001
HIGHEST DAILY MEAN	3,580	Feb 17	1,820	Feb 7	3,580	Feb 17, 2003
LOWEST DAILY MEAN	37	Sep 20	37	Sep 6	17	Oct 20, 2000
ANNUAL SEVEN-DAY MINIMUM	41	Sep 15	42	Oct 20	18	Sep 14, 2000
MAXIMUM PEAK FLOW			1,960	Feb 7	4,520	Feb 17, 2003
MAXIMUM PEAK STAGE			10.69	Feb 7	15.79	Feb 17, 2003
INSTANTANEOUS LOW FLOW			33	Sep 7	a16	Sep 16, 2000
ANNUAL RUNOFF (CFSM)	2.60		1.84		1.62	
ANNUAL RUNOFF (INCHES)	35.32		25.10		21.98	
10 PERCENT EXCEEDS	445		269		265	
50 PERCENT EXCEEDS	130		116		72	
90 PERCENT EXCEEDS	51		49		26	

a Also occurred Oct. 18, 19, 2000.
e Estimated



03538235 EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN

LOCATION.--Lat 35°59'48", long 84°14'25", Anderson County, Hydrologic Unit 06010207, on left bank upstream from bridge on Bear Creek Road, 0.5 mi south of Oak Ridge, and at mile 14.4.

DRAINAGE AREA.--1.69 mi^2.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 890 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good below 100 ft^3/s. Flow affected by operations of the Department of Energy, Y-12 Plant. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 699 ft^3/s, gage height, 5.19 ft, Sept. 17; minimum, 4.3 ft^3/s, Oct. 24, minimum gage height, 1.26 ft, Oct. 24; minimum daily, 9.3 ft^3/s, Oct. 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	12	11	12	11	11	10	12	12	12	12
2	11	11	12	11	15	17	11	22	15	12	11	12
3	11	11	11	11	14	12	11	11	13	11	11	12
4	11	11	23	11	12	11	10	10	15	13	11	12
5	11	17	14	27	15	17	10	10	12	13	14	12
6	11	35	13	13	116	83	10	10	12	15	11	12
7	11	13	12	12	18	15	10	10	12	14	11	22
8	11	12	12	12	14	13	11	10	12	12	11	26
9	11	11	12	12	13	12	10	10	12	11	11	14
10	11	11	28	12	13	12	10	10	12	11	10	13
11	12	11	14	12	12	11	15	10	12	12	11	12
12	11	13	13	12	13	11	21	10	11	17	15	13
13	11	11	12	12	12	11	32	11	11	12	11	12
14	21	11	19	11	12	10	14	11	12	12	10	12
15	12	11	13	9.9	20	12	12	11	33	11	10	12
16	11	15	14	11	15	28	11	11	14	11	10	35
17	11	12	15	11	13	12	11	11	19	42	10	134
18	11	32	13	19	12	14	11	12	13	13	10	18
19	11	39	12	12	12	12	11	12	12	12	10	13
20	11	14	12	12	12	18	11	11	12	11	11	12
21	11	13	12	11	12	13	10	11	24	11	16	12
22	11	12	12	11	12	12	11	14	15	11	11	12
23	11	12	15	12	12	11	11	12	16	11	11	12
24	9.3	18	13	11	12	11	10	11	13	11	13	12
25	10	12	12	21	12	11	11	11	39	15	13	11
26	12	12	12	13	15	11	13	19	15	13	12	11
27	14	13	12	13	13	11	11	13	12	12	12	11
28	11	15	12	12	12	11	10	14	12	11	12	11
29	11	12	12	12	12	11	10	12	12	12	18	11
30	11	12	13	12	---	14	10	12	13	11	15	11
31	11	---	12	12	---	12	---	19	---	23	12	---
TOTAL	354.3	443	423	393.9	487	470	360	371	447	418	366	534
MEAN	11.4	14.8	13.6	12.7	16.8	15.2	12.0	12.0	14.9	13.5	11.8	17.8
MAX	21	39	28	27	116	83	32	22	39	42	18	134
MIN	9.3	11	11	9.9	12	10	10	10	11	11	10	11

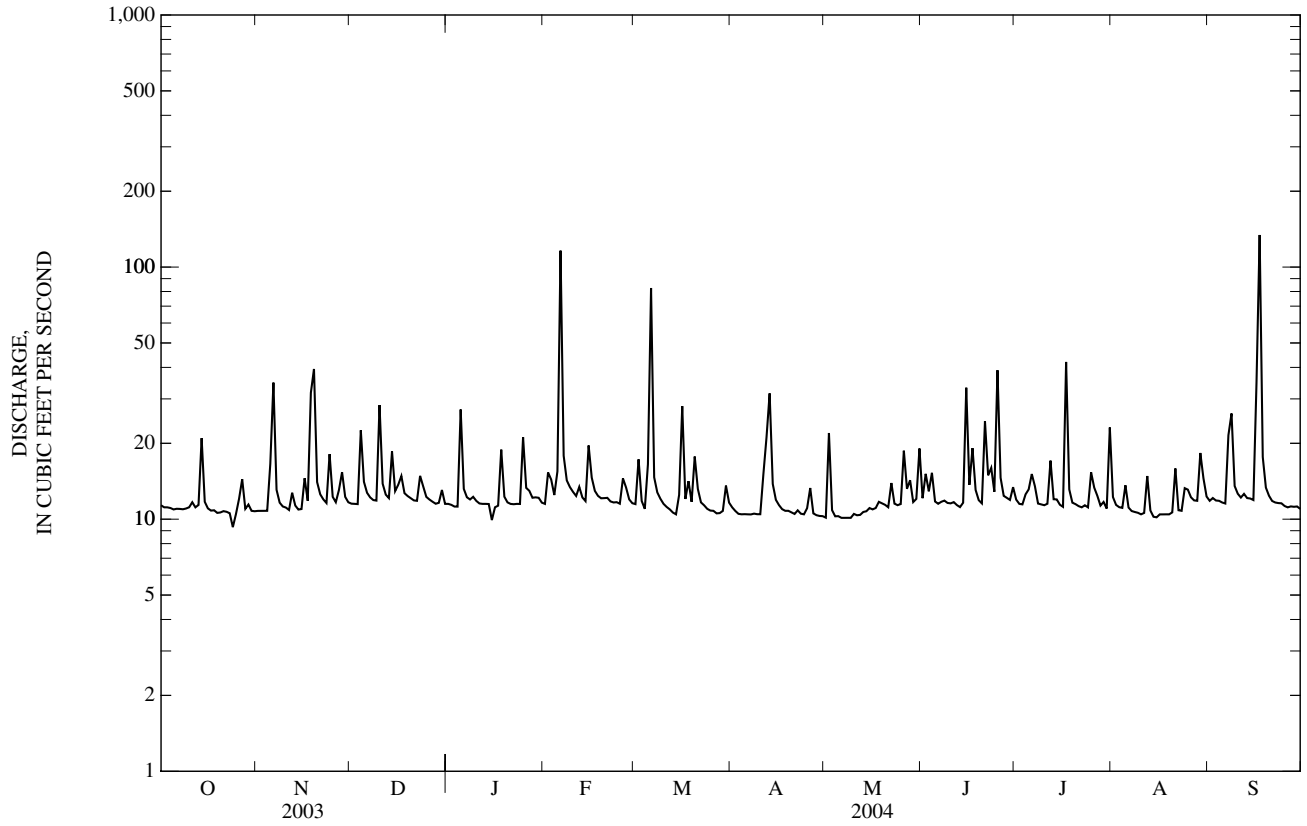
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	9.81	11.2	11.7	13.0	14.4	13.5	13.1	12.2	12.1	12.7	10.8	11.4
MAX	11.9	14.8	15.6	19.6	28.0	20.4	23.8	19.2	17.5	20.8	15.5	17.8
(WY)	(2003)	(2004)	(2003)	(2002)	(2003)	(2002)	(1998)	(2003)	(1998)	(1999)	(1996)	(2004)
MIN	5.47	6.47	5.82	7.56	7.42	7.37	4.87	6.04	4.53	4.14	5.03	5.28
(WY)	(1995)	(1995)	(1995)	(1993)	(1995)	(1995)	(1995)	(1994)	(1995)	(1995)	(1995)	(1995)

03538235 EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	5,518.8		5,067.2			
ANNUAL MEAN	15.1		13.8		12.5	
HIGHEST ANNUAL MEAN					15.3	2003
LOWEST ANNUAL MEAN					6.30	1995
HIGHEST DAILY MEAN	205	Feb 16	134	Sep 17	205	Feb 16, 2003
LOWEST DAILY MEAN	6.0	Jan 23	9.3	Oct 24	3.3	Sep 30, 1995
ANNUAL SEVEN-DAY MINIMUM	9.9	Jan 19	10	May 4	3.6	Oct 16, 1995
MAXIMUM PEAK FLOW			699	Sep 17	2,000	Jul 23, 1997
MAXIMUM PEAK STAGE			5.19	Sep 17	14.36	Jul 23, 1997
INSTANTANEOUS LOW FLOW			4.3	Oct 24	1.7	Jul 24, 1997
10 PERCENT EXCEEDS	20		17		17	
50 PERCENT EXCEEDS	12		12		11	
90 PERCENT EXCEEDS	11		11		5.0	

a From area velocity estimated at contracted section downstream.
b Affected by backwater. From high-water marks.



03539600 DADDYS CREEK NEAR HEBBERTSBURG, TN[1]

LOCATION.--Lat 35°59'51", long 84°49'21", Cumberland County, Hydrologic Unit 06010208, on right bank, 200 ft downstream of Antioch Bridge, 2.1 mi southeast of Hebbertsburg, 6.9 mi northeast of Crab Orchard, and at mile 9.1.

DRAINAGE AREA.--139 mi^2.

PERIOD OF RECORD.--October 1956 to September 1968, April 1999 to current year. Prior to May 1957 monthly discharge only, published in WSP 1726.

GAGE.--Data collection platform. Datum of gage is 1,445 ft above NGVD of 1929, from topographic map, datum of 1929, supplementary adjustment of 1936. Prior to May 24, 1965, graphic water-stage recorder at same site and datum of 1929.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,100 ft^3/s, Sept. 17, gage height, 13.14 ft; minimum discharge, 11 ft^3/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	22	276	294	200	232	466	84	222	216	157	19
2	54	20	226	255	179	815	357	206	134	349	132	20
3	44	19	194	228	189	1,060	283	399	99	286	82	48
4	35	18	236	212	199	654	233	291	101	235	57	44
5	28	21	418	744	422	512	201	221	93	374	45	36
6	26	97	402	920	6,680	7,030	168	176	70	617	41	33
7	23	223	332	563	2,700	1,940	145	136	53	429	41	48
8	22	150	272	425	1,020	868	130	109	44	320	35	736
9	20	106	232	361	660	596	115	88	35	211	26	477
10	19	81	514	304	496	459	102	72	30	223	21	270
11	18	67	872	252	398	385	103	70	25	179	18	156
12	17	60	546	225	359	318	399	62	22	118	25	118
13	16	74	411	211	348	263	1,330	54	20	89	48	88
14	18	79	502	197	300	223	1,060	46	18	72	38	70
15	23	74	557	179	291	196	722	41	145	62	34	55
16	30	93	440	160	349	248	499	37	145	48	24	145
17	27	162	446	140	363	321	384	37	109	39	19	11,200
18	25	235	422	191	429	319	299	37	89	33	17	3,080
19	23	1,470	401	316	501	371	240	59	57	28	14	800
20	21	1,120	357	275	533	340	203	60	41	25	13	428
21	20	579	297	231	499	392	179	40	33	21	20	268
22	19	393	263	210	418	336	160	35	29	20	23	191
23	17	275	260	190	356	269	147	93	30	23	23	139
24	17	287	557	166	333	220	136	54	73	18	23	107
25	16	374	489	292	302	193	120	43	545	16	137	84
26	16	299	381	589	272	166	138	38	879	33	52	67
27	19	250	316	478	243	148	153	108	385	85	35	55
28	22	318	261	388	238	132	128	70	228	139	29	48
29	26	452	233	311	242	120	109	60	166	81	24	43
30	23	353	315	269	---	589	91	46	203	52	24	38
31	23	---	350	231	---	662	---	282	---	47	21	---
TOTAL	772	7,771	11,778	9,807	19,519	20,377	8,800	3,154	4,123	4,488	1,298	18,911
MEAN	24.9	259	380	316	673	657	293	102	137	145	41.9	630
MAX	65	1,470	872	920	6,680	7,030	1,330	399	879	617	157	11,200
MIN	16	18	194	140	179	120	91	35	18	16	13	19
CFSM	0.18	1.86	2.73	2.28	4.84	4.73	2.11	0.73	0.99	1.04	0.30	4.54
IN.	0.21	2.08	3.15	2.62	5.22	5.45	2.36	0.84	1.10	1.20	0.35	5.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

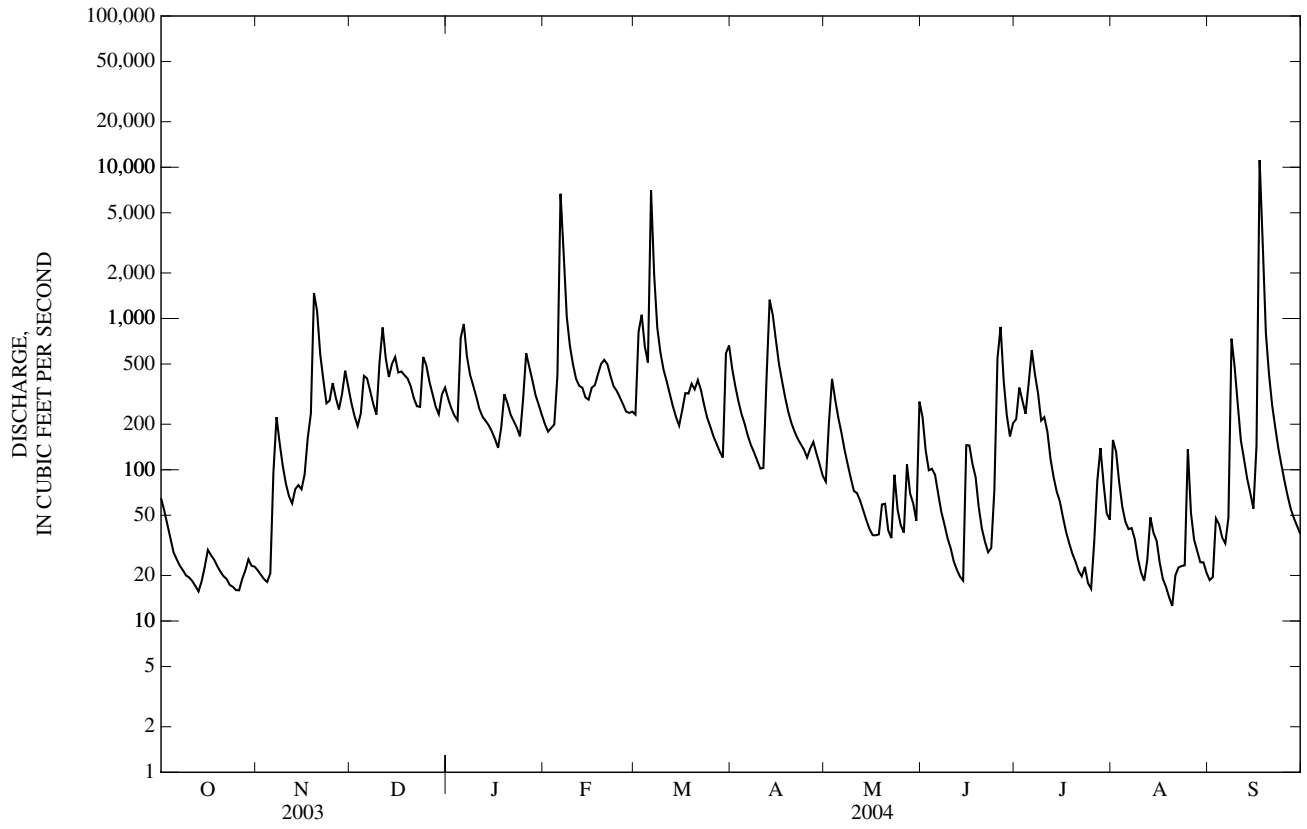
MEAN	49.2	221	379	404	521	594	427	280	93.7	109	44.9	71.4
MAX	220	1,271	860	953	1,197	1,011	812	1,057	457	587	140	630
(WY)	(1958)	(1958)	(1968)	(2002)	(2003)	(1963)	(1962)	(2003)	(1961)	(1967)	(1959)	(2004)
MIN	0.52	2.44	12.5	159	99.2	178	94.1	27.2	10.7	9.44	1.66	0.62
(WY)	(1964)	(1964)	(1964)	(2003)	(1968)	(2003)	(1963)	(1962)	(2002)	(2002)	(1957)	(1968)

1.

03539600 DADDYS CREEK NEAR HEBBERTSBURG, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1957 - 2004	
ANNUAL TOTAL	125,037.6		110,798			
ANNUAL MEAN	343		303		262	
HIGHEST ANNUAL MEAN					369	2003
LOWEST ANNUAL MEAN					162	2001
HIGHEST DAILY MEAN	10,100	May 6	11,200	Sep 17	11,200	Sep 17, 2004
LOWEST DAILY MEAN	5.9	Sep 21	13	Aug 20	0.17	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	7.7	Sep 15	18	Oct 21	0.27	Sep 11, 1968
MAXIMUM PEAK FLOW			a15,100	Sep 17	a15,100	Sep 17, 2004
MAXIMUM PEAK STAGE			13.14	Sep 17	b13.23	Mar 12, 1963
INSTANTANEOUS LOW FLOW			11	Aug 20	c0.15	Sep 13, 2002
ANNUAL RUNOFF (CFSM)	2.46		2.18		1.88	
ANNUAL RUNOFF (INCHES)	33.46		29.65		25.60	
10 PERCENT EXCEEDS	608		513		587	
50 PERCENT EXCEEDS	116		158		98	
90 PERCENT EXCEEDS	19		22		5.4	

a From rating curve extended above 8,000 ft^3/s at site and datum presently in use.
b From rating curve extended above 6,600 ft^3/s at site and datum then in use.
c Also occurred Sept. 14, 2002.



03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN

LOCATION.--Lat 36°06'11", long 84°43'06", Morgan County, Hydrologic Unit 06010208, on right bank 200 yards upstream of Lilly Bridge, 0.1 mi downstream of Little Clear Creek, 3.8 mi west-southwest of Lancing, and at mile 1.6.

DRAINAGE AREA.--170 mi^2.

PERIOD OF RECORD.--April 1997 to current year.

GAGE.--Data collection platform. Datum of gage is 1,040 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except during periods of missing record, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREME FOR PERIORD OF RECORD.--Maximum discharge 18,000 ft^3/s, gage height 14.95 ft, May 5, 2003, minimum discharge 0.16 ft^3/s, Oct. 8, 9, 1999.

EXTREME FOR CURRENT YEAR.-- Maximum discharge 16,900 ft^3/s, gage height 14.61 ft, Feb. 6, ,minimum discharge 11.0 ft^3/s, Aug. 20, 21.

REVISION.--The maximum discharges for the following years have been revised as shown in the following table. They supersede figures published in reports for years 1998, 1999, 2002 and 2003.

WATER YEAR	DATE	DISCHARGE (ft^3/s)	GAGE HEIGHT (ft)
1998	Jan. 7, 1998	15,700	14.24
1999	Jan. 23, 1999	11,000	12.62
2002	Jan. 24, 2002	11,300	12.73
2003	May 5, 2003	18,000	14.95

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	66	334	371	254	230	530	134	269	103	e560	16
2	149	61	277	403	233	386	411	205	174	104	e320	79
3	126	58	244	475	253	608	338	268	139	242	e165	75
4	107	55	258	410	255	488	282	207	372	235	105	52
5	95	58	364	574	673	412	237	185	352	200	80	56
6	83	170	368	785	10,800	5,500	203	167	224	458	68	54
7	77	208	340	564	2,390	1,530	173	135	165	563	57	78
8	69	174	303	449	1,010	832	150	115	137	366	44	1,030
9	61	146	270	393	703	607	131	99	121	229	36	539
10	56	128	350	338	556	494	118	84	101	159	30	289
11	53	117	633	285	453	398	113	104	85	122	25	187
12	49	111	481	264	390	340	220	106	73	103	26	134
13	47	165	392	253	361	290	962	83	63	84	28	105
14	47	166	472	235	317	256	906	70	58	77	26	87
15	83	151	517	222	296	236	713	61	60	81	22	73
16	103	239	433	201	287	280	520	77	75	73	18	78
17	79	527	459	185	285	315	394	80	88	110	15	9,040
18	68	463	441	259	307	303	315	100	71	129	13	2,020
19	61	1,720	427	400	344	338	262	542	59	77	12	708
20	57	1,370	387	334	357	321	225	249	50	59	11	399
21	52	726	334	293	347	687	202	159	45	46	12	259
22	48	514	310	264	307	608	183	117	46	37	14	187
23	45	398	310	237	269	467	166	174	47	105	21	142
24	42	375	757	216	246	380	198	129	54	114	48	112
25	40	437	629	362	227	319	167	96	261	67	63	92
26	39	360	480	852	216	275	212	78	721	56	44	76
27	45	312	390	610	229	243	240	77	410	946	36	65
28	106	370	333	482	237	219	196	100	236	e425	29	57
29	97	478	291	392	235	198	166	103	134	e260	24	51
30	84	396	402	346	---	699	146	91	108	e210	25	47
31	73	---	433	294	---	735	---	199	---	e390	19	---
TOTAL	2,318	10,519	12,419	11,748	22,837	18,994	9,079	4,394	4,798	6,230	1,996	16,187
MEAN	74.8	351	401	379	787	613	303	142	160	201	64.4	540
MAX	177	1,720	757	852	10,800	5,500	962	542	721	946	560	9,040
MIN	39	55	244	185	216	198	113	61	45	37	11	16
CFSM	0.44	2.06	2.36	2.23	4.63	3.60	1.78	0.83	0.94	1.18	0.38	3.17
IN.	0.51	2.30	2.72	2.57	5.00	4.16	1.99	0.96	1.05	1.36	0.44	3.54

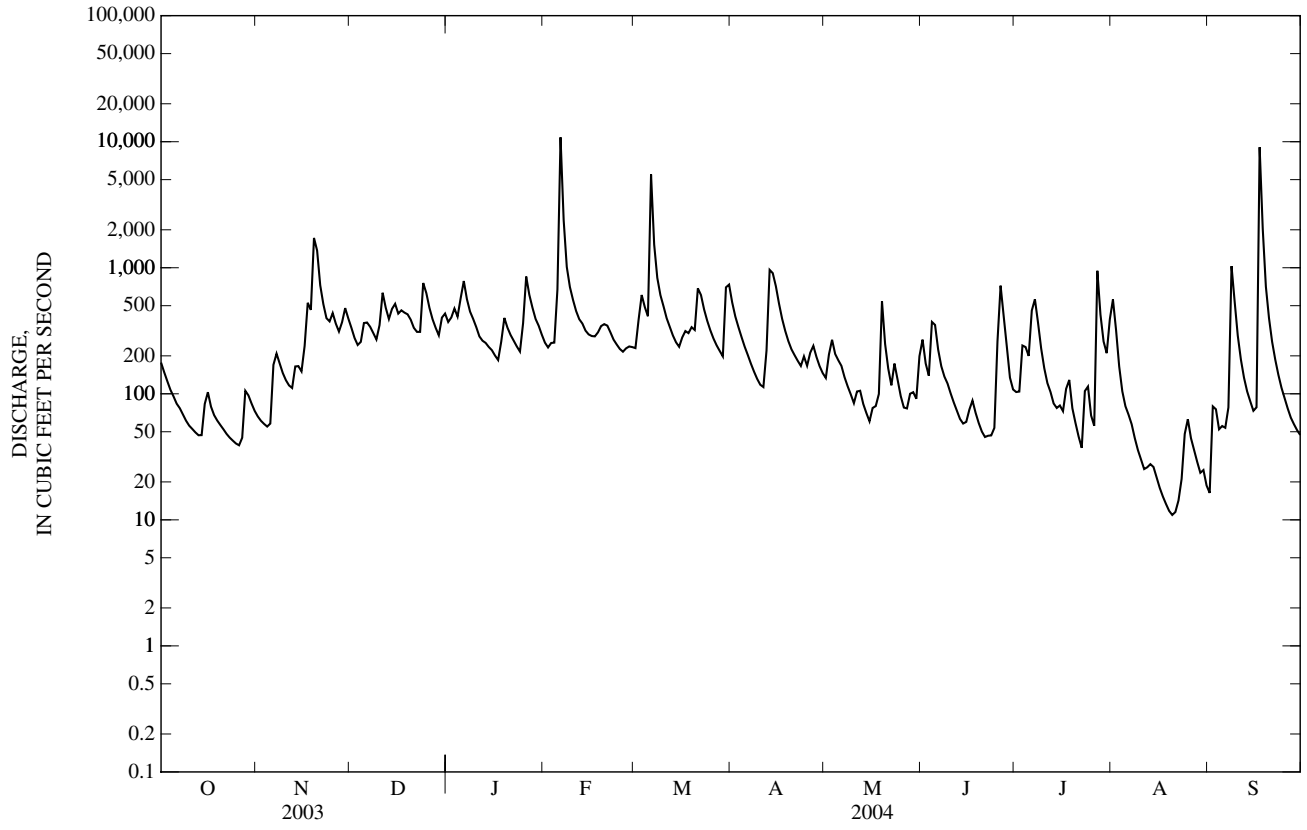
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	22.4	119	296	567	720	485	451	410	233	108	36.3	125
MAX	74.8	385	739	962	1,597	964	1,118	1,223	782	349	104	540
(WY)	(2004)	(2003)	(2003)	(1999)	(2003)	(2002)	(1998)	(2003)	(1997)	(1999)	(1998)	(2004)
MIN	0.81	5.07	32.4	141	238	190	206	80.3	30.6	11.9	4.65	1.67
(WY)	(2000)	(1999)	(2000)	(2000)	(2002)	(2003)	(2001)	(2001)	(2001)	(2000)	(1997)	(1997)

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	156,569.8		121,519			
ANNUAL MEAN	429		332		295	
HIGHEST ANNUAL MEAN					459	2003
LOWEST ANNUAL MEAN					138	2000
HIGHEST DAILY MEAN	12,600	Feb 16	10,800	Feb 6	12,600	Feb 16, 2003
LOWEST DAILY MEAN	7.5	Aug 28	11	Aug 20	0.17	Oct 8, 1999
ANNUAL SEVEN-DAY MINIMUM	9.3	Aug 27	14	Aug 16	0.23	Oct 2, 1999
MAXIMUM PEAK FLOW			a16,900	Feb 6	b18,000	May 5, 2003
MAXIMUM PEAK STAGE			14.61	Feb 6	14.95	May 5, 2003
INSTANTANEOUS LOW FLOW			c11	Aug 20	d0.16	Oct 8, 1999
ANNUAL RUNOFF (CFSM)	2.52		1.95		1.73	
ANNUAL RUNOFF (INCHES)	34.26		26.59		23.57	
10 PERCENT EXCEEDS	680		557		581	
50 PERCENT EXCEEDS	165		208		104	
90 PERCENT EXCEEDS	29		48		3.8	

a From rating curve extended above 16,800 ft^3/s.
b See REVISIONS above.
c Also occurred Aug. 21, 2004.
d Also occurred Oct. 9, 1999.
e Estimated



03539800 OBED RIVER NEAR LANCING, TN

LOCATION.--Lat 36°04'53", long 84°40'13", 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 mi^2.

PERIOD OF RECORD.--October 1956 to September 1968, March 1973 to December 1987, March 1999 to current year. Prior to May 1957 monthly discharge only, published in WSP 1726.

GAGE.--Data collection platform. Datum of gage is 891.91 ft above NGVD of 1929.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on 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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1130	41,700	19.91	Sep 17	1215	*57,100	*22.80
Mar 6	0830	35,300	18.25				

Minimum discharge, 32 ft^3/s, Aug. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	120	1,150	1,270	830	993	1,950	419	1,620	589	859	47
2	343	104	928	1,200	734	1,950	1,510	629	915	687	617	152
3	292	95	764	1,270	773	3,460	1,230	1,350	666	941	398	143
4	251	88	775	1,170	858	2,440	1,020	1,030	1,100	873	288	139
5	211	98	1,320	1,950	1,360	1,910	840	830	1,160	895	216	129
6	180	320	1,380	3,240	27,000	20,400	715	690	713	2,820	175	121
7	156	705	1,230	2,190	10,200	7,200	630	544	518	2,200	144	125
8	133	585	1,060	1,690	4,240	3,540	570	439	420	1,540	121	2,740
9	114	448	910	1,450	2,790	2,380	512	364	347	985	90	2,060
10	100	370	1,300	1,220	2,130	1,840	443	306	302	698	71	1,100
11	92	320	3,040	995	1,740	1,490	414	311	280	615	59	668
12	83	299	2,100	880	1,500	1,250	712	315	224	458	60	460
13	77	362	1,570	817	1,420	1,050	4,380	262	186	354	69	346
14	76	411	1,690	748	1,250	893	3,960	219	175	313	93	273
15	111	373	1,990	694	1,140	783	2,960	186	335	279	84	218
16	221	506	1,650	626	1,210	921	2,110	227	586	246	67	188
17	187	1,140	1,660	561	1,230	1,230	1,620	314	436	281	53	34,700
18	144	1,080	1,660	684	1,320	1,140	1,290	277	348	323	43	11,500
19	119	5,180	1,590	1,260	1,560	1,400	1,050	895	265	194	37	3,700
20	102	4,770	1,440	1,110	1,810	1,230	862	614	196	135	33	2,070
21	91	2,500	1,220	951	1,900	1,930	746	388	144	96	34	1,350
22	82	1,720	1,100	846	1,670	1,820	670	281	113	75	43	952
23	75	1,290	1,050	755	1,400	1,460	604	373	97	158	81	723
24	71	1,160	2,380	678	1,240	1,200	619	369	142	224	86	580
25	68	1,540	2,200	995	1,120	1,000	540	256	948	117	222	479
26	65	1,280	1,680	2,870	1,020	848	642	207	3,510	86	213	407
27	69	1,060	1,360	2,160	1,010	737	792	928	1,630	1,290	129	348
28	151	1,190	1,130	1,690	1,030	660	642	677	938	897	87	314
29	210	1,680	973	1,360	1,030	587	535	513	671	519	69	286
30	176	1,410	1,260	1,170	---	2,100	463	406	556	343	69	269
31	142	---	1,490	993	---	2,730	---	1,320	---	484	58	---
TOTAL	4,608	32,204	45,050	39,493	76,515	72,572	35,031	15,939	19,541	19,715	4,668	66,587
MEAN	149	1,073	1,453	1,274	2,638	2,341	1,168	514	651	636	151	2,220
MAX	416	5,180	3,040	3,240	27,000	20,400	4,380	1,350	3,510	2,820	859	34,700
MIN	65	88	764	561	734	587	414	186	97	75	33	47
CFSM	0.29	2.07	2.81	2.46	5.09	4.52	2.25	0.99	1.26	1.23	0.29	4.28
IN.	0.33	2.31	3.24	2.84	5.49	5.21	2.52	1.14	1.40	1.42	0.34	4.78

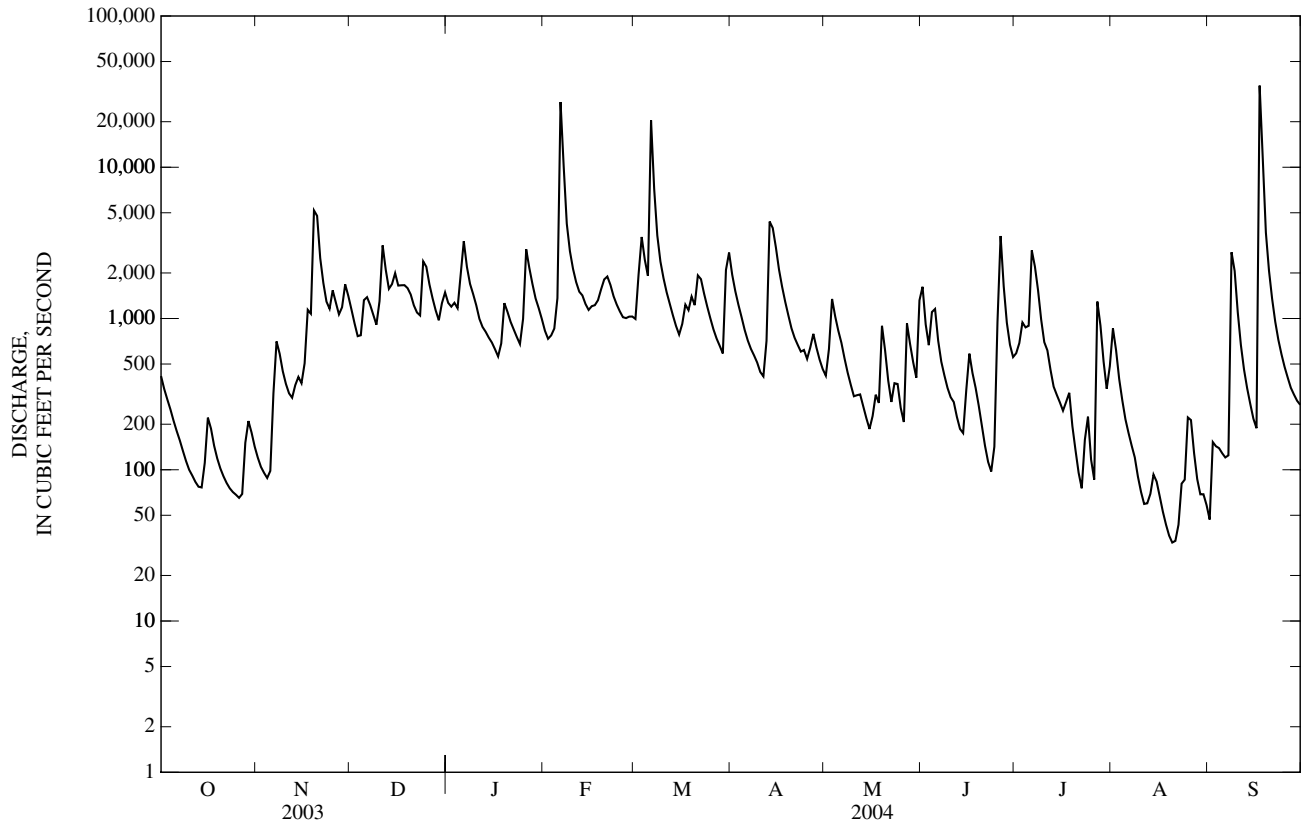
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

MEAN	267	965	1,464	1,715	1,840	2,215	1,552	1,155	398	397	148	239
MAX	1,552	3,829	3,149	4,780	4,696	6,220	3,522	4,066	1,475	2,572	587	2,220
(WY)	(1976)	(1958)	(1968)	(1974)	(2003)	(1975)	(1977)	(1984)	(1961)	(1979)	(1985)	(2004)
MIN	1.58	4.98	43.5	69.5	354	682	261	115	70.7	11.3	7.13	1.43
(WY)	(1981)	(1964)	(1964)	(1981)	(1968)	(1985)	(1986)	(1962)	(1958)	(1980)	(1980)	(1968)

03539800 OBED RIVER NEAR LANCING, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1957 - 2004	
ANNUAL TOTAL	494,602		431,923			
ANNUAL MEAN	1,355		1,180		1,015	
HIGHEST ANNUAL MEAN					1,553	1975
LOWEST ANNUAL MEAN					484	1981
HIGHEST DAILY MEAN	31,300	May 6	34,700	Sep 17	45,000	Apr 4, 1977
LOWEST DAILY MEAN	17	Aug 28	33	Aug 20	0.50	Oct 30, 1963
ANNUAL SEVEN-DAY MINIMUM	22	Aug 27	44	Aug 16	0.61	Oct 25, 1963
MAXIMUM PEAK FLOW			57,100	Sep 17	a105,000	May 27, 1973
MAXIMUM PEAK STAGE			22.80	Sep 17	b29.51	May 27, 1973
INSTANTANEOUS LOW FLOW			c32	Aug 20	0.40	Oct 31, 1963
ANNUAL RUNOFF (CFSM)	2.62		2.28		1.96	
ANNUAL RUNOFF (INCHES)	35.52		31.02		26.63	
10 PERCENT EXCEEDS	2,400		2,060		2,330	
50 PERCENT EXCEEDS	479		696		398	
90 PERCENT EXCEEDS	73		96		20	

a From rating curve extended above 33,000 ft^3/s on basis os slope conveyance study at gage height 22.40 ft and slope-area measurement of peak flow.
b From dross line in gage well, 30.5 ft from floodmarks.
c Also occurred Aug. 21.



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 mi^2.

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.--Data collection platform and data logger. Datum of gage is 761.38 ft above NGVD 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.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1330	63,700	26.72	Sep 17	1330	*83,800	*30.03
Mar 6	1000	57,100	25.49				

Minimum discharge, 53 ft^3/s, Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	167	1,800	1,830	1,210	1,310	2,820	636	2,090	833	1,210	80
2	558	150	1,440	1,670	1,080	2,450	2,140	1,080	1,220	1,030	867	143
3	462	139	1,200	1,740	1,100	5,250	1,730	2,430	852	1,220	579	331
4	386	130	1,220	1,590	1,200	3,600	1,440	1,780	1,110	1,480	399	244
5	329	165	1,810	3,170	1,320	2,710	1,220	1,400	1,410	1,260	287	206
6	274	736	1,900	5,530	38,900	32,000	1,050	1,160	934	3,110	221	185
7	237	1,350	1,710	3,440	15,400	11,000	919	908	683	2,790	183	163
8	207	1,090	1,500	2,530	6,080	5,190	836	728	563	2,030	156	3,050
9	181	819	1,320	2,090	3,840	3,420	767	603	466	1,340	131	3,100
10	160	665	1,910	1,730	2,870	2,610	680	500	377	1,020	104	1,650
11	148	570	4,700	1,420	2,280	2,050	639	435	351	873	89	1,070
12	136	509	3,190	1,250	1,920	1,720	933	466	279	676	127	787
13	128	618	2,330	1,170	1,760	1,460	7,810	386	222	515	171	594
14	124	694	2,370	1,090	1,560	1,250	6,720	330	193	430	159	443
15	153	640	2,860	1,010	1,450	1,130	4,590	281	515	371	138	342
16	254	786	2,410	922	1,630	1,310	3,170	253	1,170	320	113	276
17	255	1,790	2,490	836	1,700	1,780	2,360	414	983	269	89	48,900
18	204	1,720	2,450	965	1,800	1,720	1,840	342	1,070	779	72	16,800
19	169	9,990	2,250	1,770	2,130	1,990	1,490	813	662	411	61	4,970
20	152	8,110	2,000	1,650	2,510	1,840	1,250	788	441	265	55	2,620
21	136	3,990	1,690	1,430	2,680	2,920	1,100	530	313	191	72	1,650
22	123	2,590	1,500	1,280	2,350	2,890	980	385	267	144	91	1,160
23	112	1,900	1,410	1,150	1,920	2,240	893	364	275	134	101	888
24	104	1,730	2,840	1,030	1,660	1,800	995	506	312	292	136	677
25	99	2,190	3,000	1,260	1,490	1,490	842	334	909	195	303	550
26	97	1,900	2,310	3,760	1,350	1,270	917	254	4,920	140	347	445
27	108	1,590	1,860	3,080	1,340	1,120	1,130	854	2,350	946	226	368
28	148	1,940	1,560	2,400	1,330	992	936	914	1,390	1,070	157	308
29	261	2,800	1,350	1,910	1,330	882	791	680	1,010	665	118	269
30	233	2,270	1,760	1,660	---	2,730	698	556	895	437	105	237
31	194	---	2,100	1,420	---	4,020	---	1,260	---	365	97	---
TOTAL	6,822	53,738	64,240	57,783	107,190	108,144	53,686	22,370	28,232	25,601	6,964	92,506
MEAN	220	1,791	2,072	1,864	3,696	3,489	1,790	722	941	826	225	3,084
MAX	690	9,990	4,700	5,530	38,900	32,000	7,810	2,430	4,920	3,110	1,210	48,900
MIN	97	130	1,200	836	1,080	882	639	253	193	134	55	80
MED	169	1,220	1,900	1,650	1,700	1,990	1,070	556	767	665	136	497
CFSM	0.29	2.34	2.71	2.44	4.84	4.57	2.34	0.94	1.23	1.08	0.29	4.04
IN.	0.33	2.62	3.13	2.81	5.22	5.27	2.61	1.09	1.37	1.25	0.34	4.50

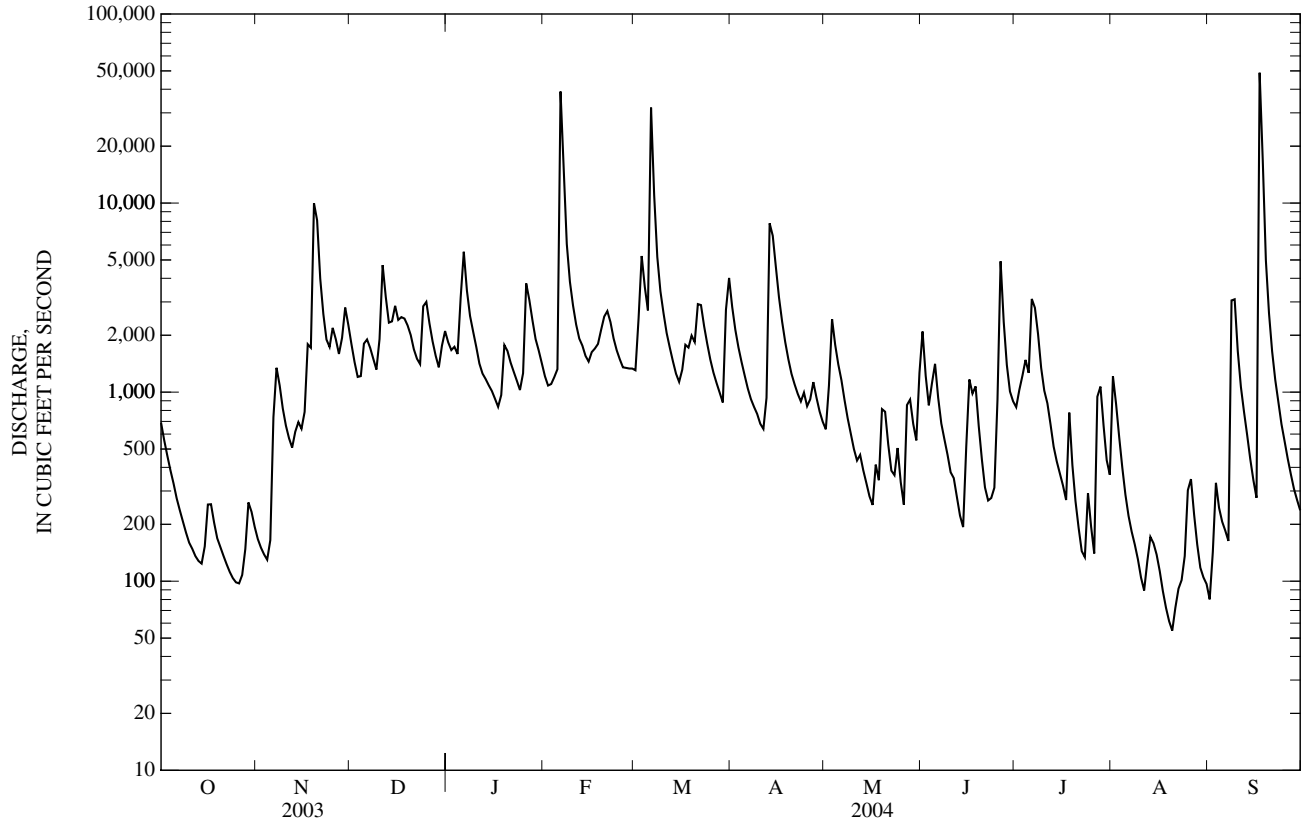
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2004, BY WATER YEAR (WY)

MEAN	277	1,067	2,207	2,801	3,023	3,130	2,184	1,372	724	498	278	276
MAX	1,971	6,214	7,938	7,941	8,136	8,962	5,808	5,804	6,731	3,694	2,107	3,084
(WY)	(1976)	(1958)	(1991)	(1937)	(1939)	(1975)	(1977)	(1973)	(1989)	(1967)	(1942)	(2004)
MIN	0.57	0.37	42.1	97.8	422	946	374	140	16.3	5.55	7.70	0.91
(WY)	(1954)	(1954)	(1940)	(1981)	(1941)	(1985)	(1986)	(1962)	(1936)	(1944)	(1930)	(1954)

03540500 EMORY RIVER AT OAKDALE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1927 - 2004	
ANNUAL TOTAL	731,781		627,276			
ANNUAL MEAN	2,005		1,714		1,479	
HIGHEST ANNUAL MEAN					2,653	1973
LOWEST ANNUAL MEAN					670	1981
HIGHEST DAILY MEAN	48,600	Feb 16	48,900	Sep 17	103,000	Dec 23, 1990
LOWEST DAILY MEAN	61	Sep 21	55	Aug 20	a0.00	Aug 13, 1944
ANNUAL SEVEN-DAY MINIMUM	74	Aug 27	77	Aug 17	0.00	Nov 7, 1953
MAXIMUM PEAK FLOW			83,800	Sep 17	b195,000	Mar 23, 1929
MAXIMUM PEAK STAGE			30.03	Sep 17	c41.20	Mar 23, 1929
INSTANTANEOUS LOW FLOW			53	Aug 20	a0.00	Aug 13, 1944
ANNUAL RUNOFF (CFSM)	2.62		2.24		1.94	
ANNUAL RUNOFF (INCHES)	35.63		30.54		26.31	
10 PERCENT EXCEEDS	3,560		2,860		3,410	
50 PERCENT EXCEEDS	813		1,020		561	
90 PERCENT EXCEEDS	140		149		21	

a Also occurred on Aug. 14, 15, 1944; Nov. 7, 8, 9, 1952.
b From rating curve extended above 85,000 ft^3/s confirmed by slope-area measurement of May 28, 1973, flood at gage height 38.68.
c From floodmarks and flood profile, present site and datum, 61.1 ft at site and datum then in use.



03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 34°59'36", long 84°22'55", Polk County, Hydrologic Unit 06020003, on right bank, 400 ft upstream of Davis Mill Creek, at mi 37.2.

DRAINAGE AREA.--424 mi^2.

PERIOD OF RECORD.--October 2002 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2002 to September 2004.
pH: October 2002 to September 2004.
WATER TEMPERATURE: October 2002 to September 2004.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Blue Ridge Dam above station. Periods of missing record were due to instrument malfunctions. Records for specific conductance, pH, and water temperature records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 59 microsiemens, Jan. 30, 2003; minimum, 16 microsiemens, June 11, 2003.
pH: Maximum, 8.0 units, Dec. 26, 27, 28, 2003; minimum, 5.3 units, Feb. 4, 2003.
WATER TEMPERATURE: Maximum, 23.6°C, Aug. 23, Sept. 20, 2003; minimum, 2.2°C, Jan. 11, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 48 microsiemens, Dec. 23; minimum, 18 microsiemens, Apr. 5, Aug. 9, Sept. 28, 30.
pH: Maximum, 7.7 units, Mar. 26, 27, 28, 29; minimum, 6.0 units, Aug. 22, 23, 27, 28.
WATER TEMPERATURE: Maximum, 23.1°C, June 19; minimum, 2.2°C, Jan. 11.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	36	33	35	25	21	23	29	28	29	25	25	25
2	37	21	34	26	21	23	29	28	29	25	23	24
3	28	21	23	25	21	22	29	28	28	25	23	24
4	27	21	24	30	22	25	29	28	29	24	23	23
5	31	25	27	32	30	32	36	29	32	23	22	23
6	31	30	31	38	31	35	37	32	34	23	23	23
7	33	31	31	38	35	36	32	30	31	23	22	23
8	31	21	24	35	33	34	30	30	30	23	22	23
9	24	21	22	34	32	33	30	29	29	23	22	23
10	24	21	22	33	32	32	30	29	29	23	23	23
11	25	22	23	42	31	34	35	29	31	23	22	23
12	27	21	23	42	36	39	34	32	33	23	22	23
13	26	21	22	40	37	38	32	30	31	23	22	23
14	25	21	23	37	36	36	34	31	33	23	22	23
15	27	22	24	36	35	36	34	31	32	23	22	23
16	37	24	31	40	34	37	31	30	31	25	22	23
17	37	24	27	39	38	39	30	29	29	25	23	23
18	29	22	25	38	35	36	30	29	29	23	19	21
19	28	21	24	36	34	35	30	29	29	24	19	20
20	26	21	23	35	31	33	34	27	31	24	19	21
21	27	21	22	34	30	31	34	31	32	25	20	21
22	28	21	24	36	33	35	31	30	31	28	20	23
23	27	21	23	33	31	32	30	29	30	28	19	23
24	24	20	21	31	31	31	30	26	29	22	19	20
25	23	21	21	31	30	30	32	30	31	24	19	21
26	23	20	21	30	30	30	32	31	31	26	19	22
27	25	21	22	30	29	30	31	30	30	23	19	20
28	26	21	23	30	29	29	30	30	30	24	19	21
29	31	23	26	30	29	29	30	29	30	41	19	27
30	33	23	26	29	28	29	30	28	29	59	21	35
31	23	22	22	---	---	---	28	25	26	30	20	23
MONTH	37	20	25	42	21	32	37	25	30	59	19	23

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	27	20	23	30	29	29	25	21	24	34	21	29
2	27	21	23	29	28	29	25	24	25	33	27	29
3	27	19	22	28	19	24	26	24	25	27	25	26
4	38	20	23	25	19	21	26	25	25	26	25	25
5	29	20	23	25	19	21	28	25	26	29	24	25
6	29	20	22	29	19	22	32	27	28	31	23	27
7	47	22	33	27	20	22	28	26	27	42	27	29
8	44	21	29	28	19	24	30	27	28	32	23	30
9	31	22	27	27	20	25	30	27	29	23	22	22
10	30	22	25	24	19	21	31	29	30	22	21	21
11	32	22	28	25	19	21	32	30	31	23	21	21
12	29	20	24	24	19	21	30	28	29	22	21	21
13	27	22	24	24	19	21	29	28	28	21	20	20
14	25	19	22	24	19	21	28	28	28	24	20	21
15	36	25	31	24	19	21	28	28	28	26	20	22
16	36	28	31	25	19	22	29	20	27	26	20	23
17	29	21	23	23	19	21	26	20	22	28	20	24
18	25	19	22	24	19	21	30	20	24	29	20	25
19	27	19	22	27	20	23	28	20	23	27	20	23
20	26	19	21	28	19	24	28	27	28	26	20	23
21	26	19	23	28	22	26	31	26	28	28	20	24
22	31	20	27	26	22	24	34	23	27	34	23	29
23	32	30	31	---	---	---	28	22	25	31	21	26
24	32	31	31	24	18	20	28	21	26	28	21	23
25	31	24	28	25	19	22	25	20	22	23	19	20
26	29	23	25	25	21	23	27	20	23	25	19	22
27	34	23	29	24	19	21	25	21	24	23	18	20
28	34	30	32	23	18	20	23	21	22	23	18	20
29	---	---	---	25	19	21	24	18	21	24	18	21
30	---	---	---	24	19	20	30	17	20	25	18	21
31	---	---	---	22	19	20	---	---	---	25	18	22
MONTH	47	19	26	30	18	22	34	17	26	42	18	24
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25	24	25	29	22	25	38	26	31	23	21	22
2	24	17	22	33	23	28	34	24	29	23	22	23
3	22	17	19	23	21	22	36	24	30	24	22	23
4	24	17	21	26	21	22	31	26	29	28	23	25
5	23	17	20	27	20	23	32	24	28	26	23	24
6	22	17	19	29	20	25	34	23	30	24	22	23
7	25	17	20	28	21	25	30	21	25	28	22	24
8	23	17	19	32	21	27	28	21	24	28	22	24
9	23	17	19	30	22	26	25	21	22	22	21	22
10	26	17	22	28	22	25	26	21	22	22	21	22
11	25	16	23	32	22	26	27	21	23	22	21	22
12	32	17	25	31	22	26	29	21	25	22	20	21
13	26	18	23	31	24	27	28	21	25	21	20	21
14	26	19	23	30	21	26	27	21	23	21	21	21
15	26	19	22	29	21	24	24	21	22	21	21	21
16	24	19	22	28	21	24	31	21	26	21	20	21
17	30	20	24	31	21	27	27	21	23	21	20	21
18	35	20	28	28	21	23	26	21	22	21	21	21
19	36	22	29	27	21	23	27	22	24	21	20	21
20	32	21	27	27	21	22	26	21	23	21	20	21
21	29	21	24	26	21	22	27	21	24	21	21	21
22	29	21	25	38	21	26	27	21	24	28	21	23
23	26	20	23	34	31	33	29	21	25	28	22	24
24	25	20	22	33	22	31	26	21	23	22	22	22
25	25	19	22	27	21	25	26	21	23	22	21	22
26	24	19	22	28	21	24	26	21	23	22	21	21
27	28	20	24	27	21	24	26	21	23	25	21	22
28	28	21	24	26	21	23	27	21	23	28	21	23
29	29	20	25	33	21	28	26	21	23	25	21	22
30	31	19	21	28	21	25	36	22	25	27	22	23
31	---	---	---	32	22	27	22	21	21	---	---	---
MONTH	36	16	23	38	20	25	38	21	25	28	20	22

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	6.7	7.1	6.8	6.9	6.8	7.6	7.4	6.9	6.8	6.8	6.6
2	7.1	6.5	7.2	6.8	7.1	6.9	7.6	7.4	6.9	6.8	6.8	6.6
3	6.8	6.5	7.0	6.7	7.4	7.0	7.6	7.4	6.9	6.8	6.8	6.6
4	7.0	6.5	6.9	6.6	7.1	6.9	7.6	7.3	6.8	5.3	6.7	6.5
5	7.1	6.6	6.9	6.8	7.0	6.9	7.4	7.2	---	---	6.7	6.5
6	7.2	6.8	7.0	6.9	7.1	6.9	7.3	7.2	6.7	6.6	6.7	6.6
7	7.1	6.8	7.1	7.0	7.1	7.0	7.3	7.2	6.8	6.6	6.8	6.5
8	6.9	6.5	7.1	7.0	7.3	7.1	7.3	7.0	6.8	6.6	6.8	6.6
9	6.8	6.5	7.1	6.9	7.2	7.1	7.2	7.0	6.9	6.6	6.8	6.6
10	6.7	6.5	7.0	6.6	7.1	7.0	7.3	7.0	6.8	6.5	6.8	6.6
11	6.8	6.4	6.7	6.6	7.0	6.9	7.3	7.1	6.8	6.5	6.8	6.6
12	6.8	6.5	6.8	6.6	7.0	6.8	7.3	7.2	6.6	6.5	6.8	6.5
13	6.9	6.5	6.9	6.7	7.0	6.9	7.3	7.2	6.7	6.4	6.8	6.5
14	6.9	6.5	7.0	6.8	7.0	6.9	7.2	7.0	7.0	6.4	6.8	6.5
15	6.8	6.6	7.0	6.9	7.1	7.0	7.1	6.9	7.0	6.8	6.8	6.5
16	6.9	6.6	7.0	6.8	7.2	6.8	---	---	7.0	6.9	6.8	6.5
17	6.9	6.6	7.1	6.9	7.5	6.7	---	---	7.0	6.8	6.8	6.5
18	---	---	7.2	7.1	7.7	6.6	---	---	7.0	6.8	6.8	6.5
19	---	---	7.2	7.1	7.8	7.5	---	---	7.0	6.8	6.8	6.6
20	---	---	7.2	6.4	7.7	7.5	---	---	7.0	6.8	6.8	6.6
21	---	---	6.9	6.2	7.8	7.7	---	---	6.9	6.8	6.8	6.7
22	7.0	6.3	7.0	6.8	7.8	7.6	---	---	6.9	6.4	6.8	6.6
23	6.8	6.4	6.9	6.8	7.8	7.6	---	---	6.8	6.6	---	---
24	6.7	6.5	6.9	6.8	7.7	7.5	7.2	7.0	6.9	6.8	6.8	6.6
25	6.7	6.6	6.9	6.8	7.8	7.5	7.1	5.8	6.9	6.7	6.8	6.5
26	6.8	6.6	6.9	6.7	8.0	7.8	7.1	5.9	6.9	6.6	6.8	6.5
27	7.0	6.6	6.8	6.7	8.0	8.0	7.1	6.9	6.7	6.6	6.9	6.5
28	6.8	6.7	6.9	6.8	8.0	7.9	7.0	6.8	6.8	6.6	6.8	6.6
29	7.0	6.7	6.8	6.8	7.9	7.8	6.9	6.8	---	---	6.8	6.5
30	6.9	6.7	6.9	6.8	7.8	7.7	7.0	6.8	---	---	6.8	6.6
31	7.0	6.8	---	---	7.7	7.6	6.9	6.7	---	---	7.0	6.6
MONTH	7.2	6.3	7.2	6.2	8.0	6.6	7.6	5.8	7.0	5.3	7.0	6.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.1	6.8	6.6	6.3	6.9	6.6	6.8	6.4	6.8	6.5	6.8	6.5
2	7.0	6.8	6.7	6.5	6.9	6.5	6.6	6.4	7.0	6.5	6.8	6.5
3	7.0	6.8	6.7	6.4	6.8	6.4	6.6	6.4	7.1	6.5	6.8	6.5
4	7.0	6.8	6.8	6.4	6.9	6.4	6.7	6.4	7.2	6.5	6.5	6.5
5	6.9	6.7	6.6	6.2	7.0	6.4	6.9	6.4	7.1	6.6	6.9	6.5
6	6.9	6.7	6.2	5.9	7.0	6.4	6.9	6.4	7.1	6.5	6.8	6.5
7	6.8	6.6	6.1	5.8	6.9	6.4	6.9	6.5	7.0	6.5	6.6	6.5
8	6.7	6.6	6.2	5.9	6.9	6.5	7.1	6.4	7.1	6.5	6.8	6.5
9	6.7	6.6	6.2	6.0	7.0	6.5	7.1	6.4	6.8	6.4	6.8	6.5
10	6.6	6.5	6.1	5.9	7.0	6.5	6.9	6.4	6.9	6.4	6.8	6.5
11	7.1	6.5	6.0	5.9	7.2	6.6	7.0	6.5	7.0	6.4	6.8	6.5
12	7.1	6.9	6.1	6.0	7.0	6.5	7.0	6.4	7.1	6.4	6.9	6.5
13	7.1	6.8	6.1	6.0	7.1	6.5	7.1	6.4	7.1	6.4	7.0	6.5
14	7.1	6.8	6.0	5.8	7.2	6.6	7.0	6.4	6.9	6.4	6.8	6.5
15	7.1	6.7	6.2	5.8	7.2	6.6	7.1	6.4	6.7	6.4	6.9	6.5
16	7.0	6.6	6.2	5.8	7.1	6.5	7.0	6.4	6.7	6.4	6.9	6.5
17	6.8	6.5	6.2	5.8	6.9	6.5	6.8	6.3	6.8	6.4	6.9	6.5
18	6.8	6.4	6.0	5.8	6.8	6.4	6.8	6.4	6.8	6.4	6.8	6.4
19	6.8	6.4	6.2	5.8	7.1	6.5	6.8	6.4	7.2	6.4	6.8	6.4
20	6.9	6.5	6.8	5.8	7.1	6.5	6.9	6.4	7.2	6.4	6.8	6.4
21	6.7	6.4	6.6	6.4	7.1	6.5	6.8	6.4	7.2	6.4	6.7	6.4
22	7.1	6.3	6.5	6.3	7.1	6.5	6.8	6.4	7.2	6.5	6.5	6.3
23	7.2	6.7	6.7	6.3	7.1	6.5	7.0	6.6	7.3	6.5	6.7	6.4
24	7.0	6.7	6.6	6.4	7.1	6.4	7.3	6.5	7.3	6.4	6.6	6.4
25	6.9	6.6	6.5	6.3	7.1	6.4	7.2	6.5	7.3	6.4	6.5	6.3
26	7.1	6.6	6.8	6.3	7.1	6.4	7.2	6.5	7.4	6.5	6.6	6.3
27	7.1	6.6	6.8	6.4	6.9	6.4	7.2	6.5	7.4	6.5	6.6	6.4
28	7.0	6.5	6.9	6.4	7.1	6.4	7.2	6.5	7.2	6.5	6.7	6.4
29	6.9	6.4	6.9	6.4	7.1	6.5	7.2	6.5	7.3	6.5	6.9	6.4
30	6.8	6.3	6.9	6.5	6.7	6.4	7.2	6.5	7.3	6.5	6.9	6.4
31	---	---	6.8	6.4	---	---	7.0	6.5	6.8	6.5	---	---
MONTH	7.2	6.3	6.9	5.8	7.2	6.4	7.3	6.3	7.4	6.4	7.0	6.3

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.5	19.3	20.4	18.3	16.3	17.5	7.6	5.5	6.4	10.1	9.2	9.6
2	22.4	19.4	20.5	18.0	13.5	16.3	6.2	4.3	5.3	9.9	9.2	9.5
3	21.2	19.6	20.2	17.6	14.0	16.9	8.0	5.8	6.8	9.5	6.9	8.2
4	20.2	19.6	19.9	17.4	14.3	15.0	8.1	7.8	8.0	7.5	6.2	6.9
5	22.4	19.7	20.8	14.3	13.5	13.7	8.2	7.6	8.0	8.3	6.6	7.4
6	22.7	20.2	21.4	13.6	12.4	13.2	7.7	6.4	7.1	7.8	6.2	6.9
7	22.2	20.0	21.1	12.9	11.1	12.0	6.5	4.9	5.7	7.0	5.6	6.3
8	21.2	19.4	20.0	12.9	10.6	11.8	6.0	4.5	5.3	7.5	5.6	6.6
9	20.8	19.5	20.1	13.7	10.7	12.2	7.0	5.4	6.2	8.7	6.4	7.5
10	20.6	20.0	20.3	16.4	13.7	15.0	8.1	6.8	7.3	8.8	7.0	8.0
11	21.6	20.2	20.8	16.6	16.0	16.3	9.0	8.1	8.6	7.0	5.4	6.0
12	21.8	20.0	20.8	16.0	14.2	15.2	8.6	7.8	8.1	5.7	4.3	5.1
13	21.6	20.3	20.8	14.2	11.8	13.0	8.1	7.5	7.8	6.2	4.7	5.4
14	21.3	18.9	20.0	11.8	10.1	11.0	8.0	6.6	7.3	6.4	4.7	5.7
15	20.6	18.6	19.7	11.0	9.6	10.3	7.3	5.7	6.5	6.3	4.8	5.5
16	19.6	16.3	18.2	12.1	11.0	11.7	7.8	5.7	6.8	5.4	4.6	4.9
17	20.1	16.3	17.9	11.5	8.6	10.2	9.1	7.2	8.1	5.5	4.3	4.8
18	19.6	15.8	17.4	9.6	7.5	8.6	9.1	7.4	8.2	6.3	3.3	5.0
19	20.2	14.7	17.1	10.4	9.0	9.6	10.0	8.1	8.9	6.4	4.0	5.2
20	19.3	16.8	18.0	12.0	10.3	11.1	10.2	8.8	9.8	7.1	5.0	6.0
21	20.1	17.8	19.2	12.8	11.8	12.1	8.8	6.9	7.6	7.1	6.5	6.8
22	19.5	17.6	18.8	11.8	8.5	10.2	8.5	6.7	7.5	7.6	6.0	6.7
23	20.1	16.7	18.4	9.0	7.2	8.2	8.0	6.8	7.6	6.4	3.4	4.7
24	19.9	18.1	19.2	9.6	7.3	8.4	8.9	7.8	8.3	5.4	2.9	4.2
25	19.5	18.5	19.2	10.1	8.0	9.0	9.1	6.4	7.9	6.0	3.5	4.7
26	20.1	18.9	19.5	10.2	8.3	9.3	6.4	5.4	5.9	5.9	4.3	4.9
27	20.0	18.4	19.3	10.2	7.5	9.1	6.1	4.8	5.5	5.7	3.5	4.8
28	19.7	18.9	19.4	7.5	5.9	6.6	6.2	4.8	5.5	5.6	3.5	4.7
29	19.4	18.8	19.1	7.0	4.9	6.0	7.0	5.1	6.0	6.3	5.4	5.7
30	19.4	18.1	18.8	8.9	6.7	7.7	7.4	5.8	6.6	6.3	5.6	6.2
31	18.8	17.9	18.4	---	---	---	9.4	7.4	8.3	6.6	5.5	6.0
MONTH	22.7	14.7	19.5	18.3	4.9	11.6	10.2	4.3	7.2	10.1	2.9	6.1
		FEBRUARY			MARCH			APRIL			MAY	
1	6.6	5.7	6.0	11.0	9.6	10.3	12.6	7.7	10.0	17.4	9.9	14.0
2	6.7	4.5	5.7	10.6	9.1	10.1	14.6	10.3	12.3	16.7	15.3	16.0
3	6.7	5.8	6.3	9.1	7.3	7.9	15.1	11.3	13.1	16.7	14.5	15.4
4	8.2	5.5	6.8	8.5	6.0	7.4	14.0	12.6	13.3	17.2	13.9	15.5
5	6.1	4.3	5.3	9.4	7.7	8.3	16.0	13.0	14.2	16.2	12.0	15.0
6	5.8	4.5	5.1	10.0	7.6	8.6	14.3	12.6	13.4	15.3	11.6	14.0
7	5.0	4.3	4.9	9.4	7.3	8.3	13.5	12.5	13.1	16.0	14.7	15.4
8	6.0	3.4	4.7	9.4	8.4	8.7	13.4	12.5	13.2	16.9	11.3	14.7
9	6.2	4.4	5.3	12.9	7.6	10.1	12.5	10.8	11.8	12.6	10.3	11.2
10	6.3	5.3	5.7	9.3	6.6	7.9	10.8	9.4	9.9	12.5	9.9	11.0
11	6.4	4.4	5.3	9.3	6.5	7.9	10.8	9.3	9.9	11.9	10.2	10.8
12	6.7	4.7	5.8	9.6	6.5	8.1	13.8	9.2	11.2	12.1	9.5	10.6
13	6.3	3.9	5.2	10.3	7.5	8.9	15.2	11.5	13.2	12.1	9.2	10.4
14	6.3	4.8	5.3	10.4	7.9	8.5	15.6	11.8	13.7	11.1	9.4	10.1
15	8.3	6.0	7.1	10.5	7.6	8.6	16.6	13.0	14.7	15.0	9.7	11.4
16	9.1	8.0	8.8	12.5	7.6	9.3	16.1	9.3	14.0	16.3	10.4	12.2
17	8.0	6.1	6.5	9.4	7.5	8.2	12.1	8.8	10.1	16.8	10.8	13.2
18	6.4	5.2	5.8	10.1	7.8	8.9	15.0	8.7	11.2	15.9	10.6	13.2
19	7.2	5.3	6.3	11.6	8.4	10.2	15.9	8.7	11.9	16.2	10.7	12.4
20	7.1	6.2	6.7	11.9	8.2	10.1	17.3	14.6	15.7	15.6	10.7	12.5
21	7.4	6.6	6.9	11.6	10.5	11.1	15.9	14.1	14.7	14.0	10.8	12.1
22	11.3	6.7	9.4	11.9	8.9	10.7	14.9	9.9	12.4	16.8	11.5	14.0
23	11.1	8.5	9.4	---	---	---	14.6	8.9	11.5	18.1	11.7	14.1
24	10.4	8.0	9.0	---	---	---	13.7	9.3	11.2	13.6	11.5	12.6
25	9.6	7.0	7.9	12.2	7.2	9.6	11.4	8.8	10	12.1	10.6	11.3
26	7.4	6.7	7.0	12.2	8.9	11.0	13.3	10.3	11.5	16.2	11.0	12.9
27	8.6	7.2	7.9	11.7	7.7	9.8	16.8	11.4	13.6	14.2	11.2	12.3
28	11.4	8.6	9.7	11.7	8.4	9.9	15.2	10.2	12.9	16.2	11.0	12.7
29	---	---	---	10.3	8.2	9.4	16.3	9.0	12.3	16.8	11.6	13.3
30	---	---	---	10.1	7.2	7.8	15.5	9.1	11.3	17.0	11.7	13.4
31	---	---	---	9.6	6.1	7.9	---	---	---	16.8	11.8	14.0
MONTH	11.4	3.4	6.6	12.9	6.0	9.1	17.3	7.7	12.4	18.1	9.2	13.0

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.3	15.0	16.5	17.1	15.8	16.2	21.5	18.6	19.5	22.0	19.9	20.8
2	17.0	12.5	15.3	18.0	16.0	17.3	21.6	18.3	19.3	22.1	19.9	20.8
3	14.6	12.0	13.0	17.9	15.5	16.4	21.0	18.1	19.1	22.3	20.1	21.0
4	19.0	12.5	14.9	17.8	15.6	16.6	21.8	18.1	19.6	21.8	20.4	20.9
5	17.4	12.3	13.8	18.9	15.7	16.8	21.4	18.2	19.7	22.4	20.1	21.0
6	16.5	12.2	13.5	20.4	16.1	17.7	21.1	18.3	20.0	21.7	20.2	20.9
7	16.7	12.7	14.3	19.7	16.3	17.4	20.4	18.2	18.9	21.0	20.4	20.7
8	16.4	13.3	14.3	21.7	16.3	18.2	21.1	17.9	18.9	21.8	20.4	20.9
9	16.7	13.0	14.4	21.8	16.6	18.1	20.2	17.8	18.8	22.1	20.1	21.0
10	19.1	13.1	15.7	18.7	16.4	17.2	19.9	18.0	18.7	22.4	20.5	21.2
11	20.3	14.4	17.9	20.9	16.4	17.7	20.0	18.0	18.8	22.4	20.6	21.3
12	18.9	13.9	15.6	20.9	16.2	17.6	21.1	18.2	19.1	22.6	20.6	21.4
13	17.9	13.8	15.2	21.2	16.2	17.6	20.9	18.5	19.2	23.0	20.6	21.6
14	19.2	14.0	15.6	19.6	16.4	17.4	20.6	18.6	19.4	22.1	20.7	21.3
15	18.8	14.6	16.0	20.9	16.4	17.8	21.1	18.8	19.7	22.8	21.1	21.8
16	18.7	14.2	15.6	19.5	16.7	17.5	21.4	19.5	20.1	23.1	20.6	21.6
17	19.1	14.6	16.1	22.4	16.5	18.9	21.2	19.0	19.9	23.1	20.8	21.7
18	17.9	14.9	16.5	18.9	16.6	17.6	22.0	19.1	20.2	23.1	20.9	21.8
19	20.2	14.9	16.6	19.3	16.6	17.7	22.9	19.2	20.4	23.2	20.8	21.8
20	20.1	14.7	16.4	19.4	16.7	17.8	22.5	19.1	20.2	23.6	21.1	22.1
21	18.1	13.9	15.4	19.3	16.7	17.8	22.6	19.3	20.4	22.7	21.2	21.9
22	19.3	13.7	15.6	19.0	17.0	17.8	22.6	19.6	20.4	21.9	20.8	21.5
23	18.2	14.6	15.8	21.1	18.4	19.5	23.6	19.3	20.6	22.9	20.6	21.6
24	19.1	14.2	15.7	21.9	17.5	19.6	23.4	19.4	20.7	22.6	20.7	21.5
25	20.1	14.6	16.4	21.8	16.7	18.2	22.7	19.5	20.5	22.4	20.2	21.1
26	19.6	14.8	16.2	21.7	17.0	18.5	22.9	19.6	20.6	22.4	20.5	21.3
27	17.9	14.9	15.9	22.6	17.4	19.0	22.7	19.7	20.6	21.9	20.5	21.1
28	20.5	14.9	16.7	22.7	17.4	19.1	22.9	19.8	20.8	21.5	20.1	20.7
29	19.8	15.4	16.6	22.3	17.9	19.3	22.2	19.7	20.7	21.2	17.2	19.7
30	18.0	15.0	16.0	21.9	17.9	19.0	22.5	19.9	20.7	20.6	15.1	17.1
31	---	---	---	21.1	18.1	19.1	22.0	20.0	20.8	---	---	---
MONTH	20.5	12.0	15.6	22.7	15.5	17.9	23.6	17.8	19.9	23.6	15.1	21.1

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	28	22	23	22	19	20	31	30	31	29	28	28
2	27	21	24	21	19	20	31	30	30	28	28	28
3	26	21	22	26	21	23	30	29	30	28	28	28
4	21	21	21	24	19	20	31	29	30	28	28	28
5	25	21	22	25	20	22	33	31	32	33	27	29
6	24	21	22	21	20	20	33	31	32	43	33	38
7	26	21	22	21	20	21	33	30	31	34	30	31
8	26	21	22	22	20	21	31	29	30	30	29	29
9	22	21	21	22	20	21	---	---	---	33	29	29
10	24	21	22	26	20	23	---	---	---	32	29	31
11	25	21	22	25	21	22	---	---	---	29	28	29
12	26	21	23	25	21	22	35	31	33	38	28	35
13	25	21	22	22	21	21	34	30	31	36	32	34
14	22	21	22	21	20	21	33	28	32	37	28	32
15	25	21	22	24	21	23	34	30	32	37	27	32
16	25	20	22	31	24	28	31	29	30	28	20	22
17	25	20	22	32	30	31	32	29	30	28	22	25
18	25	20	22	37	32	33	33	30	31	33	25	28
19	23	20	22	43	32	39	31	30	30	25	19	21
20	24	20	21	43	39	41	30	29	30	23	19	20
21	23	19	21	---	---	---	30	29	29	23	19	20
22	24	20	21	---	---	---	29	29	29	25	19	21
23	22	19	20	---	---	---	48	29	31	24	19	21
24	22	19	20	---	---	---	34	28	31	24	19	22
25	22	19	20	---	---	---	37	30	34	30	21	26
26	22	19	20	37	30	34	30	29	29	38	30	36
27	25	20	22	30	29	29	29	28	28	34	23	30
28	30	21	27	35	29	32	28	28	28	27	21	23
29	21	20	20	36	33	35	29	27	28	27	19	22
30	21	20	20	34	31	32	30	27	28	28	20	23
31	22	20	20	---	---	---	32	29	30	35	28	33
MONTH	30	19	22	43	19	26	48	27	30	43	19	28
		FEBRUARY			MARCH			APRIL			MAY	
1	35	32	34	28	28	28	29	27	29	28	26	27
2	36	29	34	30	28	29	27	26	27	27	25	26
3	40	31	35	38	30	34	28	26	27	31	27	29
4	45	34	40	34	30	31	27	26	27	28	26	27
5	42	37	40	30	29	30	27	18	23	26	26	26
6	47	35	39	34	29	31	25	20	23	27	26	26
7	45	36	42	38	32	35	26	24	25	27	26	27
8	42	24	32	32	30	31	28	25	27	29	25	28
9	36	25	30	30	24	28	28	27	27	25	20	22
10	34	25	28	29	23	26	28	27	27	26	24	26
11	39	26	31	29	24	26	28	27	27	26	26	26
12	37	28	32	29	29	29	28	27	27	26	25	26
13	34	25	29	29	28	29	33	27	29	26	21	25
14	35	26	30	29	28	29	35	30	32	25	19	20
15	33	29	31	29	29	29	31	29	30	24	19	20
16	34	20	28	33	29	30	30	28	29	24	19	21
17	28	20	23	34	30	32	29	28	28	26	19	22
18	31	20	25	30	29	30	32	28	29	40	25	30
19	27	20	23	30	29	29	28	28	28	42	24	30
20	31	22	25	30	29	29	28	28	28	40	28	32
21	31	29	30	31	29	30	28	27	28	28	27	27
22	29	19	22	31	29	30	29	28	28	28	26	27
23	30	22	27	30	25	28	28	28	28	26	21	24
24	30	28	29	28	21	24	---	---	---	27	23	26
25	29	27	28	29	23	27	---	---	---	26	23	25
26	27	22	26	29	27	28	---	---	---	26	24	25
27	27	19	23	30	28	29	---	---	---	26	23	24
28	26	20	22	29	28	29	---	---	---	26	23	25
29	28	22	26	30	28	29	---	---	---	25	19	23
30	---	---	---	31	27	29	---	---	---	27	19	21
31	---	---	---	31	29	30	---	---	---	30	19	23
MONTH	47	19	30	38	21	29	35	18	28	42	19	25

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	34	28	31	29	19	23	24	20	22	28	24	25
2	30	26	27	32	20	26	32	20	25	27	23	24
3	29	26	27	30	20	23	27	20	22	30	21	27
4	28	25	26	30	20	23	25	20	22	24	20	21
5	28	25	26	29	20	22	23	19	21	22	20	21
6	26	19	23	27	19	21	25	19	21	24	20	22
7	24	20	22	26	20	21	25	19	21	28	19	21
8	28	23	25	28	20	22	26	19	21	39	28	37
9	28	24	26	27	20	21	24	18	21	38	21	33
10	26	23	25	30	19	21	22	19	20	27	20	23
11	26	23	25	27	19	21	23	19	20	34	20	25
12	25	20	23	30	20	24	26	19	21	28	20	23
13	23	20	21	29	19	22	27	20	22	26	20	22
14	24	21	22	32	19	22	28	19	25	25	20	22
15	27	21	24	44	26	38	24	19	21	24	20	21
16	26	23	25	38	21	34	25	21	22	26	20	21
17	27	23	25	26	20	22	25	19	21	39	26	35
18	24	22	23	31	20	23	23	19	20	39	23	33
19	26	19	22	34	30	31	23	19	20	23	22	22
20	22	19	21	31	29	30	26	19	21	26	21	22
21	25	22	23	30	19	28	40	20	30	25	21	22
22	25	20	22	27	19	21	38	20	31	27	20	24
23	28	24	26	26	21	23	26	20	22	25	20	22
24	35	27	31	26	20	22	26	20	22	25	19	22
25	---	---	---	23	19	21	28	20	22	24	19	21
26	---	---	---	29	20	24	25	20	22	26	19	23
27	---	---	---	38	20	25	24	20	22	24	19	21
28	---	---	---	37	28	33	26	20	22	25	18	21
29	---	---	---	35	27	32	27	21	23	---	---	---
30	---	---	---	30	22	24	26	21	22	---	---	---
31	---	---	---	27	20	23	25	21	22	---	---	---
MONTH	35	19	25	44	19	25	40	18	22	39	18	24

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.7	6.5	6.7	6.5	6.9	6.8	7.0	6.8	7.2	7.0	7.2	7.0
2	6.9	6.6	6.7	6.5	6.9	6.7	7.0	6.8	7.2	7.0	7.1	7.0
3	6.8	6.5	6.7	6.5	6.8	6.7	7.0	6.7	7.1	7.0	7.3	7.0
4	6.7	6.4	6.8	6.5	6.8	6.7	7.1	6.7	7.2	7.0	7.3	7.0
5	6.9	6.4	6.8	6.5	6.8	6.7	6.9	6.7	7.1	7.0	7.2	7.0
6	6.7	6.5	6.7	6.4	6.8	6.7	7.0	6.8	7.1	6.8	7.1	6.9
7	6.9	6.5	6.7	6.5	6.8	6.7	7.0	6.9	7.0	6.8	7.2	6.9
8	6.8	6.4	6.7	6.5	6.9	6.7	7.0	6.9	7.1	6.9	7.3	7.0
9	6.7	6.4	6.8	6.6	---	---	7.0	6.8	7.0	6.8	7.2	6.9
10	6.6	6.4	6.9	6.6	---	---	7.1	6.8	7.0	6.8	7.2	6.9
11	6.7	6.4	6.9	6.6	---	---	7.0	6.9	7.1	6.8	7.2	6.8
12	6.8	6.4	6.8	6.5	7.0	6.9	7.0	6.9	7.0	6.9	7.4	7.0
13	6.7	6.4	6.8	6.5	7.0	6.9	7.1	6.8	7.0	6.8	7.4	7.0
14	6.5	6.4	6.8	6.6	6.9	6.9	7.1	6.8	7.0	6.8	7.4	6.9
15	6.7	6.4	6.7	6.6	7.0	6.9	7.1	6.9	7.1	6.9	7.2	6.9
16	6.8	6.4	6.7	6.6	7.0	6.9	7.0	6.7	7.1	6.9	7.2	6.9
17	6.7	6.5	6.8	6.6	7.0	6.8	6.9	6.7	7.1	6.8	7.4	6.9
18	6.9	6.5	6.8	6.7	6.9	6.8	6.9	6.8	7.1	6.9	7.3	6.9
19	6.8	6.5	6.7	6.5	7.0	6.9	6.9	6.7	7.1	6.8	7.5	6.9
20	6.7	6.5	6.8	6.5	7.0	6.9	6.8	6.7	7.0	6.8	7.6	6.9
21	6.7	6.5	---	---	7.0	6.9	6.8	6.7	7.2	7.0	7.6	6.9
22	6.8	6.5	---	---	7.0	6.8	6.9	6.6	7.1	6.9	7.6	7.0
23	6.8	6.5	---	---	7.0	6.8	6.9	6.7	7.1	6.8	7.5	7.0
24	6.8	6.5	---	---	7.0	6.8	7.0	6.7	7.1	7.0	7.4	6.8
25	6.7	6.5	---	---	7.0	6.9	6.8	6.7	7.1	6.8	7.5	6.8
26	6.6	6.5	7.0	6.8	7.0	6.9	6.9	6.8	7.0	6.8	7.7	6.9
27	6.7	6.4	6.8	6.7	7.0	6.8	6.9	6.7	7.0	6.8	7.7	6.9
28	6.9	6.6	6.8	6.7	7.0	6.8	6.9	6.7	7.1	6.7	7.7	6.9
29	6.7	6.5	6.9	6.8	7.0	6.8	7.0	6.7	7.2	6.8	7.7	6.9
30	6.7	6.5	6.9	6.8	7.0	6.8	7.1	6.9	---	---	7.4	6.8
31	6.7	6.5	---	---	7.0	6.8	7.2	7.0	---	---	7.3	6.8
MONTH	6.9	6.4	7.0	6.4	7.0	6.7	7.2	6.6	7.2	6.7	7.7	6.8
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.2	6.8	7.1	6.6	7.0	6.7	6.8	6.3	6.7	6.3	6.8	6.5
2	7.2	6.8	6.8	6.7	7.0	6.8	6.8	6.3	6.8	6.3	6.8	6.5
3	7.3	6.8	7.0	6.7	7.0	6.7	6.8	6.2	6.8	6.3	6.9	6.1
4	7.3	6.8	7.0	6.7	7.0	6.7	6.8	6.3	6.6	6.3	6.7	6.1
5	7.0	6.7	7.1	6.7	7.0	6.7	6.9	6.2	6.7	6.1	6.5	6.1
6	7.0	6.6	7.1	6.6	6.9	6.4	6.8	6.2	6.8	6.2	6.8	6.3
7	7.1	6.7	7.0	6.6	6.9	6.6	6.8	6.2	6.8	6.1	6.6	6.2
8	7.3	6.7	7.1	6.7	6.9	6.7	6.8	6.2	6.8	6.1	6.8	6.6
9	7.4	6.9	6.9	6.5	6.9	6.7	6.8	6.2	6.6	6.2	7.0	6.2
10	7.3	6.9	7.1	6.6	6.9	6.7	6.9	6.1	6.7	6.1	6.9	6.2
11	7.2	6.9	6.9	6.6	6.9	6.6	6.7	6.2	6.7	6.1	6.9	6.2
12	7.2	6.9	7.0	6.6	6.9	6.4	6.8	6.4	6.7	6.2	7.0	6.2
13	7.0	6.8	7.0	6.4	6.9	6.4	6.9	6.2	6.8	6.2	6.9	6.3
14	7.2	6.9	7.0	6.4	6.9	6.5	6.7	6.1	6.9	6.2	7.0	6.3
15	7.3	6.9	6.9	6.4	6.8	6.6	6.6	6.2	6.8	6.2	6.8	6.3
16	7.3	6.9	6.9	6.6	6.8	6.7	6.8	6.2	6.8	6.3	6.5	6.3
17	7.3	6.9	6.9	6.6	7.0	6.7	6.8	6.1	6.8	6.1	6.6	6.2
18	7.4	6.8	7.0	6.7	7.0	6.7	6.8	6.2	6.8	6.1	6.8	6.3
19	7.4	6.8	6.8	6.7	7.0	6.5	6.9	6.6	6.7	6.1	6.5	6.2
20	7.3	6.8	7.0	6.7	6.9	6.5	6.9	6.6	6.7	6.2	6.6	6.2
21	7.3	6.8	7.0	6.7	6.9	6.7	7.0	6.2	6.6	6.2	6.5	6.2
22	7.3	6.8	7.0	6.7	6.8	6.6	6.8	6.3	6.8	6.0	6.7	6.3
23	7.4	6.8	6.9	6.7	6.9	6.7	6.9	6.4	6.7	6.0	6.8	6.2
24	---	---	7.0	6.7	6.8	6.6	6.8	6.2	6.7	6.2	6.8	6.4
25	---	---	7.0	6.7	---	---	6.8	6.2	6.7	6.2	6.7	6.4
26	---	---	7.0	6.6	---	---	6.9	6.2	6.8	6.1	6.9	6.4
27	---	---	7.0	6.6	---	---	6.6	6.2	6.8	6.0	6.7	6.4
28	---	---	7.0	6.5	---	---	6.8	6.5	6.8	6.0	6.8	6.2
29	---	---	7.0	6.4	---	---	6.9	6.6	6.8	6.1	---	---
30	---	---	6.8	6.3	---	---	6.8	6.3	6.8	6.1	---	---
31	---	---	6.8	6.4	---	---	6.8	6.3	6.8	6.2	---	---
MONTH	7.4	6.6	7.1	6.3	7.0	6.4	7.0	6.1	6.9	6.0	7.0	6.1

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.8	15.6	16.9	17.1	14.7	15.9	8.0	5.8	6.9	6.2	4.2	5.2
2	19.9	14.9	17.3	17.2	14.8	15.9	7.6	5.9	6.8	8.6	6.0	7.1
3	19.9	14.5	17.5	16.2	14.1	15.2	6.8	6.1	6.4	10.6	8.6	9.6
4	20.2	18.4	19.2	16.8	15.1	15.9	7.3	6.2	6.6	12.2	10.5	11.3
5	19.3	15.6	18.0	17.1	16.3	16.7	7.8	7.2	7.6	12.2	9.9	11.7
6	19.2	17.5	18.4	17.6	16.4	17.0	7.2	5.9	6.5	9.9	5.4	7.7
7	19.2	17.2	18.5	17.0	16.3	16.6	6.4	4.8	5.6	5.4	3.2	4.0
8	19.6	17.8	18.7	16.3	15.7	16.0	6.6	4.6	5.6	3.9	2.8	3.3
9	19.7	18.1	19.0	16.8	14.7	15.7	---	---	---	5.0	3.9	4.5
10	19.8	18.4	19.1	16.0	13.2	14.3	---	---	---	4.8	3.5	4.3
11	19.9	18.4	19.1	16.5	13.3	14.7	---	---	---	4.2	2.2	3.2
12	20.1	18.3	19.1	16.6	14.1	15.2	6.1	4.8	5.4	5.4	2.9	4.1
13	20.2	17.8	19.0	16.3	13.3	14.7	5.7	4.6	5.1	6.4	4.1	5.2
14	19.8	18.5	19.3	14.4	10.4	13.0	6.9	5.7	6.4	6.4	4.5	5.6
15	19.6	17.1	18.2	11.8	10.1	10.8	7.6	6.1	6.8	7.6	6.2	6.7
16	19.7	14.6	17.5	12.3	10.8	11.6	7.2	5.8	6.6	6.7	4.7	5.7
17	18.5	13.9	15.8	14.2	12.2	13.2	7.4	6.1	7.0	5.9	5.0	5.5
18	18.3	13.7	16.0	15.1	13.9	14.4	6.1	5.1	5.4	7.4	5.9	6.7
19	18.4	15.4	16.8	15.2	13.7	14.8	5.6	4.6	5.1	6.8	4.8	5.6
20	18.6	14.2	16.8	13.7	11.7	12.5	4.8	3.7	4.2	6.0	3.5	4.9
21	18.4	15.7	17.1	---	---	---	4.4	2.6	3.5	6.0	4.2	5.0
22	17.6	15.6	16.8	---	---	---	5.5	3.2	4.3	6.2	3.8	5.0
23	17.8	14.6	16.4	---	---	---	6.6	4.5	5.6	5.8	4.1	4.9
24	18.1	14.4	16.7	---	---	---	7.2	6.2	6.9	6.6	4.7	5.6
25	18.2	14.4	16.7	---	---	---	6.2	4.4	5.2	6.5	6.2	6.3
26	17.5	16.3	16.9	9.4	7.4	8.4	5.0	3.2	4.1	7.5	6.1	6.7
27	17.1	14.7	16.3	10.6	9.3	9.8	5.2	3.1	4.2	7.3	4.7	6.4
28	15.5	12.9	13.8	11.2	9.5	10.8	5.7	3.6	4.6	5.4	3.9	4.6
29	17.0	15.3	16.0	9.5	6.9	7.9	7.5	5.0	6.1	5.8	3.4	4.6
30	17.0	14.7	15.9	7.4	5.6	6.6	8.0	6.5	7.3	6.0	4.7	5.2
31	17.0	14.9	16.0	---	---	---	6.5	4.8	5.7	5.5	3.4	4.5
MONTH	20.2	12.9	17.4	17.6	5.6	13.5	8.0	2.6	5.8	12.2	2.2	5.8
		FEBRUARY			MARCH			APRIL			MAY	
1	5.6	3.2	4.5	11.0	6.7	8.5	11.0	9.4	10.1	16.2	14.0	15.0
2	5.5	4.6	5.0	11.4	10.6	11.1	9.6	8.4	9.1	15.5	13.8	14.8
3	7.3	5.5	6.3	12.7	10.4	11.4	13.3	8.5	10.7	13.8	11.7	12.7
4	7.2	5.5	6.3	13.0	11.7	12.4	13.5	10.5	11.9	14.9	10.3	12.4
5	6.2	5.4	5.7	13.2	12.1	12.6	11.9	8.7	10.1	16.8	12.0	14.2
6	8.8	6.2	7.6	14.5	13.0	13.6	12.9	9.2	10.7	18.8	14.1	16.3
7	8.6	5.3	7.0	13.4	11.5	12.6	14.3	10.5	12.4	20.4	15.0	17.5
8	6.3	4.2	5.2	11.5	9.1	10.2	14.4	12.1	13.1	20.1	16.2	18.2
9	6.0	4.9	5.5	9.4	7.4	8.0	15.4	11.1	13.1	18.2	13.9	16.1
10	6.1	5.6	5.8	9.3	6.5	8.0	14.3	11.4	12.3	19.6	15.2	17.1
11	6.7	5.2	6.0	9.8	6.2	8.3	11.8	10.6	11.3	18.7	16.7	17.7
12	6.7	5.5	6.2	11.2	8.3	9.7	12.4	11.4	11.8	18.2	14.9	16.6
13	6.7	4.9	5.7	10.8	7.6	9.2	12.1	10.6	11.7	18.8	12.7	17.0
14	7.1	5.6	6.2	12.4	9.1	10.6	10.6	8.8	9.7	16.7	10.6	14.4
15	7.8	7.1	7.4	11.8	10.8	11.5	13.7	8.3	10.8	18.1	10.6	15.4
16	7.3	5.6	6.4	12.6	10.5	11.4	15.6	11.2	13.2	16.9	14.3	15.4
17	6.0	5.4	5.7	12.9	10.5	11.5	16.9	12.3	14.5	16.4	13.6	14.9
18	7.1	5.2	6.1	11.3	9.9	10.4	18.0	13.4	15.6	17.8	14.9	16.1
19	7.1	4.4	5.8	13.2	9.1	11.0	18.1	14.3	16.2	19.0	13.3	16.4
20	7.0	5.1	6.0	14.0	10.4	12.1	17.4	14.7	16.1	21.1	17.0	18.9
21	9.7	6.9	8.1	13.8	11.1	12.7	17.0	14.0	15.6	20.8	17.6	19.2
22	8.4	5.0	6.4	11.1	8.4	9.6	18.5	14.9	16.6	19.5	17.4	18.4
23	7.5	6.5	7.0	9.2	6.7	8.3	18.8	15.7	17.1	19.8	16.1	17.7
24	8.4	7.1	7.6	10.3	8.4	9.3	---	---	---	20.3	17.1	18.6
25	8.9	7.7	8.3	13.8	9.4	11.4	---	---	---	20.3	16.6	18.5
26	8.3	6.0	6.9	15.4	11.3	13.2	---	---	---	20.4	18.0	19.2
27	6.6	5.8	6.1	15.5	12.3	13.9	---	---	---	21.9	17.7	19.6
28	7.7	5.0	6.4	16.2	12.3	14.2	---	---	---	20.6	18.4	19.4
29	8.8	6.4	7.5	17.0	13.4	15.1	---	---	---	19.1	11.0	17.7
30	---	---	---	16.2	14.1	15.1	---	---	---	19.3	10.6	15.5
31	---	---	---	14.1	11.0	12.6	---	---	---	17.3	10.9	15.3
MONTH	9.7	3.2	6.4	17.0	6.2	11.3	18.8	8.3	12.8	21.9	10.3	16.7

03560110 OCOEE RIVER BELOW FIGHTINGTOWN CREEK AT COPPERHILL, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.3	16.3	17.6	17.0	10.6	14.6	21.1	12.2	17.8	20.7	17.5	19.3
2	19.7	15.9	17.7	18.9	11.5	14.3	21.4	12.4	18.4	19.1	17.5	18.4
3	19.2	16.7	18.1	19.4	11.1	15.7	20.5	12.3	15.9	18.6	15.2	17.4
4	20.9	16.5	18.5	19.6	11.8	16.7	20.1	12.2	15.5	18.0	14.9	16.0
5	20.5	16.8	18.6	21.7	12.1	17.3	18.8	12.0	14.9	17.5	15.1	16.0
6	19.2	11.6	15.8	20.4	11.3	16.7	20.6	12.8	17.1	19.1	15.7	17.2
7	17.8	15.7	16.6	21.1	11.2	16.4	19.7	12.7	16.4	18.1	15.7	16.4
8	18.8	15.7	17.1	22.0	11.9	17.5	19.7	12.3	16.3	20.0	18.1	19.1
9	20.0	16.9	18.4	21.4	12.0	17.2	17.6	12.5	14.9	21.3	16.5	18.9
10	21.5	17.2	19.3	20.4	11.2	16.4	18.8	12.1	14.9	20.7	16.1	17.7
11	22.3	18.5	20.2	22.0	11.2	17.8	19.7	12.4	15.1	22.0	16.6	18.4
12	22.1	12.2	19.2	22.1	18.5	20.0	17.6	12.9	15.4	20.7	16.8	17.8
13	19.0	11.7	16.0	22.0	12.1	18.1	17.8	12.7	15.6	18.9	16.5	17.2
14	21.6	18.0	19.7	20.9	12.0	16.8	17.9	13.1	15.8	20.0	16.2	17.4
15	21.0	17.7	19.0	21.5	15.2	19.1	18.5	12.8	15.6	18.5	16.4	17.3
16	22.3	18.8	20.3	20.4	12.2	18.7	19.3	15.4	17.2	18.5	17.3	17.6
17	22.5	19.3	20.8	18.4	11.5	15.0	19.4	13.2	16.0	19.6	18.5	19.3
18	22.2	19.3	20.7	20.4	11.7	16.8	20.3	13.3	16.2	19.1	17.6	18.3
19	23.1	11.6	19.6	21.1	17.8	19.4	20.4	13.1	16.0	19.7	17.1	18.1
20	20.1	11.5	16.8	21.8	17.8	19.7	19.4	13.6	16.3	19.8	17.1	18.2
21	20.8	16.4	19.3	22.2	12.1	19.1	20.0	14.2	17.1	19.9	16.9	18.3
22	20.1	16.3	18.4	20.4	11.9	17.0	20.7	14.4	19.0	19.9	16.5	18.0
23	19.4	17.3	18.4	22.5	16.2	18.9	20.3	14.0	17.4	20.7	17.4	18.7
24	20.8	16.4	18.4	21.9	12.8	18.3	19.1	14.1	16.9	20.1	17.7	18.8
25	---	---	---	20.9	12.0	17.2	19.1	13.9	16.2	20.1	18.2	18.9
26	---	---	---	22.8	13.2	20.2	19.3	14.1	16.3	20.7	18.0	18.9
27	---	---	---	19.9	12.7	17.4	20.7	14.0	16.8	18.9	18.0	18.5
28	---	---	---	21.8	18.1	19.7	21.5	14.2	18.1	e19.2	e18.5	e18.7
29	---	---	---	21.3	17.7	19.8	21.7	15.4	18.7	---	---	---
30	---	---	---	20.9	13.8	18.6	20.8	15.4	18.2	---	---	---
31	---	---	---	20.1	12.3	17.0	21.5	15.3	18.8	---	---	---
MONTH	23.1	11.5	18.5	22.8	10.6	17.7	21.7	12.0	16.6	22.0	14.9	18.0

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN

WATER-QUALITY RECORDS

LOCATION.--Lat 35°00'12", long 84°24'34", Polk County, Hydrologic Unit 06020003, on left bank 400 yd upstream from Barker Mill Branch.

DRAINAGE AREA.--446 mi^2.

PERIOD OF RECORD.--October 2002 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2002 to September 2004.
pH: October 2002 to September 2004.
WATER TEMPERATURE: October 2002 to September 2004.

INSTRUMENTATION.--Data collection platform and water-quality monitor.

REMARKS.--Flow regulated by Blue Ridge Dam upstream. Periods of missing record were due to probe being buried in sediment and instrument malfunction. Records for specific conductance are fair, pH and water temperature records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 158 microsiemens, June 6, 2004; minimum, 20 microsiemens, June 30, 2003.
pH: Maximum, 8.0 units, Mar. 13, 14, 15, 2003; minimum, 3.5 units, Apr. 30, 2003.
WATER TEMPERATURE: Maximum, 24.5°C, Aug. 23, 2003; minimum, 2.3°C, Jan. 24, 2003.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 158 microsiemens, June 21; minimum, 20 microsiemens, Oct. 4.
pH: Maximum, 7.9 units, Apr. 1; minimum, 5.1 units, Jan. 16.
WATER TEMPERATURE: Maximum, 23.1°C, June 19; minimum, 2.4°C, Jan. 11.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	68	54	59	46	33	37	88	52	68	43	32	37
2	71	28	56	---	---	---	85	55	69	38	29	34
3	69	24	39	---	---	---	84	56	70	36	28	32
4	80	25	48	---	---	---	88	57	72	35	27	31
5	73	59	68	78	63	72	61	47	57	35	27	31
6	77	70	73	65	56	61	64	52	58	35	27	30
7	99	66	80	66	62	64	66	52	60	36	27	30
8	75	26	40	74	65	70	68	54	60	38	28	33
9	49	24	29	76	70	72	72	55	62	40	30	35
10	52	23	29	76	74	75	75	60	69	38	29	33
11	61	24	31	81	56	66	72	47	58	36	27	32
12	54	23	32	---	---	---	69	55	62	35	27	31
13	55	22	30	---	---	---	68	46	59	35	28	31
14	64	22	34	---	---	---	58	46	53	36	27	31
15	42	23	32	75	65	69	59	47	51	36	28	31
16	45	30	39	---	---	---	78	46	56	50	29	34
17	46	27	35	---	---	---	80	46	59	54	29	38
18	68	27	43	---	---	---	82	47	60	55	24	35
19	70	24	49	---	---	---	83	49	66	55	26	33
20	69	24	50	---	---	---	68	41	48	41	27	32
21	68	24	31	80	34	51	49	40	46	47	28	36
22	57	24	39	54	39	46	52	40	46	63	33	46
23	74	29	43	53	43	49	55	44	51	61	27	43
24	48	26	30	56	51	53	70	40	49	46	24	28
25	46	26	30	75	49	58	43	41	42	47	25	33
26	37	28	30	79	49	62	42	37	41	48	26	36
27	53	28	37	78	53	63	46	39	43	41	23	29
28	71	30	43	77	51	64	50	39	43	39	24	30
29	63	35	46	74	49	60	53	41	46	58	29	42
30	44	35	39	83	50	66	56	42	50	55	35	47
31	37	34	35	---	---	---	50	35	43	48	28	36
MONTH	99	22	42	83	33	61	88	35	55	63	23	34

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	48	26	35	39	33	38	70	37	56	63	41	55
2	53	30	39	41	32	37	69	31	53	64	46	55
3	59	25	40	42	27	35	64	39	50	57	50	54
4	43	27	34	39	24	30	64	42	54	59	42	49
5	47	26	33	37	23	29	62	42	54	---	---	---
6	40	26	32	43	26	31	57	43	51	---	---	---
7	59	31	39	34	25	29	57	45	52	---	---	---
8	58	28	43	37	24	32	56	43	51	---	---	---
9	52	30	44	39	28	34	55	44	53	---	---	---
10	51	34	42	34	23	27	55	46	52	---	---	---
11	52	29	41	36	25	29	---	---	---	---	---	---
12	55	25	38	37	24	29	---	---	---	---	---	---
13	55	27	35	38	24	30	---	---	---	---	---	---
14	77	22	38	38	23	29	---	---	---	---	---	---
15	70	43	56	35	22	28	---	---	---	---	---	---
16	57	36	51	38	25	31	---	---	---	---	---	---
17	43	28	33	37	24	30	---	---	---	---	---	---
18	45	28	33	40	24	31	---	---	---	---	---	---
19	45	26	34	40	28	33	---	---	---	---	---	---
20	48	28	34	40	26	35	---	---	---	---	---	---
21	48	27	37	41	30	37	---	---	---	51	26	37
22	---	---	---	45	29	34	---	---	---	46	28	34
23	---	---	---	---	---	---	65	32	43	44	27	37
24	---	---	---	34	23	28	65	33	48	47	33	39
25	---	---	---	45	25	30	59	30	38	36	28	33
26	---	---	---	47	31	37	62	31	46	45	33	38
27	39	31	36	42	24	30	61	41	47	36	29	33
28	38	36	37	43	21	29	59	35	41	64	31	44
29	---	---	---	44	26	33	65	30	43	53	37	45
30	---	---	---	41	21	29	73	27	37	52	37	45
31	---	---	---	67	22	31	---	---	---	59	37	50
MONTH	77	22	38	67	21	32	73	27	48	64	26	43
		JUNE			JULY			AUGUST			SEPTEMBER	
1	69	59	62	44	36	40	43	30	36	36	21	26
2	68	56	65	43	26	35	40	29	35	36	24	28
3	56	48	52	46	24	28	49	29	37	32	21	26
4	---	---	---	37	25	29	58	33	44	38	24	30
5	---	---	---	33	23	28	63	39	50	34	22	27
6	---	---	---	39	25	31	63	32	50	29	23	26
7	---	---	---	50	30	37	55	26	41	28	21	24
8	---	---	---	68	31	47	51	26	35	31	23	28
9	---	---	---	54	33	41	37	25	30	32	23	27
10	---	---	---	84	36	51	36	24	30	30	24	27
11	---	---	---	92	38	52	61	24	35	---	---	---
12	---	---	---	50	30	38	66	24	39	---	---	---
13	65	29	49	68	27	46	61	24	39	33	23	26
14	55	28	38	64	48	54	56	27	40	34	24	28
15	54	26	37	---	---	---	48	26	34	32	25	28
16	56	26	35	---	---	---	44	29	36	32	24	27
17	48	26	34	---	---	---	49	30	36	32	24	27
18	51	29	38	---	---	---	53	29	38	32	24	27
19	51	28	36	---	---	---	73	40	49	32	24	27
20	52	28	40	---	---	---	61	33	45	33	24	27
21	36	29	32	---	---	---	74	29	48	33	24	27
22	53	29	35	---	---	---	62	36	52	85	24	32
23	50	26	37	---	---	---	79	35	53	38	28	34
24	37	23	30	---	---	---	77	31	53	30	25	28
25	54	24	34	69	28	43	69	30	47	29	24	26
26	34	23	30	59	27	40	44	24	35	29	22	25
27	46	24	31	76	27	42	41	24	33	69	22	33
28	62	28	38	65	21	42	81	23	45	39	23	27
29	39	25	32	64	30	44	77	27	44	56	23	30
30	40	20	29	55	29	42	51	27	35	70	26	42
31	---	---	---	---	---	---	30	22	26	---	---	---
MONTH	69	20	39	92	21	40	81	22	40	85	21	28

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.5	6.3	6.5	6.1	6.6	6.5	6.7	6.6	7.0	6.8	7.1	7.0
2	6.8	5.8	6.7	5.9	6.5	6.4	6.8	6.6	7.0	6.8	7.2	7.0
3	6.7	5.9	6.5	6.0	6.6	6.5	6.7	6.6	6.9	6.8	7.3	7.1
4	6.5	5.9	6.4	5.9	6.6	6.5	6.6	6.5	7.0	6.8	7.5	7.1
5	6.1	5.9	6.2	5.7	6.8	6.6	6.7	6.5	6.9	6.8	7.5	7.3
6	6.1	6.0	6.3	6.2	6.8	6.6	6.6	6.5	6.9	6.8	7.5	7.1
7	6.2	5.9	6.2	6.1	6.6	6.5	6.8	6.6	6.8	6.8	7.5	7.3
8	6.6	5.3	6.1	5.9	6.5	6.5	6.8	6.7	6.9	6.8	7.6	7.4
9	6.4	5.9	6.0	5.9	6.5	6.5	6.9	6.7	7.0	6.9	7.7	7.4
10	6.4	6.0	6.0	5.9	6.5	6.5	6.8	6.7	7.0	7.0	7.7	7.5
11	6.5	5.8	6.3	5.7	6.6	6.5	6.8	6.6	7.1	7.0	7.8	7.5
12	6.5	5.8	6.3	6.2	6.5	6.5	6.7	6.6	7.1	7.0	7.9	7.5
13	6.5	5.7	6.3	6.2	6.5	6.4	6.7	6.6	7.1	7.0	8.0	7.8
14	6.6	5.9	6.2	6.0	6.5	6.3	6.7	6.6	7.1	6.5	8.0	7.8
15	6.5	5.9	6.1	5.9	6.4	6.3	6.7	6.6	6.7	6.6	8.0	7.8
16	6.5	6.2	6.2	5.8	6.5	6.2	6.9	6.6	6.9	6.7	7.9	7.7
17	6.7	6.0	6.2	6.0	6.6	6.4	7.0	6.8	7.0	6.7	7.9	7.8
18	6.6	5.8	6.3	6.0	6.6	6.5	6.9	6.8	7.0	6.7	7.9	7.7
19	6.6	5.9	6.3	6.2	6.6	6.5	6.9	6.7	7.0	6.7	7.8	7.2
20	6.5	5.8	6.8	6.2	6.6	6.3	7.0	6.7	7.0	6.6	7.5	7.3
21	6.6	6.0	7.0	6.8	6.6	6.4	7.0	6.8	7.0	6.7	7.6	7.2
22	6.6	6.0	6.9	6.8	6.6	6.4	6.9	6.7	---	---	7.4	7.1
23	6.6	5.9	6.8	6.8	6.6	6.5	6.8	6.7	---	---	---	---
24	6.5	5.9	6.8	6.7	6.6	6.1	6.8	6.6	---	---	7.4	6.9
25	6.4	6.1	6.8	6.7	6.6	6.5	6.8	6.7	---	---	7.2	6.9
26	6.6	6.1	6.7	6.6	6.6	6.4	6.8	6.7	---	---	7.2	6.9
27	6.6	5.9	6.7	6.6	6.4	6.3	6.8	6.7	6.9	6.5	7.2	6.8
28	6.4	5.7	6.6	6.6	6.4	6.3	6.8	6.7	7.1	6.9	7.2	6.8
29	6.5	6.0	6.6	6.5	6.5	6.4	6.8	6.7	---	---	7.0	6.6
30	6.6	6.2	6.6	6.5	6.6	6.4	6.8	6.7	---	---	---	---
31	6.5	6.3	---	---	6.7	6.6	6.9	6.7	---	---	7.0	6.3
MONTH	6.8	5.3	7.0	5.7	6.8	6.1	7.0	6.5	7.1	6.5	8.0	6.3
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.1	6.7	5.5	5.2	6.5	6.3	6.8	6.3	6.3	6.0	6.9	6.6
2	7.1	6.7	5.5	5.4	6.7	6.5	6.4	5.9	6.2	6.1	6.8	6.5
3	7.0	6.6	5.5	5.4	6.7	6.5	6.3	6.1	6.4	6.2	7.0	6.5
4	6.7	6.5	5.5	5.3	7.1	6.5	6.4	6.0	6.5	6.4	6.7	6.6
5	6.8	6.6	5.7	5.3	7.0	6.4	6.3	5.9	6.5	6.4	7.0	6.6
6	6.6	6.3	5.7	5.6	6.9	6.5	6.4	6.0	6.5	6.4	6.9	6.6
7	6.5	6.2	---	---	6.9	6.5	6.5	6.3	6.6	6.4	6.9	6.7
8	6.4	6.1	---	---	6.9	6.6	6.7	6.2	6.6	6.5	7.0	6.8
9	6.8	6.2	---	---	7.0	6.5	6.2	6.0	6.6	6.5	7.0	6.7
10	6.8	6.7	---	---	6.9	6.6	6.1	6.0	6.6	6.5	7.2	6.8
11	---	---	---	---	7.4	6.7	6.2	6.0	6.7	6.6	7.2	6.9
12	---	---	---	---	7.3	6.8	6.2	6.0	6.8	6.6	7.1	6.8
13	---	---	---	---	7.3	6.1	6.3	6.1	6.8	6.7	7.2	6.7
14	---	---	---	---	6.8	6.2	6.4	6.3	7.0	6.7	7.0	6.7
15	---	---	---	---	6.9	6.2	6.5	6.4	6.9	6.8	7.1	6.7
16	---	---	---	---	6.8	6.1	6.7	6.5	6.8	6.7	7.0	6.7
17	---	---	---	---	6.6	6.0	6.7	6.6	6.9	6.6	7.0	6.6
18	---	---	---	---	6.5	6.0	6.7	6.6	6.8	6.6	7.1	6.6
19	---	---	---	---	6.9	6.1	6.7	6.5	6.8	6.6	7.0	6.6
20	---	---	---	---	7.0	6.2	6.6	6.6	6.7	6.5	7.0	6.6
21	---	---	6.8	6.2	6.9	6.2	6.7	6.5	6.7	6.6	7.0	6.6
22	---	---	6.7	6.2	7.0	6.0	6.6	6.2	6.7	6.6	6.7	5.4
23	6.4	6.0	6.6	6.2	7.0	6.2	6.6	6.5	6.8	6.6	6.8	6.5
24	6.3	5.9	6.6	6.4	7.0	6.1	6.6	6.2	6.7	6.5	6.7	6.5
25	6.2	5.8	6.7	6.5	7.0	6.2	6.3	6.0	6.8	6.3	6.7	6.5
26	6.3	5.8	6.8	6.4	7.1	6.4	6.2	6.0	6.7	6.3	6.7	6.5
27	6.1	5.7	6.8	6.5	6.9	6.3	6.3	6.1	7.0	6.3	6.7	6.3
28	6.1	5.8	6.8	6.4	7.1	6.3	6.4	6.2	6.9	6.3	6.8	6.5
29	6.1	5.5	6.8	6.4	7.2	6.3	6.5	6.3	7.0	6.3	6.9	6.4
30	6.0	3.5	6.8	6.3	6.8	6.5	6.4	6.2	7.0	6.3	7.0	6.2
31	---	---	6.8	6.4	---	---	6.3	6.1	6.8	6.6	---	---
MONTH	7.1	3.5	6.8	5.2	7.4	6.0	6.8	5.9	7.0	6.0	7.2	5.4

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.2	19.0	20.1	17.5	15.4	16.6	7.1	5.1	6.1	10.4	9.5	9.9
2	22.3	19.2	20.5	17.0	14.1	15.6	5.8	4.0	5.0	10.2	9.6	9.9
3	21.2	19.5	20.3	16.9	14.4	16.2	7.5	5.3	6.4	9.7	7.0	8.4
4	20.4	19.5	19.9	16.7	13.4	14.6	7.8	7.5	7.6	7.2	6.1	6.7
5	22.2	19.6	20.7	13.4	12.8	13.0	8.1	7.6	7.9	8.0	6.4	7.2
6	22.3	20.0	21.2	13.0	11.9	12.7	7.6	6.1	7.1	7.6	6.2	6.8
7	21.9	19.9	20.9	12.2	10.7	11.5	6.1	4.7	5.5	6.6	5.4	6.0
8	21.1	19.2	19.9	11.9	9.9	11.0	5.8	4.3	5.1	7.1	5.3	6.3
9	20.7	19.3	20.0	13.0	10.0	11.5	6.8	5.2	6.0	8.6	6.3	7.4
10	20.5	19.8	20.2	15.9	13.0	14.4	8.0	6.6	7.2	8.7	6.9	8.1
11	21.4	19.9	20.6	16.5	15.8	16.1	8.9	8.0	8.6	6.9	5.2	5.9
12	21.7	19.7	20.6	15.8	13.8	14.9	8.6	7.9	8.2	5.2	4.0	4.7
13	21.5	20.0	20.7	13.8	11.4	12.7	8.2	7.6	7.9	5.6	4.2	4.9
14	21.0	18.6	19.7	11.4	9.8	10.6	8.1	6.8	7.5	6.0	4.3	5.2
15	20.4	18.4	19.2	10.8	9.2	10.0	7.1	5.9	6.6	5.8	4.5	5.1
16	18.9	16.1	17.4	11.8	10.8	11.5	7.6	5.8	6.8	4.9	4.3	4.5
17	18.6	16.1	17.3	11.3	8.5	10.0	9.2	7.3	8.1	4.9	3.8	4.3
18	18.3	15.6	17.1	9.1	7.3	8.3	9.1	7.5	8.3	5.8	2.9	4.3
19	19.6	14.6	16.8	10.1	8.5	9.3	9.9	8.0	8.9	6.0	3.3	4.6
20	18.8	17.3	18.0	11.5	10.1	10.8	10.3	8.8	9.9	6.8	4.2	5.5
21	19.8	17.3	18.8	12.4	11.4	11.8	8.8	6.9	7.7	7.1	6.4	6.8
22	19.2	17.4	18.5	11.6	8.5	10.2	8.6	6.9	7.8	7.5	6.1	6.7
23	19.5	16.7	18.0	8.5	7.2	8.0	8.1	7.1	7.8	6.3	3.4	4.5
24	19.6	17.7	18.9	9.0	7.0	8.1	9.1	8.0	8.4	4.8	2.3	3.5
25	19.3	18.0	18.9	9.5	7.6	8.6	9.3	6.6	8.2	5.4	2.6	3.9
26	19.8	18.4	19.2	9.8	8.0	9.0	6.6	5.7	6.1	5.6	3.7	4.5
27	19.8	18.6	19.2	9.8	7.5	8.9	5.9	4.9	5.5	5.4	3.4	4.5
28	19.6	18.6	19.1	7.5	5.7	6.5	6.2	4.9	5.6	5.3	3.3	4.4
29	19.0	18.1	18.6	6.4	4.6	5.7	6.9	5.3	6.1	6.4	5.2	5.7
30	19.1	17.6	18.3	8.4	6.3	7.2	7.4	6.0	6.7	6.6	6.0	6.5
31	18.2	17.4	17.8	---	---	---	9.5	7.4	8.4	6.7	5.7	6.2
MONTH	22.3	14.6	19.2	17.5	4.6	11.2	10.3	4.0	7.2	10.4	2.3	5.9
		FEBRUARY			MARCH			APRIL			MAY	
1	6.6	5.7	6.2	10.6	9.6	10.2	12.2	7.6	9.9	17.5	11.4	14.7
2	6.7	4.9	5.9	10.6	9.2	10.2	14.5	10.3	12.3	17.2	15.6	16.3
3	7.1	6.1	6.5	9.2	7.5	8.1	15.0	11.4	13.2	16.9	14.8	15.7
4	8.8	6.0	7.4	8.7	6.6	7.6	14.2	12.7	13.5	17.5	14.0	15.7
5	6.1	5.0	5.6	9.8	8.3	8.9	16.1	13.2	14.4	---	---	---
6	5.7	4.5	5.2	10.3	8.2	9.2	14.4	12.9	13.7	---	---	---
7	5.0	4.4	4.9	9.8	7.9	8.9	13.9	12.9	13.4	---	---	---
8	5.5	3.4	4.5	9.6	8.7	9.1	13.8	13.0	13.6	---	---	---
9	5.9	4.3	5.1	12.6	8.3	10.7	13.0	11.2	12.2	---	---	---
10	6.3	5.5	5.8	9.4	7.3	8.3	11.2	9.7	10.2	---	---	---
11	6.2	4.5	5.4	9.4	7.1	8.3	---	---	---	---	---	---
12	6.7	5.2	5.8	9.7	7.2	8.6	---	---	---	---	---	---
13	6.0	4.2	5.3	10.8	8.6	9.7	---	---	---	---	---	---
14	6.2	3.9	4.9	10.6	8.7	9.5	---	---	---	---	---	---
15	7.3	4.9	6.0	10.8	8.1	9.4	---	---	---	---	---	---
16	8.3	7.3	7.9	12.3	8.1	10.2	---	---	---	---	---	---
17	7.3	5.0	5.7	9.9	8.1	9.1	---	---	---	---	---	---
18	5.2	4.4	4.8	10.8	8.4	9.8	---	---	---	---	---	---
19	6.1	4.5	5.2	12.0	9.7	11.0	---	---	---	---	---	---
20	6.6	5.2	6.0	12.1	8.9	10.9	---	---	---	---	---	---
21	6.5	5.8	6.2	12.3	10.8	11.5	---	---	---	14.6	11.7	13.2
22	---	---	---	11.9	10.3	11.3	---	---	---	16.7	12.3	14.8
23	---	---	---	---	---	---	14.5	10.2	12.4	17.8	13.0	15.1
24	---	---	---	11.6	8.1	9.7	13.5	10.0	11.5	14.4	12.7	13.8
25	---	---	---	12.5	7.8	10.3	11.7	9.6	10.7	13.0	11.7	12.3
26	---	---	---	12.5	10.3	11.7	13.7	11.3	12.2	16.9	12.1	14.1
27	8.7	7.4	8.1	12.1	8.4	10.7	16.7	11.9	14.0	15.0	12.2	13.4
28	10.9	8.7	9.7	12.5	9.4	10.9	15.4	11.4	13.7	16.7	12.0	13.8
29	---	---	---	11.2	9.0	10.4	16.4	9.9	13.3	17.2	12.7	14.6
30	---	---	---	10.3	7.8	8.4	15.8	10.0	12.4	17.3	13.0	14.6
31	---	---	---	9.4	6.2	7.9	---	---	---	17.4	12.9	15.1
MONTH	10.9	3.4	6.0	12.6	6.2	9.7	16.7	7.6	12.6	17.8	11.4	14.5

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.6	15.8	17.1	18.6	17.6	18.1	20.7	19.0	19.7	22.1	19.9	20.8
2	17.2	14.7	16.0	18.9	18.0	18.6	21.2	18.6	19.3	22.0	19.8	20.8
3	15.8	13.1	14.2	19.3	17.2	18.1	20.6	18.6	19.2	22.3	20.0	21.0
4	19.3	13.6	16.0	19.5	17.6	18.5	21.1	18.5	19.5	21.8	20.4	21.0
5	18.2	13.6	15.3	20.2	17.6	18.6	21.1	18.7	19.8	22.3	19.9	20.9
6	17.1	13.5	14.9	21.1	18.0	19.3	20.8	18.9	19.9	21.6	20.1	20.8
7	17.5	13.9	15.6	20.5	18.5	19.1	20.7	18.6	19.3	20.9	20.2	20.6
8	17.6	14.6	15.9	21.1	17.9	19.3	21.2	18.5	19.5	21.6	20.1	20.7
9	17.9	14.6	16.0	20.9	17.6	18.7	20.8	18.4	19.4	21.9	19.9	20.8
10	19.7	14.6	16.9	18.8	17.5	18.1	20.4	18.8	19.5	22.3	20.4	21.2
11	21.1	16.1	19.0	19.9	17.4	18.3	20.7	18.8	19.6	22.3	20.4	21.2
12	19.7	15.6	17.3	20.5	17.3	18.4	21.6	18.9	19.8	22.5	20.5	21.4
13	19.1	15.4	16.9	20.8	17.3	18.5	21.4	19.3	20.0	22.9	20.4	21.5
14	20.2	15.6	17.3	19.7	17.7	18.4	21.6	19.4	20.3	21.9	20.6	21.1
15	20.2	16.2	17.8	20.8	17.8	18.7	22.1	19.8	20.7	22.6	20.9	21.6
16	19.7	15.9	17.5	19.8	18.3	18.8	22.4	20.5	21.2	23.0	20.3	21.6
17	20.1	16.0	17.9	22.1	17.9	19.5	22.2	20.1	21.0	22.9	20.7	21.7
18	19.0	16.0	17.9	20.1	18.4	19.2	22.7	20.3	21.3	22.9	20.8	21.7
19	21.0	16.4	18.1	20.7	18.3	19.3	23.7	20.6	21.8	23.1	20.6	21.7
20	21.4	16.4	18.2	21.0	18.5	19.6	23.3	20.4	21.4	23.4	21.0	22.1
21	19.5	15.9	17.2	20.9	18.6	19.7	23.4	20.7	21.7	22.6	21.1	21.9
22	20.3	15.5	17.3	20.2	18.9	19.5	23.6	21.0	21.9	22.0	20.3	21.3
23	19.8	16.3	17.6	21.1	19.8	20.3	24.5	20.9	22.1	22.5	20.3	21.2
24	20.6	15.8	17.6	20.8	17.3	19.6	24.4	21.0	22.2	22.5	20.5	21.3
25	21.6	16.3	18.4	20.2	16.2	17.5	23.6	20.3	21.6	22.3	20.0	21.1
26	21.0	16.6	18.2	20.5	16.7	17.9	22.4	19.6	20.6	22.4	20.4	21.3
27	19.4	16.8	17.9	21.5	17.4	18.6	22.5	19.8	20.6	21.7	20.4	20.9
28	21.6	16.7	18.7	21.8	17.6	18.9	22.6	19.8	20.7	21.4	20.0	20.6
29	21.5	17.3	18.6	21.6	18.3	19.4	22.2	19.8	20.8	20.9	18.1	19.4
30	19.5	16.7	17.9	21.7	18.5	19.4	22.3	20.0	20.7	19.5	15.8	17.7
31	---	---	---	20.1	19.0	19.3	22.0	19.9	20.7	---	---	---
MONTH	21.6	13.1	17.2	22.1	16.2	18.9	24.5	18.4	20.5	23.4	15.8	21.0

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	59	34	43	---	---	---	---	---	---	---	---	---
2	76	28	40	---	---	---	---	---	---	---	---	---
3	43	21	31	---	---	---	---	---	---	---	---	---
4	30	20	24	---	---	---	---	---	---	---	---	---
5	60	21	30	---	---	---	---	---	---	---	---	---
6	66	21	31	---	---	---	---	---	---	---	---	---
7	86	21	44	---	---	---	---	---	---	84	47	59
8	89	22	43	---	---	---	---	---	---	89	48	61
9	33	22	27	---	---	---	114	54	82	90	49	64
10	54	22	28	---	---	---	103	36	67	89	52	68
11	41	22	30	---	---	---	72	59	66	85	50	63
12	71	25	39	---	---	---	83	61	68	93	49	66
13	74	26	40	---	---	---	93	61	73	99	49	69
14	32	24	28	---	---	---	93	58	73	106	64	77
15	36	25	28	---	---	---	85	65	72	99	50	75
16	45	25	34	---	---	---	89	65	72	65	32	39
17	---	---	---	---	---	---	94	58	76	---	---	---
18	---	---	---	---	---	---	88	47	72	---	---	---
19	---	---	---	---	---	---	87	44	59	---	---	---
20	---	---	---	---	---	---	88	44	62	---	---	---
21	---	---	---	---	---	---	89	45	59	---	---	---
22	---	---	---	---	---	---	96	43	63	---	---	---
23	---	---	---	---	---	---	97	42	60	---	---	---
24	---	---	---	---	---	---	98	38	54	---	---	---
25	---	---	---	---	---	---	85	39	55	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	94	54	68
MONTH	89	20	34	---	---	---	114	36	67	106	32	64
		FEBRUARY			MARCH			APRIL			MAY	
1	90	49	66	82	42	56	104	45	67	128	46	66
2	88	48	64	81	41	53	85	42	57	105	47	60
3	77	37	59	94	35	53	79	39	54	112	48	63
4	88	49	63	85	43	62	e89	e38	e56	105	47	66
5	91	50	72	82	40	56	---	---	---	109	46	68
6	73	36	47	76	28	44	---	---	---	e107	e48	e69
7	55	39	45	61	43	53	115	49	69	123	49	69
8	58	40	48	63	43	54	113	48	71	99	48	62
9	56	32	41	---	---	---	101	46	70	106	32	59
10	57	31	41	---	---	---	91	46	61	123	45	66
11	65	30	43	---	---	---	94	44	61	107	48	66
12	63	34	40	73	45	64	96	44	57	112	47	68
13	55	25	33	66	46	58	84	46	63	102	43	58
14	78	31	47	64	59	61	82	57	66	126	35	54
15	77	43	55	71	54	61	85	51	65	116	35	62
16	69	28	45	67	29	44	80	50	60	102	40	60
17	61	28	41	76	33	50	87	47	61	95	39	56
18	61	28	44	75	31	46	75	48	56	119	56	73
19	59	25	40	122	30	61	88	45	61	119	50	70
20	70	30	46	125	59	100	94	47	61	---	---	---
21	72	44	56	85	48	64	86	46	57	---	---	---
22	62	24	37	83	50	64	94	47	63	---	---	---
23	70	41	53	79	43	56	104	48	62	---	---	---
24	74	45	57	65	44	51	124	46	66	---	---	---
25	99	44	65	77	47	58	111	46	60	---	---	---
26	97	32	60	89	49	65	120	48	72	---	---	---
27	68	23	41	84	50	62	126	50	66	---	---	---
28	85	25	47	80	49	62	125	49	76	119	40	54
29	84	42	58	98	48	64	120	47	65	140	26	63
30	---	---	---	83	48	61	123	46	65	98	26	58
31	---	---	---	96	47	59	---	---	---	95	31	59
MONTH	99	23	50	125	28	59	126	38	63	140	26	63

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	98	52	68	81	24	49	---	---	---	118	35	73
2	90	53	59	84	28	52	---	---	---	128	38	75
3	96	58	71	87	28	51	---	---	---	118	25	59
4	106	58	74	85	30	50	---	---	---	99	25	45
5	98	59	70	84	29	52	---	---	---	107	25	35
6	95	43	63	95	27	55	106	25	54	118	26	56
7	91	60	69	98	27	58	100	28	59	45	25	36
8	96	59	72	99	31	65	90	32	63	78	45	67
9	104	60	70	83	29	51	101	41	61	96	33	70
10	100	60	72	72	27	46	83	41	65	73	33	50
11	89	54	65	88	27	55	113	53	80	73	33	53
12	93	50	68	92	36	57	120	57	90	83	33	53
13	79	49	63	93	28	55	---	---	---	76	31	50
14	85	63	72	85	28	52	---	---	---	77	31	50
15	89	64	76	81	37	70	---	---	---	80	29	43
16	105	71	84	76	36	61	---	---	---	62	29	38
17	104	39	67	79	32	50	127	24	53	61	31	43
18	127	40	61	87	32	61	118	24	55	---	---	---
19	127	22	56	106	64	80	121	24	54	---	---	---
20	133	23	58	---	---	---	113	25	55	---	---	---
21	158	28	64	---	---	---	93	32	66	---	---	---
22	140	30	66	112	27	60	120	34	87	---	---	---
23	117	44	71	105	34	61	104	32	65	---	---	---
24	61	33	48	106	30	58	106	30	60	94	24	47
25	92	49	70	---	---	---	92	29	52	92	24	43
26	80	58	70	---	---	---	93	28	49	106	25	55
27	77	56	66	---	---	---	93	28	52	92	25	44
28	75	55	64	---	---	---	103	28	64	82	26	40
29	88	32	66	---	---	---	100	34	59	87	26	49
30	89	24	52	---	---	---	101	32	60	89	23	44
31	---	---	---	---	---	---	100	32	55	---	---	---
MONTH	158	22	66	112	24	57	127	24	62	128	23	51

e Estimated

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.8	6.2	6.9	6.8	6.2	5.9	6.6	6.0	6.8	6.7	6.8	6.7
2	6.8	6.2	6.9	6.8	6.2	6.1	6.8	6.2	6.8	6.7	6.8	6.6
3	6.8	6.2	6.8	6.8	6.2	6.2	6.8	6.6	6.8	6.7	6.8	6.7
4	6.8	6.5	6.8	6.8	6.3	6.2	6.9	6.6	6.8	6.7	6.7	6.6
5	6.9	6.2	6.8	6.8	6.4	6.3	6.9	6.5	6.7	6.7	6.7	6.7
6	6.6	6.2	7.1	6.3	6.6	6.4	6.5	5.9	6.8	6.5	6.8	6.6
7	6.7	6.1	6.4	6.3	6.7	6.6	6.2	5.5	6.6	6.5	6.8	6.6
8	6.7	6.1	6.6	6.4	6.8	5.9	6.3	5.5	6.8	6.6	6.8	6.7
9	6.6	6.3	6.7	6.5	6.6	5.8	6.3	5.7	6.8	6.6	7.0	6.6
10	6.6	6.1	6.8	6.6	6.4	6.0	6.3	5.7	6.8	6.5	6.8	6.6
11	6.6	6.1	6.8	6.6	6.2	6.0	6.2	5.4	6.8	6.5	6.9	6.5
12	6.7	6.1	6.7	6.6	6.2	5.8	6.3	5.4	6.8	6.6	6.8	6.7
13	6.6	6.0	6.7	6.6	6.2	5.8	6.3	5.5	6.9	6.5	6.8	6.7
14	6.1	5.8	7.1	6.6	6.2	5.9	6.2	5.7	6.8	6.5	6.8	6.7
15	5.8	5.5	6.8	6.6	6.1	5.8	6.0	5.5	6.7	6.6	6.7	6.6
16	5.9	5.6	6.8	6.6	6.1	5.8	5.6	5.1	6.9	6.6	6.9	6.7
17	6.1	5.8	6.7	6.5	6.2	5.8	5.8	5.4	6.9	6.5	6.9	6.8
18	6.3	6.1	6.7	6.5	6.3	5.8	6.1	5.7	6.9	6.5	6.9	6.8
19	6.4	6.2	6.8	5.9	6.3	5.7	5.8	5.6	6.9	6.5	6.9	6.2
20	6.3	6.2	6.4	6.2	6.3	5.6	6.1	5.8	6.8	6.5	6.5	6.1
21	6.2	6.1	6.4	6.3	6.3	5.5	6.2	6.1	6.8	6.6	6.6	6.4
22	6.5	6.2	6.4	6.3	6.5	5.6	6.5	6.2	6.9	6.6	6.6	6.5
23	6.6	6.5	6.4	6.3	6.5	5.7	6.6	6.4	6.7	6.5	6.9	6.5
24	6.8	6.6	6.5	6.4	6.6	6.1	6.6	6.4	6.7	6.6	7.0	6.4
25	6.8	6.7	6.5	6.2	6.6	5.9	6.9	6.6	6.8	6.4	6.5	6.4
26	6.9	6.8	6.6	6.3	6.4	5.7	7.0	6.9	7.0	6.6	6.5	6.5
27	6.9	6.9	6.5	6.2	6.4	5.7	7.1	7.0	7.0	6.6	6.6	6.5
28	6.9	6.9	6.4	6.3	6.6	5.8	7.2	7.1	6.9	6.6	6.6	6.5
29	6.9	6.8	6.4	6.2	6.6	6.0	---	---	6.7	6.6	6.7	6.1
30	6.8	6.8	6.3	5.9	6.7	6.1	---	---	---	---	6.8	6.6
31	6.8	6.8	---	---	6.6	6.0	6.8	6.7	---	---	6.7	6.6
MONTH	6.9	5.5	7.1	5.9	6.8	5.5	7.2	5.1	7.0	6.4	7.0	6.1
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.9	6.6	6.8	6.6	6.6	6.3	6.9	6.4	6.6	6.1	7.0	6.7
2	6.8	6.6	6.8	6.6	6.5	6.4	6.9	6.5	6.5	6.2	6.9	6.6
3	6.8	6.6	6.7	6.6	6.5	6.4	7.0	6.5	6.4	6.0	7.2	6.6
4	---	---	6.7	6.6	---	---	7.0	6.5	6.5	6.0	7.0	6.5
5	---	---	6.7	6.6	---	---	7.0	6.5	6.5	6.1	6.7	6.4
6	---	---	---	---	---	---	7.0	6.5	6.3	6.1	7.0	6.4
7	6.7	6.6	6.7	6.5	---	---	7.0	6.4	6.4	6.3	6.6	6.5
8	6.7	6.6	6.8	6.5	---	---	7.0	6.4	6.6	6.4	6.6	6.6
9	6.7	6.6	6.8	6.4	---	---	7.0	6.5	6.7	6.6	7.0	6.5
10	6.7	6.6	6.6	6.5	---	---	7.0	6.5	6.8	6.7	7.0	6.4
11	6.7	6.6	6.6	6.5	---	---	6.9	6.4	6.9	6.8	7.0	6.5
12	6.7	6.6	6.6	6.5	---	---	7.0	6.6	7.0	6.9	7.1	6.5
13	6.6	6.5	6.8	6.5	---	---	7.0	6.5	7.0	7.0	7.1	6.5
14	6.6	6.5	6.9	6.5	---	---	6.7	6.4	7.1	7.0	7.1	6.5
15	6.6	6.5	6.8	6.5	---	---	6.7	6.4	7.1	7.1	6.9	6.4
16	6.6	6.5	6.8	6.5	---	---	7.0	6.7	7.1	6.5	6.7	6.4
17	6.6	6.6	6.8	6.5	---	---	7.0	6.5	7.0	6.4	6.4	6.1
18	6.6	6.5	6.7	6.5	6.9	6.7	6.7	6.5	7.1	6.4	6.6	6.0
19	6.6	6.5	6.8	6.5	7.1	6.7	6.8	6.6	7.0	6.4	6.6	6.4
20	6.6	6.5	6.6	6.4	6.7	6.5	6.8	6.5	7.0	6.4	6.6	6.3
21	6.6	6.4	6.6	6.4	7.0	6.6	7.1	6.6	6.6	6.2	6.6	6.3
22	6.6	6.3	6.6	6.4	6.9	6.6	7.0	6.5	6.8	6.2	6.8	6.3
23	6.8	6.2	6.7	6.4	6.8	6.6	7.0	6.5	6.9	6.3	6.9	6.2
24	6.8	6.6	6.9	6.7	6.8	6.2	7.0	6.5	6.9	6.4	6.9	6.4
25	6.8	6.6	6.8	6.5	6.5	6.3	6.8	6.5	6.9	6.4	6.8	6.4
26	6.7	6.6	6.8	6.3	6.3	6.2	7.1	6.6	7.0	6.4	7.0	6.4
27	6.8	6.6	6.9	6.3	6.4	6.3	6.8	6.3	7.0	6.4	6.8	6.4
28	6.8	6.6	6.8	6.7	6.6	6.4	6.6	6.4	6.7	6.4	6.8	6.4
29	6.8	6.7	6.9	6.6	7.0	6.6	6.8	6.3	7.0	6.4	7.0	6.4
30	6.8	6.7	6.7	6.3	6.9	6.5	6.6	6.2	7.0	6.4	7.0	6.4
31	---	---	6.6	6.3	---	---	6.7	6.2	6.8	6.4	---	---
MONTH	7.9	6.2	6.9	6.3	7.1	6.2	7.1	6.2	7.1	6.0	7.2	6.0

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.8	16.2	17.5	16.5	15.4	16.0	8.5	7.4	7.9	6.4	4.2	5.3
2	19.4	15.5	17.2	16.4	15.5	16.0	8.5	7.7	8.1	8.8	6.1	7.2
3	19.6	14.9	17.6	16.3	15.4	15.8	8.2	7.8	8.0	11.0	8.8	10.0
4	20.1	18.2	19.0	16.5	15.6	16.0	8.3	7.9	8.0	12.6	11.0	11.8
5	19.3	17.3	18.2	17.0	16.3	16.6	8.9	8.3	8.7	12.6	10.6	12.3
6	18.9	17.0	18.0	17.7	16.8	17.1	8.6	7.8	8.2	10.6	5.6	8.1
7	19.1	17.5	18.3	17.2	16.5	16.7	7.9	7.3	7.6	5.6	3.4	4.3
8	19.3	17.6	18.5	16.5	15.8	16.1	7.7	5.5	6.7	4.2	3.1	3.6
9	19.6	17.9	18.9	15.9	15.3	15.6	7.2	5.2	6.1	5.2	4.1	4.7
10	19.7	18.0	18.9	15.5	14.2	14.6	9.1	7.2	8.3	5.0	3.7	4.5
11	19.8	18.2	19.0	15.6	14.3	14.7	8.5	6.3	7.3	4.1	2.4	3.3
12	19.9	18.1	19.0	15.9	14.7	15.2	6.3	5.1	5.6	5.4	3.0	4.1
13	20.0	17.7	18.9	15.9	13.8	15.0	6.0	4.9	5.4	6.4	4.2	5.3
14	19.7	18.6	19.3	13.8	12.5	13.4	7.1	6.0	6.6	6.6	4.6	5.7
15	19.3	16.9	18.1	12.5	11.8	12.1	7.6	6.3	6.9	7.7	6.2	6.8
16	19.0	16.0	17.5	12.8	12.2	12.4	7.3	5.8	6.7	6.6	4.9	5.8
17	18.5	15.4	16.3	14.0	12.5	13.3	7.6	6.2	7.1	6.5	5.4	6.0
18	17.8	15.3	16.2	15.1	14.0	14.4	6.3	5.4	5.8	7.6	6.5	7.1
19	17.9	15.5	16.7	15.0	13.6	14.8	6.0	4.8	5.4	7.3	5.5	6.1
20	18.0	15.7	16.8	13.6	12.0	12.7	5.0	3.6	4.3	5.8	4.5	5.2
21	18.0	16.2	17.1	12.2	10.8	11.6	4.3	2.6	3.5	5.8	4.8	5.2
22	17.8	16.3	16.9	11.8	10.2	11.1	5.4	3.2	4.2	5.8	4.6	5.1
23	17.2	15.9	16.5	11.9	10.2	11.2	6.9	4.5	5.7	5.7	4.6	5.1
24	17.4	15.9	16.6	12.2	10.7	11.8	7.4	6.3	7.0	6.3	4.6	5.4
25	17.6	16.0	16.7	10.7	9.1	9.8	6.3	4.4	5.4	6.6	6.2	6.4
26	17.6	16.6	17.0	9.7	8.3	9.0	5.0	3.2	4.2	7.3	6.2	6.6
27	17.2	15.9	16.7	10.7	9.6	10.0	5.2	3.2	4.2	7.3	5.7	6.8
28	15.9	14.4	14.9	11.2	10.2	11.0	5.8	3.6	4.7	5.7	4.6	4.9
29	16.4	15.0	15.7	10.2	8.1	9.0	7.7	5.0	6.1	5.0	3.8	4.4
30	16.4	15.2	15.8	8.1	7.2	7.7	8.1	6.6	7.4	6.3	4.2	5.1
31	16.5	15.5	16.0	---	---	---	6.6	5.0	5.8	5.5	3.5	4.5
MONTH	20.1	14.4	17.4	17.7	7.2	13.4	9.1	2.6	6.4	12.6	2.4	6.0
		FEBRUARY			MARCH			APRIL			MAY	
1	5.5	3.2	4.4	10.7	6.8	8.6	11.2	9.6	10.4	17.0	14.8	15.8
2	5.7	4.6	5.1	11.7	10.7	11.2	9.9	8.6	9.5	16.3	14.5	15.6
3	7.4	5.7	6.4	12.7	10.8	11.7	13.1	8.8	10.9	14.5	12.5	13.4
4	7.4	5.7	6.4	13.3	11.9	12.6	e13.5	e10.4	e11.9	15.1	10.8	12.9
5	6.6	5.6	5.9	13.4	12.3	12.9	---	---	---	17.0	12.2	14.5
6	8.9	6.6	7.8	14.6	13.3	13.8	---	---	---	19.0	14.4	16.6
7	8.8	5.6	7.3	13.4	11.4	12.6	14.3	10.5	12.3	20.1	15.4	17.8
8	6.2	4.7	5.5	11.4	9.3	10.2	14.5	12.2	13.2	20.5	16.6	18.7
9	6.3	5.3	5.7	9.4	7.6	8.2	15.3	11.4	13.4	19.4	15.2	16.9
10	6.4	5.8	6.2	9.3	6.9	8.1	14.2	11.5	12.4	20.2	16.2	18.0
11	7.1	5.7	6.4	9.6	6.6	8.4	12.1	11.0	11.6	19.4	17.6	18.6
12	7.0	5.8	6.5	11.1	8.2	9.6	12.9	11.6	12.2	19.4	16.1	17.7
13	6.9	5.3	6.1	10.8	7.6	9.2	12.5	10.7	12.1	19.7	16.1	18.1
14	7.6	6.0	6.8	12.1	8.9	10.5	10.9	9.1	10.0	17.3	12.5	14.9
15	8.3	7.4	7.8	12.0	11.2	11.6	13.5	8.4	10.8	18.1	12.4	15.3
16	7.6	5.9	6.8	12.7	10.9	11.6	15.3	11.0	13.1	17.4	14.4	15.9
17	6.5	5.8	6.1	12.9	10.5	11.6	16.7	12.2	14.4	17.1	14.1	15.7
18	7.3	5.6	6.3	11.2	10.0	10.5	17.9	13.3	15.6	18.5	16.0	17.2
19	7.3	4.9	6.1	13.1	9.2	11.0	18.0	14.4	16.3	19.6	15.3	17.5
20	7.4	5.6	6.6	13.8	10.6	12.2	17.6	15.0	16.4	21.9	18.0	19.7
21	9.9	7.4	8.5	13.8	11.0	12.7	17.2	14.4	15.9	21.9	18.6	20.3
22	8.7	5.7	6.9	11.0	8.6	9.7	18.6	15.3	16.9	20.7	18.6	19.5
23	8.0	6.7	7.3	9.6	6.7	8.3	18.8	16.0	17.4	20.5	17.3	18.8
24	8.8	7.4	8.0	10.5	8.1	9.3	19.3	15.9	17.7	21.2	18.1	19.6
25	9.3	8.1	8.7	13.5	9.2	11.3	18.4	16.2	16.9	21.4	18.2	19.8
26	8.7	6.4	7.4	15.0	11.1	13.1	16.7	14.8	15.8	21.8	19.3	20.5
27	6.7	6.1	6.3	15.4	12.2	13.9	16.1	13.1	14.6	22.4	18.9	20.5
28	7.8	5.3	6.6	16.2	12.3	14.3	16.6	12.1	14.4	21.3	19.1	20.1
29	8.8	6.3	7.5	16.9	13.4	15.2	17.2	13.2	15.2	19.7	13.7	18.6
30	---	---	---	16.4	14.2	15.2	16.6	14.8	15.7	19.2	12.2	15.4
31	---	---	---	14.2	11.2	12.8	---	---	---	18.1	12.3	15.4
MONTH	9.9	3.2	6.7	16.9	6.6	11.4	19.3	8.4	13.8	22.4	10.8	17.4

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	16.8	18.3	17.4	12.3	15.3	20.3	13.0	16.9	20.8	18.6	19.7
2	20.2	16.6	18.4	19.2	12.7	15.5	21.9	13.5	19.0	18.9	17.8	18.3
3	19.8	17.3	18.8	19.7	12.3	15.9	20.0	13.2	16.0	18.9	15.6	17.9
4	21.3	17.2	19.2	20.2	13.5	16.6	19.6	13.1	15.5	17.9	15.2	16.2
5	20.9	17.4	19.3	21.1	13.8	17.1	18.1	12.7	14.9	17.7	15.5	16.4
6	19.8	12.6	16.3	19.6	12.3	16.3	19.7	14.3	16.5	19.1	16.1	17.2
7	18.2	15.0	16.4	20.6	12.2	16.3	18.5	14.1	16.0	18.5	16.0	16.8
8	19.0	16.4	17.7	21.3	13.6	17.1	18.4	13.9	15.9	19.9	18.5	19.3
9	20.6	17.6	19.1	20.7	13.4	16.7	18.1	13.5	15.7	21.5	17.1	19.3
10	22.1	18.0	19.9	19.6	12.3	16.0	17.4	12.9	14.8	20.9	16.6	18.3
11	22.8	19.1	20.9	20.9	12.2	16.9	18.1	13.4	15.3	21.8	17.1	18.9
12	21.4	15.5	19.7	21.6	19.4	20.2	16.9	14.0	15.3	20.6	17.1	18.4
13	18.1	13.4	15.9	21.2	13.4	18.3	17.2	13.8	15.4	19.1	17.0	17.6
14	21.5	17.5	19.3	20.6	13.2	16.5	18.2	14.4	16.5	20.0	16.7	17.9
15	20.9	18.5	19.3	21.7	15.9	19.5	18.2	14.1	15.8	18.6	16.7	17.6
16	22.3	18.5	20.1	21.1	15.2	19.6	19.5	16.0	17.6	18.7	17.4	17.8
17	22.8	19.7	21.3	17.7	12.6	14.9	19.1	14.2	16.2	19.4	18.4	19.0
18	22.0	19.5	20.9	19.9	12.6	16.3	19.9	14.0	16.2	18.8	17.3	18.0
19	23.1	13.0	20.4	21.7	18.3	19.9	19.8	13.6	16.1	19.2	16.8	17.8
20	19.4	12.9	15.8	22.3	18.4	20.4	18.9	14.4	16.3	19.4	16.4	17.9
21	20.8	18.1	19.4	22.7	13.4	20.1	20.1	15.3	18.1	19.4	16.3	17.8
22	19.5	16.2	17.8	19.9	13.0	16.5	21.3	16.2	19.9	19.5	15.8	17.4
23	19.4	18.6	19.0	21.7	16.8	19.0	19.8	14.7	17.3	20.2	16.6	18.2
24	20.7	17.5	19.0	21.0	15.8	18.2	19.0	14.7	16.8	19.9	17.1	18.5
25	20.2	18.8	19.3	19.8	13.2	16.6	18.8	14.5	16.2	20.0	17.9	18.8
26	20.8	18.2	19.3	22.6	16.4	20.6	18.9	14.6	16.2	20.6	17.8	18.9
27	20.0	18.5	19.2	20.2	14.4	17.3	20.4	14.4	16.8	18.8	17.8	18.4
28	18.5	17.5	17.8	21.9	19.0	20.3	20.7	14.8	17.7	19.1	18.2	18.6
29	20.9	17.1	18.5	21.9	18.9	20.6	21.1	16.6	18.8	20.1	17.7	18.7
30	17.2	12.5	15.2	21.3	16.9	18.9	20.5	16.2	18.0	19.7	17.4	18.5
31	---	---	---	19.3	13.2	16.5	21.2	16.1	18.5	---	---	---
MONTH	23.1	12.5	18.7	22.7	12.2	17.7	21.9	12.7	16.7	21.8	15.2	18.1

e Estimated

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	59	34	43	---	---	---	---	---	---	---	---	---
2	76	28	40	---	---	---	---	---	---	---	---	---
3	43	21	31	---	---	---	---	---	---	---	---	---
4	30	20	24	---	---	---	---	---	---	---	---	---
5	60	21	30	---	---	---	---	---	---	---	---	---
6	66	21	31	---	---	---	---	---	---	---	---	---
7	86	21	44	---	---	---	---	---	---	84	47	59
8	89	22	43	---	---	---	---	---	---	89	48	61
9	33	22	27	---	---	---	114	54	82	90	49	64
10	54	22	28	---	---	---	103	36	67	89	52	68
11	41	22	30	---	---	---	72	59	66	85	50	63
12	71	25	39	---	---	---	83	61	68	93	49	66
13	74	26	40	---	---	---	93	61	73	99	49	69
14	32	24	28	---	---	---	93	58	73	106	64	77
15	36	25	28	---	---	---	85	65	72	99	50	75
16	45	25	34	---	---	---	89	65	72	65	32	39
17	---	---	---	---	---	---	94	58	76	---	---	---
18	---	---	---	---	---	---	88	47	72	---	---	---
19	---	---	---	---	---	---	87	44	59	---	---	---
20	---	---	---	---	---	---	88	44	62	---	---	---
21	---	---	---	---	---	---	89	45	59	---	---	---
22	---	---	---	---	---	---	96	43	63	---	---	---
23	---	---	---	---	---	---	97	42	60	---	---	---
24	---	---	---	---	---	---	98	38	54	---	---	---
25	---	---	---	---	---	---	85	39	55	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	94	54	68
MONTH	89	20	34	---	---	---	114	36	67	106	32	64
		FEBRUARY			MARCH			APRIL			MAY	
1	90	49	66	82	42	56	104	45	67	128	46	66
2	88	48	64	81	41	53	85	42	57	105	47	60
3	77	37	59	94	35	53	79	39	54	112	48	63
4	88	49	63	85	43	62	e89	e38	e56	105	47	66
5	91	50	72	82	40	56	---	---	---	109	46	68
6	73	36	47	76	28	44	---	---	---	e107	e48	e69
7	55	39	45	61	43	53	115	49	69	123	49	69
8	58	40	48	63	43	54	113	48	71	99	48	62
9	56	32	41	---	---	---	101	46	70	106	32	59
10	57	31	41	---	---	---	91	46	61	123	45	66
11	65	30	43	---	---	---	94	44	61	107	48	66
12	63	34	40	73	45	64	96	44	57	112	47	68
13	55	25	33	66	46	58	84	46	63	102	43	58
14	78	31	47	64	59	61	82	57	66	126	35	54
15	77	43	55	71	54	61	85	51	65	116	35	62
16	69	28	45	67	29	44	80	50	60	102	40	60
17	61	28	41	76	33	50	87	47	61	95	39	56
18	61	28	44	75	31	46	75	48	56	119	56	73
19	59	25	40	122	30	61	88	45	61	119	50	70
20	70	30	46	125	59	100	94	47	61	---	---	---
21	72	44	56	85	48	64	86	46	57	---	---	---
22	62	24	37	83	50	64	94	47	63	---	---	---
23	70	41	53	79	43	56	104	48	62	---	---	---
24	74	45	57	65	44	51	124	46	66	---	---	---
25	99	44	65	77	47	58	111	46	60	---	---	---
26	97	32	60	89	49	65	120	48	72	---	---	---
27	68	23	41	84	50	62	126	50	66	---	---	---
28	85	25	47	80	49	62	125	49	76	119	40	54
29	84	42	58	98	48	64	120	47	65	140	26	63
30	---	---	---	83	48	61	123	46	65	98	26	58
31	---	---	---	96	47	59	---	---	---	95	31	59
MONTH	99	23	50	125	28	59	126	38	63	140	26	63

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	98	52	68	81	24	49	---	---	---	118	35	73
2	90	53	59	84	28	52	---	---	---	128	38	75
3	96	58	71	87	28	51	---	---	---	118	25	59
4	106	58	74	85	30	50	---	---	---	99	25	45
5	98	59	70	84	29	52	---	---	---	107	25	35
6	95	43	63	95	27	55	106	25	54	118	26	56
7	91	60	69	98	27	58	100	28	59	45	25	36
8	96	59	72	99	31	65	90	32	63	78	45	67
9	104	60	70	83	29	51	101	41	61	96	33	70
10	100	60	72	72	27	46	83	41	65	73	33	50
11	89	54	65	88	27	55	113	53	80	73	33	53
12	93	50	68	92	36	57	120	57	90	83	33	53
13	79	49	63	93	28	55	---	---	---	76	31	50
14	85	63	72	85	28	52	---	---	---	77	31	50
15	89	64	76	81	37	70	---	---	---	80	29	43
16	105	71	84	76	36	61	---	---	---	62	29	38
17	104	39	67	79	32	50	127	24	53	61	31	43
18	127	40	61	87	32	61	118	24	55	---	---	---
19	127	22	56	106	64	80	121	24	54	---	---	---
20	133	23	58	---	---	---	113	25	55	---	---	---
21	158	28	64	---	---	---	93	32	66	---	---	---
22	140	30	66	112	27	60	120	34	87	---	---	---
23	117	44	71	105	34	61	104	32	65	---	---	---
24	61	33	48	106	30	58	106	30	60	94	24	47
25	92	49	70	---	---	---	92	29	52	92	24	43
26	80	58	70	---	---	---	93	28	49	106	25	55
27	77	56	66	---	---	---	93	28	52	92	25	44
28	75	55	64	---	---	---	103	28	64	82	26	40
29	88	32	66	---	---	---	100	34	59	87	26	49
30	89	24	52	---	---	---	101	32	60	89	23	44
31	---	---	---	---	---	---	100	32	55	---	---	---
MONTH	158	22	66	112	24	57	127	24	62	128	23	51
YEAR	158	20	58									

e Estimated

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.8	6.2	6.9	6.8	6.2	5.9	6.6	6.0	6.8	6.7	6.8	6.7
2	6.8	6.2	6.9	6.8	6.2	6.1	6.8	6.2	6.8	6.7	6.8	6.6
3	6.8	6.2	6.8	6.8	6.2	6.2	6.8	6.6	6.8	6.7	6.8	6.7
4	6.8	6.5	6.8	6.8	6.3	6.2	6.9	6.6	6.8	6.7	6.7	6.6
5	6.9	6.2	6.8	6.8	6.4	6.3	6.9	6.5	6.7	6.7	6.7	6.7
6	6.6	6.2	7.1	6.3	6.6	6.4	6.5	5.9	6.8	6.5	6.8	6.6
7	6.7	6.1	6.4	6.3	6.7	6.6	6.2	5.5	6.6	6.5	6.8	6.6
8	6.7	6.1	6.6	6.4	6.8	5.9	6.3	5.5	6.8	6.6	6.8	6.7
9	6.6	6.3	6.7	6.5	6.6	5.8	6.3	5.7	6.8	6.6	7.0	6.6
10	6.6	6.1	6.8	6.6	6.4	6.0	6.3	5.7	6.8	6.5	6.8	6.6
11	6.6	6.1	6.8	6.6	6.2	6.0	6.2	5.4	6.8	6.5	6.9	6.5
12	6.7	6.1	6.7	6.6	6.2	5.8	6.3	5.4	6.8	6.6	6.8	6.7
13	6.6	6.0	6.7	6.6	6.2	5.8	6.3	5.5	6.9	6.5	6.8	6.7
14	6.1	5.8	7.1	6.6	6.2	5.9	6.2	5.7	6.8	6.5	6.8	6.7
15	5.8	5.5	6.8	6.6	6.1	5.8	6.0	5.5	6.7	6.6	6.7	6.6
16	5.9	5.6	6.8	6.6	6.1	5.8	5.6	5.1	6.9	6.6	6.9	6.7
17	6.1	5.8	6.7	6.5	6.2	5.8	5.8	5.4	6.9	6.5	6.9	6.8
18	6.3	6.1	6.7	6.5	6.3	5.8	6.1	5.7	6.9	6.5	6.9	6.8
19	6.4	6.2	6.8	5.9	6.3	5.7	5.8	5.6	6.9	6.5	6.9	6.2
20	6.3	6.2	6.4	6.2	6.3	5.6	6.1	5.8	6.8	6.5	6.5	6.1
21	6.2	6.1	6.4	6.3	6.3	5.5	6.2	6.1	6.8	6.6	6.6	6.4
22	6.5	6.2	6.4	6.3	6.5	5.6	6.5	6.2	6.9	6.6	6.6	6.5
23	6.6	6.5	6.4	6.3	6.5	5.7	6.6	6.4	6.7	6.5	6.9	6.5
24	6.8	6.6	6.5	6.4	6.6	6.1	6.6	6.4	6.7	6.6	7.0	6.4
25	6.8	6.7	6.5	6.2	6.6	5.9	6.9	6.6	6.8	6.4	6.5	6.4
26	6.9	6.8	6.6	6.3	6.4	5.7	7.0	6.9	7.0	6.6	6.5	6.5
27	6.9	6.9	6.5	6.2	6.4	5.7	7.1	7.0	7.0	6.6	6.6	6.5
28	6.9	6.9	6.4	6.3	6.6	5.8	7.2	7.1	6.9	6.6	6.6	6.5
29	6.9	6.8	6.4	6.2	6.6	6.0	---	---	6.7	6.6	6.7	6.1
30	6.8	6.8	6.3	5.9	6.7	6.1	---	---	---	---	6.8	6.6
31	6.8	6.8	---	---	6.6	6.0	6.8	6.7	---	---	6.7	6.6
MONTH	6.9	5.5	7.1	5.9	6.8	5.5	7.2	5.1	7.0	6.4	7.0	6.1
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.9	6.6	6.8	6.6	6.6	6.3	6.9	6.4	6.6	6.1	7.0	6.7
2	6.8	6.6	6.8	6.6	6.5	6.4	6.9	6.5	6.5	6.2	6.9	6.6
3	6.8	6.6	6.7	6.6	6.5	6.4	7.0	6.5	6.4	6.0	7.2	6.6
4	---	---	6.7	6.6	---	---	7.0	6.5	6.5	6.0	7.0	6.5
5	---	---	6.7	6.6	---	---	7.0	6.5	6.5	6.1	6.7	6.4
6	---	---	---	---	---	---	7.0	6.5	6.3	6.1	7.0	6.4
7	6.7	6.6	6.7	6.5	---	---	7.0	6.4	6.4	6.3	6.6	6.5
8	6.7	6.6	6.8	6.5	---	---	7.0	6.4	6.6	6.4	6.6	6.6
9	6.7	6.6	6.8	6.4	---	---	7.0	6.5	6.7	6.6	7.0	6.5
10	6.7	6.6	6.6	6.5	---	---	7.0	6.5	6.8	6.7	7.0	6.4
11	6.7	6.6	6.6	6.5	---	---	6.9	6.4	6.9	6.8	7.0	6.5
12	6.7	6.6	6.6	6.5	---	---	7.0	6.6	7.0	6.9	7.1	6.5
13	6.6	6.5	6.8	6.5	---	---	7.0	6.5	7.0	7.0	7.1	6.5
14	6.6	6.5	6.9	6.5	---	---	6.7	6.4	7.1	7.0	7.1	6.5
15	6.6	6.5	6.8	6.5	---	---	6.7	6.4	7.1	7.1	6.9	6.4
16	6.6	6.5	6.8	6.5	---	---	7.0	6.7	7.1	6.5	6.7	6.4
17	6.6	6.6	6.8	6.5	---	---	7.0	6.5	7.0	6.4	6.4	6.1
18	6.6	6.5	6.7	6.5	6.9	6.7	6.7	6.5	7.1	6.4	6.6	6.0
19	6.6	6.5	6.8	6.5	7.1	6.7	6.8	6.6	7.0	6.4	6.6	6.4
20	6.6	6.5	6.6	6.4	6.7	6.5	6.8	6.5	7.0	6.4	6.6	6.3
21	6.6	6.4	6.6	6.4	7.0	6.6	7.1	6.6	6.6	6.2	6.6	6.3
22	6.6	6.3	6.6	6.4	6.9	6.6	7.0	6.5	6.8	6.2	6.8	6.3
23	6.8	6.2	6.7	6.4	6.8	6.6	7.0	6.5	6.9	6.3	6.9	6.2
24	6.8	6.6	6.9	6.7	6.8	6.2	7.0	6.5	6.9	6.4	6.9	6.4
25	6.8	6.6	6.8	6.5	6.5	6.3	6.8	6.5	6.9	6.4	6.8	6.4
26	6.7	6.6	6.8	6.3	6.3	6.2	7.1	6.6	7.0	6.4	7.0	6.4
27	6.8	6.6	6.9	6.3	6.4	6.3	6.8	6.3	7.0	6.4	6.8	6.4
28	6.8	6.6	6.8	6.7	6.6	6.4	6.6	6.4	6.7	6.4	6.8	6.4
29	6.8	6.7	6.9	6.6	7.0	6.6	6.8	6.3	7.0	6.4	7.0	6.4
30	6.8	6.7	6.7	6.3	6.9	6.5	6.6	6.2	7.0	6.4	7.0	6.4
31	---	---	6.6	6.3	---	---	6.7	6.2	6.8	6.4	---	---
MONTH	7.9	6.2	6.9	6.3	7.1	6.2	7.1	6.2	7.1	6.0	7.2	6.0

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.8	16.2	17.5	16.5	15.4	16.0	8.5	7.4	7.9	6.4	4.2	5.3
2	19.4	15.5	17.2	16.4	15.5	16.0	8.5	7.7	8.1	8.8	6.1	7.2
3	19.6	14.9	17.6	16.3	15.4	15.8	8.2	7.8	8.0	11.0	8.8	10.0
4	20.1	18.2	19.0	16.5	15.6	16.0	8.3	7.9	8.0	12.6	11.0	11.8
5	19.3	17.3	18.2	17.0	16.3	16.6	8.9	8.3	8.7	12.6	10.6	12.3
6	18.9	17.0	18.0	17.7	16.8	17.1	8.6	7.8	8.2	10.6	5.6	8.1
7	19.1	17.5	18.3	17.2	16.5	16.7	7.9	7.3	7.6	5.6	3.4	4.3
8	19.3	17.6	18.5	16.5	15.8	16.1	7.7	5.5	6.7	4.2	3.1	3.6
9	19.6	17.9	18.9	15.9	15.3	15.6	7.2	5.2	6.1	5.2	4.1	4.7
10	19.7	18.0	18.9	15.5	14.2	14.6	9.1	7.2	8.3	5.0	3.7	4.5
11	19.8	18.2	19.0	15.6	14.3	14.7	8.5	6.3	7.3	4.1	2.4	3.3
12	19.9	18.1	19.0	15.9	14.7	15.2	6.3	5.1	5.6	5.4	3.0	4.1
13	20.0	17.7	18.9	15.9	13.8	15.0	6.0	4.9	5.4	6.4	4.2	5.3
14	19.7	18.6	19.3	13.8	12.5	13.4	7.1	6.0	6.6	6.6	4.6	5.7
15	19.3	16.9	18.1	12.5	11.8	12.1	7.6	6.3	6.9	7.7	6.2	6.8
16	19.0	16.0	17.5	12.8	12.2	12.4	7.3	5.8	6.7	6.6	4.9	5.8
17	18.5	15.4	16.3	14.0	12.5	13.3	7.6	6.2	7.1	6.5	5.4	6.0
18	17.8	15.3	16.2	15.1	14.0	14.4	6.3	5.4	5.8	7.6	6.5	7.1
19	17.9	15.5	16.7	15.0	13.6	14.8	6.0	4.8	5.4	7.3	5.5	6.1
20	18.0	15.7	16.8	13.6	12.0	12.7	5.0	3.6	4.3	5.8	4.5	5.2
21	18.0	16.2	17.1	12.2	10.8	11.6	4.3	2.6	3.5	5.8	4.8	5.2
22	17.8	16.3	16.9	11.8	10.2	11.1	5.4	3.2	4.2	5.8	4.6	5.1
23	17.2	15.9	16.5	11.9	10.2	11.2	6.9	4.5	5.7	5.7	4.6	5.1
24	17.4	15.9	16.6	12.2	10.7	11.8	7.4	6.3	7.0	6.3	4.6	5.4
25	17.6	16.0	16.7	10.7	9.1	9.8	6.3	4.4	5.4	6.6	6.2	6.4
26	17.6	16.6	17.0	9.7	8.3	9.0	5.0	3.2	4.2	7.3	6.2	6.6
27	17.2	15.9	16.7	10.7	9.6	10.0	5.2	3.2	4.2	7.3	5.7	6.8
28	15.9	14.4	14.9	11.2	10.2	11.0	5.8	3.6	4.7	5.7	4.6	4.9
29	16.4	15.0	15.7	10.2	8.1	9.0	7.7	5.0	6.1	5.0	3.8	4.4
30	16.4	15.2	15.8	8.1	7.2	7.7	8.1	6.6	7.4	6.3	4.2	5.1
31	16.5	15.5	16.0	---	---	---	6.6	5.0	5.8	5.5	3.5	4.5
MONTH	20.1	14.4	17.4	17.7	7.2	13.4	9.1	2.6	6.4	12.6	2.4	6.0
		FEBRUARY			MARCH			APRIL			MAY	
1	5.5	3.2	4.4	10.7	6.8	8.6	11.2	9.6	10.4	17.0	14.8	15.8
2	5.7	4.6	5.1	11.7	10.7	11.2	9.9	8.6	9.5	16.3	14.5	15.6
3	7.4	5.7	6.4	12.7	10.8	11.7	13.1	8.8	10.9	14.5	12.5	13.4
4	7.4	5.7	6.4	13.3	11.9	12.6	e13.5	e10.4	e11.9	15.1	10.8	12.9
5	6.6	5.6	5.9	13.4	12.3	12.9	---	---	---	17.0	12.2	14.5
6	8.9	6.6	7.8	14.6	13.3	13.8	---	---	---	19.0	14.4	16.6
7	8.8	5.6	7.3	13.4	11.4	12.6	14.3	10.5	12.3	20.1	15.4	17.8
8	6.2	4.7	5.5	11.4	9.3	10.2	14.5	12.2	13.2	20.5	16.6	18.7
9	6.3	5.3	5.7	9.4	7.6	8.2	15.3	11.4	13.4	19.4	15.2	16.9
10	6.4	5.8	6.2	9.3	6.9	8.1	14.2	11.5	12.4	20.2	16.2	18.0
11	7.1	5.7	6.4	9.6	6.6	8.4	12.1	11.0	11.6	19.4	17.6	18.6
12	7.0	5.8	6.5	11.1	8.2	9.6	12.9	11.6	12.2	19.4	16.1	17.7
13	6.9	5.3	6.1	10.8	7.6	9.2	12.5	10.7	12.1	19.7	16.1	18.1
14	7.6	6.0	6.8	12.1	8.9	10.5	10.9	9.1	10.0	17.3	12.5	14.9
15	8.3	7.4	7.8	12.0	11.2	11.6	13.5	8.4	10.8	18.1	12.4	15.3
16	7.6	5.9	6.8	12.7	10.9	11.6	15.3	11.0	13.1	17.4	14.4	15.9
17	6.5	5.8	6.1	12.9	10.5	11.6	16.7	12.2	14.4	17.1	14.1	15.7
18	7.3	5.6	6.3	11.2	10.0	10.5	17.9	13.3	15.6	18.5	16.0	17.2
19	7.3	4.9	6.1	13.1	9.2	11.0	18.0	14.4	16.3	19.6	15.3	17.5
20	7.4	5.6	6.6	13.8	10.6	12.2	17.6	15.0	16.4	21.9	18.0	19.7
21	9.9	7.4	8.5	13.8	11.0	12.7	17.2	14.4	15.9	21.9	18.6	20.3
22	8.7	5.7	6.9	11.0	8.6	9.7	18.6	15.3	16.9	20.7	18.6	19.5
23	8.0	6.7	7.3	9.6	6.7	8.3	18.8	16.0	17.4	20.5	17.3	18.8
24	8.8	7.4	8.0	10.5	8.1	9.3	19.3	15.9	17.7	21.2	18.1	19.6
25	9.3	8.1	8.7	13.5	9.2	11.3	18.4	16.2	16.9	21.4	18.2	19.8
26	8.7	6.4	7.4	15.0	11.1	13.1	16.7	14.8	15.8	21.8	19.3	20.5
27	6.7	6.1	6.3	15.4	12.2	13.9	16.1	13.1	14.6	22.4	18.9	20.5
28	7.8	5.3	6.6	16.2	12.3	14.3	16.6	12.1	14.4	21.3	19.1	20.1
29	8.8	6.3	7.5	16.9	13.4	15.2	17.2	13.2	15.2	19.7	13.7	18.6
30	---	---	---	16.4	14.2	15.2	16.6	14.8	15.7	19.2	12.2	15.4
31	---	---	---	14.2	11.2	12.8	---	---	---	18.1	12.3	15.4
MONTH	9.9	3.2	6.7	16.9	6.6	11.4	19.3	8.4	13.8	22.4	10.8	17.4

03561420 OCOEE RIVER ABOVE BARKERMILL CREEK AT MCHARG, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	16.8	18.3	17.4	12.3	15.3	20.3	13.0	16.9	20.8	18.6	19.7
2	20.2	16.6	18.4	19.2	12.7	15.5	21.9	13.5	19.0	18.9	17.8	18.3
3	19.8	17.3	18.8	19.7	12.3	15.9	20.0	13.2	16.0	18.9	15.6	17.9
4	21.3	17.2	19.2	20.2	13.5	16.6	19.6	13.1	15.5	17.9	15.2	16.2
5	20.9	17.4	19.3	21.1	13.8	17.1	18.1	12.7	14.9	17.7	15.5	16.4
6	19.8	12.6	16.3	19.6	12.3	16.3	19.7	14.3	16.5	19.1	16.1	17.2
7	18.2	15.0	16.4	20.6	12.2	16.3	18.5	14.1	16.0	18.5	16.0	16.8
8	19.0	16.4	17.7	21.3	13.6	17.1	18.4	13.9	15.9	19.9	18.5	19.3
9	20.6	17.6	19.1	20.7	13.4	16.7	18.1	13.5	15.7	21.5	17.1	19.3
10	22.1	18.0	19.9	19.6	12.3	16.0	17.4	12.9	14.8	20.9	16.6	18.3
11	22.8	19.1	20.9	20.9	12.2	16.9	18.1	13.4	15.3	21.8	17.1	18.9
12	21.4	15.5	19.7	21.6	19.4	20.2	16.9	14.0	15.3	20.6	17.1	18.4
13	18.1	13.4	15.9	21.2	13.4	18.3	17.2	13.8	15.4	19.1	17.0	17.6
14	21.5	17.5	19.3	20.6	13.2	16.5	18.2	14.4	16.5	20.0	16.7	17.9
15	20.9	18.5	19.3	21.7	15.9	19.5	18.2	14.1	15.8	18.6	16.7	17.6
16	22.3	18.5	20.1	21.1	15.2	19.6	19.5	16.0	17.6	18.7	17.4	17.8
17	22.8	19.7	21.3	17.7	12.6	14.9	19.1	14.2	16.2	19.4	18.4	19.0
18	22.0	19.5	20.9	19.9	12.6	16.3	19.9	14.0	16.2	18.8	17.3	18.0
19	23.1	13.0	20.4	21.7	18.3	19.9	19.8	13.6	16.1	19.2	16.8	17.8
20	19.4	12.9	15.8	22.3	18.4	20.4	18.9	14.4	16.3	19.4	16.4	17.9
21	20.8	18.1	19.4	22.7	13.4	20.1	20.1	15.3	18.1	19.4	16.3	17.8
22	19.5	16.2	17.8	19.9	13.0	16.5	21.3	16.2	19.9	19.5	15.8	17.4
23	19.4	18.6	19.0	21.7	16.8	19.0	19.8	14.7	17.3	20.2	16.6	18.2
24	20.7	17.5	19.0	21.0	15.8	18.2	19.0	14.7	16.8	19.9	17.1	18.5
25	20.2	18.8	19.3	19.8	13.2	16.6	18.8	14.5	16.2	20.0	17.9	18.8
26	20.8	18.2	19.3	22.6	16.4	20.6	18.9	14.6	16.2	20.6	17.8	18.9
27	20.0	18.5	19.2	20.2	14.4	17.3	20.4	14.4	16.8	18.8	17.8	18.4
28	18.5	17.5	17.8	21.9	19.0	20.3	20.7	14.8	17.7	19.1	18.2	18.6
29	20.9	17.1	18.5	21.9	18.9	20.6	21.1	16.6	18.8	20.1	17.7	18.7
30	17.2	12.5	15.2	21.3	16.9	18.9	20.5	16.2	18.0	19.7	17.4	18.5
31	---	---	---	19.3	13.2	16.5	21.2	16.1	18.5	---	---	---
MONTH	23.1	12.5	18.7	22.7	12.2	17.7	21.9	12.7	16.7	21.8	15.2	18.1

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03565442 OOSTANAULA CREEK AT HWY 30 NEAR ATHENS, TN

LOCATION.--Lat 35°25'58", long 84°35'09", McMinn County, Hydrologic Unit 06020002, on right bank 100 ft downstream from bridge on State Highway 30, 0.8 mi southeast of Courthouse in Athens, TN.

DRAINAGE AREA.--26.3 mi^2.

PERIOD OF RECORD.--May 2003 to October 2004.

GAGE.--Data logger.

REMARKS.--Records good except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREMES PERIOD OF RECORD.--Maximum discharge unknown, maximum gage height 16.65 ft, May 6, 2003; minimum discharge 8.1 ft^3/s, Sept. 15, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 813 ft^3/s, Sept. 17, maximum gage height 8.09 ft; minimum discharge, 8.1 ft^3/s, Sept. 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	68	61	104	46	24
2	---	---	---	---	---	---	---	69	58	265	44	24
3	---	---	---	---	---	---	---	72	58	108	42	26
4	---	---	---	---	---	---	---	63	71	78	40	34
5	---	---	---	---	---	---	---	906	53	68	37	27
6	---	---	---	---	---	---	---	e3,430	50	70	41	28
7	---	---	---	---	---	---	---	873	57	63	37	27
8	---	---	---	---	---	---	---	504	55	59	33	26
9	---	---	---	---	---	---	---	293	50	57	34	24
10	---	---	---	---	---	---	---	209	47	70	32	24
11	---	---	---	---	---	---	---	209	72	66	30	23
12	---	---	---	---	---	---	---	150	69	52	31	23
13	---	---	---	---	---	---	---	129	53	58	39	25
14	---	---	---	---	---	---	---	115	48	65	32	28
15	---	---	---	---	---	---	---	104	44	48	29	33
16	---	---	---	---	---	---	---	144	47	45	30	27
17	---	---	---	---	---	---	---	117	160	42	32	25
18	---	---	---	---	---	---	---	142	82	40	38	30
19	---	---	---	---	---	---	---	112	60	40	30	26
20	---	---	---	---	---	---	---	112	52	38	29	27
21	---	---	---	---	---	---	---	140	48	39	28	28
22	---	---	---	---	---	---	---	252	45	51	27	68
23	---	---	---	---	---	---	---	138	43	43	29	31
24	---	---	---	---	---	---	---	117	41	38	27	21
25	---	---	---	---	---	---	---	102	40	36	25	18
26	---	---	---	---	---	---	---	92	38	37	24	18
27	---	---	---	---	---	---	---	82	45	38	24	45
28	---	---	---	---	---	---	---	75	38	40	23	36
29	---	---	---	---	---	---	---	70	36	43	23	23
30	---	---	---	---	---	---	---	67	44	38	25	22
31	---	---	---	---	---	---	---	65	---	55	24	---
TOTAL	---	---	---	---	---	---	---	9,021	1,665	1,894	985	841
MEAN	---	---	---	---	---	---	---	291	55.5	61.1	31.8	28.0
MAX	---	---	---	---	---	---	---	3,430	160	265	46	68
MIN	---	---	---	---	---	---	---	63	36	36	23	18
CFSM	---	---	---	---	---	---	---	11.1	2.11	2.32	1.21	1.07
IN.	---	---	---	---	---	---	---	12.76	2.36	2.68	1.39	1.19

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

MEAN	---	---	---	---	---	---	---	291	55.5	61.1	31.8	28.0
MAX	---	---	---	---	---	---	---	291	55.5	61.1	31.8	28.0
(WY)	---	---	---	---	---	---	---	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	---	---	---	---	---	---	---	291	55.5	61.1	31.8	28.0
(WY)	---	---	---	---	---	---	---	(2003)	(2003)	(2003)	(2003)	(2003)

e Estimated

03565442 OOSTANAULA CREEK AT HWY 30 NEAR ATHENS, TN—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

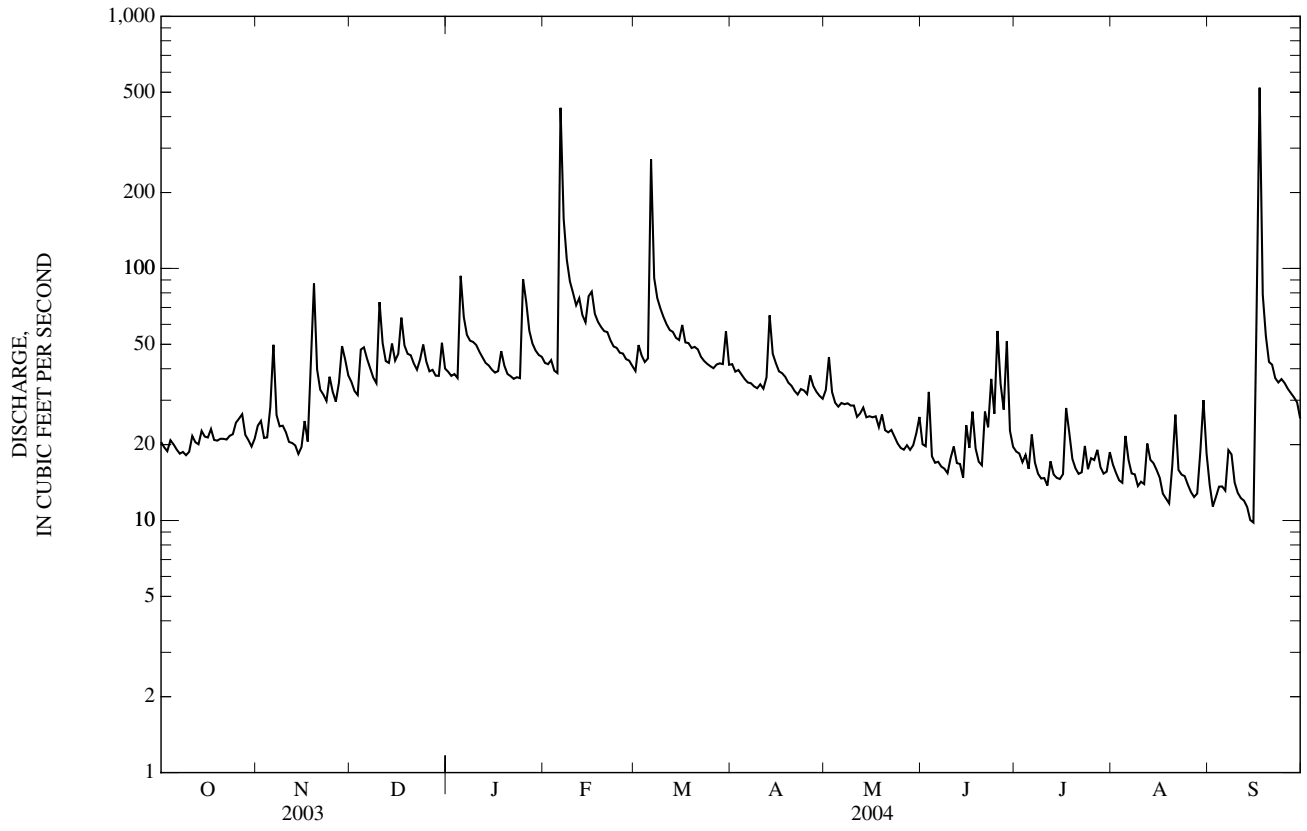
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	24	35	39	42	39	42	33	20	19	17	14
2	20	25	33	37	42	50	39	45	20	18	15	11
3	19	21	31	38	43	45	40	32	32	17	14	12
4	21	21	48	37	39	43	38	29	18	18	14	14
5	20	28	49	93	38	44	36	28	17	16	22	14
6	19	50	44	64	434	271	35	29	17	22	17	13
7	18	26	40	55	157	92	35	29	16	17	15	19
8	19	24	37	52	108	76	34	29	16	15	15	18
9	18	24	35	51	89	69	33	29	15	15	14	14
10	19	22	73	50	80	64	35	29	18	15	14	13
11	22	21	50	47	71	60	33	26	20	14	14	12
12	20	20	43	44	76	57	37	27	17	17	20	12
13	20	20	42	42	65	56	65	28	17	15	17	11
14	23	18	50	41	61	53	46	26	15	15	17	10
15	22	20	43	40	78	52	42	26	24	15	16	9.8
16	21	25	46	39	81	60	39	26	19	15	15	64
17	23	21	64	39	66	51	38	26	27	28	13	521
18	21	42	49	47	61	51	37	23	19	22	12	79
19	21	87	46	41	59	48	35	26	17	18	12	54
20	21	40	45	38	56	49	34	23	17	16	16	43
21	21	33	42	37	56	48	33	22	27	15	26	41
22	21	32	40	36	52	45	32	23	23	16	16	37
23	22	30	44	37	49	43	33	22	36	20	15	35
24	22	37	50	37	48	42	33	20	27	16	15	36
25	24	32	43	91	46	41	32	19	56	18	14	35
26	25	30	39	74	46	40	38	19	35	17	13	33
27	26	35	40	57	44	42	34	20	28	19	12	32
28	22	49	38	50	43	42	32	19	51	16	13	31
29	21	43	37	47	41	42	31	20	23	15	19	29
30	20	38	51	45	---	56	30	22	20	16	30	25
31	21	---	40	45	---	41	---	26	---	19	18	---
TOTAL	652	938	1,367	1,490	2,171	1,812	1,101	801	707	534	500	1,291.8
MEAN	21.0	31.3	44.1	48.1	74.9	58.5	36.7	25.8	23.6	17.2	16.1	43.1
MAX	26	87	73	93	434	271	65	45	56	28	30	521
MIN	18	18	31	36	38	39	30	19	15	14	12	9.8
CFSM	0.80	1.19	1.68	1.83	2.85	2.22	1.40	0.98	0.90	0.65	0.61	1.64
IN.	0.92	1.33	1.93	2.11	3.07	2.56	1.56	1.13	1.00	0.76	0.71	1.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	21.0	31.3	44.1	48.1	74.9	58.5	36.7	158	39.5	39.2	24.0	35.5
MAX	21.0	31.3	44.1	48.1	74.9	58.5	36.7	291	55.5	61.1	31.8	43.1
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2004)
MIN	21.0	31.3	44.1	48.1	74.9	58.5	36.7	25.8	23.6	17.2	16.1	28.0
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	13,364.8			
ANNUAL MEAN	36.5		36.5	
HIGHEST ANNUAL MEAN			36.5	2004
LOWEST ANNUAL MEAN			36.5	2004
HIGHEST DAILY MEAN	521	Sep 17	3,430	May 6, 2003
LOWEST DAILY MEAN	9.8	Sep 15	9.8	Sep 15, 2004
ANNUAL SEVEN-DAY MINIMUM	12	Sep 9	12	Sep 9, 2004
MAXIMUM PEAK FLOW	813	Sep 17		
MAXIMUM PEAK STAGE	8.09	Sep 17	16.65	May 6, 2003
INSTANTANEOUS LOW FLOW	8.1	Sep 15	8.1	Sep 15, 2004
ANNUAL RUNOFF (CFSM)	1.39		1.39	
ANNUAL RUNOFF (INCHES)	18.90		18.86	
10 PERCENT EXCEEDS	56		56	
50 PERCENT EXCEEDS	31		31	
90 PERCENT EXCEEDS	15		15	

03565442 OOSTANAULA CREEK AT HWY 30 NEAR ATHENS, TN—Continued



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03566000 HIWASSEE RIVER AT CHARLESTON, TN

LOCATION.--Lat 35°17'16", long 84°45'07", until April 9, 1996, lat 35°17'17", long 84°45'10", until Nov. 10, 1998, lat 35°17'42", long 84°45'36" thereafter, Hydrologic Unit 06020002, on left bank 250 ft upstream from Norfolk Southern Railway bridge until April 9, 1996, at Norfolk Southern Railway bridge until Nov. 10, 1998, on right bank at dolphin at Bowater Southern Paper Company's barge facility thereafter, 0.3 mi downstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.2.

DRAINAGE AREA.--2,298 mi^2.

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.--Data collection platform and accoustic velocity meter. Datum of gage is 665.56 ft above NGVD of 1929. Prior to July 18, 1925, non- recording gages, and July 18, 1925 to September 6, 1926, water-stage recorder, at present site, at datum 1.50 ft higher. September 1926 to January 1940, January 1963 to January 1977, September 1979 to December 1981, August 1987 to April 1996, on left bank 250 ft upstream of present site, at same datum.

REMARKS.--Records good except for estimated discharges, which are poor. Some diversions above gage for industrial and municipal water supplies. Flow regulated by seven reservoirs (see p. 358 and Water Resources Data for Georgia and North Carolina). 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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,200 ft^3/s, Sept. 17; maximum gage height, 22.54 ft, Sept. 17; minimum daily, 1,090 ft^3/s, May 27, minimum gage height, 10.67 ft, Mar. 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

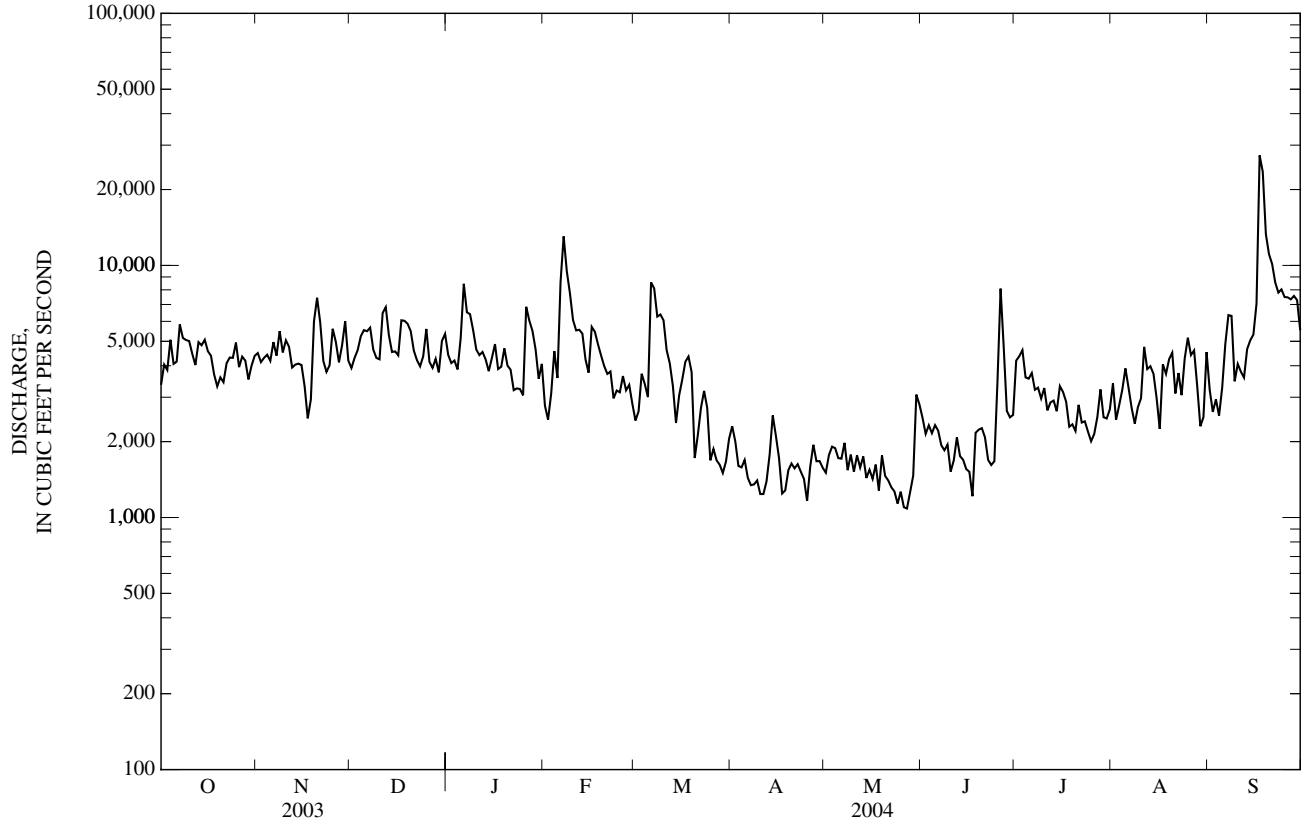
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,360	4,490	3,920	4,420	2,780	2,430	2,300	1,510	2,480	4,190	3,400	3,210
2	4,040	4,130	4,290	4,100	2,440	2,640	2,000	1,770	2,150	4,360	2,440	2,620
3	3,850	4,300	4,620	4,190	3,100	3,720	1,600	1,910	2,320	4,610	2,790	2,940
4	5,070	4,420	5,240	3,870	4,570	3,380	1,580	1,880	2,160	3,600	3,210	2,530
5	4,070	4,180	5,540	5,150	3,580	3,000	1,690	1,720	2,330	3,550	3,900	3,270
6	4,150	4,960	5,480	8,450	8,590	8,570	1,440	1,710	2,210	3,740	3,270	4,870
7	5,830	4,390	5,660	6,510	13,000	8,110	1,340	1,980	1,940	3,210	2,720	6,350
8	5,150	5,480	4,630	6,410	9,490	6,270	1,350	1,540	1,850	3,270	2,360	6,310
9	5,060	4,520	4,300	5,530	7,770	6,390	1,400	1,780	1,950	2,960	2,740	3,470
10	5,010	5,050	4,240	4,640	6,070	6,060	1,240	1,520	1,520	3,260	2,970	4,060
11	4,460	4,760	6,470	4,410	5,520	4,610	1,240	1,770	1,680	2,660	4,750	3,790
12	4,030	3,930	6,830	4,540	5,550	4,090	1,390	1,580	2,080	2,860	3,880	3,590
13	4,960	4,040	5,290	4,240	5,360	3,320	1,780	1,750	1,750	2,910	3,980	4,660
14	4,820	4,080	4,540	3,800	4,240	2,370	2,540	1,430	1,690	2,640	3,710	5,040
15	5,070	4,030	4,560	4,290	3,760	3,050	2,110	1,550	1,560	3,320	2,970	5,320
16	4,570	3,310	4,400	4,870	5,710	3,530	1,730	1,420	1,520	3,150	2,250	7,060
17	4,380	2,470	6,060	3,880	5,460	4,150	1,250	1,620	1,210	2,880	4,050	27,300
18	3,690	2,940	6,030	3,960	4,870	4,350	1,280	1,280	2,170	2,290	3,710	23,500
19	3,310	6,000	5,870	4,690	4,390	3,770	1,540	1,760	2,230	2,340	4,250	13,300
20	3,600	7,440	5,480	4,010	3,980	1,720	1,640	1,460	2,260	2,200	4,500	11,100
21	3,440	5,930	4,590	3,860	3,710	2,130	1,570	1,400	2,080	2,800	3,110	10,100
22	4,090	4,170	4,210	3,200	3,790	2,720	1,630	1,320	1,690	2,380	3,740	8,550
23	4,310	3,780	3,980	3,250	2,970	3,180	1,520	1,270	1,620	2,410	3,060	7,800
24	4,300	4,020	4,360	3,230	3,190	2,720	1,420	1,140	1,670	2,190	4,280	8,030
25	4,940	5,610	5,600	3,050	3,140	1,690	1,160	1,270	3,470	2,010	5,170	7,490
26	3,950	4,970	4,140	6,860	3,640	1,870	1,590	1,100	8,090	2,140	4,410	7,470
27	4,350	4,130	3,920	6,040	3,200	1,690	1,940	1,090	4,740	2,500	4,600	7,340
28	4,190	4,820	4,260	5,500	3,360	1,620	1,670	1,260	2,650	3,220	3,320	7,570
29	3,530	6,010	3,770	4,640	2,830	1,500	1,670	1,470	2,500	2,500	2,300	7,290
30	4,000	4,190	5,020	3,550	---	1,670	1,580	3,070	2,550	2,470	2,500	5,540
31	4,380	---	5,350	4,070	---	2,050	---	2,810	---	2,680	4,530	---
TOTAL	133,960	136,550	152,650	143,210	140,060	108,370	48,190	50,140	70,120	91,300	108,870	221,470
MEAN	4,321	4,552	4,924	4,620	4,830	3,496	1,606	1,617	2,337	2,945	3,512	7,382
MAX	5,830	7,440	6,830	8,450	13,000	8,570	2,540	3,070	8,090	4,610	5,170	27,300
MIN	3,310	2,470	3,770	3,050	2,440	1,500	1,160	1,090	1,210	2,010	2,250	2,530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	3,934	4,303	5,323	5,928	6,290	5,883	4,268	3,972	3,852	3,857	3,900	3,782
MAX	9,332	8,638	12,980	13,060	16,270	13,860	11,950	14,650	8,897	7,586	6,201	7,382
(WY)	(1990)	(1968)	(1968)	(1974)	(1990)	(1990)	(1994)	(2003)	(1989)	(2003)	(1967)	(2004)
MIN	1,442	1,681	2,070	2,318	1,623	1,866	1,110	971	1,395	1,750	1,810	1,747
(WY)	(1989)	(1982)	(1988)	(2000)	(2000)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1987)

03566000 HIWASSEE RIVER AT CHARLESTON, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	2,273,630		1,404,890			
ANNUAL MEAN	6,229		3,838		4,622	
HIGHEST ANNUAL MEAN					6,891	1990
LOWEST ANNUAL MEAN					1,940	1988
HIGHEST DAILY MEAN	62,700	May 7	27,300	Sep 17	62,700	May 7, 2003
LOWEST DAILY MEAN	1,490	Apr 2	1,090	May 27	524	May 24, 1981
ANNUAL SEVEN-DAY MINIMUM	2,210	Apr 2	1,210	May 22	817	Oct 29, 1988
MAXIMUM PEAK FLOW			34,200	Sep 17	66,800	May 7, 2003
MAXIMUM PEAK STAGE			22.54	Sep 17	29.42	Mar 28, 1994
10 PERCENT EXCEEDS	8,960		6,030		7,530	
50 PERCENT EXCEEDS	5,290		3,660		4,020	
90 PERCENT EXCEEDS	3,310		1,580		2,050	



035661285 NORTH MOUSE CREEK NEAR ROCKY MOUNT HOLLOW NEAR ATHENS, TN

LOCATION.--Lat 35°26'55", long 84°39'23", McMinn County, Hydrologic Unit 06020002, on right bank at downstream end of culvert at county road, 1.5 mi west of Athens.

DRAINAGE AREA.--42.1 mi^2

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Data collection platform. Datum of gage is 775 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1400	*2,040	*13.85	Sep 17	1300	1,760	13.52

Minimum discharge, 20 ft^3/s, Aug. 28, 29, Sept. 5, 6, 7, 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	63	68	75	67	65	49	28	38	26	22
2	32	22	60	66	74	82	62	55	28	39	24	22
3	31	22	57	64	81	77	59	56	26	35	24	23
4	30	23	92	61	74	71	57	55	27	35	23	23
5	29	31	84	159	72	69	55	51	26	33	27	21
6	29	98	70	117	1,230	439	54	49	25	30	25	20
7	28	52	64	98	431	169	53	48	27	29	22	26
8	28	36	61	92	214	138	52	46	27	28	22	35
9	27	32	59	91	171	125	51	43	28	24	22	26
10	27	31	141	83	148	114	49	41	28	23	22	23
11	26	30	101	76	132	105	49	41	32	24	22	22
12	26	31	81	74	138	97	55	40	32	26	29	22
13	26	32	74	72	123	89	116	39	33	e25	26	21
14	27	28	101	69	112	84	88	38	34	e25	23	22
15	26	28	84	66	133	82	74	38	35	25	22	22
16	26	34	82	62	145	94	69	38	35	24	22	57
17	26	32	133	58	123	81	65	36	34	25	22	1,330
18	25	59	99	78	117	79	61	35	34	26	22	226
19	25	198	90	71	111	75	59	34	34	25	22	113
20	24	90	80	64	107	71	57	32	33	24	26	94
21	24	74	74	59	102	69	e55	33	40	25	33	82
22	24	63	71	57	95	66	e60	31	37	24	23	72
23	24	55	77	55	90	64	e60	31	44	25	23	65
24	24	71	98	53	87	62	e55	31	35	23	23	60
25	23	62	75	159	81	60	e50	30	62	23	23	54
26	24	56	70	148	79	59	e55	29	46	25	23	50
27	30	61	66	113	76	57	54	29	36	30	22	48
28	25	92	63	101	72	55	54	29	66	25	21	48
29	23	77	63	91	69	54	54	29	48	24	22	45
30	23	67	103	86	---	89	50	29	39	24	28	42
31	23	---	76	80	---	70	---	29	---	27	27	---
TOTAL	818	1,609	2,512	2,591	4,562	2,913	1,797	1,194	1,059	838	741	2,736
MEAN	26.4	53.6	81.0	83.6	157	94.0	59.9	38.5	35.3	27.0	23.9	91.2
MAX	33	198	141	159	1,230	439	116	56	66	39	33	1,330
MIN	23	22	57	53	69	54	49	29	25	23	21	20
CFSM	0.63	1.27	1.92	1.99	3.74	2.23	1.42	0.91	0.84	0.64	0.57	2.17
IN.	0.72	1.42	2.22	2.29	4.03	2.57	1.59	1.06	0.94	0.74	0.65	2.42

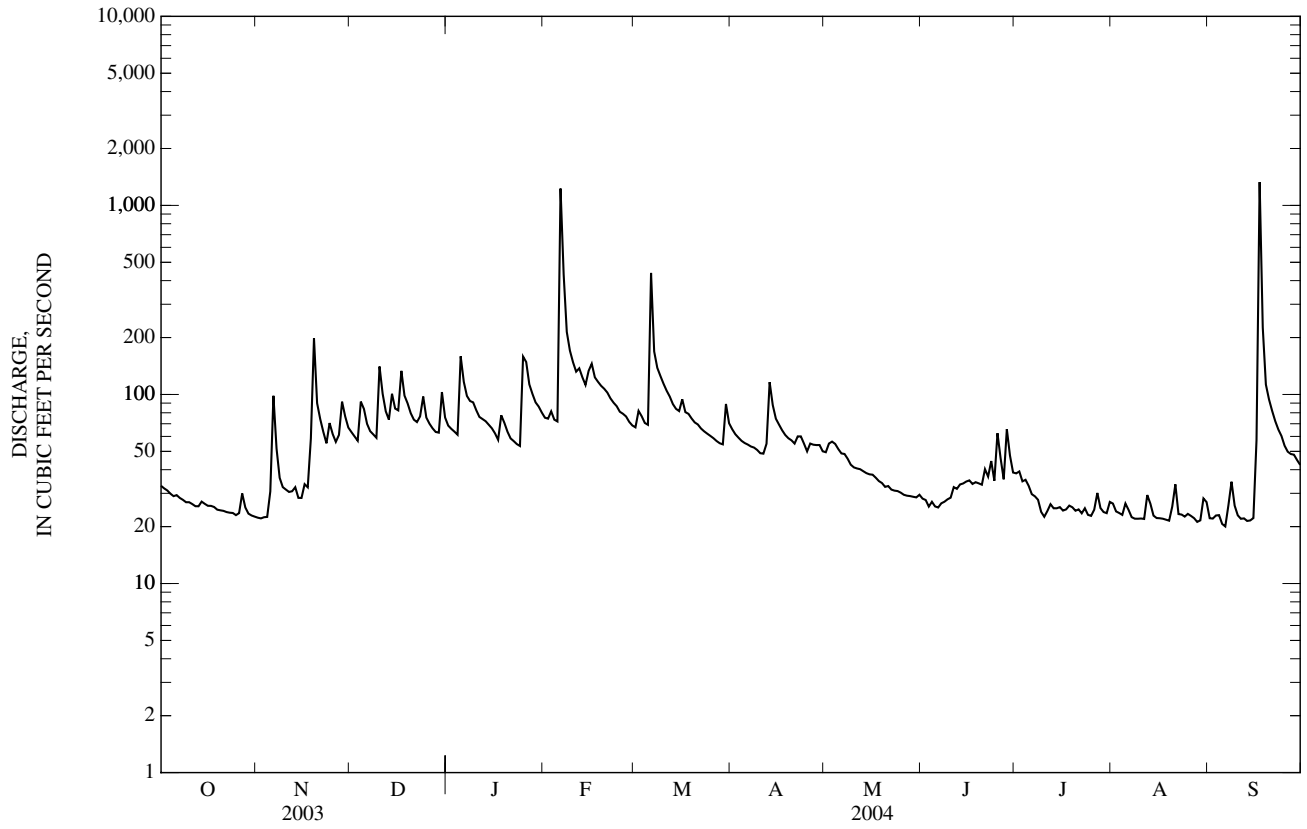
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	31.4	49.4	68.7	125	153	153	133	116	67.5	51.6	35.1	38.1
MAX	59.5	113	139	225	312	297	381	477	191	113	80.7	91.2
(WY)	(1996)	(1996)	(1997)	(1996)	(2003)	(1994)	(1994)	(2003)	(1997)	(1994)	(1994)	(2004)
MIN	15.1	15.2	19.7	48.2	58.2	64.2	53.1	38.5	32.2	25.7	21.2	19.7
(WY)	(1994)	(2002)	(2000)	(2000)	(2000)	(2000)	(1995)	(2004)	(2002)	(2002)	(2002)	(2001)

035661285 NORTH MOUSE CREEK NEAR ROCKY MOUNT HOLLOW NEAR ATHENS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	45,028		23,370			
ANNUAL MEAN	123		63.9		84.6	
HIGHEST ANNUAL MEAN					132	2003
LOWEST ANNUAL MEAN					48.1	2000
HIGHEST DAILY MEAN	7,000	May 6	1,330	Sep 17	7,000	May 6, 2003
LOWEST DAILY MEAN	22	Nov 1	20	Sep 6	13	Oct 28, 1993
ANNUAL SEVEN-DAY MINIMUM	23	Oct 29	22	Aug 23	13	Nov 17, 2001
MAXIMUM PEAK FLOW			2,040	Feb 6	5,790	Apr 11, 1994
MAXIMUM PEAK STAGE			13.85	Feb 6	a17.70	May 6, 2003
INSTANTANEOUS LOW FLOW			b20	Aug 28	c12	Oct 28, 1993
ANNUAL RUNOFF (CFSM)	2.93		1.52		2.01	
ANNUAL RUNOFF (INCHES)	39.79		20.65		27.32	
10 PERCENT EXCEEDS	186		101		153	
50 PERCENT EXCEEDS	66		49		51	
90 PERCENT EXCEEDS	29		23		22	

a From high-water mark.
b Also occurred Aug. 29, Sept. 5, 6, 7, 14.
c Also occurred Oct. 29, 1993; Nov. 19, 21, 2001.
e Estimated



03566525 NORTH CHICKAMAUGA CREEK NEAR MONTLAKE, TN

LOCATION.--Lat 35°14'18", long 85°14'09", Hamilton County, Hydrologic Unit 06020001, at Bowater Pocket Wilderness Park near Montlake, Tennessee.

DRAINAGE AREA.--60.55 mi^2.

PERIOD OF RECORD.--November 2000 to current year.

GAGE.--Electronic data logger and staff gage.

REMARKS.--Records good except for estimated daily discharges, which are fair and discharges above 8,000 ft^3/s, which are poor. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft^3/s, Sept. 17, 2004, gage height, 19.03 ft; minimum discharge, 0 many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft^3/s, Sept. 17, gage height, 19.03 ft; minimum discharge, 2.5 ft^3/s, Aug. 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	4.1	184	219	105	49	197	28	52	1,290	5.1	3.7
2	24	3.5	131	173	91	114	158	118	28	857	6.5	3.9
3	22	3.4	106	141	84	213	128	197	22	602	8.7	4.0
4	20	3.2	271	118	72	192	107	147	21	266	7.6	4.2
5	17	9.7	401	240	97	188	89	112	18	185	6.4	3.6
6	14	50	292	321	3,060	2,420	75	84	13	125	4.8	3.1
7	13	118	223	249	936	777	64	60	10	120	4.0	4.3
8	11	61	167	193	470	366	56	43	9.1	93	e3.4	50
9	9.1	43	131	162	287	243	47	34	7.9	66	e3.4	46
10	8.7	35	795	129	227	185	39	28	7.1	43	e3.3	25
11	17	31	658	107	188	150	36	25	6.8	33	e3.3	17
12	13	29	367	94	190	122	45	23	9.5	27	e3.4	11
13	11	32	258	83	187	102	78	21	15	26	e3.3	8.4
14	9.5	31	338	73	166	87	89	20	12	22	e3.2	6.7
15	8.4	29	319	67	264	79	88	18	12	19	e3.5	5.5
16	7.1	32	253	58	414	140	83	17	13	16	e3.4	349
17	6.1	55	393	53	293	152	75	18	10	12	e3.3	5,640
18	5.7	90	332	75	232	141	64	21	10	11	e3.3	825
19	5.2	682	267	91	194	126	55	22	18	9.3	e3.2	267
20	4.9	387	198	81	161	111	47	17	13	7.6	e3.6	147
21	4.6	239	155	78	135	104	42	12	10	7.5	e3.4	95
22	4.4	163	130	74	111	88	47	9.7	10	5.7	e4.5	61
23	4.0	120	120	68	97	77	43	8.4	12	4.9	5.8	40
24	3.7	112	166	63	87	69	36	7.5	19	4.4	4.6	31
25	3.5	107	145	582	77	58	31	6.8	193	4.0	3.9	26
26	3.4	93	128	832	71	50	34	6.3	285	3.9	3.3	22
27	4.4	116	111	430	69	44	34	6.2	131	5.2	3.0	20
28	5.6	445	96	280	62	40	28	6.2	111	11	2.7	17
29	5.5	396	87	210	54	36	26	6.2	131	8.3	6.8	14
30	5.2	262	293	169	---	176	25	32	1,280	6.3	5.8	12
31	4.9	---	286	128	---	217	---	68	---	5.6	4.6	---
TOTAL	302.9	3,781.9	7,801	5,641	8,481	6,916	1,966	1,222.3	2,489.4	3,896.7	135.1	7,762.4
MEAN	9.77	126	252	182	292	223	65.5	39.4	83.0	126	4.36	259
MAX	27	682	795	832	3,060	2,420	197	197	1,280	1,290	8.7	5,640
MIN	3.4	3.2	87	53	54	36	25	6.2	6.8	3.9	2.7	3.1
CFSM	0.16	2.08	4.16	3.01	4.83	3.68	1.08	0.65	1.37	2.08	0.07	4.27
IN.	0.19	2.32	4.79	3.47	5.21	4.25	1.21	0.75	1.53	2.39	0.08	4.77

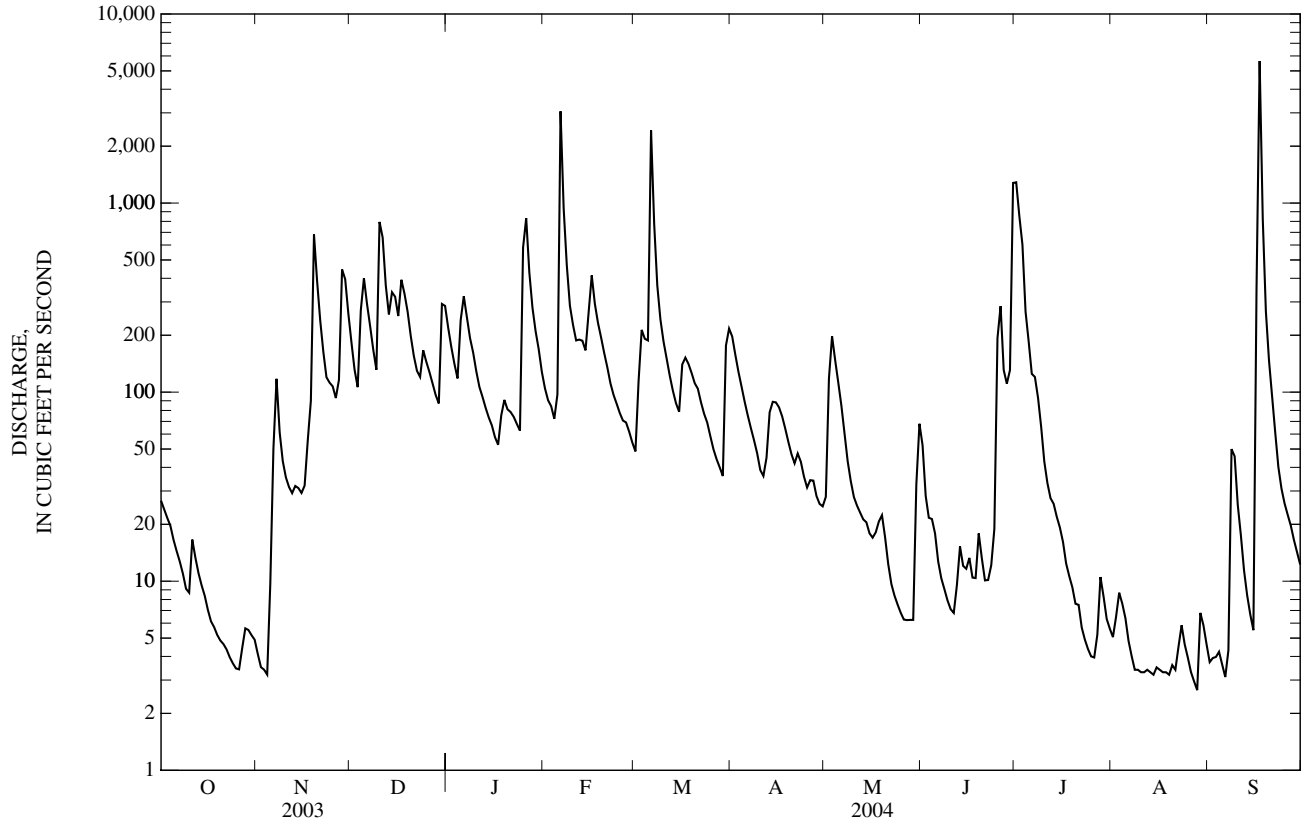
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	12.0	104	217	205	324	222	118	214	39.1	72.0	30.3	87.1
MAX	21.2	154	291	328	603	331	191	617	83.0	147	98.1	259
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)	(2004)	(2003)	(2003)	(2004)
MIN	5.05	20.1	125	59.8	105	129	65.5	36.7	3.35	5.01	0.47	8.89
(WY)	(2002)	(2002)	(2001)	(2003)	(2002)	(2003)	(2004)	(2001)	(2002)	(2002)	(2002)	(2001)

03566525 NORTH CHICKAMAUGA CREEK NEAR MONTLAKE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	69,997.6		50,395.7			
ANNUAL MEAN	192		138		147	
HIGHEST ANNUAL MEAN					198	2003
LOWEST ANNUAL MEAN					106	2002
HIGHEST DAILY MEAN	6,010	May 6	5,640	Sep 17	6,010	May 6, 2003
LOWEST DAILY MEAN	3.0	Sep 21	2.7	Aug 28	0.00	Aug 10, 2002
ANNUAL SEVEN-DAY MINIMUM	4.0	Oct 21	3.3	Aug 13	0.00	Aug 10, 2002
MAXIMUM PEAK FLOW			a11,200	Sep 17	a11,200	Sep 17, 2004
MAXIMUM PEAK STAGE			19.03	Sep 17	19.03	Sep 17, 2004
INSTANTANEOUS LOW FLOW			2.5	Aug 28	b0.00	Aug 9, 2002
ANNUAL RUNOFF (CFSM)	3.17		2.27		2.43	
ANNUAL RUNOFF (INCHES)	43.00		30.96		33.06	
10 PERCENT EXCEEDS	327		282		293	
50 PERCENT EXCEEDS	88		47		54	
90 PERCENT EXCEEDS	14		4.4		2.6	

a From rating extended above 7,340 ft^3/s.
b Also occurred many days 2002 water year.
e Estimated



0356653019 NORTH CHICKAMAUGA CREEK AT HWY 27 NEAR DAISY, TN

LOCATION.--Lat 35°12'51", long 85°12'58", Hamilton County, Hydrologic Unit 06020001, on right bank on Hwy 27 north.

DRAINAGE AREA.--63.61 mi^2.

PERIOD OF RECORD.--November 2000 to current year.

GAGE.--Data collection platform and staff gage.

REMARKS.--Records good except for discharges above 5,000 ft^3/s, which are poor. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water quality data.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft^3/s, May 6, 2003, minimum, 0.00 many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,060 ft^3/s, Sept. 17, gage height, 17.71 ft; minimum discharge, 0.00 ft^3/s, on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	0.00	198	168	79	55	145	9.2	31	1,300	0.00	0.00
2	0.14	0.00	153	134	69	104	113	72	7.8	642	0.00	0.00
3	0.00	0.00	130	107	67	200	90	147	0.19	484	0.00	0.00
4	0.00	0.00	276	89	58	177	74	105	0.00	217	0.00	0.00
5	0.00	0.00	426	175	69	169	61	78	0.00	140	0.00	0.00
6	0.00	12	302	249	3,420	2,410	51	58	0.00	88	0.00	0.00
7	0.00	131	233	186	901	629	44	40	0.00	82	0.00	0.00
8	0.00	78	184	147	443	313	38	27	0.00	63	0.00	8.1
9	0.00	54	154	124	280	199	31	18	0.00	42	0.00	22
10	0.00	37	732	100	210	143	24	10	0.00	25	0.00	2.6
11	0.00	23	624	82	168	111	21	5.3	0.00	15	0.00	0.00
12	0.00	14	365	74	168	88	26	2.1	0.00	6.5	0.00	0.00
13	0.00	22	245	65	165	72	51	0.03	0.00	2.9	0.00	0.00
14	0.00	23	319	57	151	62	59	0.00	0.00	0.14	0.00	0.00
15	0.00	16	279	51	239	55	60	0.00	0.00	0.00	0.00	0.00
16	0.00	20	214	43	402	97	56	0.00	0.00	0.00	0.00	175
17	0.00	69	340	39	291	109	50	0.00	0.00	0.00	0.00	5,490
18	0.00	93	264	54	223	100	44	0.00	0.00	0.00	0.00	846
19	0.00	632	206	70	182	89	36	0.00	0.00	0.00	0.00	272
20	0.00	402	151	63	153	77	31	0.00	0.00	0.00	0.00	133
21	0.00	245	119	62	130	72	27	0.00	0.00	0.00	0.00	78
22	0.00	178	99	58	106	61	30	0.00	0.00	0.00	0.00	44
23	0.00	140	91	53	93	53	27	0.00	0.00	0.00	0.00	29
24	0.00	131	126	47	85	47	21	0.00	0.00	0.00	0.00	18
25	0.00	127	109	499	78	41	16	0.00	98	0.00	0.00	5.9
26	0.00	113	96	727	72	34	17	0.00	207	0.00	0.00	0.50
27	0.00	129	83	363	71	28	19	0.00	75	0.00	0.00	0.00
28	0.00	431	72	216	66	24	13	0.00	56	0.00	0.00	0.00
29	0.00	416	66	159	60	20	7.4	0.00	73	0.00	0.00	0.00
30	0.00	271	216	130	---	122	5.3	1.2	1,280	0.00	0.00	0.00
31	0.00	---	219	98	---	161	---	37	---	0.00	0.00	---
TOTAL	9.34	3,807.00	7,091	4,489	8,499	5,922	1,287.7	609.83	1,827.99	3,107.54	0.00	7,124.10
MEAN	0.30	127	229	145	293	191	42.9	19.7	60.9	100	0.00	237
MAX	9.2	632	732	727	3,420	2,410	145	147	1,280	1,300	0.00	5,490
MIN	0.00	0.00	66	39	58	20	5.3	0.00	0.00	0.00	0.00	0.00
CFSM	0.00	1.99	3.60	2.28	4.61	3.00	0.67	0.31	0.96	1.58	0.00	3.73
IN.	0.01	2.23	4.15	2.63	4.97	3.46	0.75	0.36	1.07	1.82	0.00	4.17

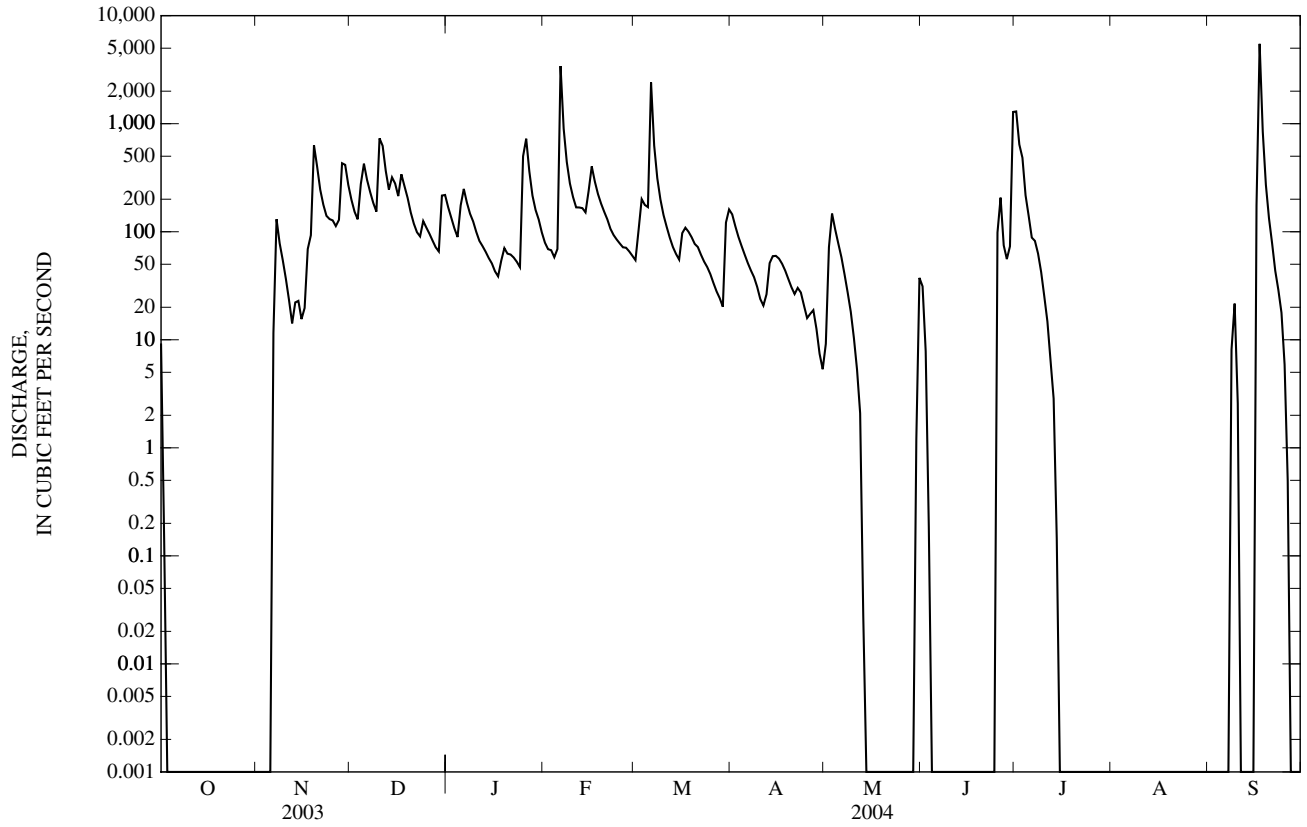
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	3.80	96.2	204	187	314	200	92.9	200	20.8	59.2	17.4	74.3
MAX	11.1	147	291	327	597	318	173	623	60.9	133	66.1	237
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)	(2004)	(2003)	(2003)	(2004)
MIN	0.00	12.7	110	42.8	85.4	106	42.9	5.31	0.11	0.00	0.00	0.00
(WY)	(2002)	(2002)	(2001)	(2003)	(2002)	(2003)	(2004)	(2001)	(2002)	(2002)	(2002)	(2001)

0356653019 NORTH CHICKAMAUGA CREEK AT HWY 27 NEAR DAISY, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	64,763.00		43,774.50			
ANNUAL MEAN	177		120		134	
HIGHEST ANNUAL MEAN					185	2003
LOWEST ANNUAL MEAN					97.2	2002
HIGHEST DAILY MEAN	6,010	May 6	5,490	Sep 17	6,010	May 6, 2003
LOWEST DAILY MEAN	0.00	Jun 3	0.00	Oct 3	a0.00	Nov 1, 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 24	0.00	Oct 3	a0.00	Nov 1, 2000
MAXIMUM PEAK FLOW			9,060	Sep 17	9,060	Sep 17, 2004
MAXIMUM PEAK STAGE			17.71	Sep 17	17.71	Sep 17, 2004
INSTANTANEOUS LOW FLOW			b0.00	Oct 2	a0.00	Oct 27, 2000
ANNUAL RUNOFF (CFSM)	2.79		1.88		2.11	
ANNUAL RUNOFF (INCHES)	37.87		25.60		28.63	
10 PERCENT EXCEEDS	348		245		282	
50 PERCENT EXCEEDS	67		31		38	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Many days most years.
b Many days.



03568000 TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.--Lat 35°05'12", long 85°16'42", Hamilton County, Hydrologic Unit 06020001, 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 mi^2, 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 NGVD 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.--Records fair. Flow regulated since 1936 by many upstream reservoirs (see p. 358 and Water Resources Data for adjoining states).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 410,000 ft^3/s, Mar. 1, 1875, gage height, 53.8 ft, present datum, at Walnut Street, from rating curve extended above 250,000 ft^3/s; minimum daily, 1,090 ft^3/s, May 18, 2004; 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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 160,000 ft^3/s, Sept. 18; maximum gage height, 30.90 ft, Sept. 17; minimum daily discharge, 1,090 ft^3/s, May 18; minimum gage height, 11.15 ft, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,700	36,800	49,900	44,100	23,600	13,100	23,500	6,960	25,000	51,100	26,000	33,200
2	33,100	34,100	49,900	45,000	27,500	17,400	19,500	5,790	25,200	53,400	30,100	26,400
3	40,100	33,900	53,600	39,600	28,800	12,400	6,660	22,400	26,700	39,200	27,100	34,500
4	37,000	33,100	60,700	39,100	40,300	24,300	3,940	5,520	19,900	37,500	28,300	35,900
5	30,000	35,300	63,500	43,200	47,200	40,100	5,220	7,430	21,400	37,200	29,400	31,200
6	31,200	32,500	65,600	50,100	74,400	47,800	6,380	11,000	28,900	35,400	31,500	33,900
7	39,100	39,900	64,600	58,200	87,900	59,600	4,730	13,000	30,000	29,600	23,600	33,100
8	37,000	42,600	64,800	60,000	79,900	70,800	6,450	6,840	19,100	31,600	16,500	37,400
9	37,000	40,100	64,800	61,800	74,800	68,400	5,100	10,100	26,600	27,700	32,500	32,400
10	30,500	37,400	65,200	48,500	73,600	68,100	4,270	11,200	29,600	22,000	24,800	35,500
11	24,600	38,100	66,500	49,000	72,300	57,500	3,830	10,300	28,500	11,000	29,900	42,600
12	32,500	38,400	63,000	48,600	68,100	43,500	5,190	11,200	25,500	29,900	26,500	39,700
13	36,600	40,900	56,300	46,100	58,400	37,000	5,970	12,000	23,700	26,600	30,900	49,500
14	30,300	34,400	56,800	42,800	52,000	36,500	5,850	11,800	28,300	25,300	27,600	60,900
15	40,500	38,600	57,800	41,800	51,600	39,800	4,050	5,560	15,500	21,300	15,800	71,500
16	36,400	38,100	57,500	41,600	52,900	32,700	4,470	4,650	27,700	24,700	22,300	87,900
17	33,800	31,200	58,000	42,800	52,600	37,800	5,460	6,450	29,500	13,800	32,700	143,000
18	29,200	39,400	58,000	42,300	48,500	32,800	4,460	1,090	30,000	10,300	31,500	153,000
19	30,300	44,500	54,900	40,100	41,200	30,400	10,300	1,670	30,100	33,600	27,400	145,000
20	36,600	43,900	49,900	46,600	41,300	15,700	12,100	7,520	26,200	18,800	32,700	123,000
21	38,200	48,000	49,700	52,100	29,000	16,200	13,000	12,000	28,100	27,600	28,500	77,900
22	35,100	56,100	47,800	48,500	20,300	31,800	13,900	6,490	15,300	20,900	17,100	62,300
23	33,700	55,900	46,100	42,800	41,700	29,500	12,700	3,410	24,300	26,000	38,100	55,900
24	34,200	55,900	46,200	42,900	41,500	29,700	10,300	15,700	35,600	14,000	28,600	54,700
25	32,100	57,600	45,700	29,900	37,700	24,200	10,700	8,680	42,400	13,600	27,100	54,800
26	29,800	61,000	45,500	36,300	41,900	31,400	11,400	4,550	44,000	28,300	23,700	54,200
27	30,900	61,500	45,200	47,500	38,100	10,900	12,600	7,040	41,500	16,600	28,600	52,500
28	30,200	55,900	44,600	45,000	38,700	6,020	15,400	10,100	42,800	18,200	35,400	49,600
29	30,400	46,600	44,500	40,100	26,400	6,820	12,200	6,940	37,900	24,600	26,200	44,900
30	35,600	55,200	44,800	42,900	---	7,430	13,700	4,240	35,800	27,900	36,800	45,200
31	34,400	---	44,400	23,600	---	19,700	---	11,200	---	26,200	30,700	---
TOTAL	1,045,100	1,306,900	1,685,800	1,382,900	1,412,200	999,370	273,330	262,830	865,100	823,900	867,900	1,801,600
MEAN	33,710	43,560	54,380	44,610	48,700	32,240	9,111	8,478	28,840	26,580	28,000	60,050
MAX	40,500	61,500	66,500	61,800	87,900	70,800	23,500	22,400	44,000	53,400	38,100	153,000
MIN	24,600	31,200	44,400	23,600	20,300	6,020	3,830	1,090	15,300	10,300	15,800	26,400

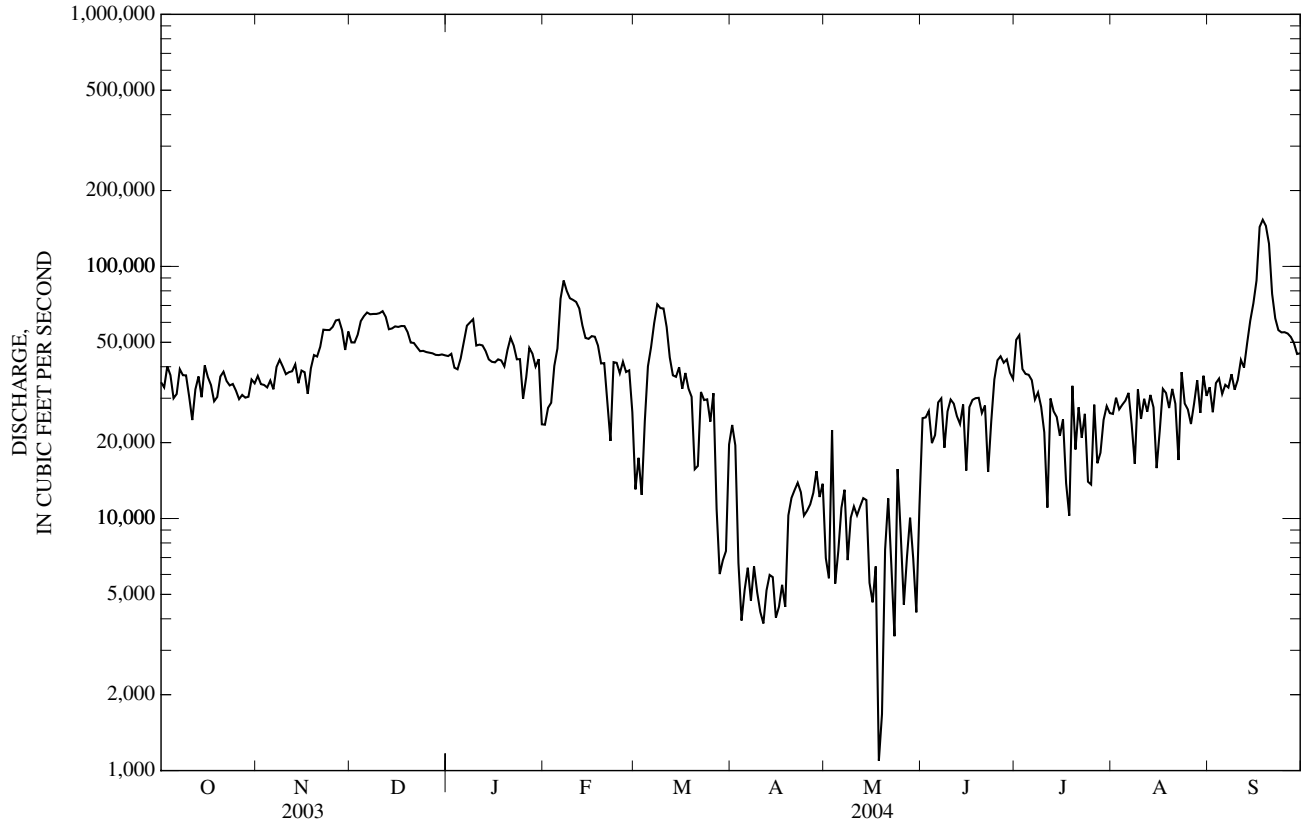
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

MEAN	29,200	34,250	43,900	48,310	50,140	46,180	28,250	28,870	29,590	29,710	31,490	29,250
MAX	63,270	68,330	94,270	127,900	132,800	98,850	107,800	87,890	65,280	49,670	43,580	60,050
(WY)	(1990)	(1958)	(1973)	(1974)	(1957)	(1963)	(1994)	(1984)	(1989)	(1989)	(2003)	(2004)
MIN	16,690	16,340	13,660	17,370	20,520	14,380	7,503	7,805	11,310	11,230	12,740	14,090
(WY)	(1984)	(1988)	(1988)	(1986)	(2000)	(1988)	(1986)	(1988)	(1988)	(1988)	(1988)	(1968)

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1954 - 2004	
ANNUAL TOTAL	18,181,000		12,726,930			
ANNUAL MEAN	49,810		34,770		35,710	
HIGHEST ANNUAL MEAN					53,260	1973
LOWEST ANNUAL MEAN					15,070	1988
HIGHEST DAILY MEAN	226,000	May 8	153,000	Sep 18	251,000	Mar 18, 1973
LOWEST DAILY MEAN	11,700	Apr 6	1,090	May 18	1,090	May 18, 2004
ANNUAL SEVEN-DAY MINIMUM	16,600	Apr 2	4,800	Apr 10	4,800	Apr 10, 2004
MAXIMUM PEAK FLOW			160,000	Sep 18	267,000	Mar 18, 1973
MAXIMUM PEAK STAGE			30.90	Sep 17	38.98	Mar 18, 1973
10 PERCENT EXCEEDS	74,400		58,000		58,400	
50 PERCENT EXCEEDS	43,000		33,100		31,300	
90 PERCENT EXCEEDS	30,100		8,330		15,500	

* Regulated period only.



03570835 SEQUATCHIE RIVER NEAR DULAP, TN

LOCATION.--Lat 35°21'34", long 85°22'20", Sequatchie County, Hydrologic Unit 06020004, on downstream side of bridge on Old York Highway near Dunlap, and at mile 44.7.

DRAINAGE AREA.--292 mi^2.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 675.551 ft above NGVD of 1929 (levels based on information provided by City of Dunlap).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	0100	3,040	9.15	Mar 6	0730	8,710	15.96
Feb 6	0945	10,300	17.55	Sep 17	0815	*11,200	*18.39

Minimum discharge, 60 ft^3/s, Nov. 3, 4.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	66	581	670	489	375	1,060	229	169	1,590	240	93
2	138	64	473	603	436	656	823	319	147	1,320	259	91
3	123	62	411	552	407	938	696	424	139	1,130	222	88
4	116	63	604	501	373	906	602	435	159	700	191	84
5	110	71	888	572	499	839	528	364	136	592	165	83
6	106	421	845	743	8,520	6,830	477	321	132	589	150	88
7	102	538	711	815	6,460	5,060	440	286	125	740	141	96
8	98	324	612	710	4,340	3,130	411	262	119	550	131	195
9	93	240	531	651	2,060	1,690	381	237	112	440	124	312
10	92	197	1,200	590	1,520	1,300	348	220	107	364	118	362
11	90	169	1,330	515	1,150	938	333	213	107	333	113	245
12	86	154	1,110	467	938	764	417	256	103	344	126	192
13	84	146	847	432	852	660	698	232	103	346	178	161
14	83	136	856	402	766	590	835	211	117	268	231	143
15	82	127	894	378	867	544	833	193	120	232	180	129
16	80	132	842	358	1,010	864	716	187	109	205	150	312
17	79	151	978	330	971	932	611	181	118	188	131	9,440
18	79	685	976	344	962	843	528	253	112	173	120	6,070
19	79	1,820	883	375	928	790	465	239	103	159	110	4,960
20	77	1,120	774	421	881	724	423	203	109	149	103	1,870
21	75	897	673	385	815	677	391	177	99	140	104	1,120
22	72	648	602	360	723	613	370	167	104	132	113	896
23	70	489	563	338	653	563	352	162	131	126	116	662
24	69	468	642	324	606	515	333	158	143	121	122	477
25	67	484	645	619	564	470	303	149	927	119	190	401
26	69	468	600	1,170	511	435	290	141	1,260	172	119	352
27	71	441	533	1,060	468	404	279	135	675	651	110	318
28	68	571	480	840	433	378	262	129	451	391	107	286
29	69	731	445	706	398	366	248	125	352	290	107	260
30	68	702	700	624	---	1,480	237	132	1,080	217	105	244
31	67	---	723	554	---	1,390	---	152	---	186	98	---
TOTAL	2,722	12,585	22,952	17,409	39,600	36,664	14,690	6,892	7,668	12,957	4,474	30,030
MEAN	87.8	420	740	562	1,366	1,183	490	222	256	418	144	1,001
MAX	160	1,820	1,330	1,170	8,520	6,830	1,060	435	1,260	1,590	259	9,440
MIN	67	62	411	324	373	366	237	125	99	119	98	83
CFSM	0.30	1.44	2.54	1.92	4.68	4.05	1.68	0.76	0.88	1.43	0.49	3.43
IN.	0.35	1.60	2.92	2.22	5.04	4.67	1.87	0.88	0.98	1.65	0.57	3.83

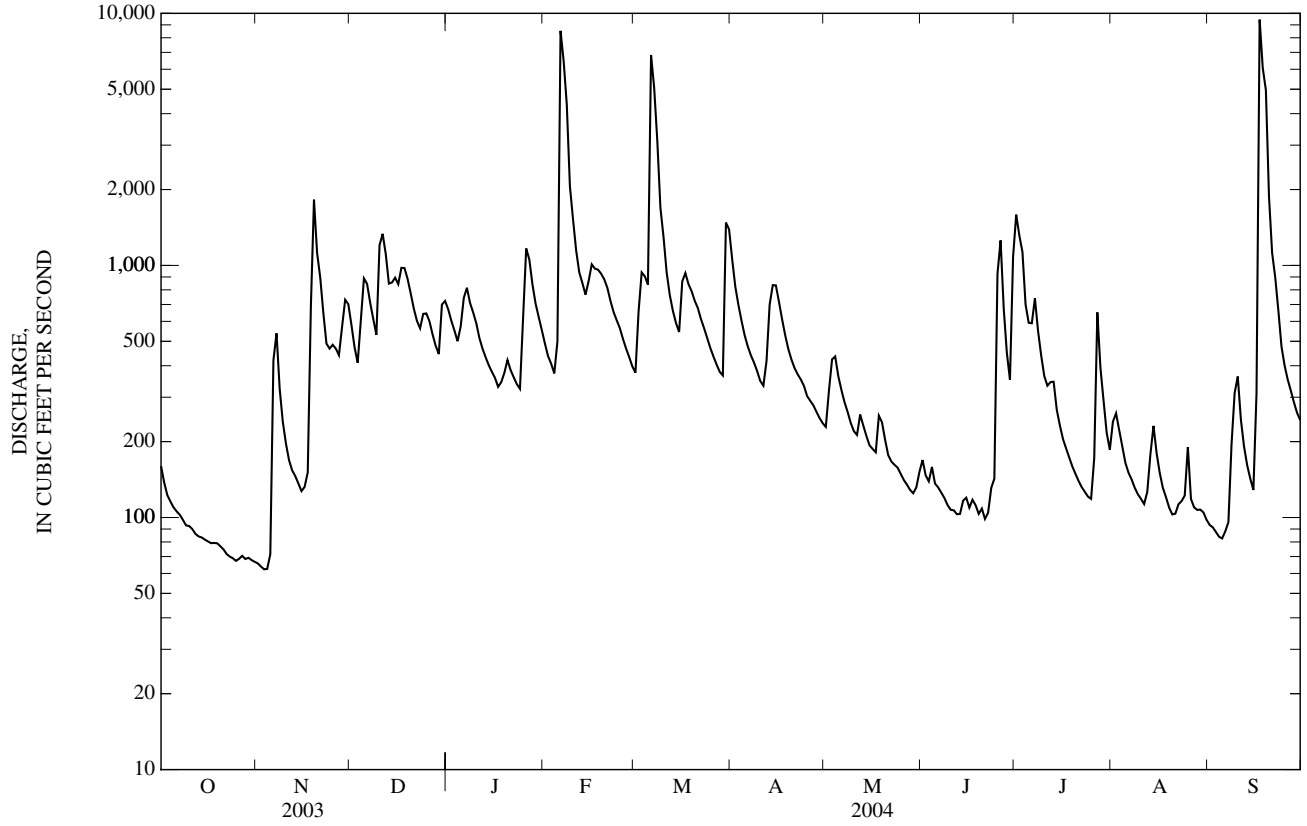
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	87.8	420	740	562	1,366	1,183	490	222	256	446	195	590
MAX	87.8	420	740	562	1,366	1,183	490	222	256	474	246	1,001
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)
MIN	87.8	420	740	562	1,366	1,183	490	222	256	418	144	179
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)

03570835 SEQUATCHIE RIVER NEAR DULAP, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	208,643			
ANNUAL MEAN	570		570	
HIGHEST ANNUAL MEAN			570	2004
LOWEST ANNUAL MEAN			570	2004
HIGHEST DAILY MEAN	9,440	Sep 17	9,440	Sep 17, 2004
LOWEST DAILY MEAN	62	Nov 3	62	Nov 3, 2003
ANNUAL SEVEN-DAY MINIMUM	66	Oct 29	66	Oct 29, 2003
MAXIMUM PEAK FLOW	11,200	Sep 17	11,200	Sep 17, 2004
MAXIMUM PEAK STAGE	18.39	Sep 17	18.39	Sep 17, 2004
INSTANTANEOUS LOW FLOW	a60	Nov 3	a60	Nov 3, 2003
ANNUAL RUNOFF (CFSM)	1.95		1.95	
ANNUAL RUNOFF (INCHES)	26.58		26.53	
10 PERCENT EXCEEDS	945		945	
50 PERCENT EXCEEDS	355		355	
90 PERCENT EXCEEDS	98		98	

a Also occurred Nov. 4.



03571000 SEQUATCHIE RIVER NEAR WHITWELL, TN

LOCATION.--Lat 35°12'23", long 85°29'49", 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 283, 4.5 mi downstream from Griffith Creek, and at mile 25.1.

DRAINAGE AREA.--402 mi^2, includes 18 mi^2 without surface drainagae.

PERIOD OF RECORD.--October 1920 to September 1994, October 1, 2001 to September 30, 2002. Prior to December 1920, monthly discharges only, published in WSP 1306.

REVISED RECORD.--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: Drainagae area. WDR TN-76-1: 1973-75(P).

GAGE.--Data collection platform. Datum of gage is 632.73 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Prior to Sept. 18, 1927, nonrecording gage at same 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 fair. Prior to 1950, some diurnal fluctuation caused by small mills above station. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 7	0100	15,600	15.35	Sep 18	0100	*18,400	*15.81
Mar 6	2345	10,200	14.33				

Minimum discharge, 86 ft^3/s, Nov. 4.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

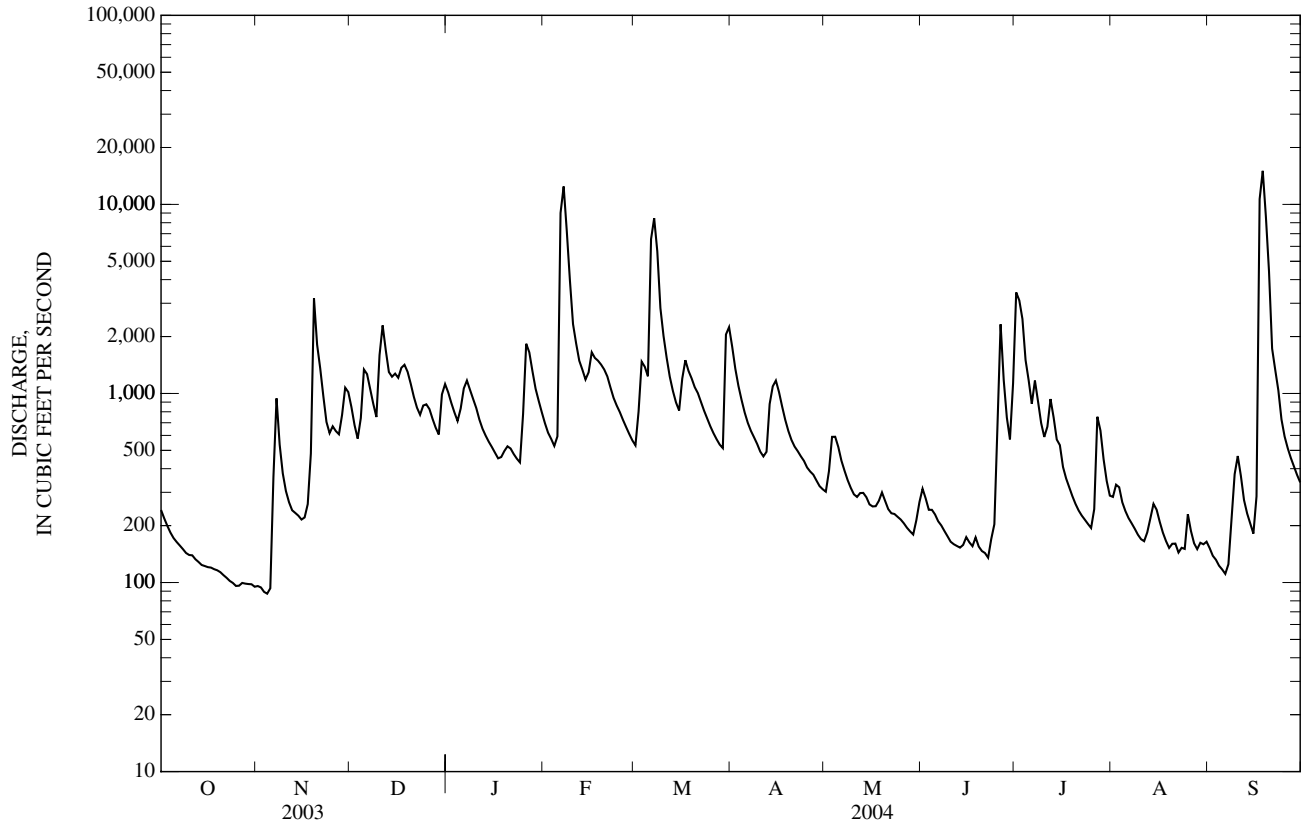
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	96	847	1,010	696	532	1,770	302	313	3,420	284	152
2	219	94	679	891	620	802	1,350	388	278	3,100	329	139
3	200	89	577	794	575	1,470	1,100	589	242	2,480	319	132
4	184	87	741	715	528	1,380	925	590	242	1,500	266	123
5	172	93	1,340	832	593	1,230	793	521	229	1,170	239	117
6	164	361	1,270	1,060	9,010	6,550	699	441	211	882	219	111
7	157	942	1,060	1,170	12,400	8,450	634	390	200	1,170	206	125
8	150	536	881	1,040	7,230	5,650	586	348	187	907	192	216
9	143	378	750	934	3,970	2,830	541	317	176	697	179	374
10	140	305	1,590	837	2,330	2,010	492	293	164	589	170	467
11	139	266	2,290	727	1,840	1,550	464	283	159	668	165	366
12	133	241	1,690	651	1,490	1,230	491	297	156	934	184	273
13	129	233	1,300	598	1,340	1,030	879	298	153	746	219	232
14	124	226	1,230	555	1,190	896	1,090	283	158	571	261	205
15	122	215	1,270	521	1,290	812	1,170	259	174	533	243	181
16	121	221	1,210	486	1,650	1,200	1,020	253	163	409	209	286
17	120	260	1,370	454	1,540	1,500	854	253	156	355	184	10,700
18	118	481	1,420	461	1,490	1,320	725	271	173	319	166	15,100
19	116	3,180	1,300	496	1,420	1,200	633	300	155	286	152	8,630
20	113	1,810	1,130	525	1,340	1,080	568	270	147	261	160	4,430
21	109	1,360	960	511	1,230	1,000	524	245	143	241	161	1,730
22	106	967	841	478	1,080	902	495	232	135	226	144	1,330
23	102	707	771	452	947	810	465	230	170	215	153	1,040
24	100	617	863	432	863	737	440	223	203	204	151	729
25	96	670	876	778	797	670	406	215	677	194	230	593
26	96	632	827	1,830	725	617	386	206	2,320	244	187	514
27	100	608	733	1,650	665	573	372	195	1,180	753	161	456
28	99	770	659	1,310	611	536	346	187	746	636	150	411
29	98	1,070	607	1,060	565	514	323	179	572	449	162	371
30	98	1,020	988	914	---	2,050	311	213	1,130	345	159	339
31	95	---	1,120	794	---	2,240	---	267	---	288	164	---
TOTAL	4,105	18,535	33,190	24,966	60,025	53,371	20,852	9,338	11,112	24,792	6,168	49,872
MEAN	132	618	1,071	805	2,070	1,722	695	301	370	800	199	1,662
MAX	242	3,180	2,290	1,830	12,400	8,450	1,770	590	2,320	3,420	329	15,100
MIN	95	87	577	432	528	514	311	179	135	194	144	111
CFSM	0.34	1.61	2.79	2.10	5.39	4.48	1.81	0.78	0.96	2.08	0.52	4.33
IN.	0.40	1.80	3.22	2.42	5.81	5.17	2.02	0.90	1.08	2.40	0.60	4.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2004, BY WATER YEAR (WY)

MEAN	182	468	1,023	1,353	1,589	1,635	1,222	718	363	294	208	191
MAX	1,626	3,471	3,935	3,736	4,126	3,508	3,449	4,116	2,381	1,770	863	1,662
(WY)	(1990)	(1958)	(1991)	(1937)	(1994)	(1973)	(1994)	(2003)	(1928)	(1989)	(1926)	(2004)
MIN	27.1	32.4	51.9	74.0	271	364	228	179	71.6	68.6	46.9	23.1
(WY)	(1932)	(1932)	(1940)	(1981)	(1941)	(1988)	(1986)	(1941)	(1988)	(1986)	(1957)	(1925)

03571000 SEQUATCHIE RIVER NEAR WHITWELL, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1921 - 2004	
ANNUAL TOTAL	423,232		316,326			
ANNUAL MEAN	1,160		864		767	
HIGHEST ANNUAL MEAN					1,284	1973
LOWEST ANNUAL MEAN					305	1981
HIGHEST DAILY MEAN	26,400	May 7	15,100	Sep 18	32,300	Dec 23, 1990
LOWEST DAILY MEAN	87	Nov 4	87	Nov 4	16	Sep 6, 1925
ANNUAL SEVEN-DAY MINIMUM	93	Oct 30	93	Oct 30	18	Sep 6, 1925
MAXIMUM PEAK FLOW			18,400	Sep 18	35,400	Dec 23, 1990
MAXIMUM PEAK STAGE			15.81	Sep 18	18.02	Dec 23, 1990
INSTANTANEOUS LOW FLOW			86	Nov 4	16	Sep 6, 1925
ANNUAL RUNOFF (CFSM)	3.02		2.25		2.00	
ANNUAL RUNOFF (INCHES)	41.00		30.64		27.12	
10 PERCENT EXCEEDS	2,200		1,490		1,770	
50 PERCENT EXCEEDS	522		504		344	
90 PERCENT EXCEEDS	149		144		62	



03578000 ELK RIVER NEAR PELHAM, TN

LOCATION.--Lat 35°17'48", long 85°52'11", 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 mi^2.

PERIOD OF RECORD.--October 1951 to November 1987, November 2000 to current year.

REVISED RECORDS.--WRD TN 1973: 1963(P), 1965(M), 1966(P), 1969(M), 1970-71(P).

GAGE.--Data collection platform. Datum of gage is 980.99 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Gage at datum 0.63 ft higher prior to Nov. 30, 1987.

REMARKS.--No estimated daily discharges. Records good. 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, 15,800 ft^3/s, Mar. 16, 1973, gage height, 14.08 ft; minimum, 1.0 ft^3/s, Sept. 27, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1000	*4,960	*11.88	Jun 25	2330	2,600	10.59
Mar 6	0930	3,280	11.05	Sep 17	1700	2,400	10.44

Minimum daily discharge, 16 ft^3/s, several days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	18	206	266	106	84	148	98	205	662	88	66
2	44	17	158	209	94	764	125	163	96	409	88	44
3	37	16	132	176	102	775	106	228	63	244	577	36
4	32	16	193	152	98	382	92	198	66	205	219	31
5	29	16	272	291	277	289	79	152	54	212	118	27
6	26	163	240	328	3,330	2,180	70	114	40	143	85	24
7	25	243	203	238	1,580	1,080	64	87	34	183	59	21
8	25	126	173	194	658	468	60	68	30	385	45	36
9	23	79	147	189	387	313	55	55	27	205	36	121
10	22	58	302	167	296	236	49	47	25	134	31	74
11	21	48	388	135	243	192	47	45	22	100	28	49
12	23	42	266	121	249	160	182	45	20	252	59	37
13	22	41	207	108	247	135	938	41	22	232	53	30
14	21	44	256	98	208	117	929	59	32	218	36	26
15	21	38	256	90	276	109	461	51	32	211	30	23
16	25	46	210	78	361	384	297	46	35	128	25	35
17	22	135	274	71	307	300	219	44	28	91	22	1,560
18	20	212	251	113	293	220	173	48	25	134	20	1,210
19	19	796	227	175	280	186	141	69	22	100	18	311
20	18	629	189	126	259	156	116	48	21	67	17	169
21	18	326	156	109	226	142	100	37	19	50	23	111
22	17	218	138	98	185	122	87	32	33	41	36	81
23	17	164	146	88	160	104	89	32	143	35	31	62
24	16	225	299	80	145	92	82	31	237	31	37	48
25	16	256	236	294	135	82	115	26	886	31	28	40
26	16	192	184	482	122	74	345	23	1,820	77	23	35
27	17	179	154	307	118	68	252	21	537	250	21	32
28	22	395	131	219	103	63	172	19	289	154	18	29
29	22	415	122	174	92	64	127	18	242	92	17	27
30	20	280	519	150	---	170	103	173	264	62	112	25
31	19	---	389	125	---	162	---	292	---	93	143	---
TOTAL	730	5,433	7,024	5,451	10,937	9,673	5,823	2,410	5,369	5,231	2,143	4,420
MEAN	23.5	181	227	176	377	312	194	77.7	179	169	69.1	147
MAX	55	796	519	482	3,330	2,180	938	292	1,820	662	577	1,560
MIN	16	16	122	71	92	63	47	18	19	31	17	21
CFSM	0.36	2.76	3.45	2.68	5.75	4.76	2.96	1.19	2.73	2.57	1.05	2.25
IN.	0.41	3.08	3.98	3.09	6.20	5.49	3.30	1.37	3.04	2.97	1.22	2.51

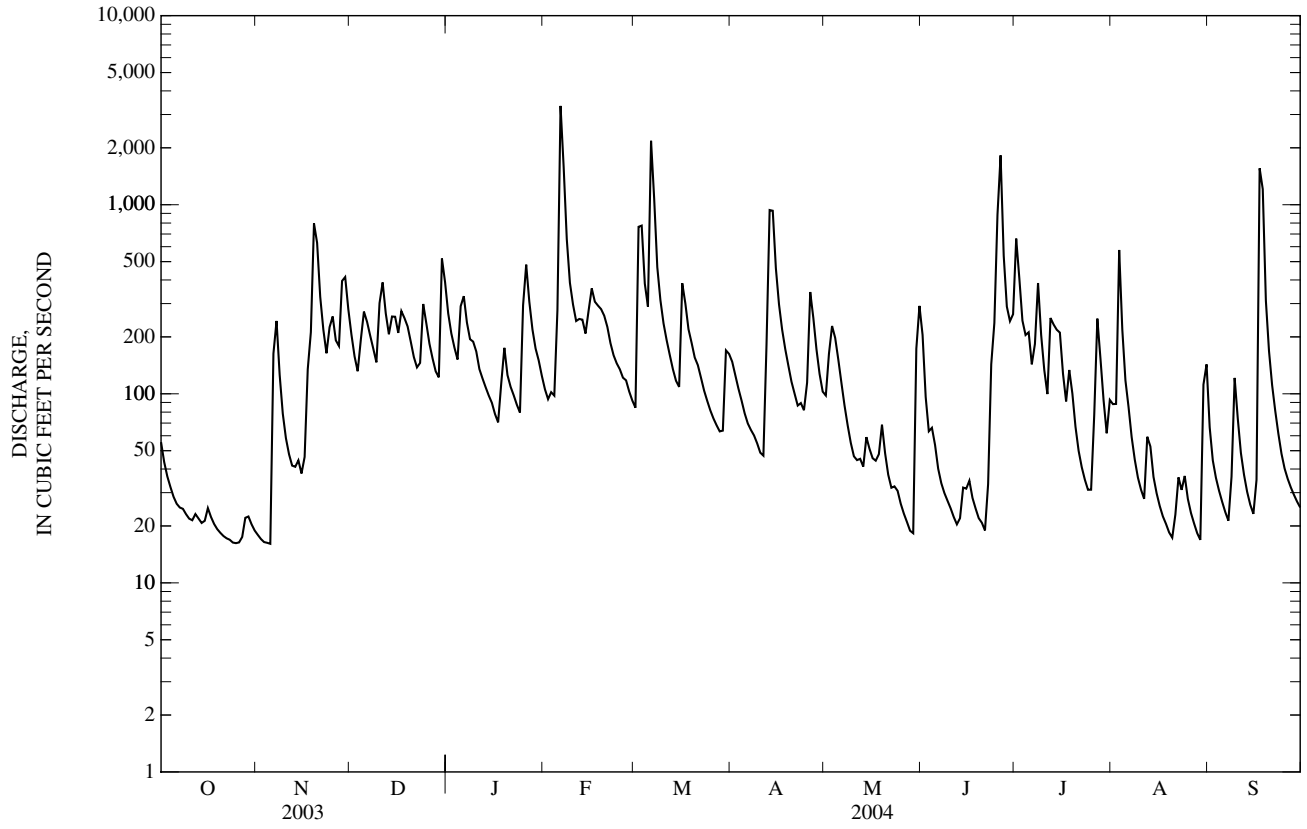
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004, BY WATER YEAR (WY)

MEAN	41.9	117	212	243	274	280	220	150	46.4	45.7	31.6	29.8
MAX	341	562	475	679	615	707	522	584	179	350	168	174
(WY)	(1976)	(1958)	(1973)	(1974)	(2003)	(1973)	(1977)	(2003)	(2004)	(2003)	(2001)	(1979)
MIN	1.92	2.24	18.2	31.5	67.3	103	50.2	18.8	7.24	3.66	2.39	1.69
(WY)	(1979)	(1957)	(1964)	(1981)	(1968)	(1985)	(1986)	(1987)	(1982)	(1954)	(1980)	(1954)

03578000 ELK RIVER NEAR PELHAM, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1952 - 2004	
ANNUAL TOTAL	77,649.7		64,644			
ANNUAL MEAN	213		177		141	
HIGHEST ANNUAL MEAN					235	1973
LOWEST ANNUAL MEAN					61.3	1981
HIGHEST DAILY MEAN	5,160	May 6	3,330	Feb 6	8,800	Mar 16, 1973
LOWEST DAILY MEAN	6.7	Sep 20	16	Oct 24	1.0	Sep 27, 1954
ANNUAL SEVEN-DAY MINIMUM	7.4	Sep 15	17	Oct 21	1.2	Sep 23, 1954
MAXIMUM PEAK FLOW			4,960	Feb 6	15,800	Mar 16, 1973
MAXIMUM PEAK STAGE			11.88	Feb 6	a14.08	Mar 16, 1973
INSTANTANEOUS LOW FLOW					b1.0	Sep 27, 1954
ANNUAL RUNOFF (CFSM)	3.24		2.69		2.15	
ANNUAL RUNOFF (INCHES)	44.03		36.66		29.19	
10 PERCENT EXCEEDS	421		312		310	
50 PERCENT EXCEEDS	93		103		55	
90 PERCENT EXCEEDS	17		22		4.4	

a Previous datum
b Also occurred Sept. 28.



03578500 BRADLEY CREEK NEAR PRAIRIE PLAINS, TN

LOCATION.--Lat 35°21'21", long 85°58'45", Coffee County, Hydrologic Unit 06030003, bridge on county road, 1.1 mi northwest of Prairie Plains, 3.6 mi upstream from Elk River.

DRAINAGE AREA.--41.3 mi^2.

PERIOD OF RECORD.--October 1951 to November 1959, water year 1960 (annual maximum only). October 1960 to September 1980, crest-stage partial record station. December 2003 to September 2004.

GAGE.--Data collection platform and radar stage sensor. Datum of gage is 968.13 ft above NGVD of 1929, supplementary adjustment of 1936.

REMARKS.--Records good except for discharges below 40 ft^3/s and estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0800	*3,920	*13.03	Apr 13	1430	1,030	7.16
Mar 6	0800	3,100	11.67	Jun 26	0015	1,670	8.89

Minimum discharge, 24 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR DECEMBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e62	83	66	42	44	56	42	129	e55	39
2	---	---	e43	71	64	326	42	69	39	103	e60	36
3	---	---	e35	63	72	188	40	70	45	85	64	35
4	---	---	e60	57	65	114	39	65	44	173	53	34
5	---	---	e55	104	599	128	38	57	40	124	51	33
6	---	---	e49	97	2,740	1,770	38	53	38	94	48	33
7	---	---	e45	69	450	268	38	50	37	117	45	30
8	---	---	e41	62	215	161	38	48	36	235	43	29
9	---	---	e37	63	155	125	37	46	34	116	42	29
10	---	---	e200	57	126	98	37	44	33	121	40	30
11	---	---	e140	49	104	83	36	43	32	100	40	30
12	---	---	e100	45	114	73	76	42	32	478	51	28
13	---	---	e80	41	95	66	559	41	32	315	41	26
14	---	---	e90	39	79	60	215	40	31	204	40	27
15	---	---	e80	37	129	57	116	40	31	149	39	27
16	---	---	e92	35	170	73	87	39	30	105	38	29
17	---	---	99	34	152	63	73	38	30	90	39	413
18	---	---	73	38	148	57	64	38	29	98	38	93
19	---	---	64	42	125	53	58	37	29	76	35	61
20	---	---	56	36	104	49	55	37	28	69	36	53
21	---	---	49	34	84	46	51	36	28	63	36	49
22	---	---	45	32	69	45	48	35	31	59	35	45
23	---	---	49	31	62	45	62	34	50	55	33	42
24	---	---	88	30	59	43	51	34	69	52	34	39
25	---	---	62	118	56	40	60	33	592	52	34	36
26	---	---	54	146	54	39	169	33	606	169	33	35
27	---	---	50	105	52	39	90	32	153	194	32	33
28	---	---	46	88	47	40	70	32	115	78	34	30
29	---	---	49	81	43	41	61	31	96	63	36	28
30	---	---	258	76	---	58	57	43	115	e58	36	25
31	---	---	113	70	---	50	---	51	---	e56	40	---
TOTAL	---	---	2,364	1,933	6,298	4,340	2,449	1,347	2,547	3,880	1,281	1,477
MEAN	---	---	76.3	62.4	217	140	81.6	43.5	84.9	125	41.3	49.2
MAX	---	---	258	146	2,740	1,770	559	70	606	478	64	413
MIN	---	---	35	30	43	39	36	31	28	52	32	25
CFSM	---	---	1.85	1.51	5.26	3.39	1.98	1.05	2.06	3.03	1.00	1.19
IN.	---	---	2.13	1.74	5.67	3.91	2.21	1.21	2.29	3.49	1.15	1.33

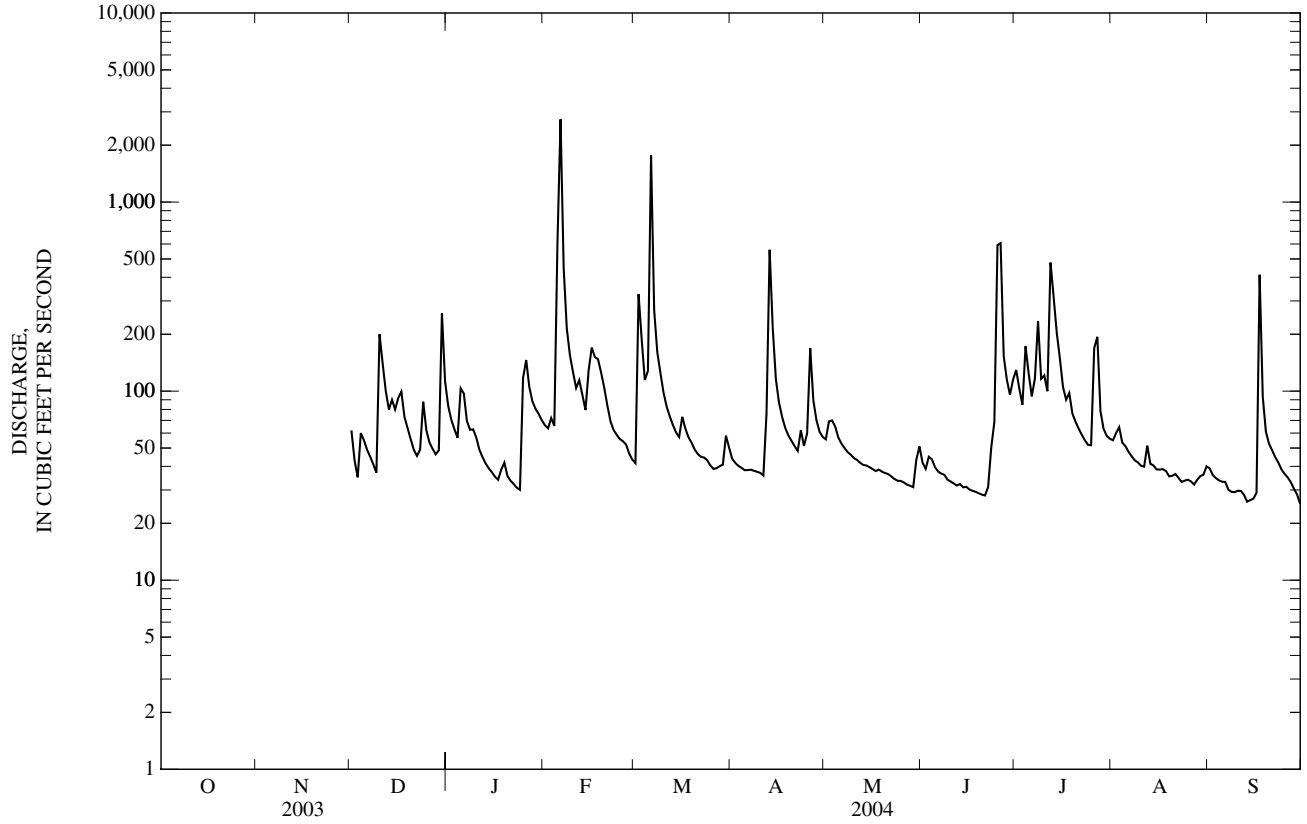
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004, BY WATER YEAR (WY)

MEAN	6.68	43.4	83.9	115	177	119	104	52.2	38.7	45.8	16.7	14.4
MAX	13.9	269	226	226	321	245	212	138	110	141	42.5	49.2
(WY)	(1958)	(1958)	(1952)	(1952)	(1956)	(1955)	(1955)	(1958)	(1955)	(1958)	(1958)	(2004)
MIN	4.28	3.62	5.08	49.6	76.4	63.2	45.1	16.4	9.88	7.00	6.28	4.79
(WY)	(1953)	(1957)	(1953)	(1956)	(1954)	(1954)	(1952)	(1952)	(1956)	(1952)	(1957)	(1954)

03578500 BRADLEY CREEK NEAR PRAIRIE PLAINS, TN—Continued

SUMMARY STATISTICS	WATER YEARS 1952 - 2004	
ANNUAL MEAN	64.9	
HIGHEST ANNUAL MEAN	97.7	1958
LOWEST ANNUAL MEAN	36.9	1959
HIGHEST DAILY MEAN	2,740	Feb 6, 2004
LOWEST DAILY MEAN	3.2	Nov 23, 1954
ANNUAL SEVEN-DAY MINIMUM	3.4	Nov 29, 1956
MAXIMUM PEAK FLOW	5,660	Mar 17, 1973
MAXIMUM PEAK STAGE	14.46	Mar 17, 1973
INSTANTANEOUS LOW FLOW	3.2	Nov 23, 1954
ANNUAL RUNOFF (CFSM)	1.57	
ANNUAL RUNOFF (INCHES)	21.35	
10 PERCENT EXCEEDS	138	
50 PERCENT EXCEEDS	23	
90 PERCENT EXCEEDS	4.5	

e Estimated



03584020 RICHLAND CREEK AT HWY 64 NEAR PULASKI, TN

LOCATION.--Lat 35°12'38", long 87°06'01", Giles County, Hydrologic Unit 06030004, bridge on Highway 64, 4.1 miles west of Pulaski.

DRAINAGE AREA.--366 mi^2.

PERIOD OF RECORD.--April 27, 1934 to September 30, 1975 published as "near Pulaski", February 2001 to current year.

GAGE.--Data collection platform and pressure sensor. Datum of gage is 637.29 ft above NGVD of 1929. April 27, 1934 to September 30, 1975, recording at gage at site 1,200 ft upstream at datum 5.25 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,630 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0215	*32,900	*25.80	Jun 28	1600	7,170	18.49
Mar 6	1715	9,790	20.31	Aug 25	1600	6,230	17.60
Jun 26	1230	10,700	20.78	Sep 17	1015	4,850	15.83

Minimum discharge, 76 ft^3/s, occurred several days during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	85	917	896	343	568	451	246	1,120	1,800	219	395
2	165	83	660	750	307	3,060	408	283	591	1,570	176	1,160
3	150	81	538	647	328	2,420	373	305	730	1,290	153	851
4	141	81	521	556	292	1,800	345	284	940	3,000	140	574
5	131	81	477	772	8,720	1,700	318	249	587	3,520	131	445
6	127	82	426	1,060	23,400	8,910	300	220	429	1,700	128	359
7	124	83	378	845	7,540	4,850	292	196	339	1,230	118	301
8	116	80	345	738	3,110	2,470	291	178	293	1,090	110	265
9	109	77	320	695	2,120	1,780	272	165	252	807	105	231
10	105	77	662	588	1,610	1,290	252	155	220	701	100	203
11	104	77	1,030	501	1,210	981	254	145	194	686	98	185
12	100	79	785	456	1,160	804	644	141	171	560	123	171
13	97	83	649	419	1,010	671	1,720	167	259	523	113	166
14	98	82	621	386	891	583	2,140	175	248	538	100	156
15	99	79	549	361	1,890	528	1,570	264	268	1,120	92	144
16	94	106	504	328	2,550	913	1,100	439	250	638	87	475
17	97	137	482	309	1,990	848	837	292	205	486	82	4,530
18	106	189	443	497	2,040	715	667	223	195	402	79	2,600
19	96	545	409	697	2,010	632	555	187	201	338	77	1,180
20	91	489	366	616	1,890	561	486	164	167	293	195	790
21	87	346	328	549	1,530	542	443	143	145	257	411	602
22	84	268	305	496	1,110	486	479	128	226	229	276	484
23	81	223	383	445	890	452	603	117	1,300	209	177	404
24	78	393	795	411	778	428	462	108	1,320	194	168	347
25	77	569	731	1,920	667	404	395	99	5,600	193	3,020	303
26	105	446	616	2,450	625	382	368	93	9,710	306	2,870	266
27	127	429	531	1,500	554	362	325	89	3,160	300	897	238
28	111	3,120	470	900	486	348	288	e87	4,670	226	1,100	219
29	101	2,470	486	656	447	371	263	89	3,910	186	1,440	201
30	94	1,400	1,120	527	---	536	256	1,750	2,030	168	703	185
31	88	---	1,090	418	---	499	---	1,740	---	200	507	---
TOTAL	3,362	12,340	17,937	22,389	71,498	40,894	17,157	8,921	39,730	24,760	13,995	18,430
MEAN	108	411	579	722	2,465	1,319	572	288	1,324	799	451	614
MAX	179	3,120	1,120	2,450	23,400	8,910	2,140	1,750	9,710	3,520	3,020	4,530
MIN	77	77	305	309	292	348	252	87	145	168	77	144
CFSM	0.30	1.12	1.58	1.97	6.74	3.60	1.56	0.79	3.62	2.18	1.23	1.68
IN.	0.34	1.25	1.82	2.28	7.27	4.16	1.74	0.91	4.04	2.52	1.42	1.87

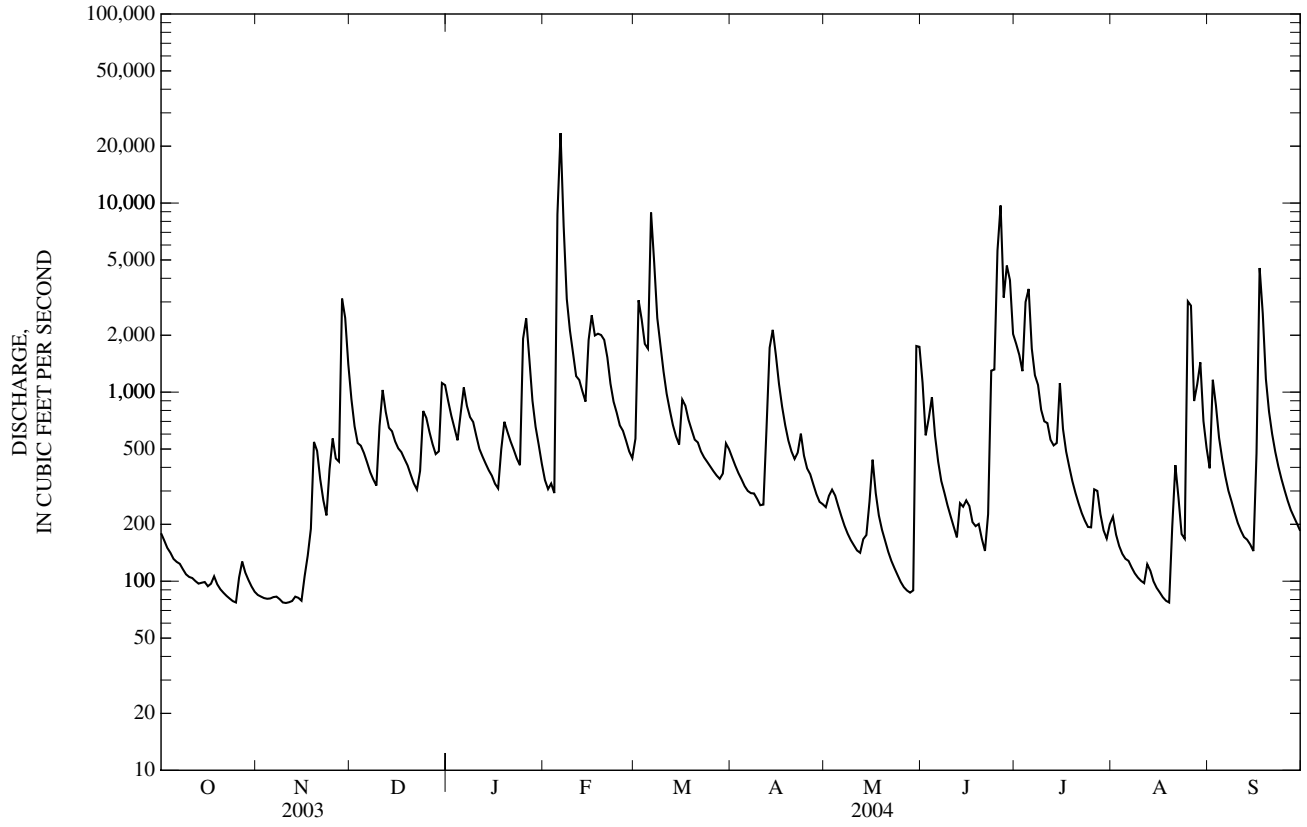
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	344	725	1,277	1,314	2,313	1,403	748	1,110	588	385	265	343
MAX	529	1,221	1,669	2,808	3,352	2,140	975	3,207	1,324	799	451	614
(WY)	(2002)	(2003)	(2003)	(2002)	(2003)	(2002)	(2002)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	108	411	579	411	737	847	540	222	118	141	61.6	152
(WY)	(2004)	(2004)	(2004)	(2003)	(2002)	(2003)	(2003)	(2001)	(2002)	(2002)	(2002)	(2002)

03584020 RICHLAND CREEK AT HWY 64 NEAR PULASKI, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	325,038		291,413			
ANNUAL MEAN	891		796		917	
HIGHEST ANNUAL MEAN					1,074	2003
LOWEST ANNUAL MEAN					796	2004
HIGHEST DAILY MEAN	26,200	May 6	23,400	Feb 6	26,200	May 6, 2003
LOWEST DAILY MEAN	46	Sep 20	77	Oct 25	28	Sep 12, 2002
ANNUAL SEVEN-DAY MINIMUM	52	Sep 15	79	Nov 9	29	Sep 9, 2002
MAXIMUM PEAK FLOW			32,900	Feb 6	55,900	Jan 23, 2002
MAXIMUM PEAK STAGE			25.80	Feb 6	27.86	Jan 23, 2002
INSTANTANEOUS LOW FLOW			a76	Oct 25	b27	Sep 13, 2002
ANNUAL RUNOFF (CFSM)	2.43		2.18		2.51	
ANNUAL RUNOFF (INCHES)	33.04		29.62		34.05	
10 PERCENT EXCEEDS	1,720		1,760		1,920	
50 PERCENT EXCEEDS	363		394		368	
90 PERCENT EXCEEDS	80		98		82	

a Also occurred several days.
b Also occurred Sept. 14, 2002.
e Estimated



03584600 ELK RIVER AT PROSPECT, TN

LOCATION.--Lat 35°00'50", long 86°59'40", Giles County, Hydrologic Unit 06030004, on right bank 25 ft upstream from county road bridge, 800 ft above abandoned L&N Railraod bridge, 0.4 mi above Ford Creek, 0.8 mi south of Prospect, 2.9 mi upstream from Tennessee-Alabama State line, and at mile 36.5.

DRAINAGE AREA.--1,805 mi^2.

PERIOD OF RECORD.--July 1904 to February 1908, January 1919 to September 1994, August 2003 to current year. Published as "near Elkmont, Ala." 1904-8, 1919-34. Record for both sites published January to March 1934. Published as "near Prospect, Tenn." 1935-89.

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.--Data collection platform and pressure sensor. Datum of gage is 558.70 ft above NGVD of 1929. July 1, 1904, to Feb. 2, 1908, and Jan. 20, 1919, to Mar. 31, 1934: nonrecording gage 6.9 mi downstream at datum 8.93 ft. lower. January 1934 to September 1989, water-stage recorder at site 5.0 mi upstream at datum 4.59 ft higher.

REMARKS.--Records good except for estimated daily discharges which are fair. Flow regulated by Woods Reservoir (station 03579000) since May 1952, and Tims Ford Lake (station 03580740) since December 1970. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data. Tennessee Valley Authority satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1902 reach a stage of 40.9 ft, site and datum then in use, discharge, 130,000 ft^3/s, and may have been equaled by a flood in March 1897, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51,700 ft^3/s, Feb. 7, gage height 29.04 ft; minimum, 446 ft^3/s, Oct. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,240	1,260	2,580	4,060	1,660	2,660	1,280	1,280	2,910	9,130	1,580	3,010
2	737	1,220	2,570	2,380	1,490	8,370	1,190	1,050	1,720	8,570	856	4,500
3	593	596	3,290	2,000	1,470	11,100	1,110	1,120	3,300	7,070	891	2,800
4	555	862	4,920	1,740	1,420	7,010	1,050	1,270	3,270	7,130	1,920	3,770
5	531	2,080	4,750	1,740	11,100	6,500	992	1,070	1,520	13,700	1,980	2,300
6	512	1,730	4,390	3,650	38,000	23,600	949	984	1,080	7,930	2,310	1,160
7	498	1,580	3,720	4,950	46,900	25,900	916	920	922	5,480	1,910	969
8	1,060	1,700	3,470	4,820	33,700	13,600	905	880	846	7,390	1,540	873
9	2,690	1,030	2,750	2,860	16,200	6,080	899	867	1,200	5,930	649	810
10	2,820	1,830	3,370	3,860	9,160	7,560	869	792	1,350	5,470	1,050	749
11	1,440	609	4,410	3,010	8,120	7,020	852	754	1,330	2,870	2,150	887
12	821	1,140	4,410	2,390	7,660	6,570	1,300	740	1,250	1,750	1,030	1,100
13	558	2,020	4,830	2,090	7,640	6,220	5,580	804	967	2,370	824	696
14	1,110	1,520	4,560	1,370	7,200	5,940	8,040	841	1,290	3,570	667	648
15	2,730	1,170	3,250	1,310	9,890	5,780	5,130	918	1,540	7,410	574	1,510
16	2,150	1,820	2,530	1,150	13,600	7,240	3,540	997	1,100	6,920	536	1,980
17	658	800	1,700	1,800	10,500	7,450	2,710	1,020	976	5,570	512	13,600
18	525	1,440	3,870	1,490	8,340	6,410	2,200	892	862	2,400	691	10,300
19	494	2,330	4,320	2,110	5,370	5,980	1,850	e801	865	1,480	2,660	4,040
20	471	1,880	4,060	2,590	4,870	4,870	1,630	e764	819	1,540	2,300	2,280
21	455	1,340	4,150	3,660	5,400	2,150	1,480	745	740	2,270	1,930	2,120
22	955	1,620	4,660	1,740	4,850	1,780	1,370	730	762	2,570	1,600	3,690
23	1,230	2,000	4,270	1,430	4,420	1,590	1,450	707	2,450	2,470	971	3,670
24	1,350	1,070	4,300	1,300	3,870	1,460	1,380	688	4,920	2,320	768	3,230
25	1,800	3,260	3,170	3,950	2,600	1,370	1,250	669	13,400	1,730	4,770	3,420
26	598	5,010	3,130	7,680	3,040	1,300	1,380	654	23,200	914	6,680	1,850
27	527	5,100	1,800	5,070	3,160	1,250	1,580	642	22,900	1,140	2,520	851
28	927	7,570	1,520	3,460	2,920	1,190	1,310	621	11,600	932	1,580	1,120
29	2,350	8,850	1,440	2,640	2,720	1,150	1,130	625	16,300	822	2,780	2,180
30	2,120	5,200	3,460	2,220	---	1,260	1,230	1,030	11,200	1,630	2,650	1,890
31	2,170	---	5,640	1,920	---	1,340	---	2,140	---	2,870	2,350	---
TOTAL	37,675	69,637	111,290	86,440	277,270	191,700	56,552	28,015	136,589	133,348	55,229	82,003
MEAN	1,215	2,321	3,590	2,788	9,561	6,184	1,885	904	4,553	4,302	1,782	2,733
MAX	2,820	8,850	5,640	7,680	46,900	25,900	8,040	2,140	23,200	13,700	6,680	13,600
MIN	455	596	1,440	1,150	1,420	1,150	852	621	740	822	512	648

WTR YR 2004 MEAN‡ 3465 CSFM‡ 1.92 IN.‡ 26.06

‡Adjusted for change in contents in Woods Reservoir and Tims Ford Lake.
Note.--Contents(cfs-days) for adjustment by Arnold Engineering Development Center and Tennessee Valley Authority.

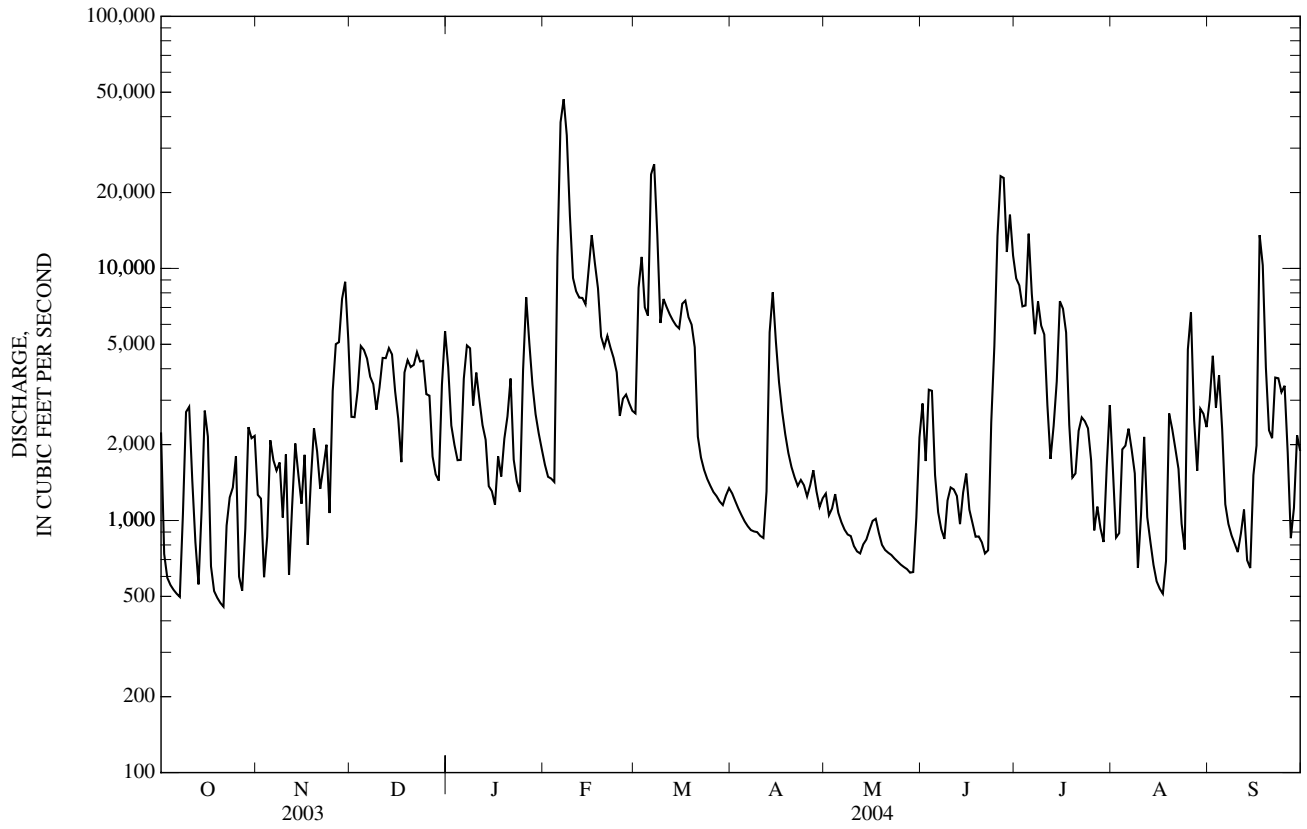
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

MEAN	1,658	2,938	5,501	5,844	5,698	6,284	4,048	2,703	1,864	1,247	896	1,167
MAX	8,699	8,888	15,320	17,290	13,680	17,700	10,220	9,806	8,011	6,260	2,439	4,389
(WY)	(1976)	(1978)	(1991)	(1974)	(1994)	(1973)	(1983)	(1983)	(1989)	(1989)	(2001)	(1979)
MIN	209	619	1,256	799	1,904	1,464	728	445	201	341	241	169
(WY)	(1988)	(1988)	(1981)	(1981)	(2000)	(1985)	(1986)	(1988)	(1988)	(1988)	(1987)	(1999)

03584600 ELK RIVER AT PROSPECT, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		*WATER YEARS 1972 - 2004	
ANNUAL TOTAL	1,265,748			
ANNUAL MEAN	3,458		3,305	
HIGHEST ANNUAL MEAN			5,214	1973
LOWEST ANNUAL MEAN			1,013	1981
HIGHEST DAILY MEAN	46,900	Feb 7	105,000	Mar 17, 1973
LOWEST DAILY MEAN	455	Oct 21	101	Sep 6, 1999
ANNUAL SEVEN-DAY MINIMUM	641	Oct 2	114	Aug 31, 1999
MAXIMUM PEAK FLOW	51,700	Feb 7	a117,000	Mar 17, 1973
MAXIMUM PEAK STAGE	29.04	Feb 7	40.12	Mar 17, 1973
INSTANTANEOUS LOW FLOW	b446	Oct 21	c78	Sep 29, 1961
10 PERCENT EXCEEDS	7,420		7,280	
50 PERCENT EXCEEDS	1,880		1,680	
90 PERCENT EXCEEDS	752		423	

* Regulated period only.
a From rating curve extended above 63,000 ft^3/s on basis of slope-area measurement of gage height 38.17 ft and contracted-opening measurement at gage height 38.96 ft, site and datum then in use.
b Also occurred Oct. 22.
c Caused by highway construction.
e Estimated



03588500 SHOAL CREEK AT IRON CITY, TN

LOCATION.--Lat 35°01'26", long 87°34'44", Lawrence County, Hydrologic Unit 06030005, on right downstream bank at 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 mi^2.

PERIOD OF RECORD.--July 1925 to September 1994, October 2000 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.--Data collection platform and pressure sensor. Datum of gage is 534.22 ft above NGVD of 1929. Prior to Feb. 25, 1931, nonrecording gage at railroad bridge, 1350 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.--No estimated daily discharges. Records good. Maximum gage height at present site and datum, 24.4 ft, from high water profile. Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREME 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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	2345	*27,500	*19.12	Jun 25	2130	11,600	13.29
Mar 6	0930	10,200	12.54				

Minimum discharge, 203 ft^3/s, Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	218	669	667	538	725	542	397	1,060	1,150	424	349
2	249	218	556	601	528	2,450	511	412	645	1,040	324	316
3	244	216	503	556	590	1,590	487	422	527	810	296	333
4	241	216	562	516	554	1,220	468	418	959	1,730	307	322
5	237	220	527	598	9,350	1,350	449	391	571	1,410	288	333
6	235	228	498	634	13,800	6,960	434	372	473	887	273	282
7	233	221	467	570	3,050	2,460	429	357	430	697	256	265
8	229	216	443	545	1,710	1,520	430	348	390	864	256	250
9	227	213	426	555	1,300	1,190	412	334	364	626	227	240
10	226	212	647	519	1,090	956	398	328	342	534	221	232
11	225	213	762	486	935	831	409	322	325	508	225	224
12	224	214	639	469	951	749	648	327	314	436	244	222
13	223	225	575	450	899	685	872	355	301	422	232	490
14	226	218	572	433	833	634	779	366	310	377	224	340
15	232	213	532	425	1,110	621	692	1,540	343	1,010	216	271
16	223	246	508	404	1,370	751	623	1,290	337	433	214	360
17	227	280	499	398	1,170	701	568	819	307	373	211	2,750
18	243	272	469	509	1,160	645	526	628	353	354	216	955
19	226	457	446	604	1,070	608	491	532	358	325	209	542
20	220	379	423	541	976	579	468	473	303	307	421	422
21	218	314	401	512	881	562	454	426	290	295	736	357
22	216	283	390	487	782	538	463	394	304	292	379	322
23	215	267	443	465	722	510	597	370	791	285	292	295
24	215	353	577	446	694	488	504	353	1,200	279	278	266
25	215	377	530	1,580	660	475	466	333	5,880	321	288	251
26	253	327	491	1,820	708	465	456	322	3,990	542	331	245
27	275	346	464	1,190	687	456	425	316	1,440	376	297	236
28	241	2,490	441	883	652	443	402	314	2,940	309	710	231
29	229	1,450	488	738	635	499	390	320	2,320	282	843	226
30	223	870	875	658	---	689	415	1,430	1,300	271	626	220
31	219	---	778	587	---	586	---	1,590	---	512	433	---
TOTAL	7,164	11,972	16,601	19,846	49,405	32,936	15,208	16,599	29,467	18,057	10,497	12,147
MEAN	231	399	536	640	1,704	1,062	507	535	982	582	339	405
MAX	275	2,490	875	1,820	13,800	6,960	872	1,590	5,880	1,730	843	2,750
MIN	215	212	390	398	528	443	390	314	290	271	209	220
CFSM	0.66	1.15	1.54	1.84	4.90	3.05	1.46	1.54	2.82	1.67	0.97	1.16
IN.	0.77	1.28	1.77	2.12	5.28	3.52	1.63	1.77	3.15	1.93	1.12	1.30

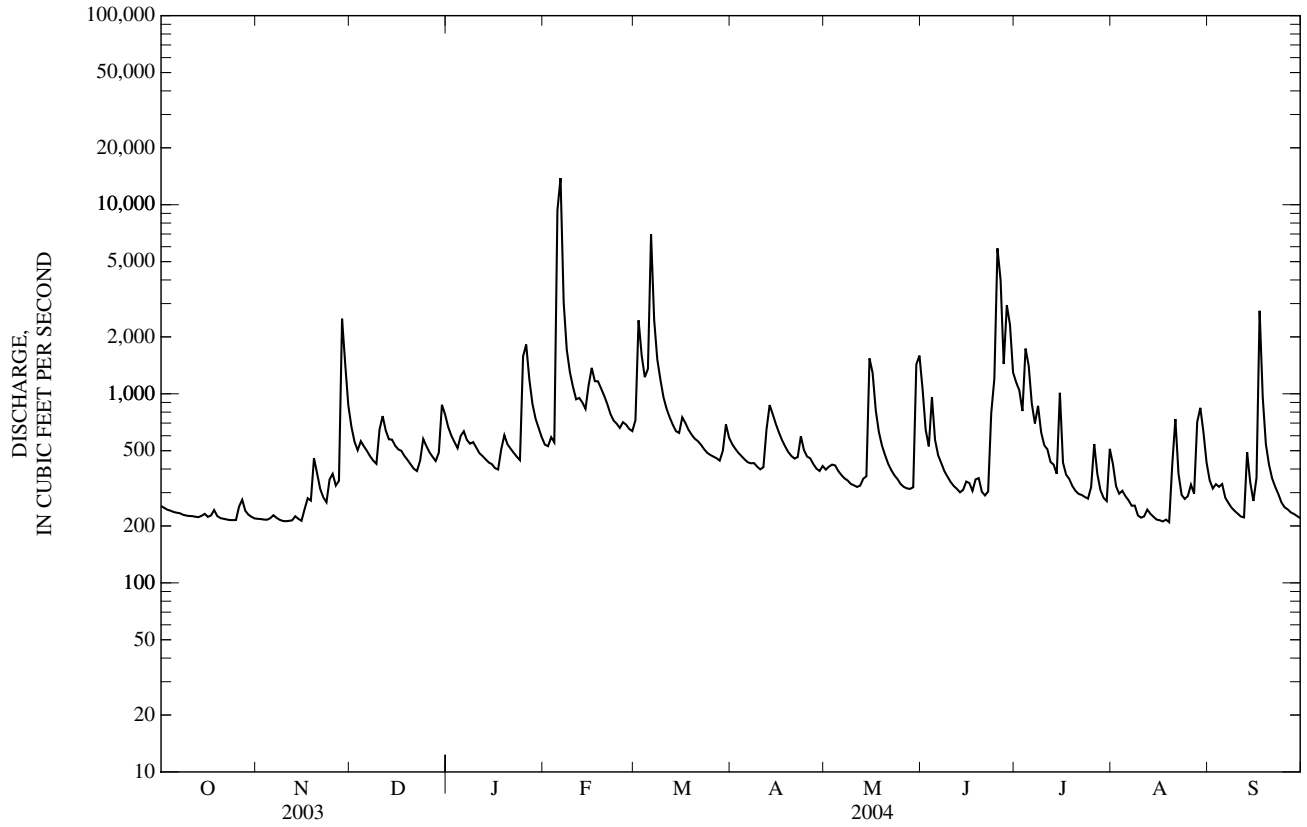
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	238	447	776	1,041	1,240	1,302	976	738	387	304	226	228
MAX	1,290	1,894	2,968	3,604	3,562	3,626	2,227	3,425	1,876	1,131	615	1,296
(WY)	(1933)	(1978)	(1927)	(1974)	(1948)	(1975)	(1964)	(1991)	(1928)	(1932)	(1926)	(1979)
MIN	69.4	123	165	170	273	373	222	169	118	105	94.8	64.8
(WY)	(1932)	(1955)	(1964)	(1981)	(1941)	(1966)	(1986)	(1936)	(1988)	(1943)	(1988)	(1925)

03588500 SHOAL CREEK AT IRON CITY, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	280,608		239,899			
ANNUAL MEAN	769		655		656	
HIGHEST ANNUAL MEAN					1,178	1973
LOWEST ANNUAL MEAN					281	1981
HIGHEST DAILY MEAN	18,500	May 6	13,800	Feb 6	44,000	Feb 13, 1948
LOWEST DAILY MEAN	212	Nov 10	209	Aug 19	41	Sep 22, 1925
ANNUAL SEVEN-DAY MINIMUM	215	Nov 9	215	Nov 9	55	Sep 3, 1925
MAXIMUM PEAK FLOW			27,500	Feb 5	a132,000	Mar 21, 1955
MAXIMUM PEAK STAGE			19.12	Feb 5	b27.25	Mar 21, 1955
INSTANTANEOUS LOW FLOW			203	Aug 19	38	Aug 31, 1943
ANNUAL RUNOFF (CFSM)	2.21		1.88		1.89	
ANNUAL RUNOFF (INCHES)	30.00		25.64		25.63	
10 PERCENT EXCEEDS	1,300		1,120		1,300	
50 PERCENT EXCEEDS	454		435		321	
90 PERCENT EXCEEDS	226		225		131	

a From rating curve extended above 50,000 ft^3/s on basis of slope-area measurement.
b Site and datum then in use (see REMARKS).



03593500 TENNESSEE RIVER AT SAVANNAH, TN

LOCATION.--Lat 35°13'29", long 88°15'26", Hardin County, Hydrologic Unit 06040001, on right bank at upstream side of bridge on U.S. Highway 64, at Savannah, 16.8 mi downstream from Pickwick Landing Dam, and at mile 189.9.

DRAINAGE AREA.--33,140 mi^2 approximately.

PERIOD OF RECORD.--September 1930 to current year. Gage-height records collected in this vicinity since June 1905, are in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 853: Drainage area. WSP 1306: 1936 (monthly runoff). WSP 2110: 1966. WRD TN-73-1: 1973-96. WRD TN- 74-1: 1973. WRD TN-85-1: 1985. WRD TN-90-1: 1989.

GAGE.--Data collection platform. Datum of gage is 350.06 ft above NGVD of 1929 (Levels by Tennessee Valley Authority). Prior to Oct. 1, 1992, at datum 50.06 ft lower, prior to Apr. 7, 1945, at datum 8.45 ft lower. Oct. 1, 1948 to Apr. 13, 1978 and Oct. 1, 1989 to present, auxiliary water-stage recorder on downstream end of lockwall in lower pool at Pickwick Landing Dam Apr. 13, 1978 to Sept. 30, 1989, auxiliary water-stage recorder over tailwater elevation well adjacent to the powerhouse which is an integral part of Pickwick Landing Dam, both sites 16.8 mi. upstream from base gage at same datum. Apr. 5, 1937, to Jan. 31, 1939, auxiliary nonrecording gage 4.0 mi downstream and Feb. 1, 1939, to Sept. 30, 1948, water-stage recorder 4.3 mi downstream from base gage at same datum.

REMARKS.--Records good, except for estimated discharges, which are fair. Slight regulation since 1924 by Wilson Lake and increasing regulation since 1936 as other reservoirs have been built above station ((see p. 358) and Water Resources Data for adjoining states). Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1867, 101.2 ft, Mar. 21, 1897, datum then in use, from floodmarks, discharge, 450,000 ft^3/s, from rating curve extended above 320,000 ft^3/s. Flood of Jan. 2, 1927, reached a stage of 92.7 ft datum then in use, discharge, 349,000 ft^3/s. Minimum stage since 1905, 38.8 ft datum then in use, Sept. 8, 1925.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 253,000 ft^3/s, Feb. 9; maximum gage height, 30.32 ft, Feb. 9, 10; minimum daily discharge, 7,360 ft^3/s, Mar. 28, minimum gage height, 4.18 ft, Nov. 16.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44,600	25,500	81,400	59,000	56,900	51,200	38,700	14,100	48,300	87,800	43,600	e33,000
2	39,800	17,900	74,500	62,300	53,700	12,500	10,400	17,700	41,100	87,300	62,000	45,100
3	43,800	36,700	75,200	40,300	52,300	57,000	8,580	16,100	42,000	77,500	59,600	37,800
4	16,900	35,700	81,200	42,600	71,100	68,300	8,820	23,600	18,300	76,500	53,300	52,900
5	13,900	45,700	80,000	61,800	91,700	76,600	8,530	22,100	13,700	79,600	53,000	47,500
6	44,200	42,500	80,000	71,900	172,000	98,200	e8,650	24,900	19,500	71,200	35,600	46,500
7	50,400	44,200	78,900	73,300	208,000	142,000	e8,800	31,100	52,000	56,900	16,200	53,900
8	59,400	50,800	71,400	72,300	233,000	159,000	9,470	19,300	53,000	60,000	31,300	49,700
9	51,800	25,800	59,300	79,500	251,000	163,000	8,910	23,800	47,200	53,800	35,200	23,600
10	38,400	33,500	92,200	80,300	225,000	165,000	9,300	21,100	31,800	33,800	49,400	33,700
11	26,400	47,500	92,600	79,400	190,000	160,000	10,100	19,300	38,900	32,300	53,100	34,900
12	9,870	38,200	92,100	62,300	177,000	131,000	10,800	21,400	26,800	38,800	14,300	23,600
13	41,400	49,500	91,200	38,100	143,000	115,000	10,000	28,300	28,900	53,400	12,800	48,800
14	48,500	47,400	89,800	59,400	111,000	108,000	13,700	e16,000	25,500	51,900	7,610	74,700
15	43,300	26,100	79,700	61,000	108,000	94,300	e16,400	26,500	28,600	38,400	10,600	102,000
16	52,500	20,800	70,700	68,800	106,000	81,800	16,100	11,200	49,500	22,200	30,400	110,000
17	42,700	42,200	71,100	51,300	96,800	80,300	e8,270	26,900	46,200	26,700	41,500	128,000
18	15,800	57,600	74,700	48,300	104,000	64,800	e8,540	30,500	35,300	23,500	38,200	159,000
19	28,500	70,100	77,300	64,900	103,000	53,300	23,500	18,100	21,000	47,700	38,400	170,000
20	43,900	68,900	77,300	75,500	92,100	29,400	29,000	40,700	16,300	41,100	49,800	170,000
21	54,000	62,600	76,900	72,300	82,700	9,980	22,800	16,500	48,700	45,700	13,200	163,000
22	50,900	51,500	75,700	75,200	82,500	47,200	25,000	11,700	41,300	41,500	16,100	154,000
23	26,800	46,500	75,300	67,600	81,600	55,600	25,100	13,000	41,100	48,300	44,200	131,000
24	21,800	66,800	76,000	58,300	80,600	55,500	9,440	15,900	50,600	14,200	61,300	96,900
25	28,800	74,200	47,400	12,800	65,700	16,000	10,300	24,600	69,600	14,400	36,200	66,700
26	27,600	59,000	49,700	42,600	56,400	15,100	18,300	20,100	119,000	12,900	42,100	64,600
27	34,100	76,000	43,500	76,200	72,200	10,500	18,800	19,400	112,000	23,700	63,600	64,200
28	28,700	81,700	49,000	75,100	53,500	7,360	20,600	13,300	105,000	53,200	e52,100	64,900
29	44,000	65,200	62,100	76,100	40,200	8,580	18,000	15,300	105,000	45,800	e49,500	64,500
30	40,500	69,500	50,800	74,700	---	8,550	15,200	13,500	92,100	15,200	e26,200	64,500
31	35,400	---	63,000	78,100	---	39,200	---	19,200	---	20,500	e50,700	---
TOTAL	1,148,670	1,479,600	2,260,000	1,961,300	3,261,000	2,184,270	450,110	635,200	1,468,300	1,395,800	1,191,110	2,379,000
MEAN	37,050	49,320	72,900	63,270	112,400	70,460	15,000	20,490	48,940	45,030	38,420	79,300
MAX	59,400	81,700	92,600	80,300	251,000	165,000	38,700	40,700	119,000	87,800	63,600	170,000
MIN	9,870	17,900	43,500	12,800	40,200	7,360	8,270	11,200	13,700	12,900	7,610	23,600

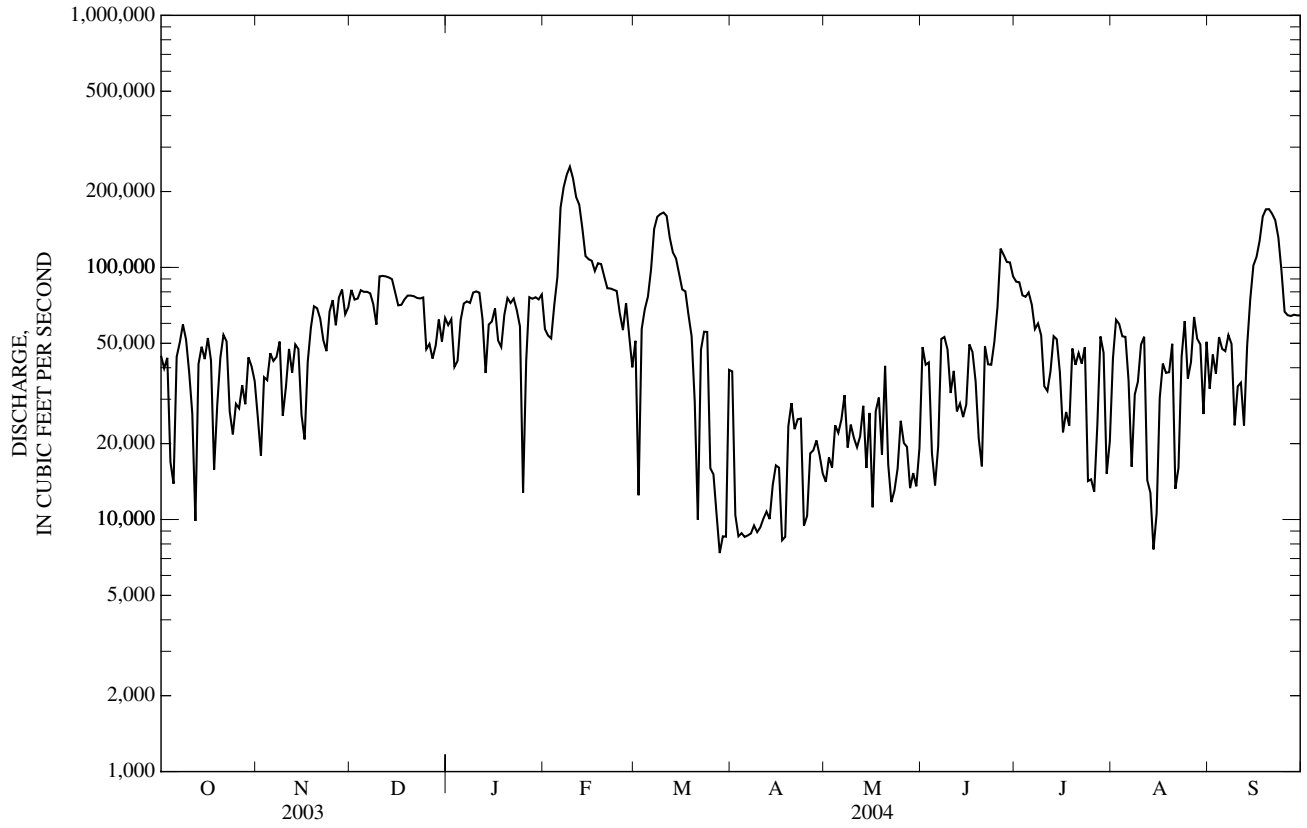
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

MEAN	36,150	47,160	71,920	87,330	93,580	84,960	54,440	48,770	40,510	38,530	37,510	35,490
MAX	97,010	147,000	160,100	223,100	228,100	185,600	172,300	157,800	112,900	84,810	64,740	79,300
(WY)	(1990)	(1958)	(1992)	(1974)	(1957)	(1973)	(1994)	(2003)	(1997)	(1989)	(1967)	(2004)
MIN	18,820	20,510	26,850	23,710	30,610	19,840	11,150	8,977	10,490	12,910	15,910	15,800
(WY)	(1955)	(1954)	(1981)	(1986)	(2000)	(1988)	(1986)	(1988)	(1988)	(1988)	(1988)	(1968)

03593500 TENNESSEE RIVER AT SAVANNAH, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1946 - 2004	
ANNUAL TOTAL	25,642,690		19,814,360			
ANNUAL MEAN	70,250		54,140		56,210	
HIGHEST ANNUAL MEAN					86,550	1973
LOWEST ANNUAL MEAN					23,090	1988
HIGHEST DAILY MEAN	361,000	May 11	251,000	Feb 9	495,000	Mar 18, 1973
LOWEST DAILY MEAN	7,200	Mar 30	7,360	Mar 28	60	Apr 23, 1966
ANNUAL SEVEN-DAY MINIMUM	13,900	Apr 1	8,820	Apr 3	5,890	May 20, 1986
MAXIMUM PEAK FLOW					507,000	Mar 18, 1973
MAXIMUM PEAK STAGE					a96.11	Mar 20, 1973
INSTANTANEOUS LOW FLOW					60	Apr 23, 1966
10 PERCENT EXCEEDS	120,000		96,800		107,000	
50 PERCENT EXCEEDS	55,000		47,600		42,400	
90 PERCENT EXCEEDS	27,100		13,800		21,100	

* Regulated period only.
a Datum then in use; see GAGE paragraph.
e Estimated



03596100 CRUMPTON CREEK AT RUTLEDGE FALLS, TN

LOCATION.--Lat 35°25'21", long 86°08'11", Coffee County, Hydrologic Unit 06040002, on right downstream of county highway bridge, 30 ft below Wiley Creek.

DRAINAGE AREA.--28.1 mi^2.

PERIOD OF RECORD.--March 2002 to current year. Occasional low-flow measurements, water years 1953-54, 1956-57, 1962, 1964-65, 1970, water-quality 1975.

GAGE.--Data collection platform and crest-stage gage, prior to Jan. 16, 2004, data logger.

REMARKS.--Records fair except for periods of estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0130	*2,810	*10.02	Jun 25	1415	1,660	7.79
Mar 6	0000	2,440	9.32	Jun 30	1830	1,440	7.39

Minimum discharge, 6.4 ft^3/s, on several days.

REVISIONS.--The maximum discharge for water years 2002 and 2003 have been revised to 1,380 ft^3/s, March 31, 2002, gage height 6.72 ft, and 5,740 ft^3/s, May 6, 2003, gage height, 11.34 ft, superseding figures published in WDR-TN reports for 2002 and 2003.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	8.5	18	32	21	27	27	26	22	247	14	10
2	6.8	8.5	15	28	21	193	24	30	15	108	13	9.8
3	6.7	8.5	14	25	24	102	23	31	37	66	13	9.7
4	6.9	8.5	19	22	22	68	21	29	32	213	12	9.5
5	6.6	8.5	18	36	870	196	20	25	21	97	12	9.2
6	6.8	8.8	17	35	1,470	787	19	22	16	60	11	9.1
7	6.8	8.5	16	31	281	170	19	19	14	74	11	9.5
8	7.2	8.5	14	28	129	91	19	17	13	68	11	9.7
9	7.0	8.5	14	29	80	69	18	16	12	45	10	9.3
10	7.1	8.5	46	27	65	56	17	15	12	38	10	9.1
11	7.3	8.5	30	24	54	49	17	14	11	36	12	9.1
12	7.5	8.7	21	22	60	43	75	13	11	69	12	9.1
13	7.8	8.1	18	20	51	38	329	14	13	61	11	9.1
14	8.3	8.1	20	19	44	34	130	13	15	159	10	9.1
15	8.5	8.2	17	18	99	33	76	13	22	88	9.9	e9.1
16	8.3	12	21	16	99	52	56	12	14	48	9.7	e12
17	8.3	9.0	37	16	87	42	46	12	13	39	9.6	e60
18	8.1	16	28	22	79	37	39	12	12	34	9.4	25
19	8.0	32	24	22	67	34	34	11	12	30	9.1	17
20	7.9	14	20	19	58	32	31	11	11	26	13	14
21	8.0	9.6	17	17	50	31	29	10	11	23	11	12
22	7.9	8.1	15	16	43	28	27	10	18	21	9.9	11
23	8.1	7.3	21	15	39	27	37	9.8	22	20	12	11
24	8.0	11	26	14	37	25	36	9.6	22	18	10	10
25	8.0	9.0	21	56	35	24	33	9.3	628	17	10	10
26	8.7	7.9	18	51	34	23	66	9.1	202	17	9.8	10
27	8.6	9.4	16	39	32	22	46	9.1	63	26	9.7	10
28	8.5	53	14	32	30	21	35	9.1	46	22	9.7	9.9
29	8.5	30	29	29	28	22	30	8.9	39	18	9.7	9.7
30	8.6	22	74	26	---	32	28	25	341	16	24	9.7
31	8.6	---	41	23	---	30	---	44	---	15	11	---
TOTAL	240.3	377.2	719	809	4,009	2,438	1,407	508.9	1,720	1,819	349.5	371.7
MEAN	7.75	12.6	23.2	26.1	138	78.6	46.9	16.4	57.3	58.7	11.3	12.4
MAX	8.7	53	74	56	1,470	787	329	44	628	247	24	60
MIN	6.6	7.3	14	14	21	21	17	8.9	11	15	9.1	9.1
CFSM	0.28	0.45	0.83	0.93	4.92	2.80	1.67	0.58	2.04	2.09	0.40	0.44
IN.	0.32	0.50	0.95	1.07	5.31	3.23	1.86	0.67	2.28	2.41	0.46	0.49

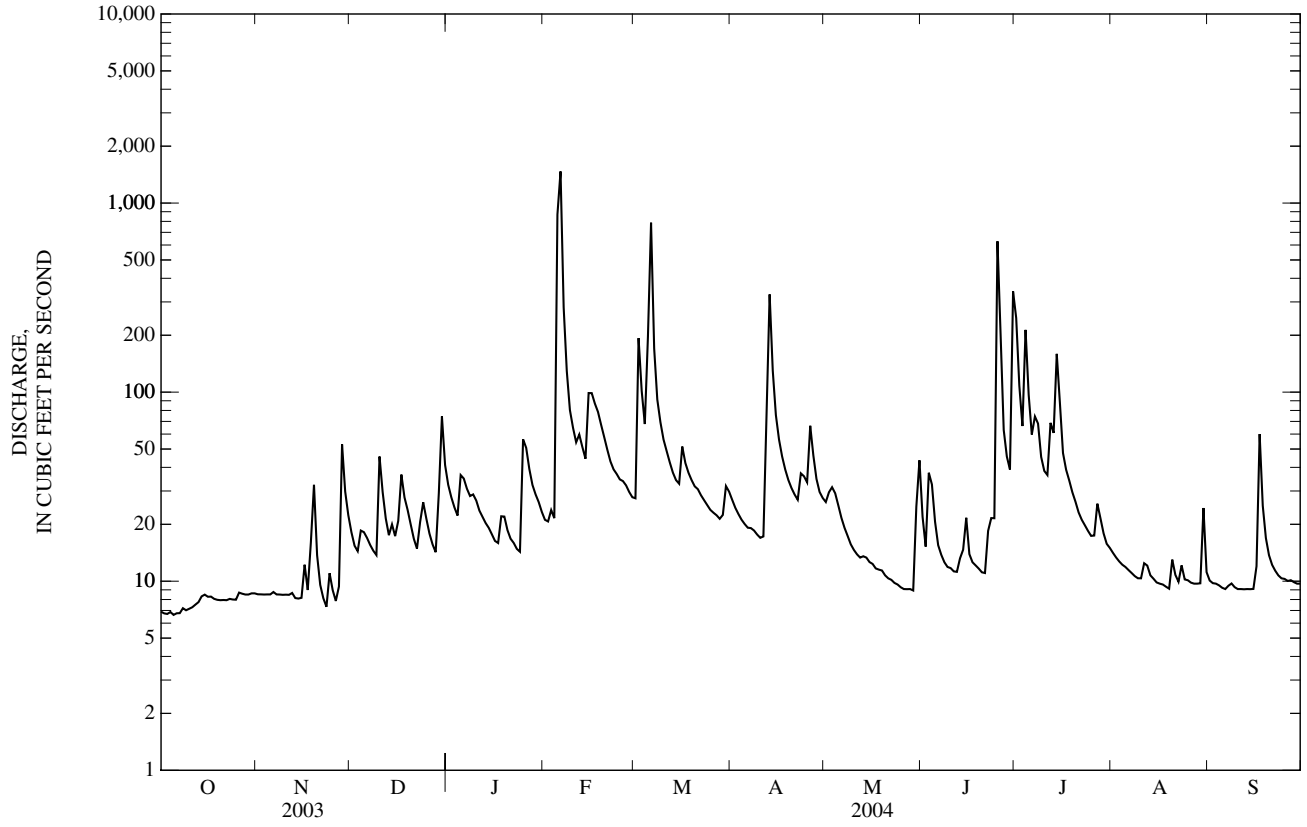
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	8.60	15.0	34.7	22.9	164	87.6	48.5	98.1	27.6	29.3	9.20	10.8
MAX	9.44	17.4	46.2	26.1	191	140	55.2	224	57.3	58.7	11.3	12.4
(WY)	(2003)	(2003)	(2003)	(2004)	(2003)	(2002)	(2003)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	7.75	12.6	23.2	19.8	138	44.1	43.3	16.4	8.72	6.70	5.93	9.32
(WY)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)	(2002)	(2004)	(2002)	(2002)	(2002)	(2002)

03596100 CRUMPTON CREEK AT RUTLEDGE FALLS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	19,098.5		14,768.6			
ANNUAL MEAN	52.3		40.4		47.6	
HIGHEST ANNUAL MEAN					54.8	2003
LOWEST ANNUAL MEAN					40.4	2004
HIGHEST DAILY MEAN	2,050	May 6	1,470	Feb 6	2,050	May 6, 2003
LOWEST DAILY MEAN	6.6	Oct 5	6.6	Oct 5	5.0	Jul 7, 2002
ANNUAL SEVEN-DAY MINIMUM	6.8	Oct 1	6.8	Oct 1	5.2	Jul 6, 2002
MAXIMUM PEAK FLOW			2,810	Feb 6	5,740	May 6, 2003
MAXIMUM PEAK STAGE			10.02	Feb 6	11.34	May 6, 2003
INSTANTANEOUS LOW FLOW			a6.4	Oct 2	b4.3	Jul 6, 2002
ANNUAL RUNOFF (CFSM)	1.86		1.44		1.69	
ANNUAL RUNOFF (INCHES)	25.28		19.55		23.00	
10 PERCENT EXCEEDS	73		66		72	
50 PERCENT EXCEEDS	17		18		18	
90 PERCENT EXCEEDS	7.8		8.5		8.0	

a Also occurred several days
b Also occurred July 7, 2002.
e Estimated



03597210 GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE, TN

LOCATION.--Lat 35°30'42", long 86°19'26", Bedford County, Hydrologic Unit 06040002, on right bank 0.3 mi above L&N Railroad bridge, 0.6 mi below Knob Creek, 1.2 mi southeast of Wartrace, and at mile 3.2.

DRAINAGE AREA.--85.5 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 769.30 ft above NGVD of 1929.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0515	8,400	15.47	Jun 25	1500	*9,280	*16.12
Mar 6	0300	6,970	14.36	Jul 7	1945	3,930	11.58

Minimum discharge, 9.2 ft^3/s, Oct. 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

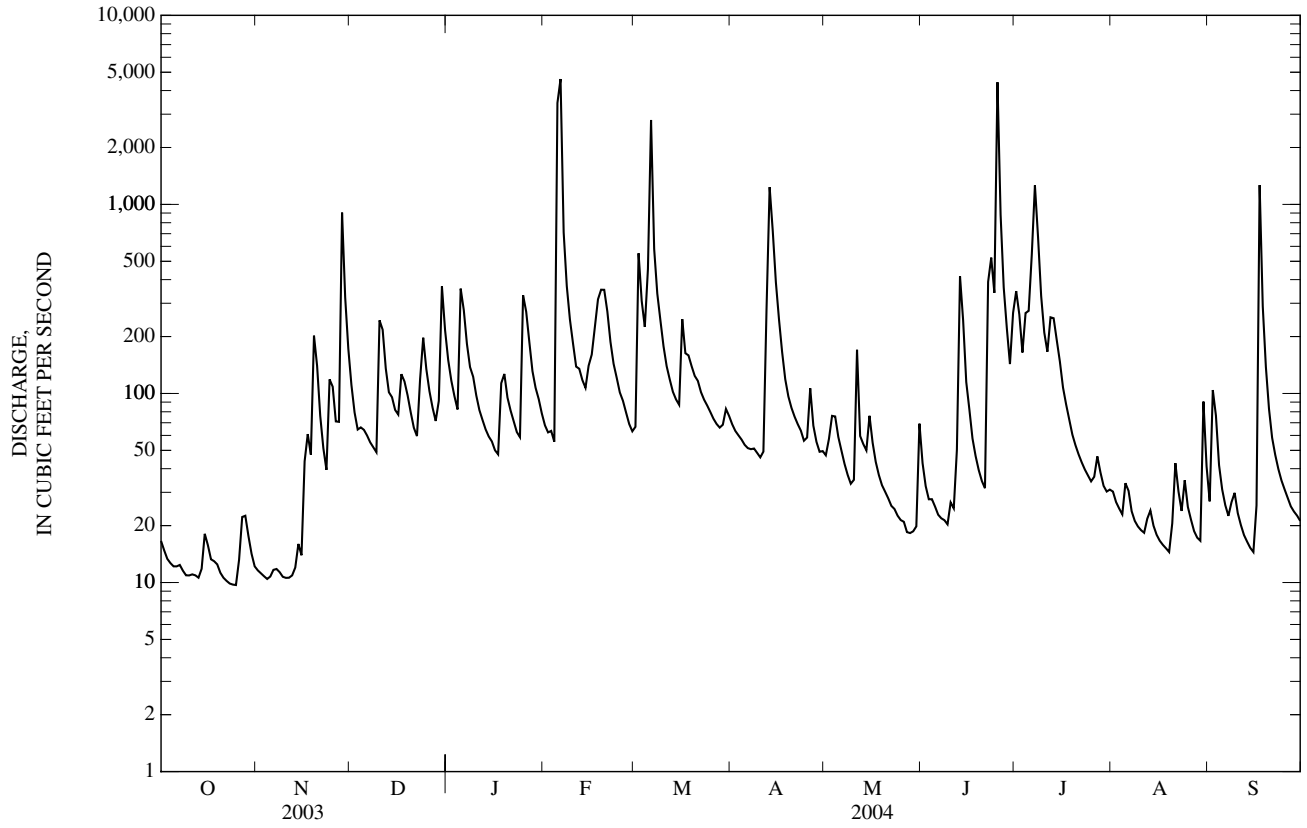
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	12	111	150	68	67	69	47	43	348	30	27
2	15	11	79	117	62	551	63	58	32	262	27	104
3	13	11	64	97	63	309	60	76	28	165	25	76
4	13	10	66	82	56	225	57	76	28	266	23	42
5	12	11	64	358	3,440	455	54	59	25	274	34	31
6	12	12	60	276	4,600	2,800	51	50	23	544	31	26
7	12	12	55	183	712	581	51	42	22	1,260	24	23
8	12	11	52	138	370	337	51	37	21	672	21	27
9	11	11	49	123	247	244	48	33	20	328	20	30
10	11	11	244	98	184	178	46	35	27	210	19	23
11	11	11	217	82	139	139	49	170	25	166	18	20
12	11	11	136	72	135	118	278	60	50	253	22	18
13	11	12	101	65	118	102	1,230	54	416	250	24	16
14	12	16	96	59	107	93	724	50	243	191	20	15
15	18	14	82	56	140	87	387	76	115	147	18	14
16	16	44	77	50	161	247	246	55	82	108	17	26
17	13	61	126	48	225	163	166	43	58	88	16	1,260
18	13	47	116	113	315	159	119	37	47	73	15	289
19	12	202	98	127	354	139	96	33	39	61	15	138
20	11	140	79	95	353	124	84	30	34	53	21	83
21	11	76	66	81	271	117	75	28	32	48	43	58
22	10	51	60	71	187	102	69	25	389	43	30	47
23	9.9	39	119	62	144	93	64	24	523	40	24	40
24	9.8	119	197	59	121	86	56	23	341	37	35	35
25	9.7	109	135	331	101	80	58	21	4,430	34	25	31
26	13	71	103	271	91	74	107	21	883	36	22	28
27	22	71	84	188	79	69	68	18	364	46	19	25
28	23	905	72	131	69	66	55	18	221	38	17	24
29	18	322	91	107	63	68	49	19	143	32	17	23
30	14	173	368	93	---	83	50	20	267	30	91	21
31	12	---	216	78	---	76	---	69	---	31	41	---
TOTAL	408.4	2,606	3,483	3,861	12,975	8,032	4,580	1,407	8,971	6,134	804	2,620
MEAN	13.2	86.9	112	125	447	259	153	45.4	299	198	25.9	87.3
MAX	23	905	368	358	4,600	2,800	1,230	170	4,430	1,260	91	1,260
MIN	9.7	10	49	48	56	66	46	18	20	30	15	14
CFSM	0.15	1.02	1.31	1.46	5.23	3.03	1.79	0.53	3.50	2.31	0.30	1.02
IN.	0.18	1.13	1.52	1.68	5.65	3.49	1.99	0.61	3.90	2.67	0.35	1.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	54.2	108	265	286	332	336	193	148	86.4	55.4	30.5	41.9
MAX	285	296	825	691	793	726	503	594	299	198	92.1	240
(WY)	(1996)	(1997)	(1991)	(2002)	(1991)	(1994)	(1994)	(2003)	(2004)	(2004)	(1996)	(1992)
MIN	5.09	10.7	22.1	28.4	91.4	118	60.2	28.5	19.4	9.06	7.33	3.90
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2003)	(1999)	(2001)	(2000)	(2000)	(1999)	(1999)

03597210 GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	57,525.3		55,881.4			
ANNUAL MEAN	158		153		161	
HIGHEST ANNUAL MEAN					233	1994
LOWEST ANNUAL MEAN					79.7	2000
HIGHEST DAILY MEAN	7,770	May 6	4,600	Feb 6	9,480	Jan 23, 2002
LOWEST DAILY MEAN	6.0	Sep 19	9.7	Oct 25	2.0	Sep 18, 1999
ANNUAL SEVEN-DAY MINIMUM	7.3	Sep 15	10	Oct 19	2.1	Sep 14, 1999
MAXIMUM PEAK FLOW			9,280	Jun 25	17,700	Jan 23, 2002
MAXIMUM PEAK STAGE			16.12	Jun 25	19.89	Jan 23, 2002
INSTANTANEOUS LOW FLOW			9.2	Oct 25	1.7	Sep 9, 1999
ANNUAL RUNOFF (CFSM)	1.84		1.79		1.88	
ANNUAL RUNOFF (INCHES)	25.03		24.31		25.54	
10 PERCENT EXCEEDS	245		277		302	
50 PERCENT EXCEEDS	55		60		53	
90 PERCENT EXCEEDS	10		14		9.1	



03597590 WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE, TN

LOCATION.--Lat 35°31'38", long 86°20'25", Bedford County, Hydrologic Unit 06040002, on right bank 300 ft below county road bridge, 0.4 mi upstream from Louisville and Nashville Railroad bridge, 0.4 mi west of Wartrace, and at mile 2.3.

DRAINAGE AREA.--35.7 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Data collection platform and crest-stage gage. Datum of gage is 781.66 ft above NGVD of 1929.

REMARKS.--Records good except for estimated discharge, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1600	*3,810	*12.39	Mar 6	0300	2,950	11.16
Feb 6	0330	3,260	11.66	Jun 25	1600	3,100	11.42

Minimum daily discharge, 0.93 ft^3/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	2.0	37	51	24	22	17	8.8	11	51	2.9	2.3
2	3.6	2.0	27	40	22	414	14	13	5.9	44	2.4	5.1
3	3.1	1.8	22	33	26	105	13	16	4.5	27	2.0	8.0
4	2.8	1.8	25	28	22	67	12	13	4.4	50	1.8	4.6
5	2.7	1.9	25	172	1,840	211	11	10	3.7	50	13	3.2
6	2.7	1.9	24	90	1,560	990	10	8.2	3.0	79	7.0	2.6
7	2.7	2.2	21	56	223	141	9.7	7.0	2.6	242	3.9	2.4
8	2.7	2.2	19	44	104	78	9.7	6.1	2.3	99	2.8	2.6
9	2.7	2.0	17	43	69	56	8.8	5.5	2.1	43	2.2	2.7
10	2.4	2.0	128	34	53	42	8.1	13	1.9	49	1.9	2.6
11	2.1	2.0	72	29	41	35	9.6	27	1.7	37	1.6	2.1
12	2.0	2.2	45	26	48	29	201	10	46	63	2.1	1.8
13	2.0	2.7	34	23	42	25	917	9.4	142	49	2.2	1.4
14	2.3	2.9	34	21	36	22	303	8.9	26	22	1.7	1.1
15	4.0	3.0	28	19	62	21	116	26	16	16	1.4	0.93
16	3.8	12	28	17	83	131	68	17	12	11	1.3	4.7
17	4.0	11	47	16	143	52	47	11	7.6	9.4	1.2	501
18	3.9	24	38	109	182	53	35	8.3	5.7	7.7	1.1	61
19	3.6	56	31	71	169	42	28	6.8	4.5	6.1	0.95	27
20	3.2	27	25	46	131	34	24	5.7	3.6	5.1	2.7	16
21	2.7	13	21	36	80	31	20	4.8	3.2	4.3	5.6	11
22	2.5	8.8	19	30	55	25	18	4.3	51	3.7	4.3	8.2
23	2.6	6.5	71	25	44	22	17	4.2	283	3.2	2.7	6.2
24	2.5	67	89	23	37	20	14	3.5	89	2.9	2.4	5.0
25	2.5	30	52	274	30	18	14	3.1	1,470	2.6	2.8	4.2
26	3.4	16	37	111	29	16	16	2.9	221	3.6	2.6	3.7
27	e4.1	17	30	67	25	15	12	2.6	78	8.3	2.5	3.5
28	e3.0	699	25	47	22	14	9.8	2.3	48	5.2	2.2	3.3
29	e2.5	106	55	38	20	15	8.9	2.3	31	3.6	1.9	3.0
30	e2.2	56	202	33	---	26	9.5	2.6	30	2.9	12	2.8
31	e2.0	---	73	27	---	20	---	21	---	2.9	3.1	---
TOTAL	90.5	1,181.9	1,401	1,679	5,222	2,792	2,001.1	284.3	2,610.7	1,003.5	98.25	704.03
MEAN	2.92	39.4	45.2	54.2	180	90.1	66.7	9.17	87.0	32.4	3.17	23.5
MAX	4.2	699	202	274	1,840	990	917	27	1,470	242	13	501
MIN	2.0	1.8	17	16	20	14	8.1	2.3	1.7	2.6	0.95	0.93
CFSM	0.08	1.10	1.27	1.52	5.04	2.52	1.87	0.26	2.44	0.91	0.09	0.66
IN.	0.09	1.23	1.46	1.75	5.44	2.91	2.09	0.30	2.72	1.05	0.10	0.73

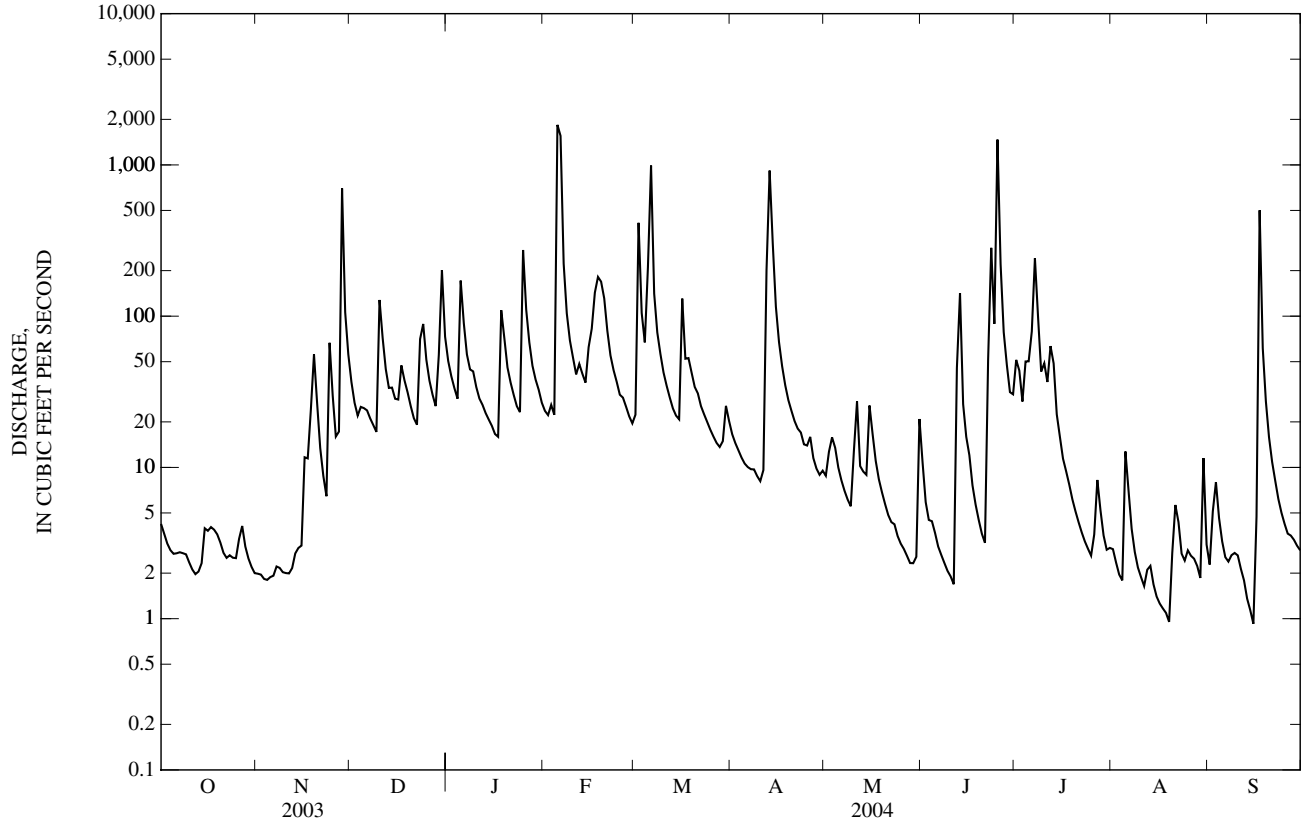
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	21.7	53.5	121	125	142	136	76.5	50.4	26.7	17.2	18.4	22.3
MAX	109	172	350	289	326	311	215	212	143	40.7	79.5	167
(WY)	(1996)	(1997)	(1991)	(1999)	(1991)	(1994)	(2000)	(2003)	(1997)	(1999)	(1992)	(1992)
MIN	0.01	0.46	7.46	10.3	36.7	41.6	11.9	2.23	0.98	0.24	0.01	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(2002)	(2003)	(1999)	(1992)	(2002)	(2000)	(1991)	(1999)

03597590 WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	22,761.51		19,068.28			
ANNUAL MEAN	62.4		52.1		67.3	
HIGHEST ANNUAL MEAN					97.2	1994
LOWEST ANNUAL MEAN					36.2	2000
HIGHEST DAILY MEAN	3,280	May 6	1,840	Feb 5	4,000	Sep 22, 1992
LOWEST DAILY MEAN	0.35	Sep 21	0.93	Sep 15	0.00	Aug 24, 1990
ANNUAL SEVEN-DAY MINIMUM	0.50	Sep 15	1.4	Aug 13	0.00	Aug 24, 1990
MAXIMUM PEAK FLOW			3,810	Feb 5	10,900	Jan 23, 1999
MAXIMUM PEAK STAGE			12.39	Feb 5	16.72	May 6, 2003
INSTANTANEOUS LOW FLOW			0.71	Aug 20	a0.00	Aug 24, 1990
ANNUAL RUNOFF (CFSM)	1.75		1.46		1.89	
ANNUAL RUNOFF (INCHES)	23.72		19.87		25.63	
10 PERCENT EXCEEDS	94		85		120	
50 PERCENT EXCEEDS	15		14		14	
90 PERCENT EXCEEDS	2.2		2.2		0.29	

a No flow many days most years.
e Estimated



03597860 DUCK RIVER AT SHELBYVILLE, TN

LOCATION.--Lat 35°28'58", long 86°27'45", Bedford County, Hydrologic Unit 06040002, on right bank 125 ft upstream from U.S. Highway 231 bridge, one block west of the southwest corner of the public square, and at mile 221.4.

DRAINAGE AREA.--425 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year, discharge for gage height of 12.00 ft and below only. Continuous stage records were collected by Tennessee Valley Authority from December 1981 to September 1991.

GAGE.--Data collection platform. Datum of gage is 680.00 ft above NGVD of 1929. Prior to Oct. 10, 1991 at datum 10.00 ft higher.

REMARKS.--Records good except for estimated discharges, which are fair. Flow regulated by Normandy Reservoir (station 03596460) since January 1976.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum gage height, 40.53 ft, May 7, 2003; minimum discharge, 129 ft^3/s, May 20, 1992; minimum daily discharge, 125 ft^3/s, July 30, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined, maximum gage height, 31.51 ft, Feb. 6; minimum discharge, 150 ft^3/s, May 27, 28; minimum daily discharge, 152 ft^3/s, May 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	394	---	---	439	325	e226	233	578	---	194	221
2	192	394	---	---	423	---	e210	487	253	---	191	244
3	188	401	772	637	526	---	e200	522	307	---	180	356
4	186	496	736	588	310	---	e190	509	319	---	187	246
5	186	500	692	---	---	---	e181	313	238	---	223	215
6	188	498	440	---	---	---	177	278	207	---	223	---
7	185	492	417	---	---	---	184	251	192	---	193	---
8	184	488	401	---	---	---	183	235	185	---	186	---
9	182	486	389	---	---	---	180	228	176	---	179	194
10	180	471	---	---	---	---	e170	e250	188	---	187	175
11	183	379	---	---	---	---	e500	e690	190	---	189	172
12	183	384	736	353	---	---	---	426	e195	---	218	176
13	181	392	620	328	---	461	---	418	e600	---	196	174
14	182	385	598	434	---	339	---	564	---	---	188	170
15	186	379	563	485	---	308	---	664	---	---	185	---
16	188	428	541	471	---	---	---	623	e700	---	185	---
17	189	532	647	406	---	509	e820	449	e310	---	170	---
18	191	---	648	416	---	418	e710	248	e280	---	165	---
19	195	---	605	555	---	414	599	223	266	542	176	529
20	191	---	557	437	---	346	384	204	248	395	---	364
21	189	---	521	427	---	333	345	189	237	275	---	282
22	192	809	499	404	---	293	331	181	---	196	273	241
23	187	770	550	382	---	267	338	176	---	180	221	221
24	181	---	---	368	---	251	295	164	---	177	227	208
25	180	---	754	---	637	236	305	159	---	194	200	199
26	198	572	645	---	604	229	654	160	---	194	181	191
27	253	---	585	---	576	215	438	153	---	205	292	183
28	410	---	551	---	547	211	298	152	---	203	185	179
29	404	---	e530	654	461	211	245	174	---	189	198	175
30	396	---	e500	596	---	251	231	222	---	187	460	171
31	396	---	e470	541	---	246	---	581	---	205	297	---
TOTAL	6,721	---	---	---	---	---	---	10,126	---	---	---	---
MEAN	217	---	---	---	---	---	---	327	---	---	---	---
MAX	410	690										
MIN	180	152										

e Estimated

03597860 DUCK RIVER AT SHELBYVILLE, TN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1991 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1991 to current year.
DISSOLVED OXYGEN: October 1991 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1991.

REMARKS.--Records for water temperature good, for dissolved oxygen fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 30.1°C, July 30, 31, 1999; minimum, 0.1°C, Feb. 4, 5, 6, 1996.
DISSOLVED OXYGEN: Maximum, 19.4, mg/L, Jan. 25, 26, 2003; minimum, 5.7 mg/L, June 12, 1999.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.8°C, Aug. 4; minimum, 4.2°C, Jan. 21, Feb. 1.
DISSOLVED OXYGEN: Maximum, 16.0 mg/L, Feb. 1; minimum, 6.9 mg/L, June 25.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.4	17.5	17.8	18.6	17.8	18.1	11.6	11.1	11.4	8.2	7.9	8.0
2	17.5	16.8	17.2	18.7	18.0	18.3	11.1	10.6	10.8	9.8	8.2	9.1
3	16.9	16.0	16.5	18.7	17.9	18.2	11.1	10.6	10.9	12.1	9.8	10.9
4	17.2	15.9	16.5	18.4	18.0	18.1	11.1	11.0	11.0	13.5	12.1	12.8
5	17.5	16.5	16.9	19.5	18.4	18.9	11.0	10.6	10.9	13.5	10.5	12.3
6	18.1	17.5	17.8	19.6	18.9	19.4	10.6	9.2	10.0	10.5	7.4	8.9
7	19.3	17.8	18.3	18.9	16.8	17.8	9.2	8.3	8.7	7.4	5.7	6.3
8	19.8	18.3	19.0	16.8	15.5	16.0	8.5	8.2	8.3	6.4	5.6	6.1
9	20.4	19.0	19.6	15.6	15.2	15.3	9.8	8.4	9.1	6.8	6.4	6.7
10	20.3	19.8	20.0	15.9	15.2	15.5	10.8	9.8	10.5	6.7	6.2	6.4
11	20.9	19.9	20.3	16.5	15.9	16.2	10.2	8.8	9.3	6.2	5.7	5.9
12	20.6	20.0	20.3	17.1	16.5	16.9	8.8	8.1	8.3	6.5	5.7	6.1
13	20.8	20.2	20.5	17.0	15.3	16.5	8.3	7.9	8.1	7.0	6.2	6.6
14	20.5	19.7	20.2	15.3	13.2	14.2	8.5	8.3	8.4	7.1	6.6	6.9
15	19.7	18.7	19.3	13.8	13.1	13.4	8.5	8.2	8.4	7.4	7.0	7.1
16	18.7	17.4	18.0	15.4	13.8	14.7	9.5	8.4	8.9	7.3	6.6	6.9
17	17.4	16.5	16.8	16.8	15.4	16.2	9.6	8.8	9.3	7.0	6.6	6.7
18	16.8	16.2	16.5	17.0	16.7	16.8	8.8	7.8	8.1	7.7	7.0	7.5
19	17.4	16.1	16.6	16.8	15.9	16.5	7.8	7.3	7.5	7.7	5.9	6.9
20	18.0	16.3	16.9	15.9	14.7	15.1	7.3	6.3	6.7	5.9	4.4	5.0
21	17.8	16.9	17.3	15.0	14.6	14.8	6.3	5.9	6.1	4.5	4.2	4.4
22	18.1	17.4	17.7	15.5	14.8	15.2	7.6	6.2	6.8	5.2	4.5	4.8
23	18.2	17.4	17.7	16.0	15.4	15.7	8.7	7.6	8.2	5.2	4.5	4.8
24	17.8	16.8	17.2	15.9	13.5	15.0	8.7	7.7	8.3	5.2	4.5	4.9
25	17.4	16.6	17.0	13.5	12.0	12.3	7.7	6.6	7.1	8.2	5.2	6.8
26	17.2	17.1	17.1	12.1	11.9	12.0	6.6	6.0	6.3	9.5	8.1	9.0
27	17.6	16.5	17.1	14.0	12.1	13.0	6.7	5.9	6.3	9.4	7.4	8.7
28	16.5	15.7	16.0	14.1	11.9	13.0	7.2	6.5	6.8	7.4	5.8	6.2
29	16.8	15.8	16.3	11.9	11.1	11.4	8.9	7.2	7.9	5.8	5.4	5.6
30	17.4	16.5	16.9	11.3	11.0	11.1	9.0	8.4	8.7	6.2	5.6	5.9
31	18.0	16.9	17.5	---	---	---	8.4	7.9	8.0	5.9	4.6	5.0
MONTH	20.9	15.7	17.8	19.6	11.0	15.5	11.6	5.9	8.6	13.5	4.2	7.1

03597860 DUCK RIVER AT SHELBYVILLE, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.9	4.2	4.6	10.0	8.7	9.4	14.9	13.4	14.1	20.4	18.7	19.4
2	6.1	4.9	5.5	12.5	9.9	11.6	---	---	---	19.7	17.7	19.3
3	6.5	6.1	6.3	12.2	10.9	11.5	---	---	---	17.7	14.2	15.6
4	6.2	5.5	5.8	12.4	11.5	11.7	---	---	---	14.6	13.5	14.1
5	6.5	5.4	5.6	13.0	12.1	12.4	14.3	13.8	14.1	17.0	14.6	15.8
6	9.5	6.5	8.7	13.8	12.4	13.4	15.3	13.6	14.3	19.8	16.2	18.0
7	9.2	7.0	7.8	12.4	10.5	11.1	15.6	13.9	14.6	21.0	18.4	19.7
8	7.0	6.4	6.7	11.2	9.2	10	16.4	14.9	15.6	22.4	19.6	20.9
9	6.8	6.2	6.5	10.4	9.2	9.7	17.4	16.0	16.5	23.3	20.5	21.7
10	6.9	6.6	6.7	10.0	8.7	9.5	---	---	---	23.2	21.3	22.0
11	7.0	6.2	6.6	10.3	9.6	9.8	---	---	---	---	---	---
12	7.0	6.5	6.8	10.3	10.1	10.2	---	---	---	---	---	---
13	6.8	6.2	6.6	10.5	9.7	10.1	---	---	---	20.7	20.2	20.5
14	7.0	6.4	6.7	11.3	10.4	11.0	---	---	---	20.3	19.3	19.7
15	7.1	4.9	6.1	11.9	11.0	11.6	---	---	---	19.4	18.9	19.1
16	6.4	4.9	5.7	13.4	11.8	12.5	15.2	13.8	14.4	19.3	18.6	18.9
17	6.8	6.3	6.5	13.8	12.9	13.3	16.4	15.2	15.8	19.7	18.7	19.1
18	7.3	6.3	6.7	14.4	13.5	13.9	17.4	16.2	16.4	21.1	19.2	20.0
19	8.0	6.9	7.4	15.1	14.1	14.6	17.7	16.7	17.3	23.2	20.2	21.6
20	8.5	8.0	8.3	16.1	14.6	15.3	17.8	17.2	17.5	24.4	21.6	22.8
21	8.7	8.2	8.5	16.1	14.4	15.4	18.9	17.4	18.3	25.2	22.6	23.7
22	8.5	7.6	7.9	14.5	12.8	14.0	19.1	18.1	18.4	25.8	23.6	24.6
23	8.0	7.5	7.8	13.1	11.9	12.4	19.0	18.1	18.5	26.0	24.1	24.9
24	8.4	7.8	8.2	13.1	11.4	12.2	20.3	18.4	19.1	26.1	24.4	25.1
25	8.7	8.3	8.5	15.0	12.2	13.4	21.0	19.2	20.1	26.4	24.5	25.3
26	8.5	7.6	8.0	16.8	13.9	15.2	20.0	18.1	19.2	25.9	24.8	25.3
27	7.6	7.0	7.3	18.7	15.5	16.9	18.1	17.2	17.7	26.2	24.8	25.4
28	7.6	6.6	7.1	19.3	16.8	17.9	18.2	16.8	17.3	25.1	24.5	24.7
29	8.7	7.6	8.2	18.1	17.6	17.8	18.8	16.6	17.6	25.2	24.1	24.5
30	---	---	---	17.7	16.1	17.1	19.3	17.6	18.4	24.8	23.5	24.0
31	---	---	---	16.1	14.9	15.5	---	---	---	23.8	22.4	23.2
MONTH	9.5	4.2	7.0	19.3	8.7	12.9	21.0	12.7	16.9	26.4	13.5	21.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.4	21.0	21.4	21.7	20.0	20.8	26.0	25.1	25.5	24.0	22.9	23.4
2	22.6	20.9	21.5	20.6	19.8	20.2	26.0	24.9	25.5	24.3	23.2	23.7
3	22.5	21.1	21.9	21.4	20.6	21.0	26.5	25.1	25.8	24.4	23.8	24.1
4	22.1	21.2	21.7	21.7	21.3	21.5	27.8	25.5	26.4	24.5	23.8	24.1
5	22.8	20.9	21.8	22.1	21.1	21.4	26.7	26.1	26.4	25.1	23.6	24.3
6	23.2	21.4	22.2	22.8	21.6	22.1	26.2	24.8	25.4	25.4	24.1	24.6
7	23.3	22.1	22.7	22.8	21.1	21.6	25.1	23.6	24.4	25.5	24.4	25.0
8	23.9	22.3	23.0	21.8	21.1	21.5	24.6	23.3	24.0	24.4	23.6	24.0
9	24.6	22.7	23.6	22.8	21.4	22.1	24.9	23.4	24.0	24.1	23.4	23.7
10	25.8	23.6	24.7	22.8	22.1	22.5	25.2	23.7	24.4	24.2	23.0	23.6
11	26.8	24.7	25.7	23.7	22.2	22.8	25.2	24.1	24.6	24.6	23.1	23.8
12	27.5	25.4	25.9	24.4	23.6	24.0	24.7	24.0	24.4	24.7	23.3	24.0
13	---	---	---	24.7	23.6	24.1	24.0	22.4	23.0	25.4	23.8	24.4
14	---	---	---	24.0	22.8	23.1	22.4	21.4	21.8	25.5	24.1	24.7
15	---	---	---	23.2	22.4	22.8	21.9	20.8	21.4	25.5	24.2	24.7
16	---	---	---	23.1	22.7	22.8	22.3	20.9	21.5	24.9	23.9	24.5
17	24.2	22.9	23.4	23.1	22.5	22.8	23.3	21.5	22.3	23.9	20.6	21.9
18	25.4	24.6	25.1	23.3	22.9	23.1	24.6	22.2	23.2	20.6	20.1	20.4
19	25.2	24.4	24.7	23.7	23.0	23.4	25.6	23.0	24.1	20.6	19.9	20.2
20	24.7	23.9	24.4	23.5	22.8	23.2	24.7	23.9	24.3	20.6	19.8	20.1
21	24.8	23.4	24.0	25.0	23.2	24.0	23.9	22.6	23.0	21.1	19.9	20.4
22	23.8	22.3	23.1	25.9	23.7	24.7	23.5	22.6	23.0	21.4	19.8	20.5
23	22.3	20.8	21.8	26.3	24.4	25.2	24.6	22.6	23.4	21.7	20.0	20.8
24	21.3	20.8	21.2	26.3	25.2	25.8	25.0	23.4	24.1	22.0	20.6	21.3
25	21.1	20.7	21.0	26.8	25.7	26.1	25.5	24.1	24.7	22.5	21.3	21.9
26	20.8	19.0	19.7	26.5	25.7	26.0	25.8	24.5	25.1	22.8	21.8	22.3
27	21.2	20.4	20.8	25.7	24.6	25.1	26.3	24.8	25.4	22.7	22.1	22.4
28	21.5	20.8	21.2	24.8	23.6	24.2	26.3	25.4	25.8	22.5	22.0	22.3
29	22.2	21.1	21.6	25.5	23.3	24.3	26.0	25.2	25.6	22.1	21.3	21.8
30	22.2	21.5	21.7	26.0	24.0	24.8	25.6	24.2	25.1	21.3	20.4	20.8
31	---	---	---	26.1	24.8	25.3	24.2	23.1	23.5	---	---	---
MONTH	27.5	19.0	22.7	26.8	19.8	23.3	27.8	20.8	24.2	25.5	19.8	22.8

03597860 DUCK RIVER AT SHELBYVILLE, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.4	9.0	9.2	9.6	9.4	9.5	11.8	11.6	11.6	---	---	---
2	9.7	9.2	9.4	9.5	9.3	9.4	11.9	11.8	11.8	---	---	---
3	10.0	9.4	9.7	9.5	9.3	9.4	11.8	11.6	11.7	---	---	---
4	10.1	9.5	9.7	9.5	9.2	9.4	11.7	11.5	11.6	---	---	---
5	10.0	9.5	9.7	9.2	8.9	9.1	11.5	11.4	11.5	---	---	---
6	9.8	9.2	9.5	9.0	8.9	8.9	11.8	11.4	11.6	---	---	---
7	9.7	9.1	9.4	9.6	9.0	9.3	12.0	11.8	11.9	---	---	---
8	9.8	9.2	9.4	10.0	9.6	9.8	12.1	11.7	11.9	---	---	---
9	9.6	9.0	9.3	10.2	10.0	10.1	11.9	11.5	11.7	---	---	---
10	9.4	8.8	9.2	10.2	9.9	10.1	11.5	11.1	11.3	---	---	---
11	9.5	8.9	9.2	9.9	9.6	9.8	11.8	11.3	11.5	---	---	---
12	9.4	8.8	9.2	9.6	9.4	9.5	12.0	11.8	12.0	13.3	12.8	12.9
13	9.5	8.9	9.2	9.9	9.5	9.7	12.0	11.7	11.9	13.0	12.6	12.8
14	9.7	8.9	9.3	10.7	9.9	10.3	11.7	11.6	11.6	12.9	12.6	12.7
15	10.0	9.2	9.5	10.8	10.4	10.7	11.6	11.4	11.5	12.9	12.6	12.7
16	10.5	9.4	9.7	10.4	9.9	10.2	11.5	11.1	11.3	13.0	12.6	12.8
17	10.4	9.6	9.9	9.9	9.7	9.8	11.3	11.1	11.2	13.0	12.4	12.8
18	10.5	9.6	10.0	9.8	9.5	9.6	11.4	10.9	11.1	12.5	12.3	12.3
19	10.8	9.4	9.9	9.7	9.4	9.5	11.1	10.9	11.0	12.7	12.3	12.5
20	10.6	9.4	9.7	10.4	9.7	10.1	11.7	10.8	11.2	13.6	12.7	13.2
21	9.6	9.4	9.5	10.5	10.4	10.4	12.1	11.0	11.5	14.3	13.6	13.9
22	9.4	9.2	9.4	10.5	10.3	10.4	11.8	10.0	11.1	14.3	13.5	13.8
23	9.4	9.3	9.3	10.4	10.2	10.3	11.9	10.2	10.9	14.8	13.6	14.0
24	9.6	9.4	9.5	10.7	10.2	10.4	11.0	10.1	10.5	15.1	13.4	13.9
25	9.7	9.5	9.6	11.3	10.7	11.1	11.1	9.8	10.4	13.6	11.4	12.7
26	9.6	9.4	9.5	11.3	11.2	11.2	11.1	10.1	10.5	11.8	11.3	11.5
27	9.4	9.3	9.4	11.3	10.6	11.0	10.8	10.0	10.4	12.6	11.8	12.1
28	9.9	9.4	9.8	10.9	9.9	10.4	10.8	8.8	10.2	13.8	12.6	13.2
29	9.9	9.7	9.8	11.6	10.8	11.3	10.7	9.4	9.8	14.2	13.4	13.6
30	9.8	9.7	9.8	11.7	11.5	11.6	---	---	---	14.2	13.2	13.5
31	9.7	9.5	9.6	---	---	---	---	---	---	15.4	13.4	13.9
MONTH	10.8	8.8	9.5	11.7	8.9	10.1	12.1	8.8	11.2	15.4	11.3	13.0
		FEBRUARY			MARCH			APRIL			MAY	
1	16.0	13.8	14.3	12.8	11.9	12.3	11.2	10.6	11.0	11.2	10.1	10.8
2	14.0	13.1	13.6	12.2	10.5	11.1	11.1	11.0	---	11.2	9.9	10.7
3	13.3	13.0	13.1	11.9	10.9	11.5	---	---	---	12.1	10.9	11.6
4	14.0	13.1	13.4	11.9	11.6	11.8	---	---	---	13.0	11.5	12.3
5	14.1	11.7	13.0	11.7	10.7	11.4	11.4	11.1	11.2	12.7	11.2	12.0
6	11.7	10.5	10.8	11.1	9.1	9.9	11.2	10.7	11.0	12.2	9.8	11.3
7	12.8	11.0	12.2	12.2	11.1	11.7	10.8	10.3	10.6	11.9	10.3	11.1
8	13.3	12.7	13.0	12.7	11.8	12.3	10.3	9.6	10.1	11.7	10.2	11.0
9	13.4	13.1	13.3	12.7	12.0	12.4	9.8	9.6	9.7	11.5	10.2	10.7
10	13.3	13.1	13.2	13.1	12.2	12.7	9.4	9.4	9.3	11.1	9.7	10.6
11	13.5	13.1	13.3	12.8	12.4	12.6	---	---	---	---	---	---
12	13.3	13.1	13.2	12.8	12.2	12.5	---	---	---	---	---	---
13	13.4	13.0	13.3	12.6	12.1	12.4	---	---	---	9.0	8.9	8.9
14	13.2	13.0	13.1	12.1	11.8	12.0	---	---	---	9.5	9.0	9.3
15	13.4	12.9	13.1	11.8	11.4	11.7	---	---	---	9.6	9.5	9.5
16	13.4	13.3	13.4	11.7	11.2	11.4	11.3	10.8	11.1	9.6	9.5	9.6
17	13.3	13.1	13.2	11.2	10.8	11.0	11.1	10.7	11.0	9.7	9.3	9.6
18	13.2	12.9	13.0	11.1	10.8	10.9	11.0	10.7	10.9	9.4	9.0	9.3
19	12.9	12.7	12.8	11.7	10.8	11.1	11.1	10.0	10.6	9.0	8.5	8.8
20	12.7	12.3	12.3	11.6	10.6	10.9	10.8	10.0	10.4	8.7	8.3	8.5
21	12.7	12.3	12.5	11.8	10.6	11.0	10.6	9.4	10.1	8.4	8.1	8.3
22	13.1	12.6	12.9	13.1	10.8	11.5	10.6	9.4	10.0	8.2	7.9	8.1
23	13.0	12.8	12.9	13.5	11.3	12.0	10.4	9.5	10.0	8.1	7.8	7.9
24	12.9	12.7	12.8	13.8	11.8	12.3	10.6	9.6	10.1	8.1	7.7	7.9
25	12.7	12.5	12.6	13.8	11.5	12.2	10.6	9.6	10.1	8.2	7.7	7.8
26	12.9	12.6	12.8	13.2	10.9	11.7	10.8	9.8	10.2	8.4	7.6	7.8
27	13.3	12.9	13.1	12.2	10.5	11.0	11.4	10.2	10.9	8.4	7.5	7.7
28	13.7	13.2	13.4	11.6	10.2	10.6	11.8	10.8	11.3	8.1	7.4	7.7
29	13.3	12.6	13.0	11.0	10.0	10.2	11.7	10.5	11.3	8.1	7.6	7.8
30	---	---	---	10.7	9.9	10.2	11.6	10.5	11.1	8.6	7.7	8.0
31	---	---	---	11.5	10.0	10.7	---	---	---	8.5	8.0	8.2
MONTH	16.0	10.5	13.0	13.8	9.1	11.5	11.8	9.3	10.5	13.0	7.4	9.4

03597860 DUCK RIVER AT SHELBYVILLE, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	8.5	8.8	8.8	8.1	8.5	9.4	9.1	9.2	9.9	9.6	9.7
2	9.0	8.7	8.9	8.9	8.2	8.7	9.6	9.2	9.4	9.9	9.7	9.8
3	8.8	8.5	8.6	8.9	8.1	8.8	9.7	9.3	9.5	9.9	9.6	9.8
4	8.8	8.3	8.5	8.9	8.0	8.5	9.7	9.4	9.5	9.8	9.5	9.7
5	8.9	8.4	8.6	8.8	8.1	8.6	9.8	9.5	9.6	9.5	9.3	9.4
6	8.8	8.4	8.6	8.8	8.3	8.6	10.2	9.7	10	9.4	9.2	9.4
7	8.7	8.4	8.5	8.6	7.7	8.2	10.7	10.2	10.4	9.3	9.2	9.3
8	8.7	8.4	8.5	8.7	8.0	8.5	11.1	10.6	10.9	9.4	9.0	9.2
9	8.8	8.4	8.5	8.8	8.5	8.7	11.3	10.9	11.1	9.0	8.8	9.0
10	8.9	8.1	8.4	8.7	8.5	8.6	11.2	10.7	11.0	8.9	8.6	8.8
11	8.2	7.7	7.9	9.0	8.6	8.7	10.8	10.3	10.6	8.7	8.4	8.6
12	7.9	7.7	7.7	8.7	8.5	8.5	10.3	9.9	10.2	8.4	8.1	8.3
13	---	---	---	8.5	8.2	8.3	10.0	9.6	9.8	8.2	7.8	8.0
14	---	---	---	8.4	8.3	8.3	9.6	9.4	9.5	8.0	7.8	7.9
15	---	---	---	8.7	8.6	8.7	---	---	---	8.0	7.8	7.9
16	---	---	---	8.8	8.6	8.7	---	---	---	8.0	7.5	7.7
17	8.4	8.3	8.4	8.8	8.6	8.7	9.9	9.4	9.7	8.4	7.5	7.8
18	8.1	7.9	8.1	8.7	8.6	8.7	9.8	9.3	9.6	8.9	8.4	8.8
19	8.4	7.9	8.1	8.8	8.5	8.6	9.8	9.3	9.4	9.0	8.9	8.9
20	8.3	7.9	8.1	8.8	8.4	8.6	9.4	9.1	9.3	9.1	8.9	9.0
21	8.3	8.0	8.1	8.7	8.3	8.4	9.7	9.3	9.5	9.0	8.8	8.9
22	8.2	7.4	7.9	8.6	8.1	8.3	9.6	9.3	9.4	8.9	8.5	8.8
23	8.2	7.4	8.0	8.6	7.6	8.2	9.7	9.4	9.5	8.9	8.6	8.7
24	8.8	7.6	8.3	8.7	8.0	8.2	9.6	9.4	9.5	8.8	8.5	8.7
25	8.9	6.9	7.8	---	---	---	9.6	9.4	9.5	8.7	8.4	8.6
26	8.9	7.0	8.1	8.3	8.0	8.1	9.5	9.3	9.4	8.5	8.3	8.4
27	8.7	8.6	8.6	8.6	8.1	8.4	9.7	9.4	9.5	8.4	8.2	8.3
28	8.6	8.5	8.6	9.0	8.5	8.8	9.6	9.3	9.5	8.4	8.2	8.3
29	8.6	8.2	8.5	9.2	8.8	9.1	9.6	9.3	9.4	8.5	8.3	8.4
30	8.7	8.1	8.3	9.3	9.0	9.1	9.9	9.3	9.7	8.6	8.3	8.5
31	---	---	---	9.3	9.0	9.1	9.9	9.6	9.8	---	---	---
MONTH	9.0	6.9	8.3	9.3	7.6	8.6	11.3	9.1	9.8	9.9	7.5	8.8

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03597898 FLAT CREEK AT HWY 231 BELOW SHELBYVILLE, TN

LOCATION.--Lat 35°27'35", long 86°28'10", Bedford County, Hydrologic Unit 06040002, on the downstream side of bridge on Highway 231, south of Shelbyville, and at mile 2.0.

DRAINAGE AREA.--49 mi^2.

PERIOD OF RECORD.--June 2003 to current year.

GAGE.--Data logger, data collection platform, and crest-stage gage. Datum of gage is 712.54 ft above NGVD of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 7,590 ft^3/s, June 23; maximum gage height, 15.87 ft; minimum daily discharge, 1.3 ft^3/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e8.2	113	131	44	36	23	35	65	479	43	34
2	9.8	e7.7	93	113	42	277	21	39	43	354	35	101
3	7.2	e7.2	83	100	45	150	20	40	350	e268	31	118
4	8.8	e5.5	91	91	e80	101	18	39	107	478	29	68
5	11	e5.1	89	222	e2,070	252	17	36	53	387	62	47
6	11	e5.0	81	169	e2,530	2,200	16	e35	39	e412	42	33
7	9.5	e4.8	74	136	e506	238	16	31	33	e782	29	26
8	7.9	e4.6	69	119	e197	134	19	31	36	e378	25	24
9	8.0	e4.4	66	112	e125	101	19	e30	32	e249	21	18
10	e6.3	e3.8	157	98	e110	75	16	e48	23	e210	19	11
11	e5.4	e3.1	142	88	e92	61	18	e96	24	e201	18	6.3
12	e4.7	e8.7	115	83	e71	52	113	46	24	e191	48	4.1
13	3.7	e7.1	99	79	e65	47	389	44	57	e201	34	2.8
14	6.7	e6.5	98	74	56	41	176	41	49	311	24	1.9
15	9.1	e18	88	72	199	38	106	50	33	264	17	1.3
16	9.9	e48	85	67	174	61	e77	46	25	170	13	25
17	9.1	e78	103	66	163	48	62	40	25	135	11	709
18	8.9	e88	96	89	155	44	47	35	26	111	8.4	202
19	7.5	e180	90	91	130	39	41	33	15	94	6.9	123
20	4.8	e46	82	80	103	35	e40	27	7.5	83	386	86
21	3.6	e32	74	75	80	36	39	27	17	73	159	63
22	3.0	e16	70	71	64	34	37	23	208	66	86	48
23	2.6	e27	102	68	57	33	40	21	139	61	54	38
24	2.4	44	141	66	52	32	35	20	135	57	38	30
25	2.1	41	118	214	46	e31	43	18	3,270	53	30	25
26	5.4	28	102	139	47	e26	87	18	784	54	26	20
27	14	34	91	97	43	e24	55	e16	302	59	20	15
28	e12	650	83	73	38	e25	43	14	263	49	75	12
29	e9.9	209	e110	61	35	e31	e35	14	342	44	64	9.3
30	e9.5	145	e180	56	---	27	33	71	545	41	75	5.9
31	e8.8	---	e142	50	---	23	---	150	---	43	54	---
TOTAL	236.6	1,765.7	3,127	3,050	7,419	4,352	1,701	1,214	7,071.5	6,358	1,583.3	1,907.6
MEAN	7.63	58.9	101	98.4	256	140	56.7	39.2	236	205	51.1	63.6
MAX	14	650	180	222	2,530	2,200	389	150	3,270	782	386	709
MIN	2.1	3.1	66	50	35	23	16	14	7.5	41	6.9	1.3

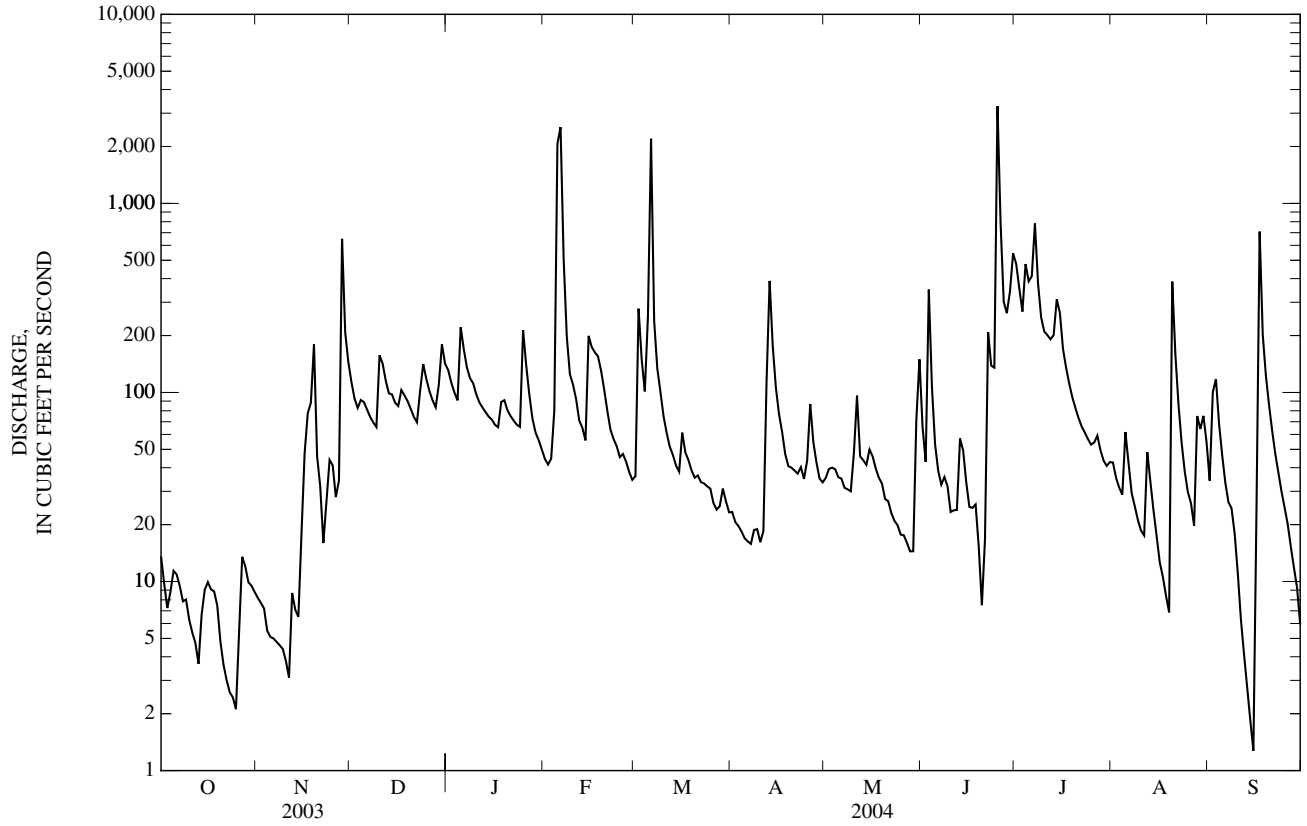
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	7.63	58.9	101	98.4	256	140	56.7	39.2	146	124	32.9	52.2
MAX	7.63	58.9	101	98.4	256	140	56.7	39.2	236	205	51.1	63.6
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	7.63	58.9	101	98.4	256	140	56.7	39.2	55.5	43.7	14.7	40.7
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

03597898 FLAT CREEK AT HWY 231 BELOW SHELBYVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	39,785.7			
ANNUAL MEAN	109		109	
HIGHEST ANNUAL MEAN			109	2004
LOWEST ANNUAL MEAN			109	2004
HIGHEST DAILY MEAN	3,270	Jun 25	3,270	Jun 25, 2004
LOWEST DAILY MEAN	1.3	Sep 15	0.84	Sep 2, 2003
ANNUAL SEVEN-DAY MINIMUM	3.4	Oct 20	3.0	Sep 15, 2003
MAXIMUM PEAK FLOW	7,590	Jun 25	7,590	Jun 25, 2004
MAXIMUM PEAK STAGE	15.87	Jun 25	15.87	Jun 25, 2004
10 PERCENT EXCEEDS	201		201	
50 PERCENT EXCEEDS	46		46	
90 PERCENT EXCEEDS	8.1		8.1	

e Estimated



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 mi^2.

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.--Data collection platform. Datum of gage is 683.51 ft above NGVD of 1929. Prior to Sept. 2, 1966, at datum 2.0 ft higher.

REMARKS.--Records good except for estimated discharges, which are fair. Maximum discharge prior to regulation, 62,900 ft^3/s, Feb. 13, 1948, gage height, 38.40 ft, present datum, from floodmarks, from rating curve extended above 35,000 ft^3/s on basis of slope-area measurement of peak flow. Prior to 1948, diurnal fluctuation caused by powerplant upstream. Flow regulated by Normandy Reservoir (station 03596460) since January 1976. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 39.6 ft present datum, discharge, about 70,000 ft^3/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, 18,400 ft^3/s, at 0900 hours Feb. 6, gage height 26.07 ft; minimum discharge, 134 ft^3/s, May 28; minimum daily, 138 ft^3/s, May 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	436	1,030	1,200	431	379	261	276	776	2,310	244	263
2	206	434	865	1,000	404	2,340	240	548	353	1,690	234	301
3	198	433	756	690	513	2,060	229	619	750	1,230	220	461
4	196	552	722	617	300	1,680	220	621	569	2,480	225	311
5	195	565	689	1,570	5,710	1,660	206	392	350	2,310	293	262
6	197	561	389	1,490	17,200	e10,000	199	342	280	1,960	279	906
7	192	557	352	1,060	7,300	e5,000	194	304	243	4,660	237	1,200
8	192	553	329	1,140	3,950	e4,000	194	277	225	3,800	223	700
9	189	547	311	1,080	3,560	3,150	190	264	203	2,530	212	235
10	182	535	822	985	3,270	2,730	173	1,090	214	2,110	217	203
11	184	417	1,060	832	3,070	1,420	187	1,760	216	1,490	222	194
12	185	416	739	353	3,100	1,200	1,020	563	231	764	279	192
13	180	428	590	306	2,850	551	4,070	494	887	858	243	196
14	185	415	559	406	2,130	399	3,390	675	1,160	2,550	225	189
15	190	414	509	468	2,540	362	2,120	800	1,210	1,850	217	231
16	188	486	473	448	2,750	726	1,260	772	1,070	1,460	213	2,120
17	191	588	600	391	2,610	622	981	575	412	1,360	193	3,520
18	189	962	605	388	2,240	486	842	319	347	1,200	181	1,310
19	187	1,350	551	586	2,170	481	730	274	314	626	196	626
20	183	1,190	482	421	2,030	405	459	243	287	481	730	434
21	179	993	434	402	1,790	389	411	216	270	368	782	342
22	181	911	406	370	1,530	346	400	197	1,620	276	377	292
23	185	869	482	343	1,360	312	419	188	1,840	243	293	264
24	181	1,070	981	324	1,200	293	360	166	2,270	233	283	246
25	180	1,090	737	1,380	759	273	356	156	9,570	255	250	233
26	209	663	599	1,790	716	264	844	155	10,900	255	216	223
27	253	930	515	1,370	672	246	570	143	4,230	268	303	212
28	460	4,120	465	1,240	626	240	388	138	3,690	262	258	206
29	454	2,170	e590	721	542	241	313	166	3,090	241	260	200
30	443	1,330	e570	635	---	295	288	327	3,050	233	461	195
31	440	---	e530	561	---	288	---	848	---	257	358	---
TOTAL	6,988	25,985	18,742	24,567	77,323	42,838	21,514	13,908	50,627	40,610	8,924	16,267
MEAN	225	866	605	792	2,666	1,382	717	449	1,688	1,310	288	542
MAX	460	4,120	1,060	1,790	17,200	10,000	4,070	1,760	10,900	4,660	782	3,520
MIN	179	414	311	306	300	240	173	138	203	233	181	189
(†)	-3,700	-8,300	-1,200	-1,300	300	6,400	9,200	200	400	-600	-700	-3,500
MEAN(‡)	106	590	566	571	2,677	1,588	1,024	455	1,701	1,291	265	426
CFSM(†)	0.22	1.23	1.18	1.56	5.56	3.30	2.13	0.95	3.54	2.68	0.55	0.88
IN.(‡)	0.25	1.37	1.36	1.80	6.00	3.81	2.37	1.09	3.95	3.09	0.64	0.99

CAL YR 2003	MEAN(‡) 985	CFSM(‡) 2.05	IN.(‡) 27.88
WTR YR 2004	MEAN(‡) 944	CFSM(‡) 1.96	IN.(‡) 26.71

(†) Change in contents, in cfs-days in Normandy Lake.
(‡) Adjusted for change in content.
NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

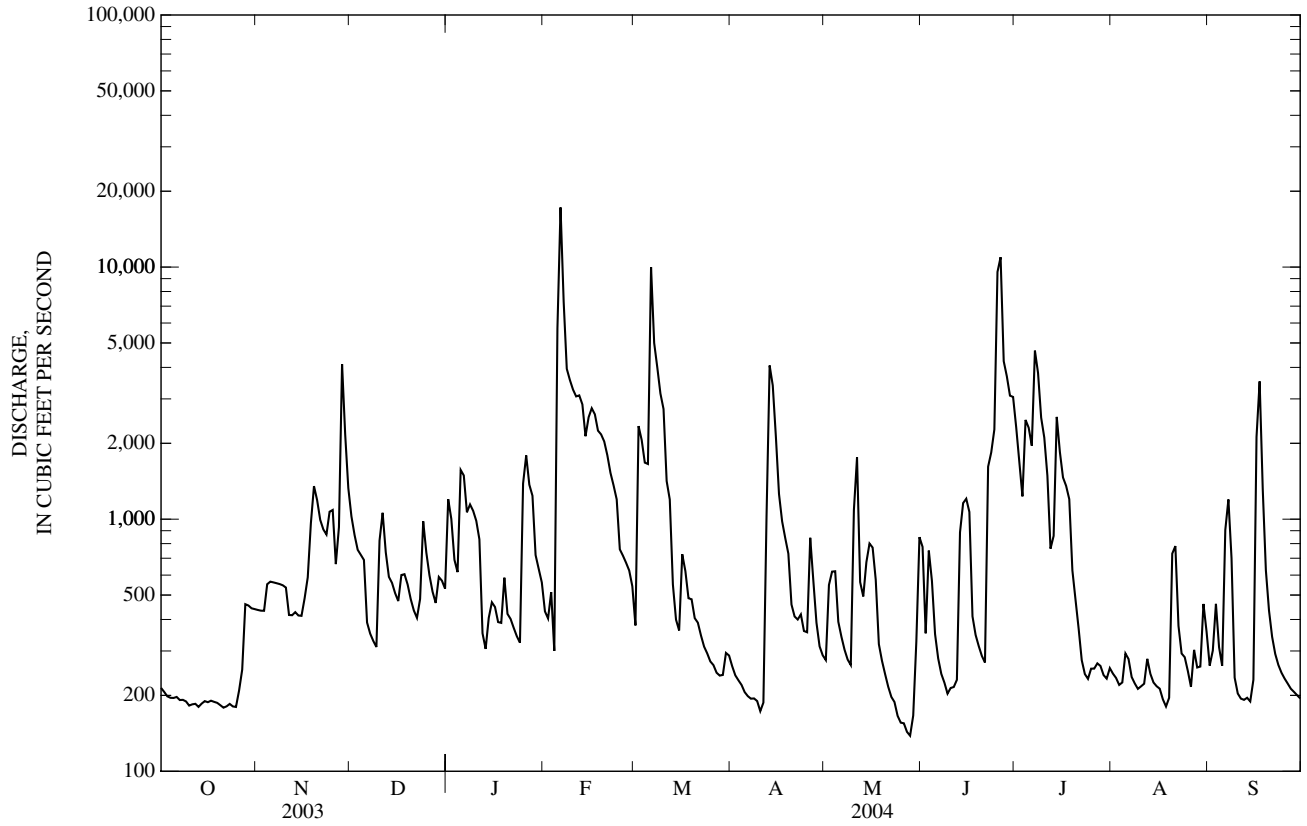
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	349	915	1,320	1,378	1,424	1,485	917	809	559	379	285	316
MAX	1,314	2,277	4,132	3,160	3,730	3,649	2,992	3,612	2,151	1,670	749	1,036
(WY)	(1990)	(1987)	(1992)	(2002)	(1994)	(1980)	(1994)	(2003)	(1989)	(1989)	(1998)	(1992)
MIN	157	170	289	175	339	308	165	137	166	166	154	163
(WY)	(1988)	(1988)	(2000)	(1986)	(1978)	(1988)	(1986)	(1988)	(1988)	(1987)	(1983)	(1980)

03598000 DUCK RIVER NEAR SHELBYVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1977 - 2004	
ANNUAL TOTAL	359,987		348,293			
ANNUAL MEAN	986		952		841	
HIGHEST ANNUAL MEAN					1,253	1991
LOWEST ANNUAL MEAN					257	1981
HIGHEST DAILY MEAN	30,100	May 8	17,200	Feb 6	30,100	May 8, 2003
LOWEST DAILY MEAN	177	Jul 21	138	May 28	72	Oct 1, 1982
ANNUAL SEVEN-DAY MINIMUM	182	Oct 19	159	May 23	88	Sep 25, 1982
MAXIMUM PEAK FLOW			18,400	Feb 6	37,200	May 7, 2003
MAXIMUM PEAK STAGE			26.07	Feb 6	33.46	May 7, 2003
INSTANTANEOUS LOW FLOW			134	May 28	71	Sep 30, 1982
10 PERCENT EXCEEDS	1,560		2,250		2,050	
50 PERCENT EXCEEDS	398		442		314	
90 PERCENT EXCEEDS	193		195		174	

* Regulated period only.
e Estimated



03598250 NORTH FORK CREEK NEAR POPLINS CROSSROADS, TN

LOCATION.--Lat 35°35'04", long 86°35'46", Bedford County, Hydrologic Unit 06040002, on left bank 25 ft downstream from State Highway 270 bridge, 1.2 mi downstream from Weakly Creek, 0.8 mi northwest of Poplins Crossroads, and at mile 3.4.

DRAINAGE AREA.--71.9 mi^2.

PERIOD OF RECORD.--April 1994 to April 1995, October 1998 to current year.

GAGE.--Data logger. Elevation of gage is 662 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 28	0900	2,030	9.85	Jun 25	1645	3,380	11.69
Feb 6	0115	*5,530	*14.03	Sep 17	1345	2,800	11.00
Mar 6	0745	2,910	11.14				

Minimum discharge, 0.67 ft^3/s, Oct. 22, 23.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	2.0	117	104	58	44	23	9.0	40	191	4.2	3.2
2	7.7	1.7	91	89	57	508	18	14	18	486	3.3	5.8
3	6.2	1.5	78	80	91	164	15	21	12	168	2.6	107
4	5.0	1.4	83	71	75	109	13	23	10	194	2.0	27
5	4.1	1.6	82	286	2,420	196	11	15	7.6	153	72	16
6	3.7	2.3	73	185	3,690	1,810	9.9	11	5.2	167	42	10
7	3.4	2.0	63	118	458	251	9.1	8.3	3.8	512	17	7.6
8	2.9	1.7	56	99	238	140	8.7	6.5	3.1	169	11	6.3
9	2.1	1.6	50	103	164	99	7.9	5.4	2.5	102	7.4	4.8
10	1.7	1.5	219	88	129	74	7.1	30	3.0	68	5.3	3.9
11	1.5	1.3	173	72	98	60	7.1	52	3.1	53	4.4	3.0
12	1.3	1.3	112	64	113	50	198	24	2.7	87	5.8	2.4
13	1.1	1.6	91	58	98	42	995	20	111	47	4.3	1.8
14	1.3	1.5	100	53	77	37	465	16	41	40	3.4	1.8
15	1.3	1.9	87	49	86	34	158	34	27	33	2.7	1.6
16	1.2	11	78	43	131	61	101	76	20	23	2.1	14
17	1.4	30	112	41	236	48	73	44	12	18	1.7	2,050
18	1.4	44	88	317	291	48	56	27	9.6	14	1.4	282
19	1.1	172	76	192	193	48	45	19	7.6	11	1.2	111
20	1.0	88	65	116	133	37	38	15	5.4	8.5	22	67
21	0.93	54	57	94	99	36	32	11	4.0	6.7	21	46
22	0.79	39	52	80	75	31	29	7.7	36	5.2	12	33
23	0.78	30	159	67	62	27	27	5.7	492	4.1	7.8	24
24	0.77	225	277	61	55	24	23	4.4	282	3.4	5.6	19
25	0.75	120	143	551	48	21	20	3.9	1,950	3.5	28	15
26	1.4	72	105	272	51	19	18	3.4	738	7.3	29	11
27	2.6	80	87	162	51	17	15	2.7	190	21	16	9.4
28	3.6	1,470	74	114	43	15	12	2.2	129	12	9.6	7.8
29	3.4	294	82	93	38	15	11	1.9	93	6.7	6.9	6.1
30	2.8	163	265	81	---	33	9.6	1.9	94	4.6	5.1	5.1
31	2.4	---	136	66	---	29	---	51	---	4.6	3.9	---
TOTAL	79.32	2,916.9	3,331	3,869	9,358	4,127	2,455.4	566.0	4,352.6	2,623.6	360.7	2,902.6
MEAN	2.56	97.2	107	125	323	133	81.8	18.3	145	84.6	11.6	96.8
MAX	9.7	1,470	277	551	3,690	1,810	995	76	1,950	512	72	2,050
MIN	0.75	1.3	50	41	38	15	7.1	1.9	2.5	3.4	1.2	1.6
CFSM	0.04	1.35	1.49	1.74	4.49	1.85	1.14	0.25	2.02	1.18	0.16	1.35
IN.	0.04	1.51	1.72	2.00	4.84	2.14	1.27	0.29	2.25	1.36	0.19	1.50

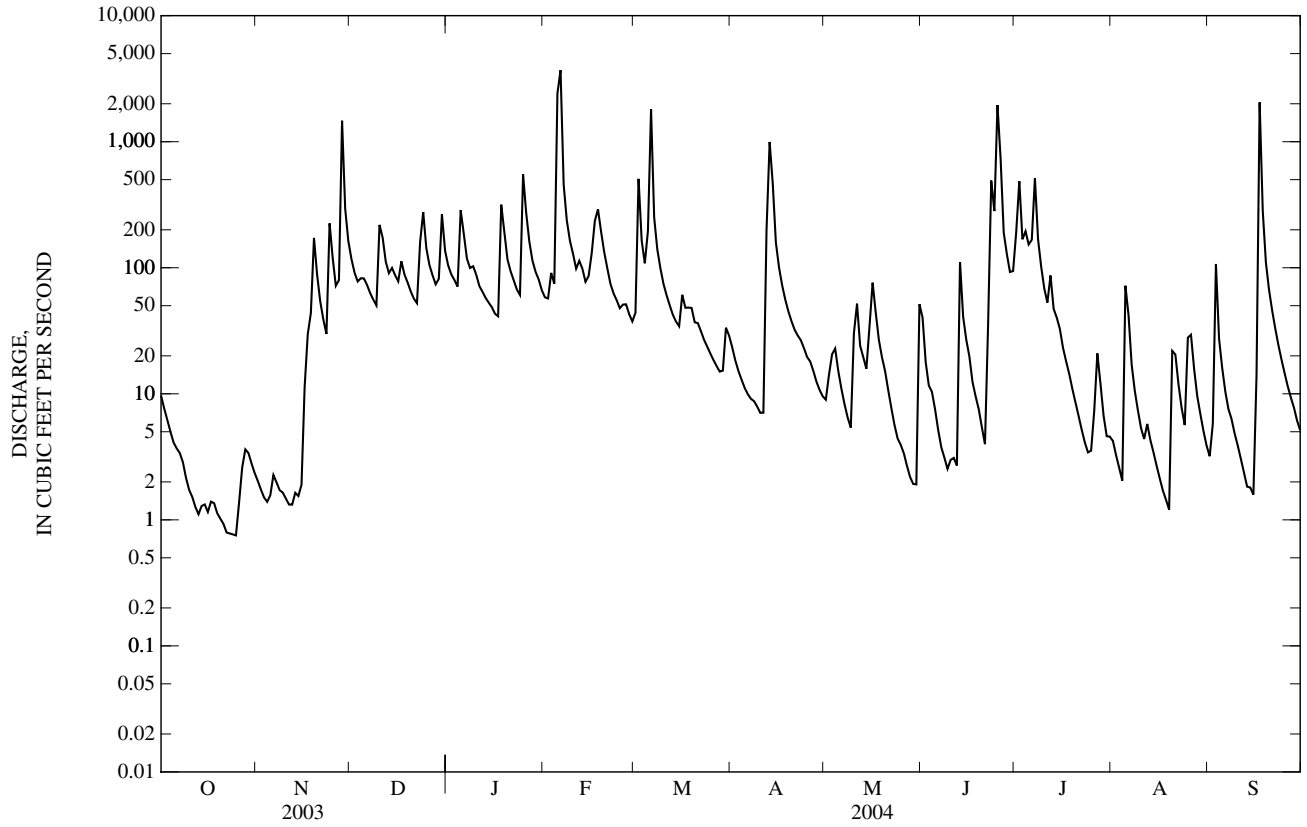
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	18.6	63.2	158	208	217	200	133	97.2	33.8	24.0	20.3	20.5
MAX	51.4	183	292	472	433	386	369	376	145	84.6	94.2	96.8
(WY)	(1995)	(2003)	(2003)	(1999)	(2001)	(2002)	(1994)	(2003)	(2004)	(2004)	(2001)	(2004)
MIN	0.00	0.50	25.6	38.3	65.6	50.9	29.7	3.89	2.30	0.61	0.02	0.00
(WY)	(2000)	(1999)	(2000)	(2000)	(2002)	(2003)	(1999)	(2001)	(2002)	(2000)	(1999)	(1999)

03598250 NORTH FORK CREEK NEAR POPLINS CROSSROADS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	36,937.18		36,942.12			
ANNUAL MEAN	101		101		98.3	
HIGHEST ANNUAL MEAN					127	2003
LOWEST ANNUAL MEAN					61.7	2000
HIGHEST DAILY MEAN	3,530	May 6	3,690	Feb 6	4,700	Jan 23, 1999
LOWEST DAILY MEAN	0.27	Sep 20	0.75	Oct 25	0.00	Aug 4, 1999
ANNUAL SEVEN-DAY MINIMUM	0.34	Sep 15	0.87	Oct 19	0.00	Aug 4, 1999
MAXIMUM PEAK FLOW			5,530	Feb 6	7,390	Jan 23, 1999
MAXIMUM PEAK STAGE			14.03	Feb 6	15.67	Jan 23, 1999
INSTANTANEOUS LOW FLOW			a0.67	Oct 22	b0.00	Aug 4, 1999
ANNUAL RUNOFF (CFSM)	1.41		1.40		1.37	
ANNUAL RUNOFF (INCHES)	19.11		19.11		18.57	
10 PERCENT EXCEEDS	165		186		175	
50 PERCENT EXCEEDS	32		28		17	
90 PERCENT EXCEEDS	1.5		1.9		0.12	

a Also occurred Oct. 23.
b Also occurred many days most years.



03599100 BIG ROCK CREEK AT DOUBLE BRIDGES, TN

LOCATION.--Lat 35°31'49", long 86°46'07", Marshall County, Hydrologic Unit 06040002, on the upstream side of the bridge on Thompson Road, at mile 9.4.

DRAINAGE AREA.--48.7 mi^2.

PERIOD OF RECORD.--May 2003 to current year. Partial record low flow site 1939, 1944, 1954-54, 1956-57.

GAGE.--Data collection platform with radar sensing device.

REMARKS.--Records good except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 8,110 ft^3/s, June 25, gage height, 20.94 ft; minimum discharge, 4.1 ft^3/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	5.2	77	e93	51	53	e39	25	56	94	e16	19
2	9.5	5.7	57	e69	46	410	e31	50	34	82	e14	20
3	9.7	6.8	46	52	56	188	e26	47	416	85	e12	19
4	8.3	6.5	44	45	e77	131	e26	41	164	e143	e11	15
5	7.2	6.4	39	130	e2,280	194	e26	32	58	137	e27	13
6	6.8	8.5	35	118	e2,000	1,400	e20	27	35	94	20	11
7	6.2	7.9	31	80	e450	361	e18	23	26	108	15	11
8	5.5	7.7	28	64	e252	216	e18	20	21	e124	13	11
9	6.2	6.3	26	58	e183	147	e16	18	e12	e89	12	9.4
10	6.1	5.9	117	51	168	110	e14	17	e12	97	11	7.6
11	6.4	6.2	101	44	130	88	e13	e63	e11	90	10	7.7
12	5.8	6.1	67	39	144	74	e288	e31	23	52	12	7.4
13	5.4	10	54	37	e124	62	e1,170	e29	205	40	11	6.7
14	6.9	8.6	53	35	e112	56	e647	30	33	214	8.6	5.2
15	8.0	9.1	50	32	e170	53	e341	42	31	171	9.0	5.0
16	7.0	14	45	30	239	118	e220	66	24	79	9.4	26
17	6.6	e24	48	28	274	88	e153	38	15	57	8.7	e839
18	8.7	e33	44	93	305	75	e113	28	37	44	7.9	e168
19	7.3	e100	38	93	222	65	e92	24	27	35	7.6	80
20	7.1	45	33	64	166	58	e81	20	14	30	57	e59
21	6.0	27	29	52	128	60	e72	17	9.6	27	60	e44
22	5.6	19	27	45	101	53	43	14	346	23	26	30
23	4.7	13	88	40	87	48	56	12	360	22	18	26
24	4.8	100	147	35	76	e42	43	11	172	21	15	e25
25	5.6	62	87	501	66	e32	37	10	3,080	19	504	e22
26	7.5	39	63	276	64	e29	36	10	826	21	175	e19
27	12	39	51	154	60	e28	32	9.8	304	30	68	e19
28	9.8	808	43	105	54	e28	28	8.5	209	e25	42	e18
29	8.2	252	46	84	50	e28	24	8.5	150	e19	31	21
30	7.1	122	174	69	---	e54	23	22	112	e16	26	17
31	5.5	---	e138	58	---	e50	---	109	---	e16	22	---
TOTAL	222.5	1,803.9	1,926	2,674	8,135	4,399	3,746	902.8	6,822.6	2,104	1,279.2	1,581.0
MEAN	7.18	60.1	62.1	86.3	281	142	125	29.1	227	67.9	41.3	52.7
MAX	12	808	174	501	2,280	1,400	1,170	109	3,080	214	504	839
MIN	4.7	5.2	26	28	46	28	13	8.5	9.6	16	7.6	5.0

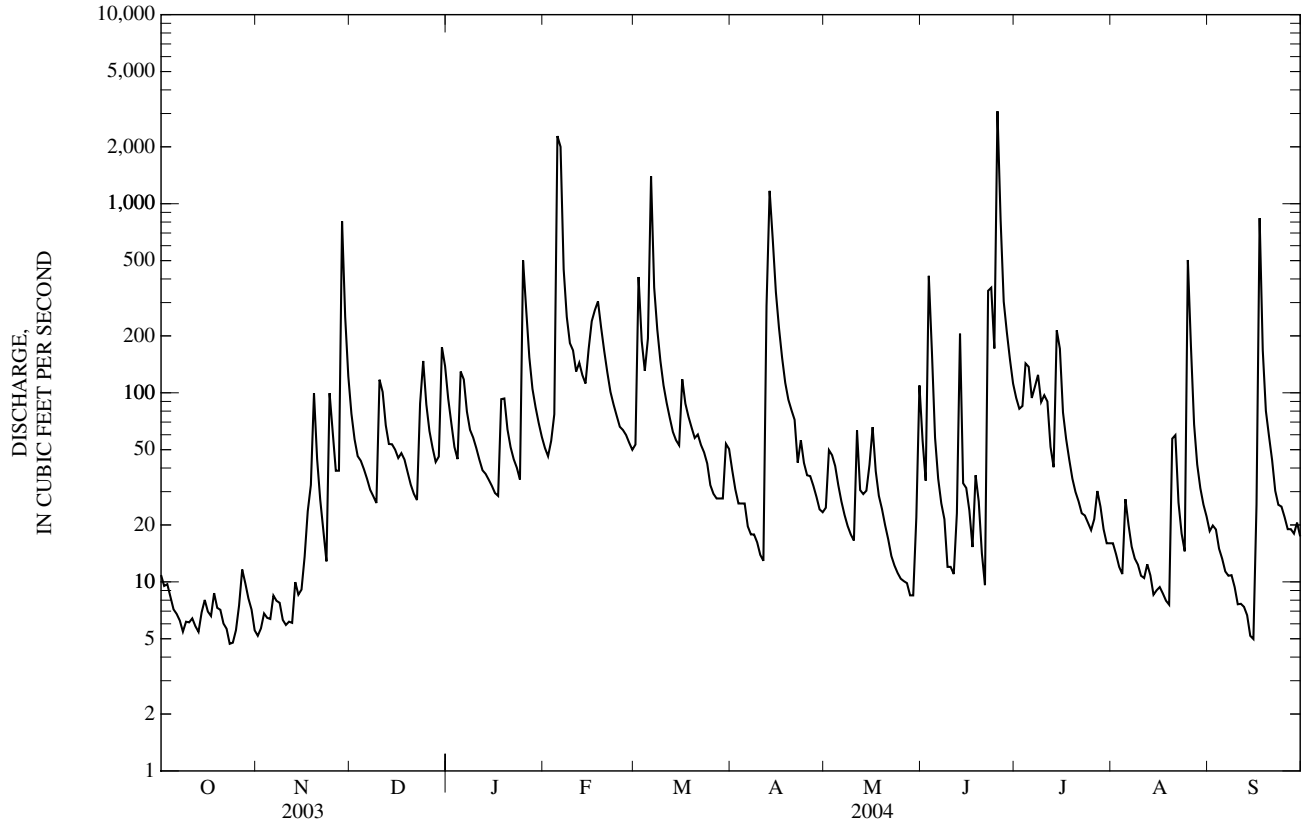
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	7.18	60.1	62.1	86.3	281	142	125	207	152	55.7	31.0	43.7
MAX	7.18	60.1	62.1	86.3	281	142	125	385	227	67.9	41.3	52.7
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	7.18	60.1	62.1	86.3	281	142	125	29.1	77.5	43.5	20.8	34.7
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

03599100 BIG ROCK CREEK AT DOUBLE BRIDGES, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	35,596.0			
ANNUAL MEAN	97.3		97.3	
HIGHEST ANNUAL MEAN			97.3	2004
LOWEST ANNUAL MEAN			97.3	2004
HIGHEST DAILY MEAN	3,080	Jun 25	4,280	May 6, 2003
LOWEST DAILY MEAN	4.7	Oct 23	4.0	Sep 19, 2003
ANNUAL SEVEN-DAY MINIMUM	5.9	Oct 19	5.4	Sep 15, 2003
MAXIMUM PEAK FLOW	8,110	Jun 25	11,600	May 6, 2003
MAXIMUM PEAK STAGE	20.94	Jun 25	22.83	May 6, 2003
INSTANTANEOUS LOW FLOW	4.1	Sep 15		
10 PERCENT EXCEEDS	174		174	
50 PERCENT EXCEEDS	35		35	
90 PERCENT EXCEEDS	7.6		7.6	

e Estimated



03599240 DUCK RIVER ABOVE MILLTOWN, TN

LOCATION.--Lat 35°34'34", long 86°46'42", Marshall County, Hydrologic Unit 06040002, on right upstream side of bridge on Hwy 272 at mile 180.3.

DRAINAGE AREA.--916 mi^2.

PERIOD OF RECORD.--June 2003 to current year.

GAGE.--Data collection platform with radar sensing device.

REMARKS.--Records good except for estimated discharges, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 39,400 ft^3/s, Feb. 6, gage height, 37.40 ft; minimum discharge, 153 ft^3/s, Oct. 22, May 27.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	394	1,870	1,980	948	776	492	411	1,540	6,260	327	441
2	242	390	1,500	1,610	812	4,230	416	483	895	3,910	310	337
3	231	391	1,280	1,310	877	3,880	371	829	593	3,020	285	507
4	219	400	1,150	1,040	988	2,830	322	891	1,890	2,940	262	562
5	214	482	1,120	1,900	11,600	2,480	299	763	833	4,490	348	393
6	210	496	996	3,220	38,100	20,900	273	535	553	3,070	479	335
7	208	495	750	2,070	34,100	13,700	262	462	415	5,770	363	1,220
8	206	489	680	1,710	9,550	5,140	259	409	350	5,490	293	1,160
9	204	485	620	1,660	5,000	4,100	258	345	322	3,880	259	665
10	204	481	1,080	1,550	4,330	3,610	250	359	420	2,970	242	282
11	192	461	2,350	1,360	3,880	2,590	233	4,110	385	2,670	245	238
12	189	377	1,610	1,030	3,790	1,820	1,900	1,450	313	1,370	267	223
13	188	375	1,260	715	3,780	1,380	e9,500	824	1,150	1,090	311	222
14	183	384	1,130	661	3,130	848	e1,300	848	1,530	1,850	269	230
15	195	378	1,110	720	3,080	698	4,880	1,050	1,490	3,380	242	219
16	197	417	964	731	4,410	1,030	3,040	1,640	1,630	2,030	233	881
17	200	537	1,070	693	4,010	1,540	2,100	1,190	984	1,710	226	8,950
18	202	734	1,190	1,320	4,520	1,040	e1,500	800	614	1,550	209	5,110
19	201	1,630	1,080	1,830	3,670	976	1,300	543	587	1,150	198	1,800
20	197	1,720	962	1,310	3,160	805	1,000	445	469	729	277	1,100
21	178	1,270	850	1,040	2,770	696	809	379	391	570	1,560	790
22	177	1,050	765	896	2,340	672	724	318	1,950	430	747	614
23	179	925	834	813	2,000	581	746	276	6,800	334	475	507
24	186	1,430	2,140	720	1,780	515	e650	253	5,560	292	352	437
25	180	1,860	1,770	2,830	1,420	471	e550	230	13,900	273	772	384
26	198	1,250	1,370	4,120	1,150	430	735	214	30,800	312	892	338
27	230	978	1,140	2,610	1,130	400	988	203	12,500	385	491	316
28	276	6,580	987	2,110	1,020	368	706	201	5,720	368	472	299
29	408	5,400	896	1,650	920	356	531	194	5,130	338	456	e280
30	404	2,620	2,750	1,260	---	459	441	209	4,380	311	397	276
31	396	---	2,730	1,110	---	558	---	874	---	303	587	---
TOTAL	6,955	34,879	40,004	47,579	158,265	79,879	36,835	21,738	104,094	63,245	12,846	29,116
MEAN	224	1,163	1,290	1,535	5,457	2,577	1,228	701	3,470	2,040	414	971
MAX	408	6,580	2,750	4,120	38,100	20,900	9,500	4,110	30,800	6,260	1,560	8,950
MIN	177	375	620	661	812	356	233	194	313	273	198	219
(†)	-3,700	-8,300	-1,200	-1,300	300	6,400	9,200	200	400	-600	-700	-3,500
MEAN(‡)	105	886	1,252	1,493	5,468	2,783	1,535	708	3,483	2,021	392	854
CFSM(†)	0.11	0.97	1.37	1.63	5.97	3.04	1.68	0.77	3.80	2.21	0.43	0.93
IN.(‡)	0.13	1.08	1.58	1.88	6.44	3.50	1.87	0.89	4.24	2.54	0.49	1.04

WTR YR 2004 MEAN(‡) 1729 CFSM(‡) 1.89 IN.(‡) 25.69

(†) 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.

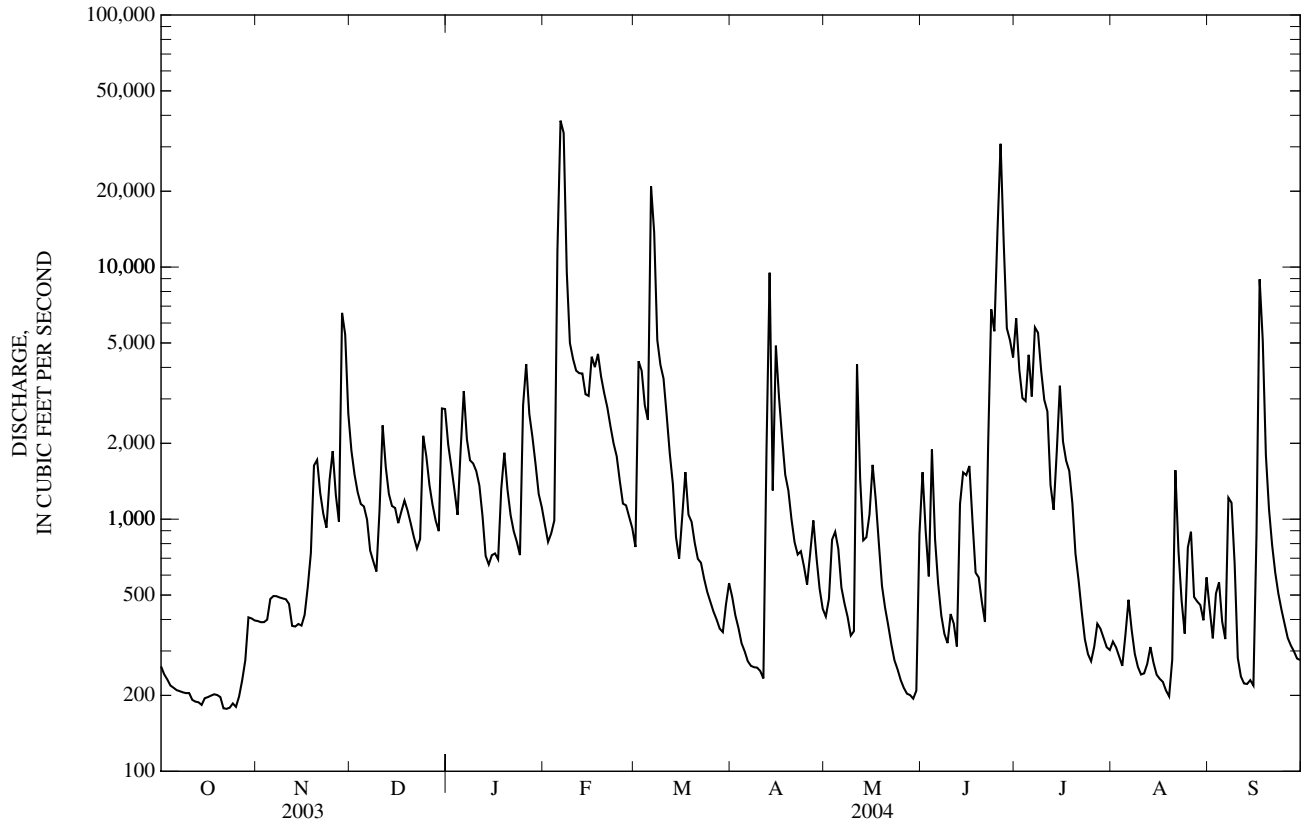
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	224	1,163	1,290	1,535	5,457	2,577	1,228	701	2,075	1,357	345	690
MAX	224	1,163	1,290	1,535	5,457	2,577	1,228	701	3,470	2,040	414	971
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	224	1,163	1,290	1,535	5,457	2,577	1,228	701	679	673	275	410
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

03599240 DUCK RIVER ABOVE MILLTOWN, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	635,435			
ANNUAL MEAN	1,736		1,736	
HIGHEST ANNUAL MEAN			1,736	2004
LOWEST ANNUAL MEAN			1,736	2004
HIGHEST DAILY MEAN	38,100	Feb 6	38,100	Feb 6, 2004
LOWEST DAILY MEAN	177	Oct 22	171	Sep 20, 2003
ANNUAL SEVEN-DAY MINIMUM	185	Oct 20	183	Sep 15, 2003
MAXIMUM PEAK FLOW	39,400	Feb 6	39,400	Feb 6, 2004
MAXIMUM PEAK STAGE	37.40	Feb 6	37.40	Feb 6, 2004
INSTANTANEOUS LOW FLOW	153	Oct 22	a153	Oct 22, 2003
10 PERCENT EXCEEDS	3,880		3,880	
50 PERCENT EXCEEDS	764		764	
90 PERCENT EXCEEDS	230		230	

a Also occurred May 27.
e Estimated



03599407 DUCK RIVER AT MILE 166.1 NEAR POTTSVILLE, TN

LOCATION.--Lat 35°37'51", long 86°51'43", Maury County, Hydrologic Unit 06040002, in the Spring Hill Water Compound, and at mile 166.1.

DRAINAGE AREA.--1016 mi^2.

PERIOD OF RECORD.--January 2004 to September 2004.

GAGE.--Data collection platform. Datum of gage is 582.88 ft above NGVD of 1929.

REMARKS.--Records fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

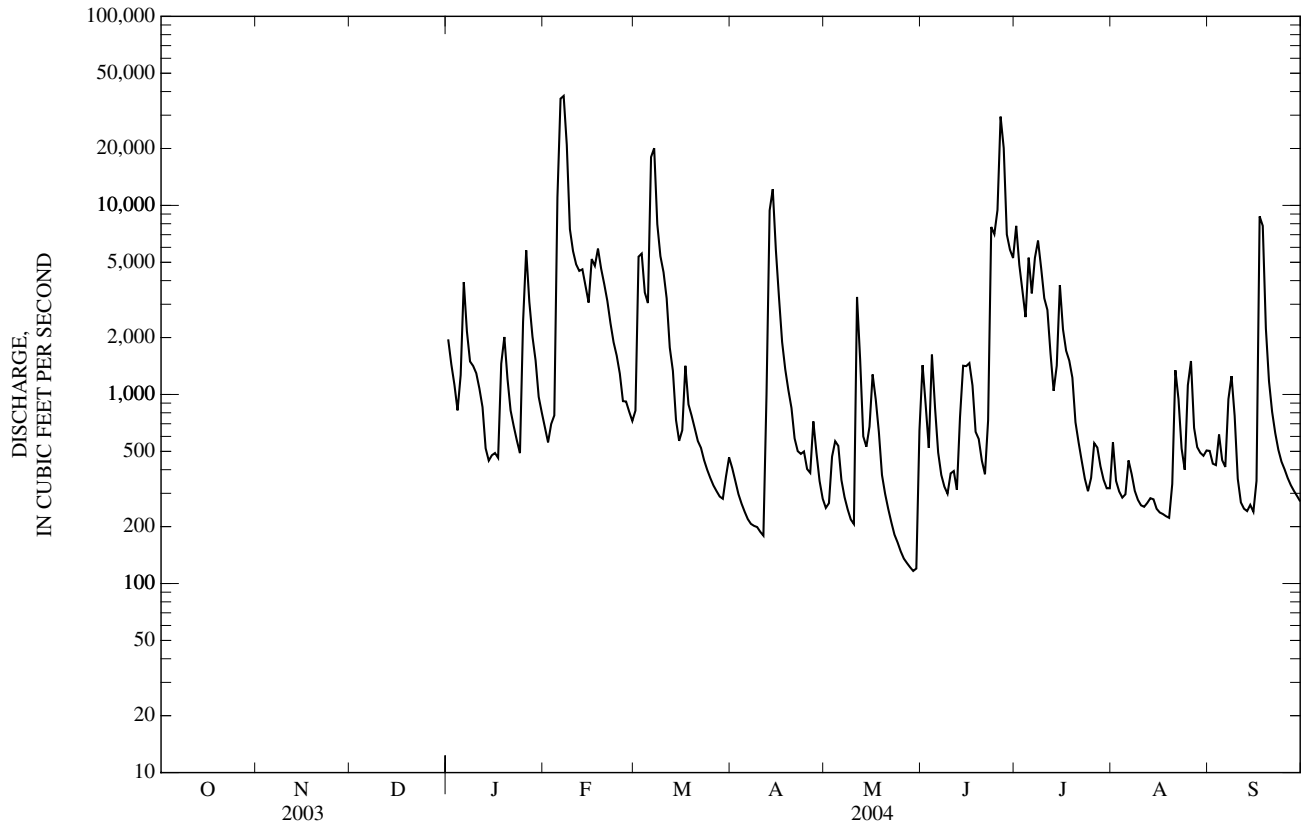
EXTREMES FOR CURRENT YEAR.--Maximum discharge during period, 40,600 ft^3/s, Feb. 6; maximum gage height, 41.02 ft, Feb. 6; minimum daily discharge, 117 ft^3/s, May 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1,960	668	822	408	251	1,430	7,800	558	503
2	---	---	---	1,440	558	5,360	349	266	878	4,850	349	431
3	---	---	---	1,120	698	5,560	297	469	522	3,540	307	423
4	---	---	---	824	775	3,460	265	566	1,620	2,570	285	614
5	---	---	---	1,270	11,000	3,040	240	535	848	5,290	296	449
6	---	---	---	3,930	36,700	18,000	219	353	493	3,430	448	414
7	---	---	---	2,160	37,900	20,100	207	286	375	5,280	379	944
8	---	---	---	1,490	20,900	7,960	202	247	325	6,510	309	1,250
9	---	---	---	1,410	7,480	5,390	199	218	299	4,660	277	770
10	---	---	---	1,290	5,730	4,430	188	206	382	3,230	259	358
11	---	---	---	1,070	4,880	3,230	179	3,280	394	2,800	255	268
12	---	---	---	857	4,500	1,770	1,000	1,530	313	1,650	267	249
13	---	---	---	519	4,590	1,330	9,410	600	759	1,050	283	242
14	---	---	---	447	3,750	733	12,200	529	1,420	1,420	279	261
15	---	---	---	477	3,060	568	5,800	676	1,410	3,790	249	240
16	---	---	---	490	5,200	647	3,250	1,280	1,460	2,210	238	349
17	---	---	---	462	4,790	1,420	1,890	942	1,120	1,700	233	8,740
18	---	---	---	1,450	5,910	886	1,360	633	634	1,510	227	7,800
19	---	---	---	2,010	4,640	772	1,060	375	581	1,230	223	2,230
20	---	---	---	1,210	3,840	663	849	298	446	713	336	1,170
21	---	---	---	823	3,120	567	586	248	378	557	1,340	809
22	---	---	---	680	2,380	522	502	210	730	445	945	625
23	---	---	---	572	1,890	449	485	181	7,690	358	517	510
24	---	---	---	489	1,610	399	499	165	7,040	308	400	441
25	---	---	---	2,430	1,290	361	403	148	9,450	362	1,120	402
26	---	---	---	5,790	922	330	385	135	29,500	553	1,500	361
27	---	---	---	3,090	917	308	720	128	20,100	524	666	331
28	---	---	---	2,020	810	289	491	122	7,020	417	526	309
29	---	---	---	1,510	724	281	349	117	5,830	354	491	290
30	---	---	---	971	---	367	281	120	5,270	319	474	272
31	---	---	---	801	---	465	---	645	---	319	506	---
TOTAL	---	---	---	45,062	181,232	90,479	44,273	15,759	108,717	69,749	14,542	32,055
MEAN	---	---	---	1,454	6,249	2,919	1,476	508	3,624	2,250	469	1,068
MAX	---	---	---	5,790	37,900	20,100	12,200	3,280	29,500	7,800	1,500	8,740
MIN	---	---	---	447	558	281	179	117	299	308	223	240
(†)				-1,300	300	6,400	9,200	200	400	-600	-700	-3,500
MEAN(‡)				1,412	6,260	3,125	1,782	515	3,637	2,231	447	952
CFSM(†)				1.39	6.16	3.08	1.75	0.51	3.58	2.20	0.44	0.94
IN.(‡)				1.60	6.64	3.55	1.96	0.58	3.99	2.53	0.51	1.05

(†) Change in contents, in cfs-days in Normandy Lake.
(‡) Adjusted for change in content.
NOTE.--Contents(cfs-days) for adjustments furnished by Tennessee Valley Authority.

03599407 DUCK RIVER AT MILE 166.1 NEAR POTTSVILLE, TN—Continued



03599408 DUCK RIVER AT CARPENTERS BRIDGE NEAR POTTSVILLE, TN

LOCATION.--Lat 35°37'04", long 86°51'58", Maury County, Hydrologic Unit 06040002 (revised), on downstream side of Carpenters Bridge, and at mi 164.6.

DRAINAGE AREA.--1,060 mi^2.

PERIOD OF RECORD.--May to December 2003 (discontinued).

GAGE.--Data collection platform, with radar-stage sensing device. Datum of gage is 581.63 ft above NGVD of 1929.

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

EXTREMES FOR CURRENT PERIOD.--October to December 2003: Maximum discharge during period, 13,600 ft^3/s, Nov. 29; gage height, 18.16 ft, minimum discharge, 178 ft^3/s, Oct. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	e418	2,420	---	---	---	---	---	---	---	---	---
2	291	e411	1,880	---	---	---	---	---	---	---	---	---
3	261	e405	1,590	---	---	---	---	---	---	---	---	---
4	244	e401	1,420	---	---	---	---	---	---	---	---	---
5	236	e410	1,380	---	---	---	---	---	---	---	---	---
6	231	e511	1,300	---	---	---	---	---	---	---	---	---
7	227	e530	993	---	---	---	---	---	---	---	---	---
8	219	e523	880	---	---	---	---	---	---	---	---	---
9	211	e515	816	---	---	---	---	---	---	---	---	---
10	214	e514	1,000	---	---	---	---	---	---	---	---	---
11	206	e510	2,720	---	---	---	---	---	---	---	---	---
12	201	e505	2,020	---	---	---	---	---	---	---	---	---
13	200	e446	1,570	---	---	---	---	---	---	---	---	---
14	197	e401	1,410	---	---	---	---	---	---	---	---	---
15	e193	e405	1,410	---	---	---	---	---	---	---	---	---
16	e188	e480	1,270	---	---	---	---	---	---	---	---	---
17	e200	e550	1,280	---	---	---	---	---	---	---	---	---
18	e200	e970	1,430	---	---	---	---	---	---	---	---	---
19	e201	e1,800	1,330	---	---	---	---	---	---	---	---	---
20	e196	e2,010	1,210	---	---	---	---	---	---	---	---	---
21	190	e1,800	1,070	---	---	---	---	---	---	---	---	---
22	183	e1,250	976	---	---	---	---	---	---	---	---	---
23	187	e1,170	1,010	---	---	---	---	---	---	---	---	---
24	191	e1,750	2,260	---	---	---	---	---	---	---	---	---
25	192	e2,200	2,270	---	---	---	---	---	---	---	---	---
26	211	e1,600	1,710	---	---	---	---	---	---	---	---	---
27	e230	e4,480	1,430	---	---	---	---	---	---	---	---	---
28	e265	8,150	1,250	---	---	---	---	---	---	---	---	---
29	e301	9,810	1,150	---	---	---	---	---	---	---	---	---
30	e418	3,670	2,660	---	---	---	---	---	---	---	---	---
31	e430	---	e3,100	---	---	---	---	---	---	---	---	---
TOTAL	7,243	48,595	48,215	---	---	---	---	---	---	---	---	---
MEAN	234	1,620	1,555	---	---	---	---	---	---	---	---	---
MAX	430	9,810	3,100	---	---	---	---	---	---	---	---	---
MIN	183	401	816	---	---	---	---	---	---	---	---	---
(†)	-3,700	-8,300	-1,200									
MEAN(‡)	114	1,343	1,517									
CFSM(†)	0.11	1.27	1.43									
IN.(‡)	0.12	1.41	1.65									

(†)Change in contents, in cfs-days in Normandy Lake
(‡)Adjusted for change in content.
NOTE.--Contents(cfs-days) for adjustments furnished by Tennessee Valley Authority.
e Estimated

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03599450 FOUNTAIN CREEK NEAR FOUNTAIN HEIGHTS, TN

LOCATION.--Lat 35°31'05", long 86°56'31", Maury County, Hydrologic Unit 06040002, on downstream side of second pier from left abutment of Edmondson Bridge, 2.3 mi southeast of Fountain Heights, 3.1 mi southeast of Glendale, and 3.5 mi northeast of Culleoka.

DRAINAGE AREA.--74.0 mi^2.

PERIOD OF RECORD.--March 1966 to September 1968. May 2003 to current year.

GAGE.--Data logger and data collection platform. Datum of gage is 600 ft (from topographic map).

REMARKS.--Records good except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,490 ft^3/s, June 25, gage height, 14.99 ft; minimum discharge, 6.7 ft^3/s, May 29, 30, Aug. 20, gage height, 1.23 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e29	11	141	e109	88	159	53	28	52	107	18	e17
2	e27	11	101	97	83	474	49	40	34	109	14	37
3	e24	10	83	84	100	268	48	38	93	109	12	25
4	23	10	72	71	e90	212	45	33	83	173	12	19
5	21	11	63	151	e3,000	486	43	28	43	124	12	16
6	20	11	54	131	e1,300	1,350	42	24	32	87	13	14
7	18	11	48	107	e650	529	41	21	26	69	11	13
8	17	10	44	97	e420	340	41	19	23	58	10	12
9	15	9.6	40	92	e304	e235	38	18	21	48	10	11
10	15	9.3	156	76	248	180	36	e14	20	57	9.7	10
11	15	9.2	125	66	190	132	37	e13	17	50	10	9.3
12	14	9.5	97	60	e201	109	296	e12	15	37	18	8.8
13	13	13	83	54	e170	88	538	20	50	31	14	8.5
14	13	12	88	50	e137	76	414	18	22	206	12	8.3
15	14	10	75	47	165	70	256	22	24	102	11	7.9
16	13	e19	70	44	172	104	182	27	22	54	9.9	69
17	14	e60	66	41	241	76	134	19	18	41	9.1	e500
18	15	e144	61	199	338	80	104	17	25	34	8.8	e110
19	13	108	56	147	357	65	85	16	21	28	9.2	64
20	12	75	51	112	336	62	74	14	16	24	81	46
21	11	52	46	96	259	71	65	13	14	21	41	35
22	11	40	43	83	197	62	64	12	293	19	19	28
23	10	33	94	71	158	63	62	11	240	17	14	24
24	10	160	131	65	133	61	51	10	171	16	12	21
25	10	102	100	622	110	56	46	9.6	1,880	15	76	18
26	20	72	83	390	101	51	43	9.2	624	20	51	17
27	22	67	71	261	87	e50	37	9.0	310	24	28	16
28	17	1,040	63	186	76	e55	33	8.8	224	18	46	15
29	14	392	85	148	68	e61	31	9.6	163	15	41	14
30	12	220	e224	121	---	72	30	26	119	13	e25	13
31	11	---	e150	102	---	58	---	160	---	18	e20	---
TOTAL	493	2,741.6	2,664	3,980	9,779	5,755	3,018	719.2	4,695	1,744	677.7	1,206.8
MEAN	15.9	91.4	85.9	128	337	186	101	23.2	156	56.3	21.9	40.2
MAX	29	1,040	224	622	3,000	1,350	538	160	1,880	206	81	500
MIN	10	9.2	40	41	68	50	30	8.8	14	13	8.8	7.9
CFSM	0.21	1.23	1.16	1.73	4.56	2.51	1.36	0.31	2.11	0.76	0.30	0.54
IN.	0.25	1.38	1.34	2.00	4.92	2.89	1.52	0.36	2.36	0.88	0.34	0.61

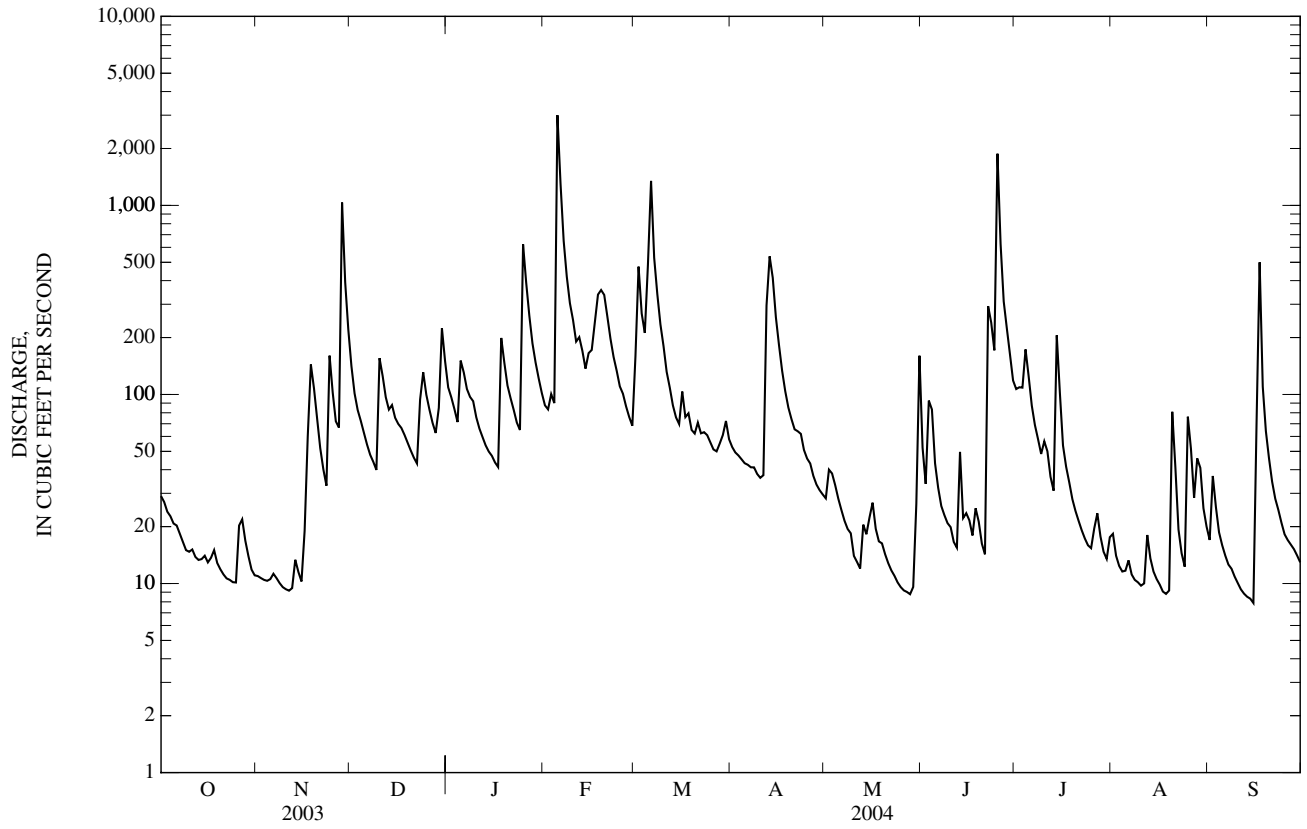
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

MEAN	17.6	64.8	196	179	170	237	79.2	297	65.1	48.3	31.0	41.9
MAX	19.7	91.4	268	325	337	307	154	610	156	130	83.8	129
(WY)	(1967)	(2004)	(1968)	(1968)	(2004)	(1968)	(1968)	(1967)	(2004)	(1967)	(1967)	(2003)
MIN	15.9	42.5	85.9	84.5	81.9	186	25.8	23.2	20.1	7.33	1.77	5.40
(WY)	(2004)	(1968)	(2004)	(1967)	(1967)	(2004)	(1966)	(2004)	(1966)	(1966)	(1968)	(1966)

03599450 FOUNTAIN CREEK NEAR FOUNTAIN HEIGHTS, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1966 - 2004	
ANNUAL TOTAL	37,473.3			
ANNUAL MEAN	102		120	
HIGHEST ANNUAL MEAN			137	1967
LOWEST ANNUAL MEAN			102	2004
HIGHEST DAILY MEAN	3,000	Feb 5	8,050	May 13, 1967
LOWEST DAILY MEAN	7.9	Sep 15	0.85	Aug 29, 1968
ANNUAL SEVEN-DAY MINIMUM	9.1	Sep 9	0.92	Aug 26, 1968
MAXIMUM PEAK FLOW	5,490	Jun 25	a20,000	May 13, 1967
MAXIMUM PEAK STAGE	14.99	Jun 25	24.54	May 13, 1967
INSTANTANEOUS LOW FLOW	b6.7	May 29	c0.82	Aug 29, 1968
ANNUAL RUNOFF (CFSM)	1.38		1.62	
ANNUAL RUNOFF (INCHES)	18.84		21.95	
10 PERCENT EXCEEDS	214		232	
50 PERCENT EXCEEDS	46		43	
90 PERCENT EXCEEDS	11		9.1	

a From rating curve extended above 4,450 ft^3/s on basis of contracted opening determination of peak flow.
b Also occurred May 30, Aug. 20.
c Also occurred Aug. 30, 1968
e Estimated



03599500 DUCK RIVER AT COLUMBIA, TN

LOCATION.--Lat 35°37'04", 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, 2.4 mi upstream from Rutherford Creek, and at mile 132.8.

DRAINAGE AREA.--1,208 mi^2.

PERIOD OF RECORD.--October 1904 to December 1908, April 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site, 1887-95, 1911 (fragmentary), 1947-71, published in reports of U.S. Weather Bureau. Discharge records furnished by Tennessee Valley Authority, 1983-1991.

REVISED RECORD.--WSP 783: 1929(M). WSP 853: Drainage area. WSP 1306: 1905-9, 1920-22, 1923(M).

GAGE.--Data collection platform. Datum of gage is 535.33 ft above NGVD of 1929, supplementary adjustment of 1955. Prior to Jan. 9, 1925, nonrecording gages near this site; all gages at datum 2.37 ft higher prior to Oct. 1, 1933.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. Maximum discharge prior to regulation, 61,500 ft^3/s, Mar. 17, 1973; maximum gage height, 51.75 ft Feb. 14, 1948; no flow Oct. 22, 1922, caused by regulation by power plant .75 mi upstream. Flow regulated by Normandy Lake (station 03596460) since January 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1902, reached a stage of 48.0 ft, present datum, discharge, 50,700 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,400 ft^3/s, Feb. 7, gage height, 39.19 ft; minimum discharge, 223 ft^3/s, Oct. 22, 23, 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	443	3,090	2,920	1,370	1,430	872	529	1,440	6,390	559	599
2	405	435	2,200	2,220	1,220	4,940	771	542	1,450	5,500	517	590
3	365	429	1,780	1,880	1,280	6,530	679	606	1,030	3,890	398	546
4	340	424	1,560	1,540	1,420	4,670	605	889	1,220	2,840	346	565
5	321	436	1,440	1,590	11,500	3,940	551	926	1,680	3,860	319	628
6	311	514	1,400	3,440	30,600	12,800	510	785	914	3,710	357	464
7	299	531	1,180	3,320	34,600	18,200	475	589	644	3,210	491	416
8	293	526	996	2,250	30,600	11,700	458	510	511	5,610	411	1,190
9	282	517	904	2,030	13,600	6,220	442	452	516	4,670	339	1,100
10	275	515	1,080	1,920	6,490	4,930	429	425	572	3,250	300	688
11	276	511	2,180	1,730	5,430	4,110	413	1,020	540	2,680	290	358
12	264	507	2,510	1,550	4,860	2,650	838	3,160	496	2,220	298	278
13	257	448	1,800	1,210	4,810	2,070	5,490	1,240	473	1,310	305	252
14	259	426	1,560	986	4,420	1,510	11,300	884	1,360	1,220	325	242
15	254	430	1,500	921	3,550	1,180	7,650	1,150	1,500	2,710	308	247
16	249	505	1,430	956	4,430	1,090	4,370	1,420	1,470	2,710	276	279
17	259	581	1,330	941	5,130	1,600	2,720	1,560	1,560	1,830	259	3,650
18	259	916	1,430	1,860	5,870	1,640	2,020	1,230	1,080	1,610	250	8,170
19	255	2,020	1,430	2,960	5,620	1,320	1,670	957	844	1,480	240	3,560
20	251	2,400	1,300	2,320	4,780	1,230	1,470	637	695	1,100	360	1,620
21	245	1,960	1,170	1,690	4,010	1,100	1,200	527	548	779	679	1,150
22	243	1,460	1,080	1,430	3,270	1,020	1,010	454	650	619	1,520	879
23	232	1,240	1,060	1,260	2,690	931	938	391	4,500	494	805	696
24	225	1,770	1,750	1,140	2,320	828	924	346	6,710	400	567	570
25	230	2,560	2,580	2,630	2,060	758	852	319	7,190	524	562	489
26	260	2,140	1,960	6,040	1,680	699	739	294	16,400	958	1,720	431
27	281	1,490	1,590	4,730	1,560	653	897	273	20,000	1,070	1,090	389
28	284	5,990	1,390	3,110	1,480	618	1,010	261	9,940	671	688	358
29	313	10,400	1,280	2,470	1,350	646	765	252	5,480	529	620	332
30	443	5,780	1,900	1,870	---	779	612	251	4,540	441	555	312
31	455	---	3,900	1,550	---	858	---	732	---	411	495	---
TOTAL	9,160	48,304	51,760	66,464	202,000	102,650	52,680	23,611	95,953	68,696	16,249	31,048
MEAN	295	1,610	1,670	2,144	6,966	3,311	1,756	762	3,198	2,216	524	1,035
MAX	475	10,400	3,900	6,040	34,600	18,200	11,300	3,160	20,000	6,390	1,720	8,170
MIN	225	424	904	921	1,220	618	413	251	473	400	240	242
(†)	-3,700	-8,300	-1,200	-1,300	300	6,400	9,200	200	400	-600	-700	-3,500
MEAN(‡)	176	1,333	1,631	2,102	6,976	3,518	2,063	768	3,212	2,197	502	918
CFSM(†)	0.15	1.10	1.35	1.74	5.77	2.91	1.71	0.64	2.66	1.82	0.42	0.76
IN.(‡)	0.17	1.23	1.56	2.01	6.23	3.36	1.91	0.73	2.97	2.10	0.48	0.85

CAL YR 2003 MEAN(‡) 2501 CFSM(‡) 2.07 IN.(‡) 28.18
WTR YR2004 MEAN(‡) 2092 CFSM(‡) 1.73 IN.(‡) 23.58

(†) Change in contents, in cfs-days in Normandy Lake.
(‡) Adjusted for change in content.
NOTE.--Contents (cfs-days) for adjustments furnished by Tennessee Valley Authority.

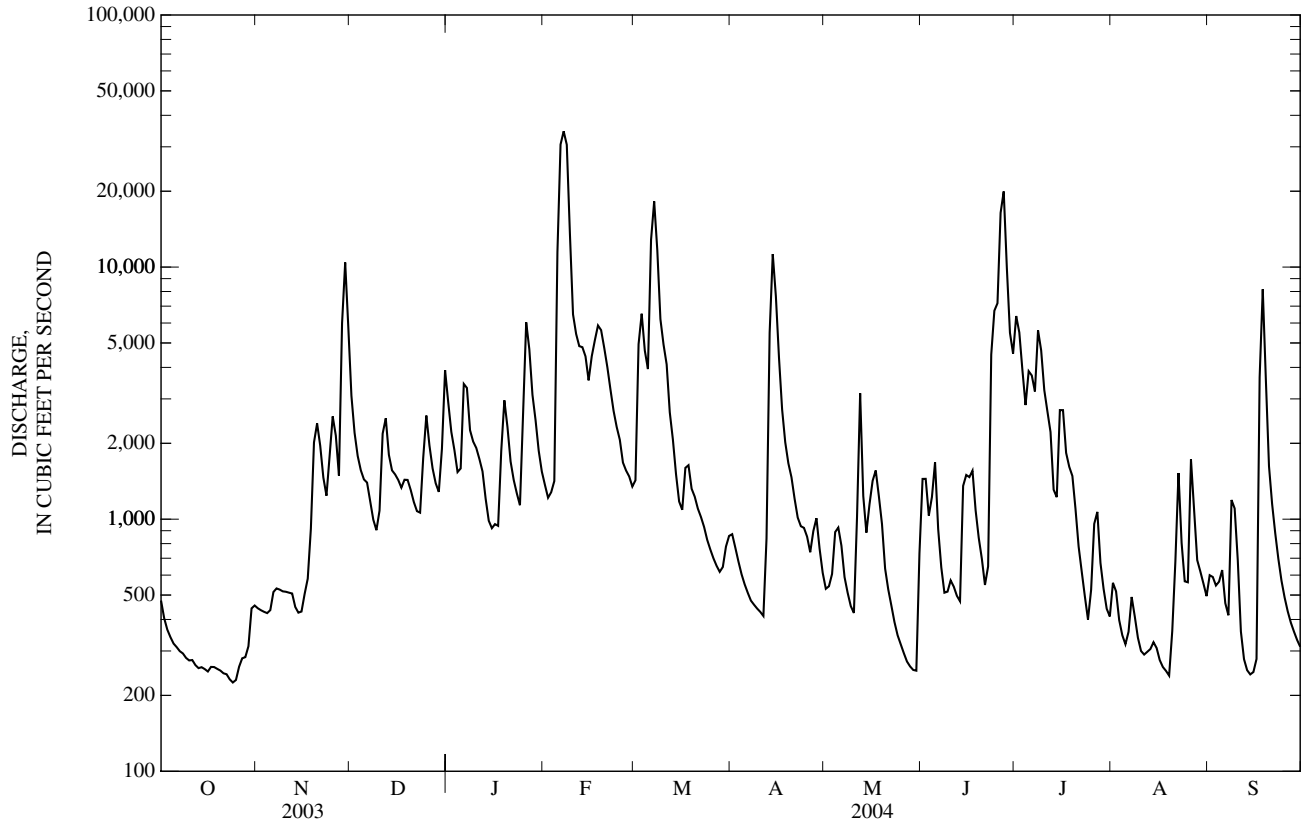
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	712	2,047	3,474	3,658	3,921	4,143	2,582	2,168	1,114	716	468	649
MAX	3,642	5,925	10,360	8,513	9,901	10,090	7,464	9,106	5,081	4,740	1,365	3,832
(WY)	(1990)	(1987)	(1991)	(1979)	(1991)	(1980)	(1994)	(1983)	(1997)	(1989)	(1998)	(1979)
MIN	160	236	418	273	953	1,104	325	244	167	220	172	150
(WY)	(2000)	(1981)	(1981)	(1986)	(1978)	(1985)	(1986)	(1988)	(1988)	(1988)	(1999)	(1999)

03599500 DUCK RIVER AT COLUMBIA, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1977 - 2004	
ANNUAL TOTAL	914,886		768,575			
ANNUAL MEAN	2,507		2,100		2,135	
HIGHEST ANNUAL MEAN					3,282	1989
LOWEST ANNUAL MEAN					553	1981
HIGHEST DAILY MEAN	48,500	May 8	34,600	Feb 7	52,300	Feb 20, 1991
LOWEST DAILY MEAN	199	Sep 20	225	Oct 24	86	Oct 4, 1982
ANNUAL SEVEN-DAY MINIMUM	213	Sep 15	240	Oct 19	100	Sep 28, 1982
MAXIMUM PEAK FLOW			35,400	Feb 7	52,300	Feb 20, 1991
MAXIMUM PEAK STAGE			39.19	Feb 7	45.82	Feb 20, 1991
INSTANTANEOUS LOW FLOW			a223	Oct 22	161	Sep 12, 2002
10 PERCENT EXCEEDS	4,410		4,790		4,930	
50 PERCENT EXCEEDS	891		1,020		754	
90 PERCENT EXCEEDS	260		297		191	

* Regulated period only.
a Also occurred Oct. 23, 24.



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 mi^2.

PERIOD OF RECORD.--October 1986 to current year

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)
NOV 24...	1000	80020	59	748	10.4	96	7.0	282	11.0	K8,600	K14,000	E1	20.2
MAR 03...	0930	80020	76	755	11.8	108	7.9	319	11.0	650	--	<2	13.2
MAY 26...	0930	80020	6.1	745	7.4	85	7.4	381	21.0	510	430	<2	19.5
JUL 27...	0920	80020	1.1	751	6.7	76	7.6	403	21.0	--	1,000	<2	21.1

Date	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, unfltrd recoverable, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Lead, water, unfltrd recoverable, ug/L (01051)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, unfltrd recoverable, ug/L (01092)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd ug/L (82626)	2,4,6-Trichlorophenol, water, unfltrd ug/L (34621)
NOV 24...	E.2	<.8	2.0	<.01	E.9	E.02	2.8	<3	<.3	12	<7	<2	<1
MAR 03...	<.2	<.8	1.6	<.01	<1.0	<.02	<2.0	<3	<.3	<4	<7	--	--
MAY 26...	<.2	E.6	<1.2	<.01	<1.0	<.02	<2.0	<3	<.3	E2	<7	<2	<1
JUL 27...	<.2	<.8	2.5	<.01	<1.0	<.02	<2.0	<3	<.3	E2	<7	--	--

Date	2,4-Dichlorophenol, water, unfltrd ug/L (34601)	2,4-Dimethylphenol, water, unfltrd ug/L (34606)	2,4-Dinitrophenol, water, unfltrd ug/L (34616)	2,4-Dinitrotoluene water unfltrd ug/L (34611)	2,6-Dinitrotoluene water unfltrd ug/L (34626)	2-Chloronaphthalene, water, unfltrd ug/L (34581)	2-chlorophenol, water, unfltrd ug/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf ug/L (34657)	2-nitrophenol, water unfltrd ug/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd ug/L (34631)	4-Bromophenyl phenyl ether, wat unf ug/L (34636)	4-Chloro-3-methylphenol, wat unf ug/L (34452)	4-Chlorophenyl phenyl ether, wat unf ug/L (34641)
NOV 24...	<2	<2.0	<3	<1	<2	<1	<1	<2	<1	<.9	<2	<2	<1
MAR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	<2	<2.0	<3	<1	<2	<1	<1	<2	<1	<.9	<2	<2	<1
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	4-Nitrophenol, water, unfltrd ug/L (34646)	9H-Fluorene, water, unfltrd ug/L (34381)	Acenaphthene, water, unfltrd ug/L (34205)	Acenaphthylene, water, unfltrd ug/L (34200)	Anthracene, water, unfltrd ug/L (34220)	Benzidine, water, unfltrd ug/L (39120)	Benzo[a]anthracene, water, unfltrd ug/L (34526)	Benzo[a]pyrene, water, unfltrd ug/L (34247)	Benzo[b]fluoranthene water unfltrd ug/L (34230)	Benzo[g,h,i]perylene, water, unfltrd ug/L (34521)	Benzo[k]fluoranthene water unfltrd ug/L (34242)	Benzyl n-butyl phthalate, water, unfltrd ug/L (34292)	Bis(2-chloroethoxy) methane water unfltrd ug/L (34278)
NOV 24...	<2	<1	<2	<2	<2	<1,000	<2	<1	<2	<2	<1	<2	<1
MAR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	<2	<1	<2	<2	<2	<1,000	<2	<1	<2	<2	<1	<2	<1
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

03600085 CARTERS CREEK AT PETTY LANE NEAR CARTERS CREEK, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Bis(2-chloroethyl) ether, water, unfltrd ug/L (34273)	Bis(2-chloroisopropyl) ether, wat unf ug/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf ug/L (39100)	Chrysene, water, unfltrd ug/L (34320)	Dibenzo-[a,h]-anthracene, wat unf ug/L (34556)	Diethyl phthalate, water, unfltrd ug/L (34336)	Dimethyl phthalate, water, unfltrd ug/L (34341)	Di-n-butyl phthalate, water, unfltrd ug/L (39110)	Di-n-octyl phthalate, water, unfltrd ug/L (34596)	Fluoranthene water unfltrd ug/L (34376)	Hexachlorobenzene water unfltrd ug/L (39700)	Hexachlorocyclopentadiene, wat unf ug/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403)
NOV													
24...	<1	<1	<2	<1	<2	<2	<1	<2	<2	<1	<1	<1	<2
MAR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
26...	<1	<1	<2	<1	<2	<2	<1	<2	<2	<1	<1	<1	<2
JUL													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Isophorone water unfltrd ug/L (34408)	Nitrobenzene water unfltrd ug/L (34447)	N-NItroso-dimethylamine, wat unf ug/L (34438)	N-NItroso-di-n-propylamine, wat unf ug/L (34428)	N-NItroso-diphenylamine, wat unf ug/L (34433)	Pentachlorophenol, water, unfltrd ug/L (39032)	Phenanthrene, water, unfltrd ug/L (34461)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)
NOV													
24...	<2	<1	<2	<2	<2	<2	<1	<1	<2	<1	<1	<1	<2
MAR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
26...	<2	<1	<2	<2	<2	<2	<1	<1	<2	<1	<1	<1	<2
JUL													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphthalene, water, unfltrd ug/L (34696)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV				
24...	<2	94	28	4.5
MAR				
03...	--	87	10	2.1
MAY				
26...	<2	83	6	.10
JUL				
27...	--	93	4	.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 mi^2.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)
NOV 24...	1100	80020	26	748	10.3	95	7.2	268	11.0	3,500	4,500	<2	12.7
MAR 03...	1015	80020	15	755	11.4	107	7.9	678	12.0	130	--	<2	14.5
MAY 26...	1030	80020	.93	745	7.8	90	7.4	593	21.0	260	290	<2	17.2
JUL 27...	1010	80020	1.3	751	7.6	88	7.6	474	21.5	--	K850	E1	13.7

Date	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, unfltrd recoverable, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Lead, water, unfltrd recoverable, ug/L (01051)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, unfltrd recoverable, ug/L (01092)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd ug/L (82626)	2,4,6-Trichlorophenol, water, unfltrd ug/L (34621)
NOV 24...	<.2	<.8	E1.1	<.01	E.5	<.02	<2.0	<3	<.3	14	<7	<2	<1
MAR 03...	<.2	<.8	E.8	<.01	<1.0	<.02	<2.0	<3	<.3	E3	<7	--	--
MAY 26...	<.2	<.8	<1.2	<.01	<1.0	<.02	<2.0	<3	<.3	E3	<7	<2	<1
JUL 27...	<.2	<.8	6.0	<.01	<1.0	<.02	10.1	<3	<.3	E3	<7	--	--

Date	2,4-Dichlorophenol, water, unfltrd ug/L (34601)	2,4-Dimethylphenol, water, unfltrd ug/L (34606)	2,4-Dinitrophenol, water, unfltrd ug/L (34616)	2,4-Dinitrotoluene water unfltrd ug/L (34611)	2,6-Dinitrotoluene water unfltrd ug/L (34626)	2-Chloronaphthalene, water, unfltrd ug/L (34581)	2-chlorophenol, water, unfltrd ug/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf ug/L (34657)	2-nitrophenol, water unfltrd ug/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd ug/L (34631)	4-Bromophenyl phenyl ether, wat unf ug/L (34636)	4-Chloro-3-methylphenol, wat unf ug/L (34452)	4-Chlorophenyl phenyl ether, wat unf ug/L (34641)
NOV 24...	<2	<2.0	<3	<1	<2	<1	<1	<2	<1	<.9	<2	<2	<1
MAR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	<2	<2.0	<3	<1	<2	<1	<1	<2	<1	<.9	<2	<2	<1
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	4-Nitrophenol, water, unfltrd ug/L (34646)	9H-Fluorene, water, unfltrd ug/L (34381)	Acenaphthene, water, unfltrd ug/L (34205)	Acenaphthylene, water, unfltrd ug/L (34200)	Anthracene, water, unfltrd ug/L (34220)	Benzidine, water, unfltrd ug/L (39120)	Benzo[a]anthracene, water, unfltrd ug/L (34526)	Benzo[a]pyrene, water, unfltrd ug/L (34247)	Benzo[b]fluoranthene water unfltrd ug/L (34230)	Benzo[g,h,i]perylene, water, unfltrd ug/L (34521)	Benzo[k]fluoranthene water unfltrd ug/L (34242)	Benzyl n-butyl phthalate, water, unfltrd ug/L (34292)	Bis(2-chloroethoxy) methane water unfltrd ug/L (34278)
NOV 24...	<2	<1	<2	<2	<2	<1,000	<2	<1	<2	<2	<1	<2	<1
MAR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	<2	<1	<2	<2	<2	<1,000	<2	<1	<2	<2	<1	<2	<1
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--

E--Estimated

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

03600086 CARTERS CREEK TRIBUTARY NEAR CARTERS CREEK, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Bis(2-chloroethyl) ether, water, unfltrd ug/L (34273)	Bis(2-chloroisopropyl) ether, wat unf ug/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf ug/L (39100)	Chrysene, water, unfltrd ug/L (34320)	Dibenzo-[a,h]-anthracene, wat unf ug/L (34556)	Diethyl phthalate, water, unfltrd ug/L (34336)	Dimethyl phthalate, water, unfltrd ug/L (34341)	Di-n-butyl phthalate, water, unfltrd ug/L (39110)	Di-n-octyl phthalate, water, unfltrd ug/L (34596)	Fluoranthene water unfltrd ug/L (34376)	Hexachlorobenzene water unfltrd ug/L (39700)	Hexachlorocyclopentadiene, wat unf ug/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403)
NOV													
24...	<1	<1	<2	<1	<2	<2	<1	<2	<2	<1	<1	<1	<2
MAR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
26...	<1	<1	<2	<1	<2	<2	<1	<2	<2	<1	<1	<1	<2
JUL													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Isophorone water unfltrd ug/L (34408)	Nitrobenzene water unfltrd ug/L (34447)	N-NItroso-dimethylamine, wat unf ug/L (34438)	N-NItroso-di-n-propylamine, wat unf ug/L (34428)	N-NItroso-diphenylamine, wat unf ug/L (34433)	Pentachlorophenol, water, unfltrd ug/L (39032)	Phenanthrene, water, unfltrd ug/L (34461)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)
NOV													
24...	<2	<1	<2	<2	<2	<2	<1	<1	<2	<1	<1	<1	<2
MAR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
26...	<2	<1	<2	<2	<2	<2	<1	<1	<2	<1	<1	<1	<2
JUL													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphthalene, water, unfltrd ug/L (34696)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV				
24...	<2	88	23	1.6
MAR				
03...	--	75	13	.54
MAY				
26...	<2	85	4	.01
JUL				
27...	--	--	--	--

03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN

LOCATION.--Lat 35°43'02", long 86°59'44", 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 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1986 to current year. Occasional low-flow measurements, water year 1986.

REVISED RECORD.--WDR TN-97-1: 1992-96 (M): 1992-96(P).

GAGE.--Data collection platform, crest-stage gage and concrete weir. Datum of gage is 605.94 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation caused by industrial development upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1330	*2,660	*13.61	Mar 5	1915	1,560	9.88

Minimum discharge, 0.43 ft^3/s, Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	2.9	36	46	32	122	35	12	9.5	24	1.9	0.90
2	10	2.8	30	47	36	161	30	32	8.9	14	1.2	10
3	9.2	2.7	27	41	77	89	26	26	10	10	1.1	2.2
4	8.3	2.6	27	37	58	70	23	20	6.5	13	1.0	2.4
5	7.5	13	25	51	1,410	297	20	16	4.6	11	6.8	2.4
6	7.8	4.9	23	44	458	279	18	13	3.9	7.0	1.9	1.5
7	6.6	3.8	21	38	178	129	17	11	3.4	13	1.5	1.1
8	5.7	3.3	20	35	119	91	17	9.7	3.1	7.8	1.3	0.98
9	5.2	3.0	18	35	91	73	15	8.6	4.8	5.6	1.2	0.91
10	5.3	2.9	50	30	76	59	14	7.8	6.4	5.3	1.1	0.80
11	5.2	2.8	43	28	64	50	13	8.0	2.5	4.2	3.8	0.72
12	4.8	3.4	34	26	60	43	55	6.9	12	4.1	9.2	0.67
13	4.5	5.1	31	24	51	37	97	12	25	3.9	2.5	0.70
14	8.2	3.3	41	23	46	34	84	12	8.2	4.2	1.8	0.75
15	5.6	3.2	36	21	44	31	57	170	6.2	4.1	1.5	0.63
16	4.8	13	36	19	41	31	44	72	4.9	2.7	1.3	8.2
17	5.1	9.5	37	18	41	27	36	44	8.6	2.4	1.1	24
18	4.1	48	34	108	37	27	30	32	9.9	2.2	1.1	6.2
19	3.8	51	30	69	36	24	26	26	5.9	1.9	1.0	3.1
20	3.6	33	26	52	34	25	23	20	4.2	1.6	5.2	1.9
21	3.5	25	24	43	31	37	21	16	3.4	1.6	4.8	1.4
22	3.1	19	22	37	28	27	23	13	8.1	1.6	2.3	1.1
23	3.0	15	50	32	27	24	21	12	7.2	1.3	1.8	0.85
24	2.9	70	66	30	25	22	19	9.9	5.2	1.3	2.8	0.74
25	2.7	43	48	185	23	20	16	8.4	11	3.6	5.2	0.71
26	8.6	32	38	99	51	18	15	7.5	8.1	5.0	3.2	0.75
27	6.4	33	33	72	46	17	13	6.7	5.3	2.4	2.2	0.67
28	4.4	104	29	57	37	16	12	6.0	4.8	1.4	1.4	0.74
29	3.8	62	53	49	34	55	11	6.3	3.8	1.2	2.0	0.70
30	3.3	46	81	42	---	63	11	5.8	20	1.0	1.6	0.66
31	3.2	---	58	36	---	43	---	30	---	3.1	1.2	---
TOTAL	172.2	663.2	1,127	1,474	3,291	2,041	842	680.6	225.4	165.5	76.0	78.38
MEAN	5.55	22.1	36.4	47.5	113	65.8	28.1	22.0	7.51	5.34	2.45	2.61
MAX	12	104	81	185	1,410	297	97	170	25	24	9.2	24
MIN	2.7	2.6	18	18	23	16	11	5.8	2.5	1.0	1.0	0.63
CFSM	0.28	1.10	1.81	2.37	5.65	3.28	1.40	1.09	0.37	0.27	0.12	0.13
IN.	0.32	1.23	2.09	2.73	6.09	3.78	1.56	1.26	0.42	0.31	0.14	0.15

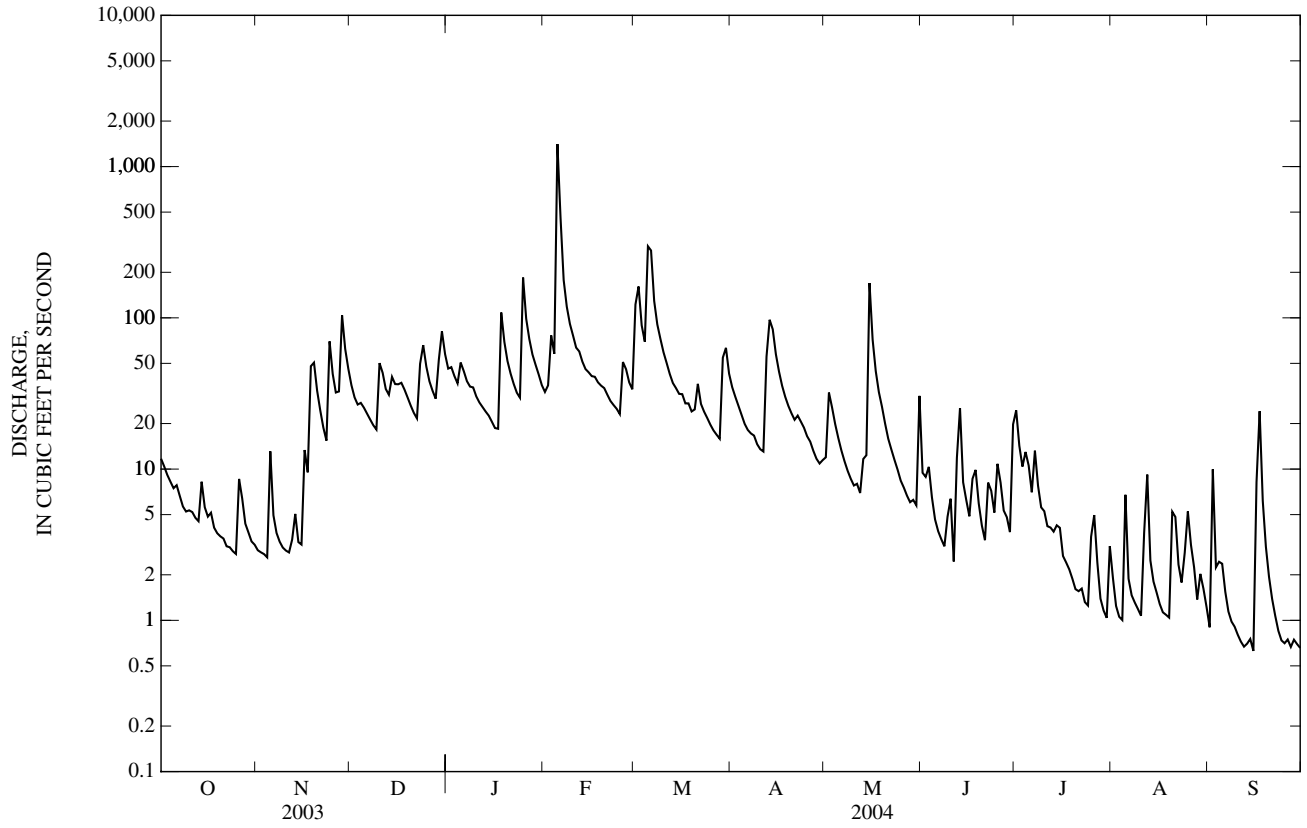
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

MEAN	9.76	28.6	54.3	58.0	79.8	66.2	35.9	32.2	17.7	9.06	5.06	7.54
MAX	44.8	64.7	126	119	185	138	98.7	97.2	54.3	45.5	23.6	37.6
(WY)	(1990)	(1989)	(1991)	(1999)	(2003)	(1994)	(1994)	(2003)	(2003)	(1989)	(2003)	(2003)
MIN	0.29	1.35	9.79	18.2	20.8	20.5	13.9	3.11	0.51	0.54	0.47	0.64
(WY)	(2001)	(1999)	(2000)	(2003)	(1995)	(1988)	(1992)	(1988)	(1988)	(1988)	(1987)	(1999)

03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004	
ANNUAL TOTAL	15,981.3		10,836.28			
ANNUAL MEAN	43.8		29.6		33.5	
HIGHEST ANNUAL MEAN					50.1	2003
LOWEST ANNUAL MEAN					17.4	1988
HIGHEST DAILY MEAN	1,200	Feb 15	1,410	Feb 5	1,430	Feb 3, 1990
LOWEST DAILY MEAN	1.2	Sep 13	0.63	Sep 15	0.12	Aug 15, 1987
ANNUAL SEVEN-DAY MINIMUM	1.8	Sep 7	0.71	Sep 24	0.15	Jun 25, 1988
MAXIMUM PEAK FLOW			2,660	Feb 5	3,300	May 3, 1993
MAXIMUM PEAK STAGE			13.61	Feb 5	15.90	May 3, 1993
INSTANTANEOUS LOW FLOW			0.43	Sep 27	a0.11	Aug 15, 1987
ANNUAL RUNOFF (CFSM)	2.18		1.47		1.66	
ANNUAL RUNOFF (INCHES)	29.58		20.06		22.61	
10 PERCENT EXCEEDS	70		57		70	
50 PERCENT EXCEEDS	17		13		13	
90 PERCENT EXCEEDS	3.0		1.4		0.81	

a Also occurred Aug. 16, 1987, June 26, 1988.



03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN—Continued

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recoverable, ug/L (01007)
NOV 24...	1145	80020	79	748	10.5	97	7.5	280	11.0	7,600	9,700K	<2	17.8
MAR 03...	1045	80020	89	755	12.0	111	8.0	373	11.5	720	--	<2	14.5
MAY 26...	1115	80020	7.9	745	8.1	95	7.7	418	22.0	490	390	<2	18.9
JUL 27...	1045	80020	2.3	751	7.9	92	7.7	377	22.0	--	750K	<2	14.9

Date	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, unfltrd recoverable, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Lead, water, unfltrd recoverable, ug/L (01051)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, unfltrd recoverable, ug/L (01092)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd ug/L (82626)	2,4,6-Trichlorophenol, water, unfltrd ug/L (34621)
NOV 24...	<.2	E.5	2.4	<.01	1.3	E.02	E1.0	<3	<.3	9	<7	<2	<1
MAR 03...	<.2	<.8	E.7	<.01	<1.0	<.02	<2.0	<3	<.3	<4	<7	--	--
MAY 26...	<.2	<.8	<1.2	<.01	<1.0	<.02	<2.0	<3	<.3	E3	<7	<2	<1
JUL 27...	<.2	<.8	E.6	<.01	<1.0	<.02	2.1	<3	<.3	E2	<7	--	--

Date	2,4-Dichlorophenol, water, unfltrd ug/L (34601)	2,4-Dimethylphenol, water, unfltrd ug/L (34606)	2,4-Dinitrophenol, water, unfltrd ug/L (34616)	2,4-Dinitrotoluene water unfltrd ug/L (34611)	2,6-Dinitrotoluene water unfltrd ug/L (34626)	2-Chloronaphthalene, water, unfltrd ug/L (34581)	2-chlorophenol, water, unfltrd ug/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf ug/L (34657)	2-nitrophenol, water unfltrd ug/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd ug/L (34631)	4-Bromophenyl phenyl ether, wat unf ug/L (34636)	4-Chloro-3-methylphenol, wat unf ug/L (34452)	4-Chlorophenyl phenyl ether, wat unf ug/L (34641)
NOV 24...	<2	<2.0	<3	<1	<2	<1	<1	<2	<1	<.9	<2	<2	<1
MAR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	<2	<2.0	<3	<1	<2	<1	<1	<2	<1	<.9	<2	<2	<1
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	4-Nitrophenol, water, unfltrd ug/L (34646)	9H-Fluorene, water, unfltrd ug/L (34381)	Acenaphthene, water, unfltrd ug/L (34205)	Acenaphthylene, water, unfltrd ug/L (34200)	Anthracene, water, unfltrd ug/L (34220)	Benzidine, water, unfltrd ug/L (39120)	Benzo-[a]-anthracene, water, unfltrd ug/L (34526)	Benzo-[a]-pyrene, water, unfltrd ug/L (34247)	Benzo-[b]-fluoranthene water unfltrd ug/L (34230)	Benzo-[g,h,i]-perylene, water, unfltrd ug/L (34521)	Benzo-[k]-fluoranthene water unfltrd ug/L (34242)	Benzyl n-butyl phthalate, water, unfltrd ug/L (34292)	Bis(2-chloroethoxy) methane water unfltrd ug/L (34278)
NOV 24...	<2	<1	<2	<2	<2	<1,000	<2	<1	<2	<2	<1	<2	<1
MAR 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	<2	<1	<2	<2	<2	<1,000	<2	<1	<2	<2	<1	<2	<1
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

03600088 CARTERS CREEK AT BUTLER ROAD AT CARTERS CREEK, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Bis(2-chloroethyl) ether, water, unfltrd ug/L (34273)	Bis(2-chloroisopropyl) ether, wat unf ug/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf ug/L (39100)	Chrysene, water, unfltrd ug/L (34320)	Dibenzo-[a,h]-anthracene, wat unf ug/L (34556)	Diethyl phthalate, water, unfltrd ug/L (34336)	Dimethyl phthalate, water, unfltrd ug/L (34341)	Di-n-butyl phthalate, water, unfltrd ug/L (39110)	Di-n-octyl phthalate, water, unfltrd ug/L (34596)	Fluoranthene water unfltrd ug/L (34376)	Hexachlorobenzene water unfltrd ug/L (39700)	Hexachlorocyclopentadiene, wat unf ug/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403)
NOV													
24...	<1	<1	<2	<1	<2	<2	<1	<2	<2	<1	<1	<1	<2
MAR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
26...	<1	<1	<2	<1	<2	<2	<1	<2	<2	<1	<1	<1	<2
JUL													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Isophorone water unfltrd ug/L (34408)	Nitrobenzene water unfltrd ug/L (34447)	N-NItroso-dimethylamine, wat unf ug/L (34438)	N-NItroso-di-n-propylamine, wat unf ug/L (34428)	N-NItroso-diphenylamine, wat unf ug/L (34433)	Pentachlorophenol, water, unfltrd ug/L (39032)	Phenanthrene, water, unfltrd ug/L (34461)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)
NOV													
24...	<2	<1	<2	<2	<2	<2	<1	<1	<2	<1	<1	<1	<2
MAR													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
26...	<2	<1	<2	<2	<2	<2	<1	<1	<2	<1	<1	<1	<2
JUL													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphthalene, water, unfltrd ug/L (34696)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV				
24...	<2	95	22	4.7
MAR				
03...	--	90	8	1.9
MAY				
26...	<2	88	5	.11
JUL				
27...	--	85	6	.04

03601990 DUCK RIVER AT HIGHWAY 100 AT CENTERVILLE, TN

LOCATION.--Lat 35°47'03", long 87°27'36", Hickman County, Hydrologic Unit 06040003, on downstream right bank side of bridge on US Highway 48/100, at Defeated Creek, 0.43 mi northeast of public square in Centerville, 3.5 mi downstream from Swan Creek and at mile 72.6.

DRAINAGE AREA.--2,048 mi^2.

PERIOD OF RECORD.--April 1919 to September 1955, published as "at Centerville." May 2001 to current year.

GAGE.--Data collection platform. Datum of gage is 447.76 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges and discharge below 1,500 ft^3/s, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 14, 1948, (from graph through bi-hourly gage readings) at site downstream, 03602000 Duck River at Centerville, TN, 37.58 ft (discharge 97,700 ft/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45,900 ft^3/s, Feb. 6, gage height, 29.98 ft; minimum discharge, 429 ft^3/s, Oct. 25.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,090	693	5,920	5,130	2,900	2,950	e2,230	1,600	1,720	6,360	980	1,150
2	990	679	4,110	4,190	2,640	6,350	2,200	1,730	e1,850	7,900	1,330	1,140
3	870	665	3,360	3,630	2,810	8,920	2,010	1,780	e2,160	6,270	1,090	1,360
4	781	657	2,940	3,220	3,100	8,480	1,830	1,770	2,070	4,790	863	1,320
5	726	693	2,680	2,850	12,200	6,530	1,670	1,930	2,150	3,890	765	1,190
6	702	722	2,490	3,170	43,800	13,300	1,560	1,880	2,330	5,100	736	1,210
7	673	800	2,370	e5,160	44,400	20,300	1,480	1,670	1,600	4,420	731	983
8	628	797	2,080	4,190	41,700	22,600	1,430	1,420	1,310	4,820	849	846
9	598	770	1,840	3,490	39,000	12,100	1,370	1,280	1,140	6,150	778	1,520
10	584	756	1,880	3,270	18,700	7,870	1,300	1,180	1,200	5,000	666	1,530
11	576	751	2,480	3,050	8,550	6,530	1,260	1,530	1,250	3,990	605	1,160
12	568	762	3,600	2,790	7,330	5,470	1,440	2,460	1,170	3,480	1,090	1,010
13	552	799	3,520	2,550	6,750	4,180	3,190	3,450	2,130	2,870	912	778
14	550	761	3,100	2,160	6,490	3,650	10,400	2,080	1,930	2,030	733	665
15	560	691	2,910	1,880	5,860	2,980	12,600	3,480	2,280	2,270	665	615
16	552	761	2,820	1,780	5,260	2,600	8,160	4,510	2,350	3,780	634	604
17	525	1,040	2,800	1,790	6,310	2,450	5,450	3,840	2,250	3,260	571	1,020
18	535	1,280	2,650	2,110	6,870	3,010	4,140	3,300	2,820	2,570	540	6,490
19	525	2,920	2,680	4,150	7,740	2,910	3,460	2,730	2,180	2,290	515	7,490
20	507	4,250	2,560	4,420	7,080	2,520	2,980	2,210	1,710	2,080	528	3,610
21	495	3,890	2,340	3,670	6,250	2,520	2,670	1,790	1,470	1,640	1,320	2,240
22	478	3,110	2,150	3,020	5,390	2,350	3,760	1,540	1,280	1,320	1,530	1,690
23	468	2,430	2,090	2,650	4,670	2,150	3,040	1,370	1,810	1,130	2,070	1,400
24	455	2,520	2,590	2,400	4,160	2,020	3,110	1,210	6,530	960	1,730	1,190
25	439	3,910	3,500	3,250	3,810	1,880	2,820	1,090	7,030	822	1,310	1,030
26	488	4,200	3,820	7,150	3,640	1,770	2,420	1,000	10,600	978	1,220	905
27	575	3,480	3,210	8,300	3,340	1,670	2,090	927	19,300	2,430	2,300	799
28	582	3,780	2,760	6,020	3,110	1,600	2,080	867	20,800	1,970	1,870	731
29	555	11,700	2,560	4,670	2,890	1,680	2,050	830	8,860	1,360	2,310	676
30	546	10,500	3,110	4,020	---	e1,820	1,790	797	6,470	1,110	1,630	628
31	638	---	4,160	3,340	---	e2,000	---	1,180	---	981	1,320	---
TOTAL	18,811	70,767	91,080	113,470	316,750	167,160	95,990	58,431	121,750	98,021	34,191	46,980
MEAN	607	2,359	2,938	3,660	10,920	5,392	3,200	1,885	4,058	3,162	1,103	1,566
MAX	1,090	11,700	5,920	8,300	44,400	22,600	12,600	4,510	20,800	7,900	2,310	7,490
MIN	439	657	1,840	1,780	2,640	1,600	1,260	797	1,140	822	515	604
(†)	-3,700	-8,300	-1,200	-1,300	300	6,400	9,200	200	400	-600	-700	-3,500
MEAN(‡)	487	2,082	2,899	3,618	10,933	5,599	3,506	1,891	4,072	3,143	1,080	1,449
CFSM(†)	0.24	1.02	1.42	1.77	5.34	2.73	1.71	0.92	1.99	1.53	0.53	0.71
IN.(‡)	0.27	1.13	1.63	2.04	5.76	3.15	1.91	1.06	2.22	1.77	0.61	0.79

CAL YR 2003 MEAN(‡) 4,308 CFSM(‡) 2.10 IN.(‡) 28.63
WTR YR 2004 MEAN(‡) 3,362 CFSM(‡) 1.64 IN.(‡) 22.35

(†) Change in contents, in cfs-days in Normandy Lake.
(‡) Adjusted for change in content.
NOTE.--Contents(cfs-days) for adjustments furnished by Tennessee Valley Authority.

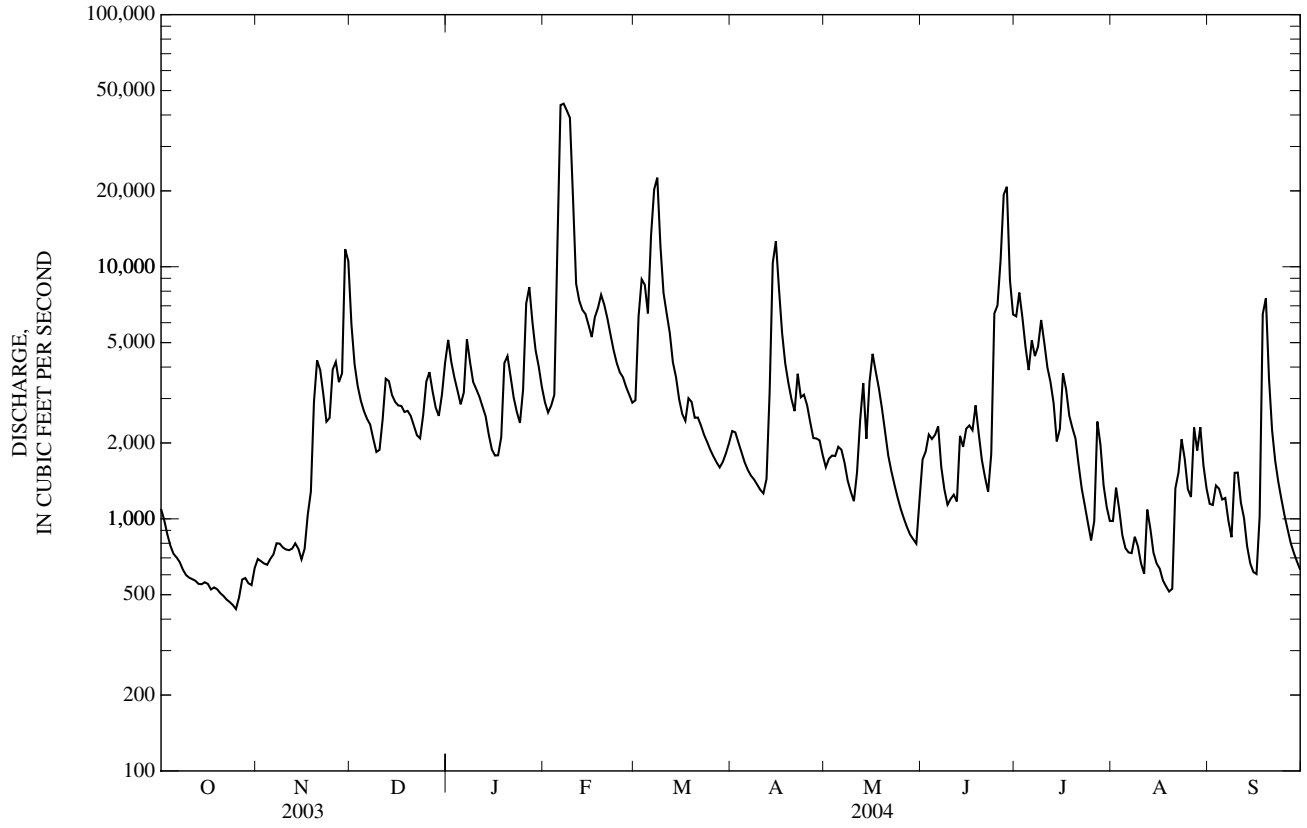
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	1,714	3,345	5,722	5,659	10,250	6,736	4,104	5,077	2,259	1,607	1,215	1,472
MAX	2,451	5,073	7,553	11,530	16,650	10,750	5,893	13,230	4,058	3,162	1,984	2,370
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2002)	(2003)	(2004)	(2004)	(2001)	(2003)
MIN	607	2,359	2,938	1,790	3,150	4,070	3,200	1,077	758	802	584	737
(WY)	(2004)	(2004)	(2004)	(2003)	(2002)	(2003)	(2004)	(2001)	(2002)	(2002)	(2002)	(2001)

03601990 DUCK RIVER AT HIGHWAY 100 AT CENTERVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	1,576,155		1,233,401			
ANNUAL MEAN	4,318		3,370		4,221	
HIGHEST ANNUAL MEAN					5,090	2003
LOWEST ANNUAL MEAN					3,370	2004
HIGHEST DAILY MEAN	53,200	May 8	44,400	Feb 7	53,200	May 8, 2003
LOWEST DAILY MEAN	439	Oct 25	439	Oct 25	424	Sep 14, 2002
ANNUAL SEVEN-DAY MINIMUM	476	Oct 20	476	Oct 20	440	Sep 9, 2002
MAXIMUM PEAK FLOW			45,900	Feb 6	54,400	May 8, 2003
MAXIMUM PEAK STAGE			29.98	Feb 6	33.10	May 8, 2003
INSTANTANEOUS LOW FLOW			429	Oct 25	407	Sep 14, 2002
10 PERCENT EXCEEDS	7,590		6,500		8,110	
50 PERCENT EXCEEDS	1,990		2,120		1,880	
90 PERCENT EXCEEDS	574		665		615	

e Estimated



03602219 PINEY RIVER AT CEDAR HILL, TN

LOCATION.--Lat 35°59'43", long 87°26'22", Dickson County, Hydrologic Unit 06040003, on right bank 300 ft upstream of Interstate Highway 40 bridge, 0.2 mi southeast of Cedar Hill, 0.5 mi upstream from Double Branch, and at mile 22.

DRAINAGE AREA.--46.6 mi^2.

PERIOD OF RECORD.--October 1987 to current year, discharge for stage of 7.00 ft and below only.

GAGE.--Data collection platform. Datum of gage is 552.20 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. The City of Dickson diverts water for municipal water supply at confluence of West Piney River, 1.6 mi upstream from gage. 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, not determined; maximum gage height, 19.78 ft, May 27, 1991; minimum discharge, 6.8 ft^3/s, Oct. 2, 3, 4, 5, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 14.31 ft, May 31, from high-water mark; minimum discharge, 13 ft^3/s, Sept. 11, 14, 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	23	62	103	67	79	70	111	276	53	31	26
2	31	22	57	106	66	105	67	256	160	50	27	26
3	30	22	54	95	78	88	63	210	156	43	25	35
4	29	22	52	87	67	83	60	172	112	40	24	28
5	28	24	51	93	---	229	57	136	93	37	62	25
6	28	24	48	81	---	436	53	110	82	35	31	23
7	27	23	45	73	369	245	51	93	72	51	27	22
8	26	22	44	70	246	171	50	81	63	39	26	20
9	25	22	43	69	188	141	47	73	58	35	25	20
10	29	22	56	63	157	115	45	67	58	34	23	18
11	26	22	56	60	133	101	45	62	51	33	23	18
12	25	23	52	57	124	90	87	56	49	32	22	19
13	24	25	52	53	110	83	152	56	64	29	21	18
14	28	23	71	51	102	78	196	67	55	29	21	16
15	27	47	67	49	96	74	139	---	47	28	21	16
16	24	56	67	47	87	71	112	340	45	27	21	17
17	26	44	65	47	81	65	95	240	42	28	20	21
18	25	---	62	71	74	61	83	206	67	29	20	17
19	24	424	59	68	71	58	74	139	63	27	19	18
20	24	185	55	62	69	68	68	106	52	26	28	17
21	23	114	52	59	65	80	115	86	47	25	26	15
22	23	87	49	56	62	69	---	74	43	24	23	15
23	23	72	90	54	59	63	---	66	42	24	22	15
24	23	173	123	52	56	61	503	58	40	24	23	15
25	23	119	99	277	54	58	315	52	40	24	21	14
26	34	93	84	211	53	56	224	48	38	24	21	15
27	28	84	74	145	49	53	162	44	36	24	19	15
28	25	84	68	110	48	53	127	43	35	23	71	14
29	24	75	e60	94	46	78	106	41	35	22	46	14
30	23	69	e57	83	---	81	102	45	51	23	34	14
31	23	---	e55	73	---	74	---	---	---	53	29	---
MEAN	26.2	---	62.2	84.5	---	102	---	---	69.1	32.1	27.5	18.9
MAX	34	123	277	436	276	53	71	35				
MIN	23	43	47	53	35	22	19	14				

e Estimated

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03602500 PINEY RIVER AT VERNON, TN

LOCATION.--Lat 35°52'16", long 87°29'59", Hickman County, Hydrologic Unit 06040003, on left bank upstream from county highway bridge, 375 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 mi^2.

PERIOD OF RECORD.--July 1925 to December 1993. January 1994 to October 2000, crest-stage partial record station. November 2000 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.--Data collection platform and crest-stage gage. Datum of gage is 461.72 ft above NGVD 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.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Flood of March 1897 reached a stage of 20.7 ft, present site and datum, discharge, 37,000 ft^3/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1800	*14,700	*15.14	May 15	1100	4,400	9.69
Apr 22	1030	11,100	13.57	May 31	0845	9,870	13.24
Apr 23	1945	4,780	9.97				

Minimum discharge, 83 ft^3/s, Sept. 27, 28, 29, 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	107	288	419	307	289	325	391	806	276	171	126
2	160	106	264	415	297	561	315	727	521	279	142	125
3	152	105	251	390	343	482	302	689	456	233	136	148
4	148	105	244	357	331	452	289	604	353	210	132	139
5	143	136	236	349	6,360	629	272	519	292	192	206	125
6	144	145	224	319	4,000	2,240	262	442	256	177	167	117
7	136	129	213	290	1,590	1,150	254	373	228	231	144	112
8	131	120	206	279	1,010	820	249	326	206	268	139	110
9	127	114	203	278	798	673	237	291	193	209	136	107
10	129	111	228	262	685	560	227	263	192	190	134	104
11	127	110	245	247	594	489	221	243	172	180	133	109
12	123	113	233	239	547	438	301	219	166	167	132	109
13	120	117	230	229	493	396	468	214	204	156	124	107
14	126	109	281	222	457	371	703	219	205	162	123	103
15	126	117	288	217	434	347	581	2,170	174	152	121	98
16	118	192	293	209	399	339	499	1,150	170	146	119	101
17	121	185	303	207	370	317	437	765	157	146	116	114
18	119	649	290	251	347	302	389	709	239	147	119	102
19	115	1,850	276	266	332	283	354	558	270	139	116	97
20	113	1,010	257	249	327	282	328	448	219	134	130	94
21	112	607	241	242	312	331	354	375	188	129	145	91
22	109	454	232	236	293	296	5,180	326	173	127	126	90
23	108	375	282	228	279	282	3,040	289	166	125	124	88
24	107	558	454	225	272	276	2,280	257	162	132	150	89
25	106	509	403	618	259	269	1,400	229	168	127	132	87
26	132	429	358	799	259	263	957	209	155	132	125	86
27	131	386	325	606	245	260	714	193	143	134	118	85
28	120	369	301	471	235	255	562	184	136	125	175	84
29	115	336	327	409	229	297	467	172	131	123	209	84
30	111	311	579	373	---	347	433	162	180	123	157	83
31	109	---	476	334	---	333	---	3,940	---	185	138	---
TOTAL	3,909	9,964	9,031	10,235	22,404	14,629	22,400	17,656	7,081	5,256	4,339	3,114
MEAN	126	332	291	330	773	472	747	570	236	170	140	104
MAX	171	1,850	579	799	6,360	2,240	5,180	3,940	806	279	209	148
MIN	106	105	203	207	229	255	221	162	131	123	116	83
CFSM	0.65	1.72	1.51	1.71	4.00	2.45	3.87	2.95	1.22	0.88	0.73	0.54
IN.	0.75	1.92	1.74	1.97	4.32	2.82	4.32	3.40	1.36	1.01	0.84	0.60

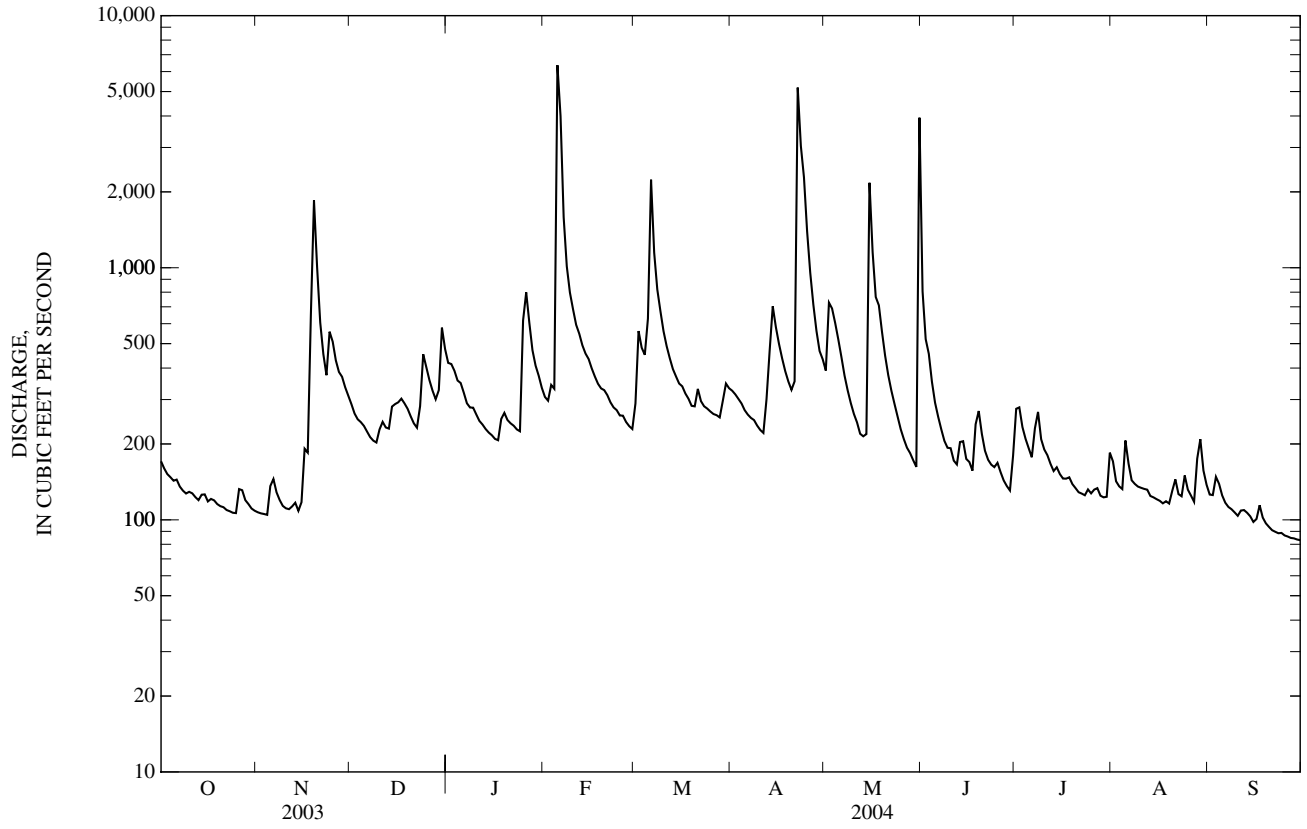
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	105	182	360	487	581	614	500	408	212	140	115	111
MAX	272	749	2,535	1,930	1,704	2,091	1,393	1,715	1,041	340	258	685
(WY)	(2002)	(1958)	(1927)	(1937)	(1932)	(1975)	(1927)	(1983)	(1974)	(1972)	(1938)	(1979)
MIN	52.5	64.9	66.2	84.4	115	109	137	84.9	59.8	61.4	49.3	47.0
(WY)	(1932)	(1957)	(1936)	(1940)	(1941)	(1941)	(1967)	(1941)	(1941)	(1942)	(1936)	(1936)

03602500 PINEY RIVER AT VERNON, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	160,792		130,018			
ANNUAL MEAN	441		355		319	
HIGHEST ANNUAL MEAN					684	1927
LOWEST ANNUAL MEAN					102	1941
HIGHEST DAILY MEAN	9,640	Feb 15	6,360	Feb 5	31,200	Dec 21, 1926
LOWEST DAILY MEAN	105	Nov 3	83	Sep 30	38	Aug 19, 1936
ANNUAL SEVEN-DAY MINIMUM	108	Oct 29	85	Sep 24	38	Aug 19, 1936
MAXIMUM PEAK FLOW			14,700	Feb 5	49,400	May 27, 1991
MAXIMUM PEAK STAGE			15.14	Feb 5	24.42	May 27, 1991
INSTANTANEOUS LOW FLOW			a83	Sep 27	b35	Sep 19, 1936
ANNUAL RUNOFF (CFSM)	2.28		1.84		1.65	
ANNUAL RUNOFF (INCHES)	30.99		25.06		22.47	
10 PERCENT EXCEEDS	637		580		619	
50 PERCENT EXCEEDS	239		232		153	
90 PERCENT EXCEEDS	118		112		73	

a Also occurred Sept. 28, 29, 30.
b Also occurred Sept. 20, 1936.



03604000 BUFFALO RIVER NEAR FLAT WOODS, TN

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 mi^2.

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-71: 1970.

GAGE.--Data collection platform. Datum of gage is 513.58 ft above NGVD of 1929, determined by levels run by Army Engineers December 1926 and July 1927, from BM-39, datum of 1929. Prior to May 27, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of May 27, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0815	*29,600	*23.54	Jun 26	1400	4,930	9.13
Mar 6	2145	5,220	9.43				

Minimum daily discharge, 249 ft^3/s, Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	274	700	797	665	704	546	e505	691	863	412	494
2	327	272	611	742	610	1,450	518	e520	537	874	358	418
3	313	272	560	691	662	1,660	502	e538	468	798	322	382
4	305	270	567	641	673	1,260	489	544	531	726	304	377
5	300	282	551	641	6,010	1,160	469	e510	483	686	298	404
6	300	288	525	649	24,500	3,400	454	e467	426	616	295	369
7	297	305	498	616	5,680	3,170	445	e415	398	549	286	340
8	289	300	476	576	2,420	1,790	443	e410	378	909	275	348
9	284	292	463	569	1,670	1,370	433	e395	360	761	270	327
10	279	287	530	557	1,370	1,130	418	e480	346	653	267	293
11	281	286	708	527	1,140	983	411	e370	336	538	275	285
12	282	311	674	504	1,030	889	495	e380	341	461	310	370
13	279	343	626	484	985	794	802	379	350	425	306	1,230
14	290	340	679	457	913	718	886	390	363	398	280	740
15	319	323	673	441	894	667	843	1,470	341	436	268	490
16	301	418	648	426	929	642	753	2,270	354	497	261	422
17	293	549	695	417	897	629	679	1,500	347	412	256	900
18	316	561	664	489	969	604	619	1,080	366	412	252	1,040
19	305	1,240	620	666	1,030	584	579	876	384	375	249	731
20	286	1,090	576	652	1,000	545	544	738	354	345	264	534
21	277	833	537	599	938	532	525	628	332	330	485	427
22	273	690	508	568	859	510	651	551	328	319	444	377
23	269	604	525	537	800	490	722	492	486	310	346	346
24	265	734	746	512	749	476	753	451	1,140	304	341	324
25	265	854	751	930	706	458	676	419	1,020	311	397	309
26	291	746	682	2,050	734	443	652	396	3,140	336	364	300
27	353	667	632	1,470	717	436	609	381	1,370	458	335	285
28	327	685	592	1,130	670	431	559	373	980	406	1,130	279
29	300	1,150	592	942	625	486	519	372	1,290	347	1,900	280
30	287	835	826	833	---	611	511	366	948	321	946	274
31	279	---	869	744	---	613	---	522	---	388	643	---
TOTAL	9,172	16,101	19,304	21,857	60,845	29,635	17,505	19,188	19,188	15,564	13,139	13,695
MEAN	296	537	623	705	2,098	956	584	619	640	502	424	456
MAX	353	1,240	869	2,050	24,500	3,400	886	2,270	3,140	909	1,900	1,230
MIN	265	270	463	417	610	431	411	366	328	304	249	274
MED	291	381	620	616	913	642	545	480	391	425	306	373
CFSM	0.66	1.20	1.39	1.58	4.69	2.14	1.31	1.38	1.43	1.12	0.95	1.02
IN.	0.76	1.34	1.61	1.82	5.06	2.47	1.46	1.60	1.60	1.30	1.09	1.14

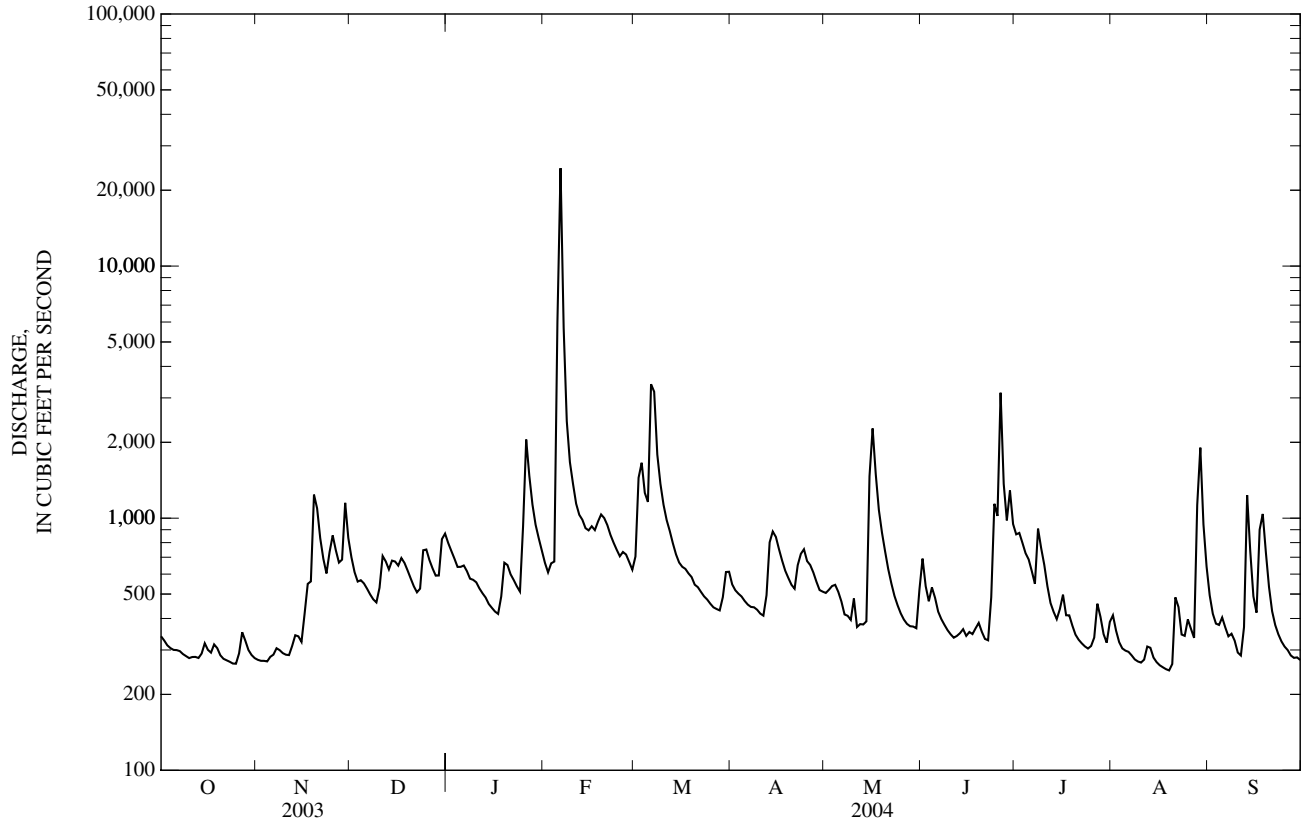
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)

MEAN	293	531	927	1,204	1,398	1,463	1,165	901	469	372	291	279
MAX	1,418	2,554	3,568	3,854	4,901	4,405	3,034	5,227	1,642	1,824	1,008	1,286
(WY)	(1933)	(1958)	(1927)	(1937)	(1948)	(1973)	(1964)	(1991)	(1974)	(1932)	(1923)	(1979)
MIN	112	174	213	234	316	458	303	210	146	121	117	94.2
(WY)	(1932)	(1925)	(1964)	(1940)	(1926)	(1966)	(1986)	(1942)	(1941)	(1943)	(1925)	(1925)

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1920 - 2004	
ANNUAL TOTAL	375,698		255,193			
ANNUAL MEAN	1,029		697		771	
HIGHEST ANNUAL MEAN					1,583	1973
LOWEST ANNUAL MEAN					323	1942
HIGHEST DAILY MEAN	28,800	May 7	24,500	Feb 6	75,800	May 27, 1991
LOWEST DAILY MEAN	252	Sep 18	249	Aug 19	65	Sep 9, 1925
ANNUAL SEVEN-DAY MINIMUM	259	Sep 14	261	Aug 14	71	Sep 5, 1925
MAXIMUM PEAK FLOW					a96,300	May 27, 1991
MAXIMUM PEAK STAGE					b32.19	May 27, 1991
INSTANTANEOUS LOW FLOW					65	Sep 9, 1925
ANNUAL RUNOFF (CFSM)	2.30		1.56		1.72	
ANNUAL RUNOFF (INCHES)	31.27		21.24		23.44	
10 PERCENT EXCEEDS	1,480		1,020		1,440	
50 PERCENT EXCEEDS	587		506		401	
90 PERCENT EXCEEDS	289		287		180	

a From rating curve extended above 50,000 ft^3/s, on basis of slope-area and contracted opening measurements and rainfall runoff study.
b From high-water mark in gage house.
e Estimated



03605078 CYPRESS CREEK AT CAMDEN, TN

LOCATION.--Lat 36°02'49", long 88°04'33", Benton County, Hydrologic Unit 06040005, on left bank, adjacent to southwest corner of third sewage lagoon at Camden Sewage Treatment Plant, 1.5 mi southeast of Camden, and 1.4 mi upstream from Kentucky Lake.

DRAINAGE AREA.--27.3 mi^2.

PERIOD OF RECORD.--January 1992 to current year, discharge for stage of 4.30 ft and below only.

GAGE.--Data logger. Datum of gage is 360.00 ft above NGVD of 1929, determined by the city of Camden, Tennessee.

REMARKS.--Records poor. Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum gage height, 11.41 ft, Sept. 27, 2002; minimum discharge, 0.0 ft^3/s, Sept. 2-19, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; maximum gage height, 9.31 ft, Nov. 18-19; minimum recorded discharge, 2.9 ft^3/s, Sept. 6, minimum estimated daily discharge, 2.3 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	9.1	22	45	24	---	14	34	45	17	e5.3	4.0
2	5.3	8.9	17	---	25	57	13	89	22	27	e4.5	3.6
3	5.2	8.6	20	---	36	32	13	---	16	16	e4.2	3.6
4	4.9	8.0	36	58	24	29	12	60	16	11	e4.0	3.6
5	4.9	18	30	78	---	---	12	36	14	9.5	e10	3.4
6	6.4	13	27	50	---	---	12	26	11	27	e5.3	e3.5
7	5.4	12	22	36	---	78	12	19	11	---	e4.5	e3.5
8	5.3	9.0	20	33	62	46	12	15	9.3	---	e4.3	e3.4
9	4.7	8.3	18	34	50	38	10	14	---	23	e4.2	e3.4
10	4.7	8.5	46	29	46	29	9.5	14	29	44	e3.9	e3.3
11	4.8	8.3	24	25	41	26	9.5	16	12	25	e3.8	e3.2
12	4.6	9.4	16	23	46	23	---	12	---	16	e3.8	e3.2
13	4.6	14	17	21	38	22	---	14	---	13	e3.7	e3.1
14	12	9.6	54	19	31	21	---	31	---	9.6	e3.7	e3.1
15	8.0	---	28	18	28	20	84	---	43	8.6	e3.6	e3.0
16	5.3	---	25	17	23	23	47	---	48	7.9	e3.6	e2.9
17	9.8	77	24	17	21	19	33	42	33	31	e3.5	e3.7
18	7.7	---	18	59	20	17	25	---	52	12	e3.5	e3.6
19	5.9	---	14	38	20	15	19	34	55	6.6	e3.5	e3.5
20	5.4	---	12	25	22	24	17	20	24	5.6	e3.5	e3.5
21	5.1	45	11	23	19	79	---	15	18	5.0	e4.2	e3.4
22	4.9	30	11	20	16	34	---	13	17	4.4	e4.0	e3.3
23	4.8	24	---	18	16	27	---	11	37	3.9	e3.9	e3.1
24	4.6	---	---	17	15	23	---	9.0	21	4.1	e3.8	e3.0
25	4.6	---	70	---	15	19	---	8.3	18	e4.1	e7.0	e2.9
26	---	41	45	---	14	18	91	7.8	19	e4.0	e5.0	e2.9
27	37	---	38	68	13	16	51	7.5	14	e4.0	e3.9	e2.8
28	20	80	31	44	13	15	36	7.4	11	e3.8	e12	e2.6
29	15	39	---	37	13	17	28	7.5	13	e3.7	e7.7	e2.5
30	12	30	---	32	---	17	45	8.7	20	e3.8	e5.7	e2.3
31	10	---	60	26	---	15	---	---	---	e8.8	4.7	---
TOTAL	---	---	---	---	---	---	---	---	---	---	148.3	96.9
MEAN	---	---	---	---	---	---	---	---	---	---	4.78	3.23
MAX	--	--	--	--	--	--					12	4.0
MIN	--	--	--	--	--	--					3.5	2.3
CFSM	---	---	---	---	---	---	---	---	---	---	0.18	0.12
IN.	---	---	---	---	---	---	---	---	---	---	0.20	0.13

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03606500 BIG SANDY RIVER AT BRUCETON, TN

LOCATION.--Lat 36°02'14", long 88°13'46", Carroll County, Hydrologic Unit 06040005, at bridge on U.S. Highway 70, 0.9 mi east of Bruceton and 2 mi east of Carroll-Benton County line, and at mile 31.6

DRAINAGE AREA.--205 mi^2.

PERIOD OF RECORD.--July 1929 to November 1988, January 2002 to current year.

REVISED RECORDS.--WSP 853: Drainage area. WSP 923: 1929-35.

GAGE.--Data collection platform. Datum of gage is 380.58 ft above NGVD of 1929. Prior to March 1, 1940, nonrecording gage at same site

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in the report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1897 reached a stage of 18 ft, discharge 25,000 ft^3/s, and flood in March 1919 reached a stage of 17 ft, discharge, 21,000 ft^3/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 7	1815	2,320	12.40	Apr 23	0700	*2,380	*12.48

Minimum discharge, 59 ft^3/s, Aug. 17, 18, 19, 20.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	107	203	238	169	241	142	245	768	241	106	80
2	104	106	184	417	180	475	137	436	312	227	82	77
3	101	105	182	369	216	269	132	377	316	153	75	77
4	100	103	252	268	185	218	129	301	221	121	74	79
5	101	144	224	309	1,240	318	122	233	167	115	78	86
6	113	129	202	247	2,040	948	121	195	144	113	81	77
7	111	117	183	193	2,220	577	121	170	138	320	76	74
8	102	110	177	191	1,890	266	123	155	124	262	72	72
9	101	103	174	205	523	216	117	143	143	154	70	71
10	104	104	322	186	314	189	116	134	182	124	69	71
11	107	106	296	169	263	178	117	135	126	115	68	70
12	108	116	206	165	287	169	465	132	216	102	67	114
13	107	155	191	160	271	163	812	194	826	103	66	227
14	137	125	297	157	232	168	1,050	200	883	93	65	141
15	166	645	241	157	215	165	624	634	257	87	63	98
16	124	677	210	150	193	174	284	423	234	83	61	86
17	142	254	207	156	186	163	209	259	206	95	61	86
18	161	795	184	252	179	163	175	195	192	100	60	81
19	134	1,640	171	245	180	159	154	170	223	89	60	76
20	128	1,330	161	178	178	178	145	150	217	82	143	74
21	124	631	156	168	172	434	247	135	140	77	175	72
22	123	276	159	161	164	241	1,650	125	127	74	112	72
23	121	224	634	152	159	184	2,310	117	448	84	115	74
24	121	775	779	154	162	167	2,260	111	191	167	286	73
25	128	455	342	757	163	157	2,110	107	150	111	152	73
26	670	276	230	813	161	149	1,710	102	159	104	107	73
27	318	381	206	454	160	144	631	101	128	101	101	71
28	170	504	189	244	151	140	298	100	111	89	101	70
29	136	308	342	206	148	151	239	108	106	81	95	72
30	119	237	637	200	---	167	264	107	145	78	91	71
31	110	---	331	176	---	153	---	1,140	---	87	85	---
TOTAL	4,493	11,038	8,272	7,897	12,601	7,484	17,014	7,134	7,600	3,832	2,917	2,538
MEAN	145	368	267	255	435	241	567	230	253	124	94.1	84.6
MAX	670	1,640	779	813	2,220	948	2,310	1,140	883	320	286	227
MIN	100	103	156	150	148	140	116	100	106	74	60	70
CFSM	0.71	1.79	1.30	1.24	2.12	1.18	2.77	1.12	1.24	0.60	0.46	0.41
IN.	0.82	2.00	1.50	1.43	2.29	1.36	3.09	1.29	1.38	0.70	0.53	0.46

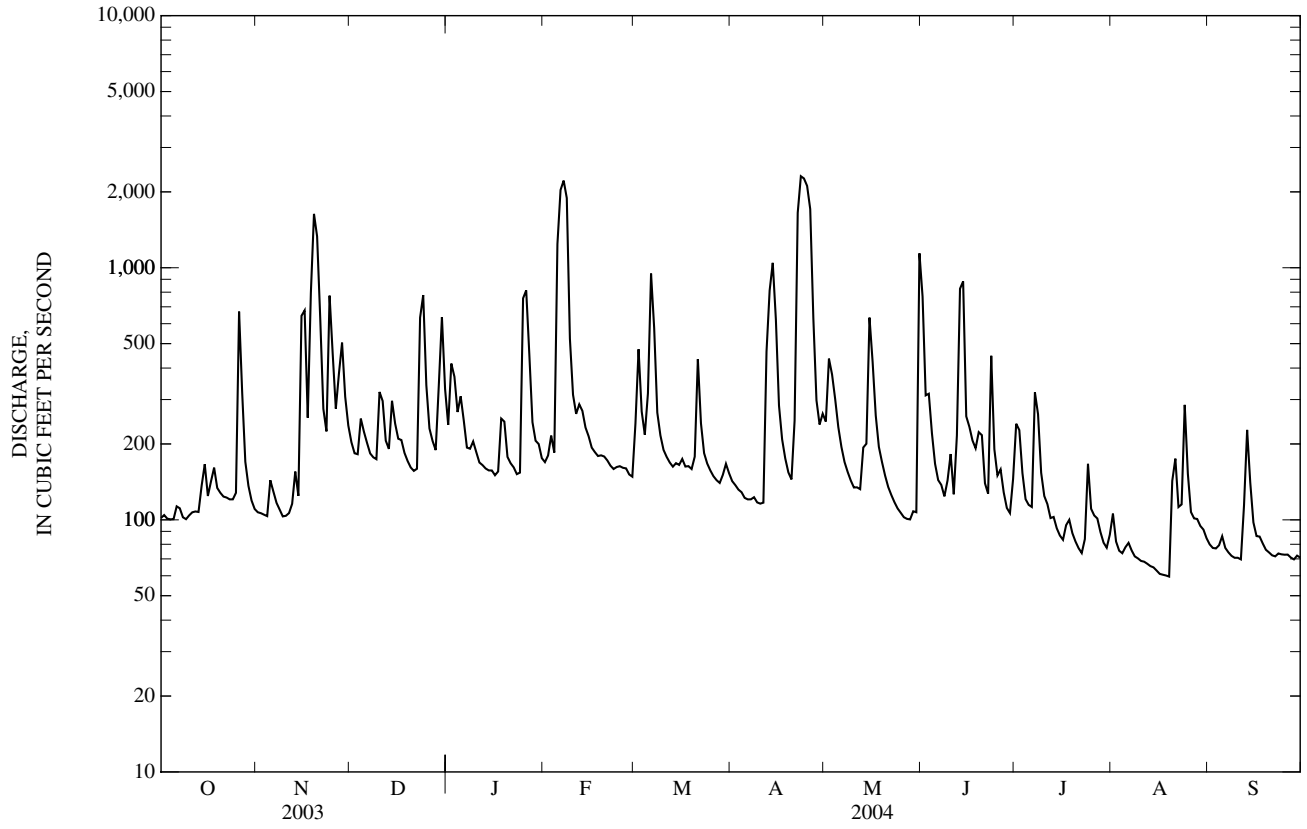
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	124	261	361	500	453	495	398	311	182	151	127	148
MAX	534	995	1,011	2,712	1,235	1,478	1,292	1,423	956	929	613	885
(WY)	(1973)	(1958)	(1950)	(1937)	(1950)	(1975)	(1979)	(1983)	(1974)	(1972)	(1971)	(2002)
MIN	42.0	65.7	88.1	90.8	96.4	84.6	89.2	51.6	41.8	32.9	39.7	35.7
(WY)	(1944)	(1955)	(1964)	(1963)	(1941)	(1941)	(1967)	(1941)	(1941)	(1943)	(1956)	(1942)

03606500 BIG SANDY RIVER AT BRUCETON, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	120,874		92,820			
ANNUAL MEAN	331		254		291	
HIGHEST ANNUAL MEAN					632	1950
LOWEST ANNUAL MEAN					77.8	1941
HIGHEST DAILY MEAN	4,550	Feb 16	2,310	Apr 23	15,500	Jan 21, 1935
LOWEST DAILY MEAN	64	Jul 28	60	Aug 18	28	Aug 17, 1943
ANNUAL SEVEN-DAY MINIMUM	74	Jul 22	62	Aug 13	29	Aug 17, 1943
MAXIMUM PEAK FLOW					a19,600	Nov 29, 2001
MAXIMUM PEAK STAGE					b16.60	Nov 29, 2001
INSTANTANEOUS LOW FLOW					28	Aug 17, 1943
ANNUAL RUNOFF (CFSM)	1.62		1.24		1.42	
ANNUAL RUNOFF (INCHES)	21.93		16.84		19.29	
10 PERCENT EXCEEDS	599		468		642	
50 PERCENT EXCEEDS	181		159		127	
90 PERCENT EXCEEDS	95		77		53	

a From rating curve extended above 9,200 ft^3/s.
b Peak stage from crest-stage gage, outside period of recorded stage.



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 mi^2. PERIOD OF RECORD, February 1943 to current year. GAGE,water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir formed by concrete main dam and 10 saddle dams. Spillway equipped with 11 radial gates, 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, 693,300 cfs-days, Sept. 20, elevation, 999.18 ft; minimum, 112,000 cfs-days, Jan. 23, elevation, 941.25 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 mi^2. PERIOD OF RECORD, November 1950 to current year. GAGE, water-stage recorder. Datum of gage is sea level. 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.--Maximim contents, 339,600 cfs-days, June 27, elevation 1,731.05 ft: minimum, 232,300 cfs-days, Feb. 2, elevation, 1,699.86 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 mi^2. PERIOD OF RECORD, December 1948 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 301,000 cfs-days, Sept. 19, elevation, 1,963.34 ft; minimum, 218,400 cfs-days, Jan. 29, elevation, 1,936.27 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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...	972.98	360,000	-	1,716.04	284,600	-	1,949.20	255,700	-
Oct. 31...	953.28	185,900	-174,100	1,706.82	254,000	-30,600	1,939.81	228,400	-27,300
Nov. 30...	958.35	224,500	+38,600	1,712.98	274,200	+20,200	1,945.62	245,100	+16,700
Dec. 31...	945.02	132,500	-92,000	1,704.36	246,200	-28,000	1,940.30	229,700	-15,500
CAL YR 2003	-	-	-3,800	-	-	-7,500	-	-	-6,100
Jan. 31...	942.99	121,200	-11,300	1,700.47	234,200	-12,000	1,936.56	219,200	-10,500
Feb. 29...	949.12	157,600	+36,400	1,709.83	263,700	+29,500	1,945.02	243,300	+24,100
Mar. 31...	966.66	297,300	+139,700	1,716.09	284,800	+21,100	1,949.45	256,500	+13,200
Apr. 30...	985.46	502,100	-204,800	1,729.12	332,200	+47,400	1,956.90	279,800	+23,300
May 31...	994.56	624,900	-122,800	1,729.76	334,600	+2,400	1,959.39	287,900	+8,100
June 30...	994.14	618,800	-6,100	1,730.32	336,800	+2,200	1,959.98	289,800	+1,900
July 31...	991.78	585,500	-33,300	1,729.00	331,700	-5,100	1,958.41	284,700	-5,100
Aug. 31...	986.06	509,700	-75,800	1,723.43	310,800	-20,900	1,953.31	268,400	-16,300
Sept. 30...	994.42	622,900	-113,200	1,722.96	309,100	-1,700	1,958.51	285,000	+16,600
WTR YR 2004	-	-	+262,900	-	-	+24,500	-	-	+29,300

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 mi^2. PERIOD OF RECORD, December 1952 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 94,700 cfs-days, June 28, elevation, 1,383.73 ft; minimum, 45,400 cfs-days, Jan. 20, elevation, 1,353.56 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 mi^2. PERIOD OF RECORD, October 1953 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 2,300 cfs-days, Dec. 4, 2002, elevation, 1,223.86 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,600 cfs-days, June 27, elevation, 1,263.14 ft; minimum, 10,800 cfs-days, Aug. 27, elevation, 1,256.50 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 mi^2. PERIOD OF RECORD, December 1941 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 722,800 cfs-days, June 7, elevation, 1,071.37 ft; minimum, 254,500 cfs-days, Jan. 23, elevation, 1,028.36 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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...	1,377.39	81,800	-	1,261.82	13,000	-	1,057.35	536,000	-
Oct. 31...	1,370.15	68,900	-12,900	1,262.49	13,300	+300	1,043.50	384,200	-151,800
Nov. 30...	1,363.16	58,100	-10,800	1,260.18	12,300	-1,000	1,042.88	378,200	-6,000
Dec. 31...	1,354.35	46,400	-11,700	1,259.22	11,900	-400	1,032.00	282,300	-95,900
CAL YR 2003	-	-	-4,300	-	-	+9,100	-	-	-22,000
Jan. 31...	1,355.73	48,100	+1,700	1,259.89	12,200	+300	1,032.36	285,200	+2,900
Feb. 29...	1,364.27	59,700	+11,600	1,261.06	12,700	+500	1,038.67	338,800	+53,600
Mar. 31...	1,374.41	76,300	+16,600	1,261.16	12,800	+100	1,047.77	427,600	+88,800
Apr. 30...	1,380.82	88,600	+12,300	1,261.21	12,800	0	1,061.09	582,500	+154,900
May 31...	1,382.74	92,600	+4,000	1,260.76	12,600	-200	1,068.26	678,300	+95,800
June 30...	1,381.75	90,500	-2,100	1,261.02	12,700	+100	1,070.47	709,700	+31,400
July 31...	1,381.96	90,900	+400	1,262.01	13,100	+400	1,068.92	687,600	-22,100
Aug. 31...	1,381.76	90,500	-400	1,260.38	12,400	-700	1,062.29	597,900	-89,700
Sept. 30...	1,378.49	83,900	-6,600	1,259.87	12,200	-200	1,063.93	619,400	+21,500
WTR YR 2004	-	-	+2,100	-	-	-800	-	-	+83,400

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 mi^2. PERIOD OF RECORD, July 1943 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 815.87 ft, May 7, 2003; minimum after first filling, 805.54 ft, Jan. 18, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 186,500 cfs-days, June 19 ; maximum elevation, 813.62 ft, June 27; minimum contents, 143,900 cfs-days, Feb. 5, minimum elevation, 807.15 ft, Feb. 6. Contents based on backwater profile.

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 mi^2. PERIOD OF RECORD, December 1979 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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; maximum elevation, 816.04 ft, on May 8, 2003; minimum after first filling, 155,300 cfs-days, Feb. 17, 1997, elevation, 807.30 ft; minimum elevation, 806.96 ft, Jan. 14, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 203,300 cfs-days, June 27, elevation, 813.72 ft; minimum, 154,900 cfs-days, Feb. 6, elevation, 807.24 ft.

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 mi^2. PERIOD OF RECORD, June 1935 to current year. GAGE, water-stage recorder. Datum of stage is 0.11 ft above sea level. Gage readings have been reduced to sea level.

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, 1,070,900 cfs-days, June 7, elevation, 1,022.56 ft; minimum, 586,400 cfs-days, Jan. 31, elevation, 988.79 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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		03519800	TELLICO LAKE		03532500	NORRIS LAKE	
Sept. 30...	812.38	179,300	-	812.49	193,600	-	1,008.28	840,300	-
Oct. 31...	812.74	182,400	+3,100	812.89	196,800	+3,200	1,001.41	743,000	-97,300
Nov. 30...	809.32	157,700	-24,700	809.52	171,200	-25,600	996.99	684,700	-58,300
Dec. 31...	809.62	159,500	+1,800	809.78	173,100	+1,900	991.21	613,400	-71,300
CAL YR 2003	-	-	+10,000	-	-	+12,800	-	-	-38,500
Jan. 31...	808.52	151,800	-7,700	808.63	164,700	-8,400	988.97	587,200	-26,200
Feb. 29...	808.23	149,900	-1,900	808.32	162,500	-2,200	995.27	662,900	+75,700
Mar. 31...	808.84	153,900	+4,000	809.01	167,500	+5,000	1,005.33	797,500	+134,600
Apr. 30...	811.66	173,300	+19,400	811.79	188,200	+20,700	1,015.79	956,600	+159,100
May 31...	812.99	183,000	+9,700	813.14	198,700	+10,500	1,019.63	1,020,400	+63,800
June 30...	812.73	183,100	+100	812.76	195,800	-2,900	1,021.57	1,053,600	+33,200
July 31...	812.74	181,400	-1,700	812.89	196,800	+1,000	1,019.70	1,021,500	-32,100
Aug. 31...	812.25	179,000	-2,400	812.48	193,600	-3,200	1,013.74	923,800	-97,700
Sept. 30...	812.30	178,400	-600	812.52	193,900	+300	1,011.84	894,100	-29,700
WTR YR 2004	-	-	-900	-	-	+300	-	-	+53,800

* Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

03535900 MELTON HILL LAKE.--Lat 35°53'04", long 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 mi^2. PERIOD OF RECORD, August 1962 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 61,400 cfs-days, Jan. 5, elevation, 795.31 ft; minimum, 49,700 cfs-days, Mar. 27, elevation, 790.94 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 mi^2, approximately. PERIOD OF RECORD, October 1941 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 747.35 ft, May 7, 2003; minimum after first filling, 733.44 ft, Mar. 20, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 571,500 cfs-days, Sept. 18; maximum elevation, 744.32 ft, Sept. 18; minimum midnight contents, 413,800 cfs-days, Feb. 28; minimum elevation, 735.53 ft, Feb. 28. Contents based on backwater profile.

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 mi^2. 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 sea level. Gage readings have been reduced to sea level.

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, 43,700 cfs-days, Sept. 17, elevation, 839.31 ft; minimum 32,400 cfs-days, Feb. 5, elevation, 826.81 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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)
	03535900 MELTON HILL LAKE			*03543000 WATTS BAR LAKE			03564000 LAKE OCOEE		
Sept. 30...	792.38	53,300	-	741.03	510,500	-	833.89	38,400	-
Oct. 31...	793.27	55,600	+2,300	740.05	491,500	-19,000	834.81	39,200	+800
Nov. 30...	793.70	56,800	+1,200	737.58	447,500	-44,000	829.50	34,500	-4,700
Dec. 31...	792.82	54,400	-2,400	736.14	422,300	-25,200	827.38	32,800	-1,700
CAL YR 2003	-	-	-1,200	-	-	+4,300	-	-	+200
Jan. 31...	793.83	57,200	+2,800	737.60	445,600	+23,300	828.05	33,300	+500
Feb. 29...	793.87	57,300	+100	736.16	420,600	-25,000	828.02	33,300	0
Mar. 31...	791.31	50,600	-6,700	737.80	449,400	+28,800	829.69	34,600	+1,300
Apr. 30...	793.68	56,700	+6,100	740.60	501,400	+52,000	835.44	39,800	+5,200
May 31...	794.40	58,800	+2,100	741.26	514,400	+13,000	835.71	40,100	+300
June 30...	793.91	57,400	-1,400	740.28	496,400	-18,000	835.67	40,100	0
July 31...	794.61	59,400	+2,000	741.18	512,800	+16,400	835.48	39,900	-200
Aug. 31...	793.91	57,400	-2,000	740.50	500,600	-12,200	835.26	39,600	-300
Sept. 30...	794.11	57,900	+500	740.11	493,300	-7,300	834.67	39,100	-500
WTR YR 2004	-	-	+4,600	-	-	-17,200	-	-	+700

* Contents based on backwater profile.

RESERVOIRS IN TENNESSEE RIVER BASIN--Continued

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 mi^2, approximately. PERIOD OF RECORD, October 1939 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 687.13 ft, May 7, 2003; minimum after first filling, 673.27 ft, Jan. 21, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 341,700 cfs-days, Sept. 17; maximum elevation, 683.76 ft, Sept. 17; minimum midnight contents, 215,800 cfs-days, Mar. 29; minimum elevation, 676.01 ft, Mar. 27. 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 mi^2, approximately. PERIOD OF RECORD, December 1967 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 161,500 cfs-days, Sept. 17; maximum elevation, 634.59 ft, Sept. 17; minimum midnight contents, 114,500 cfs-days, Feb. 16; minimum elevation, 631.82 ft, Sept. 19. Contents based on backwater profile.

03579000 WOODS RESERVOIR.--Lat 35°17'54", long 86°05'48", Franklin County, Hydrologic Unit 06030003, at Elk River Dam on Elk River, 1.2 mi upstream from Spring Creek, 2.5 mi northeast of Estill Springs, 6.8 mi upstream from bridge on U.S. Highway 41-A, and at mile 170.0. DRAINAGE AREA, 263 mi^2. PERIOD OF RECORD, May 1952 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by concrete gravity and earthfill-type dam with riprapped embankments. Spillway equipped with three radial gates, each 25 ft high by 50 ft wide, and two sluice gates, each 6 ft high by 4 ft wide. Closure of dam was made May 1, 1952; water in reservoir first reached minimum pool elevation Feb. 6, 1953. Total capacity at elevation 962.0 ft, surcharge pool, is 44,400 cfs-days, of which 9,900 cfs- days is controlled storage above elevation 957.0 ft, normal minimum pool. Reservoir is used for cooling water, flood control, and recreational purposes.

COOPERATION.--Twice-daily gage readings (0600 and 2400 hours) furnished by U.S. Air Force.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 42,300 cfs-days, April 21 and 22, 1956, elevation, 960.98 ft; minimum after first filling, 26,300 cfs-days, Nov. 8-11, 1953, elevation, 951.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum midnight contents, 40,700 cfs-days, Aug. 3, elevation, 960.20 ft; minimum midnight contents, 36,000 cfs-days, Dec. 12; elevation, 957.81 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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)
	*03566500 CHICKAMAUGA LAKE			*03570520 NICKAJACK LAKE			03579000 WOODS RESERVOIR		
Sept. 30...	681.31	292,700	-	633.93	122,300	-	959.49	39,200	-
Oct. 31...	678.40	247,000	-45,700	633.70	122,100	-200	958.70	37,700	-1,500
Nov. 30...	678.42	251,300	+4,300	632.85	120,600	-1,500	958.17	36,700	-1,000
Dec. 31...	679.32	263,200	+11,900	632.61	118,100	-2,500	958.25	36,900	+200
CAL YR 2003	-	-	+44,800	-	-	-1,800	-	-	+500
Jan. 31...	677.22	228,000	-35,200	633.44	121,100	+3,000	958.00	36,400	-500
Feb. 29...	676.91	223,500	-4,500	634.16	122,300	+1,200	957.97	36,300	-100
Mar. 31...	677.33	230,200	+6,700	633.81	121,100	-1,200	959.58	39,400	+3,100
Apr. 30...	681.63	298,300	+68,100	633.64	119,500	-1,600	959.44	39,200	-200
May 31...	682.40	312,000	+13,700	634.09	121,900	+2,400	959.54	39,400	+200
June 30...	683.11	327,700	+15,700	634.03	124,200	+2,300	959.51	39,300	-100
July 31...	681.90	304,800	-22,900	634.24	124,700	+500	959.59	39,500	+200
Aug. 31...	682.24	313,000	+8,200	634.01	123,400	-1,300	959.59	39,500	0
Sept. 30...	680.91	290,900	-22,100	633.64	122,800	-600	958.02	36,400	-3,100
WTR YR 2004	-	-	-1,800	-	-	+500	-	-	-2,800

* 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 mi^2. PERIOD OF RECORD, December 1970 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 302,300 cfs-days, May 7, 2003, elevation, 894.27 ft; minimum after first filling 130,600 cfs-days, Dec. 1, 1997, elevation, 855.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 280,600 cfs-days, June 28, elevation, 890.44 ft; minimum, 183,700 cfs-days, Dec. 22, elevation, 870.05 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 mi^2, approximately. PERIOD OF RECORD, October 1937 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 651,000 cfs-days, Feb. 8; maximum elevation, 417.23 ft; Sept. 20, minimum midnight contents, 434,800 cfs-days, Jan. 24, minimum elevation, 408.02 ft, Dec. 30. Contents based on backwater profile.

03596460 NORMANDY LAKE.--Lat 35°27'55", long 86°14'55", 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 mi^2. PERIOD OF RECORD, January 1976 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 63,800 cfs-days, Feb. 20, 1991, elevation, 880.12 ft; minimum after first filling, 26,800 cfs-days, Nov. 27, 1981, elevation, 853.12 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 61,500 cfs-days, June 26, elevation, 878.78 ft; minimum 39,100 cfs-days, Feb. 3, elevation, 863.78 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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...	884.24	247,600	-	411.11	494,800	-	874.01	53,800	-
Oct. 31...	880.25	228,100	-19,500	409.80	464,100	-30,700	871.65	50,100	-3,700
Nov. 30...	877.15	213,800	-14,300	412.23	524,500	+60,400	865.79	41,800	-8,300
Dec. 31...	871.26	188,600	-25,200	410.07	470,600	-53,900	864.89	40,600	-1,200
CAL YR 2003	-	-	-8,600	-	-	+19,500	-	-	+600
Jan. 31...	874.06	200,300	+11,700	410.63	484,000	+13,400	863.95	39,300	-1,300
Feb. 29...	877.11	213,600	+13,300	410.56	482,300	-1,700	864.14	39,600	+300
Mar. 31...	879.63	225,100	+11,500	413.01	539,000	+56,700	868.84	46,000	+6,400
Apr. 30...	886.26	258,000	+32,900	413.64	553,300	+14,300	874.93	55,200	+9,200
May 31...	888.59	270,400	+12,400	413.85	566,400	+13,100	875.08	55,400	+200
June 30...	889.28	274,200	+3,800	414.62	582,800	+16,400	875.33	55,800	+400
July 31...	887.66	265,400	-8,800	404.84	587,400	+4,600	874.95	55,200	-600
Aug. 31...	886.03	256,800	-8,600	413.33	547,700	-39,700	874.51	54,500	-700
Sept. 30...	884.63	249,600	-7,200	413.38	544,900	-2,800	872.19	51,000	-3,500
WTR YR 2004	-	-	+2,000	-	-	+50,100	-	-	-2,800

* 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 mi^2, approximately. PERIOD OF RECORD, July 1944 to current year. GAGE, water-stage recorder. Datum of gage is sea level.

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, 1,712,000 cfs-days Feb. 9; maximum elevation, 361.48 ft, June 10; minimum midnight contents, 1,095,700 cfs-days, Nov. 12, minimum elevation, 353.70 ft, Nov. 12.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Elevation (feet)	Content (cfs-days)	Change contents (cfs-days)
	*03609000 KENTUCKY LAKE		
Sept. 30...	355.38	1,197,800	-
Oct. 31...	354.84	1,128,200	-69,600
Nov. 30...	356.74	1,286,600	+158,400
Dec. 31...	354.48	1,133,100	-153,500
CAL YR 2003	-	-	-81,900
Jan. 31...	356.70	1,297,700	+164,600
Feb. 29...	254.48	1,108,000	-189,700
Mar. 31...	355.31	1,171,400	+63,400
Apr. 30...	359.66	1,473,600	+302,200
May 31...	358.99	1,428,500	-45,100
June 30...	359.80	1,537,500	+109,000
July 31...	358.00	1,351,500	-186,000
Aug. 31...	356.50	1,255,200	-96,300
Sept. 30...	356.13	1,240,800	-14,400
WTR YR 2004	-	-	+43,000

* Contents based on backwater profile.

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.

03518200 CHILHOWEE LAKE on Little Tennessee River at Chilhowee Dam, with a total capacity of 24,800 cfs-days of which 3,400 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.

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07024305 BEAVER CREEK AT HIGHWAY 22 BYPASS NEAR HUNTINGDON, TN

LOCATION.--Lat 36°00'47", long 88°26'42", Carroll County, Hydrologic Unit 08010203, on the upstream side of the main channel bridge on Highway 22 Bypass, 0.8 mi northwest of Huntingdon, 3 mi upstream of Crooked Creek, and at mile 4.5.

DRAINAGE AREA.--58.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1994 to April 1996, December 2000 to current year. Prior to June 1994, occasional low-flow measurements, water years 1946, 1948, 1952-54, 1956-61 and annual maximum, water years 1954-62, 1989-91. October 1962 to February 1988, July 1988 to September 1989. October 1991 to April 14, 1994, continuous stage at bridge 1.0 mi upstream of present location.

REVISED RECORDS.--WSP 1920: 1956(M).

GAGE.--Data collection platform. Datum of gage is 350 ft above NGVD of 1929, from topographic map. Prior to June 1994 water-stage recorder at site 1.0 mi upstream at datum 14.2 ft higher.

REMARKS.--Records good except for estimated discharges, which are poor. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	1215	2,300	18.60	Apr 23	1100	*2,850	*19.12

Minimum daily discharge, 24 ft^3/s, Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	38	58	83	58	156	49	120	75	66	31	31
2	43	37	52	205	63	139	48	303	50	77	28	31
3	32	37	56	127	70	84	47	173	64	63	28	31
4	32	37	80	102	60	77	45	103	60	58	27	33
5	32	38	69	195	976	87	44	71	40	49	29	32
6	35	39	64	101	2,070	191	44	57	37	e52	29	e31
7	37	40	57	73	1,030	89	45	49	40	e189	27	e28
8	34	39	54	74	136	68	44	45	36	e122	25	e30
9	34	38	53	74	95	61	42	41	35	49	26	30
10	34	38	173	64	87	56	42	40	34	40	30	29
11	34	39	93	59	78	55	43	41	33	36	31	30
12	34	41	66	59	94	53	328	39	124	34	26	56
13	34	50	67	57	83	51	611	43	671	32	26	88
14	48	40	139	56	74	53	700	174	975	31	25	36
15	43	348	85	54	68	53	176	451	281	29	25	31
16	35	360	73	52	62	58	87	145	87	29	25	31
17	48	96	64	55	59	53	66	77	73	31	25	31
18	42	364	58	122	57	52	56	56	62	30	26	30
19	37	682	54	84	58	50	50	48	123	29	24	29
20	35	186	51	62	64	115	47	44	64	28	202	28
21	35	82	50	59	60	258	84	40	53	27	75	28
22	35	61	51	56	54	85	1,190	37	80	27	39	32
23	34	59	538	53	56	66	2,600	35	730	36	37	29
24	34	394	680	55	59	60	1,800	33	357	74	64	28
25	35	125	147	558	53	56	1,180	32	79	36	42	28
26	116	80	84	376	51	53	375	32	64	37	38	28
27	57	218	69	120	49	51	99	32	52	34	39	27
28	46	165	64	81	49	50	69	33	48	31	38	28
29	41	87	250	72	49	59	63	33	45	29	36	28
30	39	68	309	69	---	58	261	40	52	28	35	28
31	38	---	110	60	---	52	---	341	---	35	33	---
TOTAL	1,256	3,926	3,818	3,317	5,822	2,449	10,335	2,808	4,524	1,468	1,191	980
MEAN	40.5	131	123	107	201	79.0	344	90.6	151	47.4	38.4	32.7
MAX	116	682	680	558	2,070	258	2,600	451	975	189	202	88
MIN	32	37	50	52	49	50	42	32	33	27	24	27
CFSM	0.69	2.23	2.10	1.83	3.43	1.35	5.88	1.55	2.57	0.81	0.66	0.56
IN.	0.80	2.49	2.42	2.11	3.70	1.55	6.56	1.78	2.87	0.93	0.76	0.62

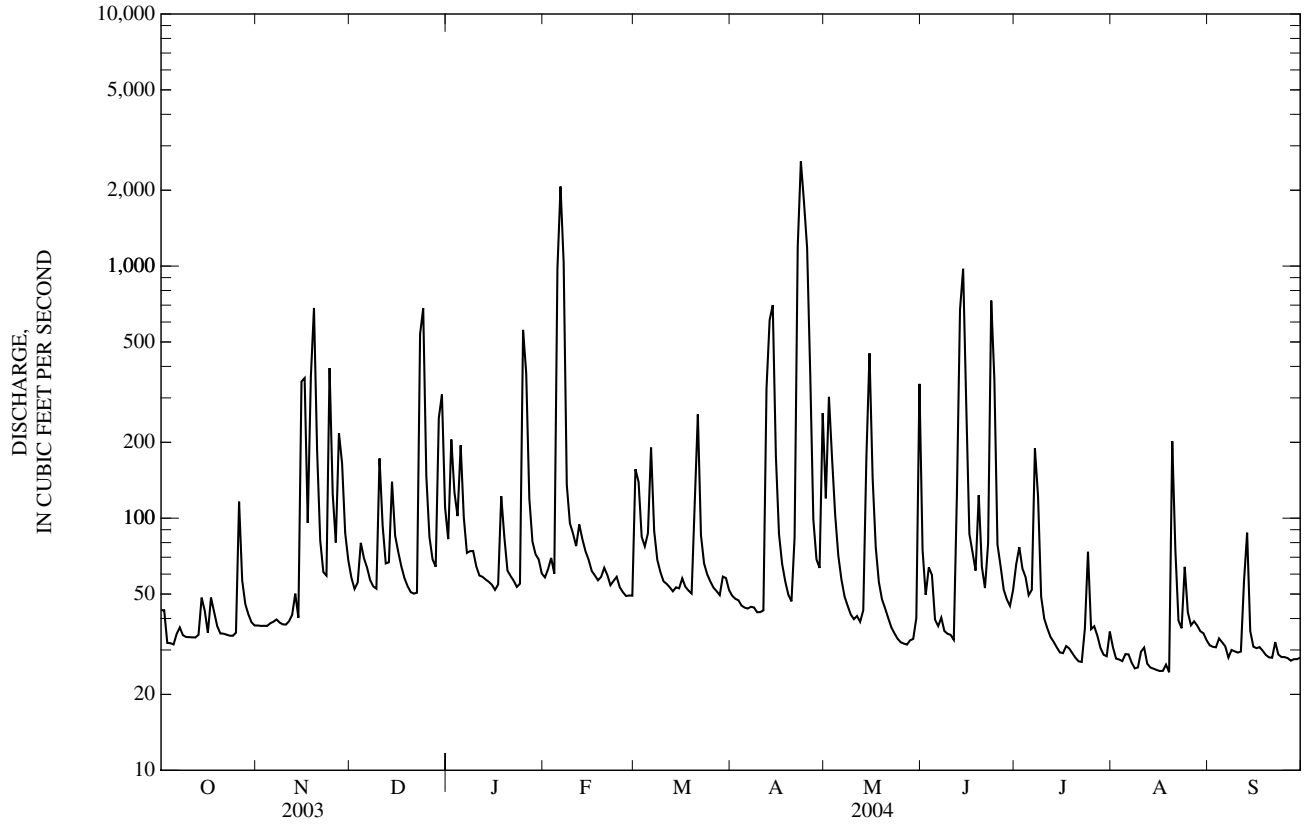
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	59.5	166	172	139	224	162	126	128	77.8	60.9	55.6	84.2
MAX	91.4	454	387	264	447	381	344	306	151	86.9	120	322
(WY)	(2003)	(2002)	(2003)	(1994)	(2003)	(1994)	(2004)	(2003)	(2004)	(1994)	(1995)	(2002)
MIN	40.5	77.8	68.1	67.6	82.4	76.4	61.4	70.5	32.0	34.9	38.4	30.5
(WY)	(2004)	(1994)	(2001)	(2001)	(2002)	(2003)	(1995)	(2001)	(2002)	(2002)	(2004)	(2001)

07024305 BEAVER CREEK AT HIGHWAY 22 BYPASS NEAR HUNTINGDON, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	44,433		41,894			
ANNUAL MEAN	122		114		127	
HIGHEST ANNUAL MEAN					160	2002
LOWEST ANNUAL MEAN					86.0	1995
HIGHEST DAILY MEAN	2,540	Feb 15	2,600	Apr 23	5,940	Sep 27, 2002
LOWEST DAILY MEAN	31	Sep 16	24	Aug 19	20	Jul 7, 2002
ANNUAL SEVEN-DAY MINIMUM	32	Sep 13	25	Aug 13	22	Sep 1, 2002
MAXIMUM PEAK FLOW					a8,350	Sep 9, 1970
MAXIMUM PEAK STAGE					b15.20	Sep 13, 1982
INSTANTANEOUS LOW FLOW					18	Jul 9, 1993
ANNUAL RUNOFF (CFSM)	2.08		1.95		2.18	
ANNUAL RUNOFF (INCHES)	28.21		26.59		29.56	
10 PERCENT EXCEEDS	173		192		232	
50 PERCENT EXCEEDS	54		53		54	
90 PERCENT EXCEEDS	35		29		32	

a From rating curve extended above 3,600 ft^3/s on basis of contracted opening measurement of peak flow; at site 1 mile upstream of present location.
b At site 1 mile upstream of present location and at datum 14.2 ft higher than present datum.
e Estimated



07024305 BEAVER CREEK AT HIGHWAY 22 BYPASS NEAR HUNTINGDON, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC 10...	1020	234	74	10.5	87
MAR 16...	1235	60	74	12.0	49
APR 21...	1045	46	75	18.5	25
JUN 23...	1130	712	53	22.0	184

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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 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 mi^2.

PERIOD OF RECORD.--July 1929 to February 1988, July 1988 to April 1989, October 2001 to current year. Water years 1990-93, 1997-2001, annual maximum.

REVISED RECORDS.--WSP 1311: 1936(M). WSP 1920: Drainage area.

GAGE.--Data collection platform. Datum of gage is 300.36 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated discharges, which are poor. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 18	1500	3,300	11.01	Apr 26	2000	*4,860	*13.56
Feb 5	1500	4,540	13.12	Jun 13	2000	3,420	11.27

Minimum discharge, 138 ft^3/s, Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	180	627	627	422	345	302	906	397	519	169	204
2	158	177	495	829	410	373	315	980	424	409	169	185
3	163	173	420	700	403	658	292	945	779	345	163	172
4	159	173	394	706	379	582	262	849	676	335	160	167
5	155	171	365	959	3,150	542	249	713	512	317	159	166
6	156	170	345	717	3,210	557	239	579	376	302	158	165
7	156	171	331	611	2,890	499	230	472	294	380	157	162
8	157	168	321	533	2,990	442	e230	397	250	346	154	158
9	157	162	310	468	2,180	381	e230	338	226	338	151	155
10	156	163	418	416	988	323	223	298	214	309	149	153
11	155	163	413	377	661	287	220	287	250	268	148	151
12	154	168	410	350	554	259	379	257	215	236	151	188
13	155	171	412	333	473	239	1,320	250	1,280	214	150	171
14	158	175	432	307	434	230	1,380	283	2,390	200	148	191
15	159	728	401	288	399	227	1,350	900	1,790	190	147	182
16	165	711	402	274	365	254	1,070	1,010	2,010	183	146	171
17	170	641	391	269	344	241	742	1,000	1,240	181	145	164
18	171	1,820	361	347	325	238	558	829	838	182	144	159
19	175	1,380	330	355	307	230	442	604	1,110	182	143	155
20	172	1,380	304	347	295	700	366	451	720	179	417	152
21	167	1,220	288	342	281	1,010	e520	360	510	175	424	149
22	162	925	276	322	270	592	e1,200	301	416	171	368	148
23	159	674	619	298	259	533	e3,000	261	579	170	438	149
24	156	1,200	699	286	e254	453	e4,000	233	651	328	473	150
25	175	849	906	1,250	e249	387	4,650	214	806	248	317	148
26	486	819	939	1,060	e247	342	4,810	201	691	210	244	147
27	222	1,590	700	1,120	e245	317	4,460	193	501	197	210	146
28	229	1,280	542	950	e242	306	2,350	192	401	188	992	144
29	221	890	537	715	240	312	988	193	336	179	888	141
30	205	772	586	570	---	309	927	204	322	171	408	139
31	191	---	619	484	---	305	---	574	---	167	251	---
TOTAL	5,581	19,264	14,593	17,210	23,466	12,473	37,304	15,274	21,204	7,819	8,341	4,832
MEAN	180	642	471	555	809	402	1,243	493	707	252	269	161
MAX	486	1,820	939	1,250	3,210	1,010	4,810	1,010	2,390	519	992	204
MIN	154	162	276	269	240	227	220	192	214	167	143	139
CFSM	0.47	1.68	1.23	1.45	2.11	1.05	3.25	1.29	1.85	0.66	0.70	0.42
IN.	0.54	1.87	1.42	1.67	2.28	1.21	3.62	1.48	2.06	0.76	0.81	0.47

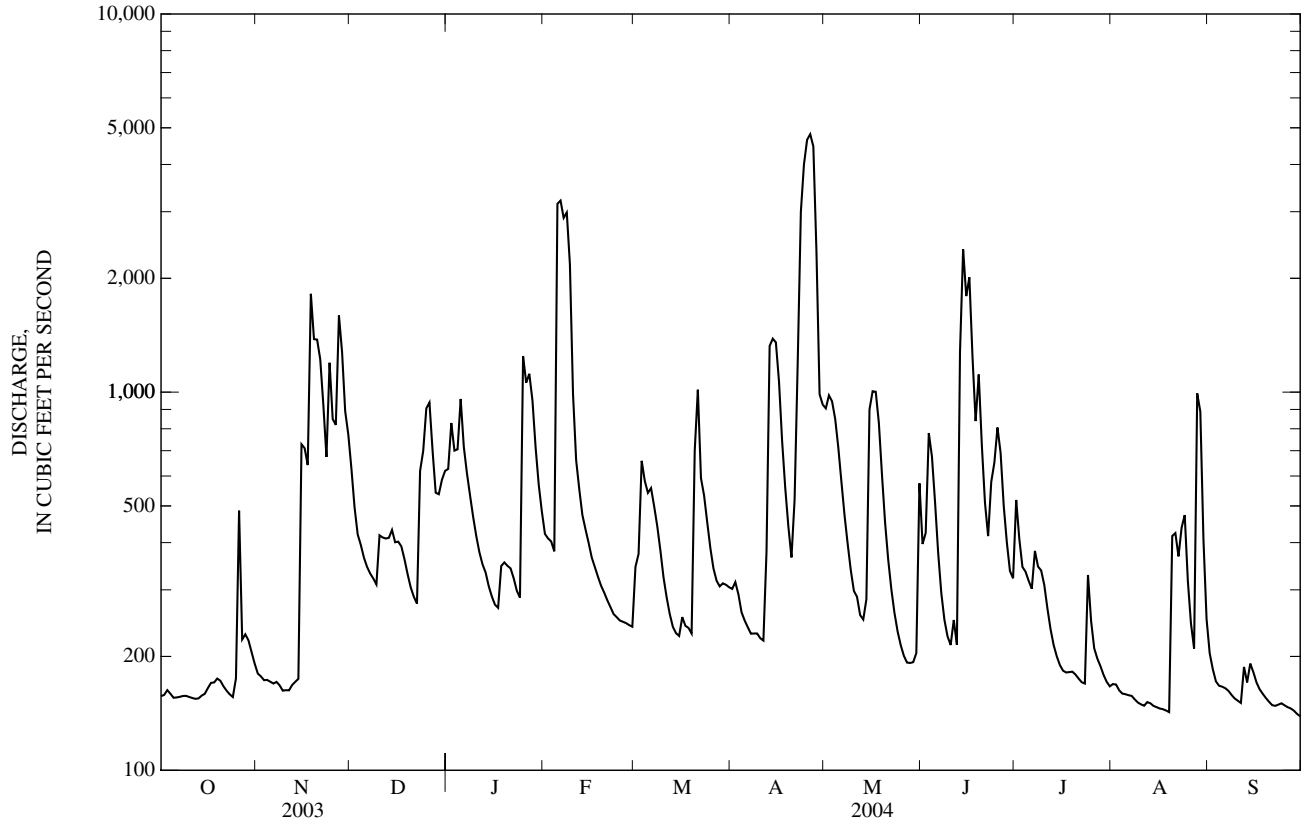
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	217	472	818	1,052	1,007	1,018	800	656	361	273	234	248
MAX	921	2,921	2,921	5,853	3,608	2,638	3,185	3,085	1,858	1,055	1,763	1,310
(WY)	(1973)	(1958)	(2002)	(1937)	(1956)	(1975)	(1979)	(1983)	(1981)	(1972)	(1971)	(1950)
MIN	85.0	108	135	153	147	132	156	120	99.7	90.7	91.8	83.9
(WY)	(1944)	(1955)	(1966)	(1940)	(1941)	(1941)	(1967)	(1941)	(1936)	(1943)	(1987)	(1956)

07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	245,538		187,361			
ANNUAL MEAN	673		512		588	
HIGHEST ANNUAL MEAN					1,184	1950
LOWEST ANNUAL MEAN					136	1941
HIGHEST DAILY MEAN	6,300	Feb 18	4,810	Apr 26	25,000	Jan 22, 1937
LOWEST DAILY MEAN	154	Oct 12	139	Sep 30	61	Aug 21, 1944
ANNUAL SEVEN-DAY MINIMUM	156	Oct 7	145	Sep 24	70	Aug 22, 1943
MAXIMUM PEAK FLOW					a25,600	Jan 22, 1937
MAXIMUM PEAK STAGE					b17.82	Jan 22, 1937
INSTANTANEOUS LOW FLOW					61	Aug 21, 1944
ANNUAL RUNOFF (CFSM)	1.76		1.34		1.54	
ANNUAL RUNOFF (INCHES)	23.85		18.20		20.87	
10 PERCENT EXCEEDS	1,170		989		1,410	
50 PERCENT EXCEEDS	378		316		224	
90 PERCENT EXCEEDS	170		157		105	

a From rating curve extended above 14,000 ft^3/s.
b From floodmarks.
e Estimated



07025400 NORTH FORK OBION RIVER NEAR MARTIN, TN

LOCATION.--Lat 36°24'18", long 88°51'16", Weakley County, Hydrologic Unit 08010203, on right bank on U.S. Highway 45E, 4.0 miles north of Martin.

DRAINAGE AREA.--372 mi^2.

PERIOD OF RECORD.--October 2001 to current year. Annual maximum at unknown datum, 1939 to 1967. Periodic measurements of discharge and miscellaneous water-quality data, 1979 to 1987. Annual maximum at present datum, 1997 to 2001.

GAGE.--Data collection platform, operated in cooperation with the Memphis District Corps of Engineers. Datum of gage is 303.46 ft above NGVD of 1929, determined by the Memphis District Corps of Engineers.

REMARKS.--Records good except for estimated daily discharges, which are poor. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

COOPERATION.--Gage operated jointly with the Memphis District U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge for years 1939-2001, 30,300 ft^3/s, Nov. 19, 1957, stage 23.05; minimum discharge, 40 ft^3/s, Feb. 7, 1946 from reports by Memphis District U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 5	unknown	*5,790	*16.62

No peak discharges greater than base discharge.

Minimum discharge, 140 ft^3/s, Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	192	362	344	286	365	293	482	429	351	175	165
2	167	190	304	1,380	365	490	275	402	273	486	170	161
3	163	190	291	765	905	528	255	401	245	272	168	162
4	164	191	326	507	516	774	245	365	241	228	168	162
5	163	193	324	857	e3,750	571	234	295	230	216	172	161
6	164	199	300	511	e4,940	1,400	230	262	225	211	175	158
7	167	207	278	356	1,910	550	229	240	225	240	166	155
8	166	199	271	330	644	391	231	226	220	229	163	152
9	170	196	275	342	487	321	224	220	214	212	164	151
10	179	197	400	317	422	286	215	216	244	202	162	150
11	186	203	408	293	376	271	214	407	273	204	166	150
12	183	222	306	290	370	257	275	264	248	200	167	153
13	184	256	283	281	348	245	923	253	802	200	163	225
14	196	228	315	274	323	244	871	268	530	198	160	171
15	219	265	305	272	314	245	392	1,450	323	184	164	159
16	200	407	292	264	291	395	306	833	950	187	157	153
17	213	302	285	269	285	344	272	394	1,180	191	157	154
18	227	1,070	270	535	276	317	248	302	372	196	158	151
19	204	1,620	262	492	277	287	229	272	285	186	161	146
20	197	690	250	317	291	525	224	250	249	182	166	144
21	195	359	245	292	299	1,520	237	232	231	180	206	144
22	194	280	248	288	262	500	928	226	226	182	187	144
23	192	265	1,540	275	263	354	2,840	224	242	183	271	144
24	190	1,910	1,170	276	258	311	2,260	222	239	173	504	145
25	199	690	492	1,290	254	289	3,980	225	219	178	307	148
26	1,450	385	376	1,420	246	276	1,790	226	222	195	246	148
27	562	1,900	333	726	241	268	615	230	212	186	197	146
28	276	2,650	314	476	236	260	405	230	201	178	199	145
29	222	816	411	375	235	400	323	236	197	172	260	143
30	199	464	691	353	---	441	343	246	396	172	182	144
31	190	---	414	299	---	355	---	1,230	---	187	172	---
TOTAL	7,548	16,936	12,341	15,066	19,670	13,780	20,106	11,329	10,143	6,561	6,033	4,634
MEAN	243	565	398	486	678	445	670	365	338	212	195	154
MAX	1,450	2,650	1,540	1,420	4,940	1,520	3,980	1,450	1,180	486	504	225
MIN	163	190	245	264	235	244	214	216	197	172	157	143
CFSM	0.65	1.52	1.07	1.31	1.82	1.19	1.80	0.98	0.91	0.57	0.52	0.42
IN.	0.75	1.69	1.23	1.51	1.97	1.38	2.01	1.13	1.01	0.66	0.60	0.46

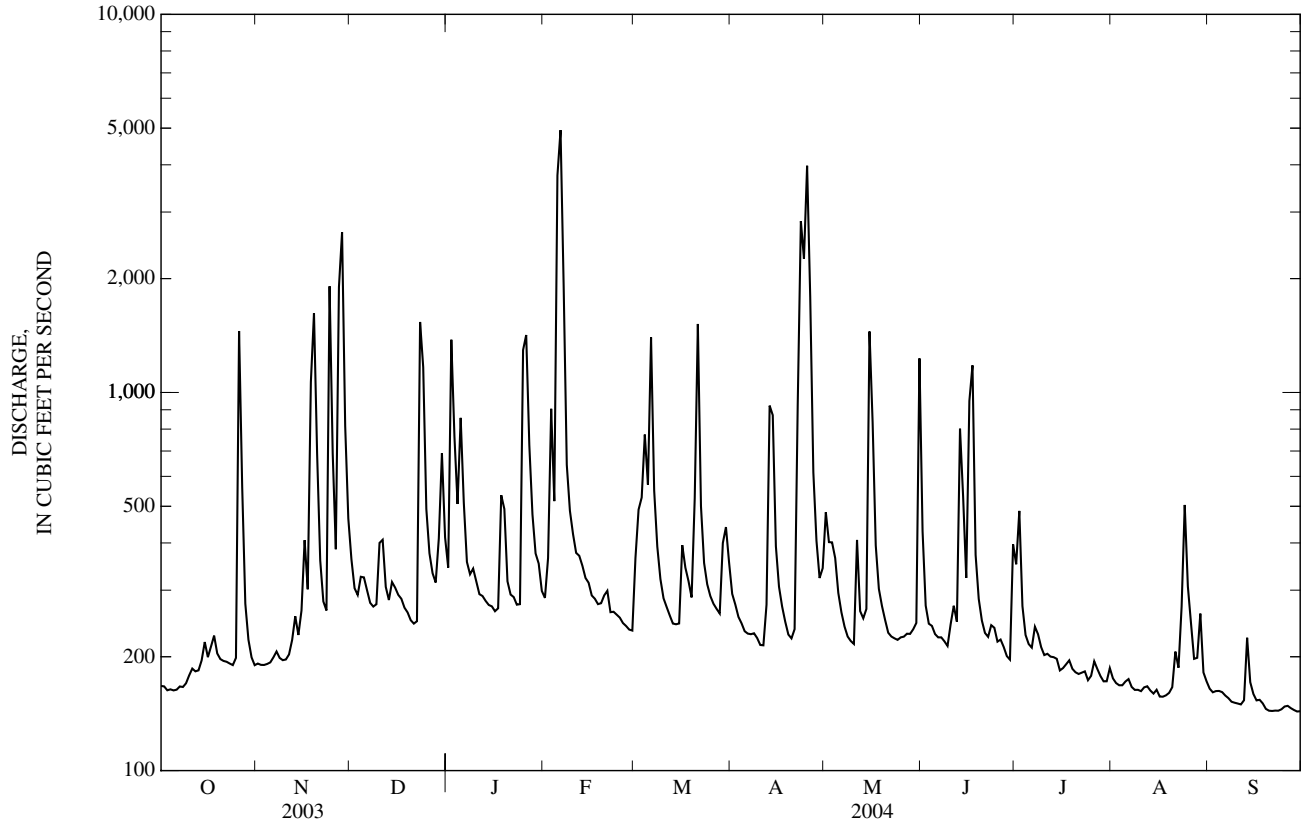
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	414	667	1,510	637	1,057	746	651	1,180	392	230	232	421
MAX	679	1,106	2,832	954	1,885	1,320	711	1,597	496	294	290	788
(WY)	(2003)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)	(2003)	(2003)	(2003)	(2003)	(2002)
MIN	243	332	398	470	621	445	571	365	338	186	195	154
(WY)	(2004)	(2003)	(2004)	(2003)	(2002)	(2004)	(2003)	(2004)	(2004)	(2002)	(2004)	(2004)

07025400 NORTH FORK OBION RIVER NEAR MARTIN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	228,116		144,147			
ANNUAL MEAN	625		394		677	
HIGHEST ANNUAL MEAN					918	2002
LOWEST ANNUAL MEAN					394	2004
HIGHEST DAILY MEAN	7,370	May 5	4,940	Feb 6	12,300	Dec 1, 2001
LOWEST DAILY MEAN	163	Oct 3	143	Sep 29	143	Sep 29, 2004
ANNUAL SEVEN-DAY MINIMUM	165	Sep 30	145	Sep 19	145	Sep 19, 2004
ANNUAL RUNOFF (CFSM)	1.68		1.06		1.82	
ANNUAL RUNOFF (INCHES)	22.81		14.41		24.72	
10 PERCENT EXCEEDS	1,360		690		1,450	
50 PERCENT EXCEEDS	283		254		276	
90 PERCENT EXCEEDS	183		163		167	

e Estimated



07026040 OBION RIVER AT U.S. HIGHWAY 51 NEAR OBION, TN

LOCATION.--Lat 36°14'26", long 89°13'03", Obion County, Hydrologic Unit 08010202, on right downstream bank, at end of main channel bridge on U.S. Highway 51, 3.2 mi northeast of Trimble, 2.0 mi southwest of Obion and 1.6 river miles downstream of the former gage location, Obion River at Obion.

DRAINAGE AREA.--1,875 mi^2.

PERIOD OF RECORD.--July 1929 to September 1958, October 1966 to September 1995, October 2001 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. Prior to Oct. 1990 published as "at Obion."

REVISED RECORD.--WSP 1211: 1930, 1943. WSP 2120: Drainage area.

GAGE.--Data collection platform. Datum of gage is 245.17 ft above NGVD of 1929. Prior to Oct. 1990 water-stage recorder at site 1.6 mi upstream at a datum 1.31 ft higher (levels by the U.S. Army Corps of Engineers). Prior to Oct. 1, 1932, nonrecording gage at site 1.6 mi upstream at datum 6.31 ft higher; Oct. 1, 1932 to Aug. 2, 1939, nonrecording gage, and Aug. 3, 1939, to Sept. 1958, water-state recorder at site 1.6 mi upstream at datum 16.31 ft higher.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 99,500 ft^3/s, Jan. 24, 1937 gage height, 40.4 ft present datum; minimum under conditions of no backwater, 230 ft^3/s, Oct. 7-9, 1943, minimum daily discharge, 15 ft^3/s, backwater from Mississippi River, Feb. 4, 1937, reverse flow of 57 ft^3/s, measured by current meter on that date.

REMARKS.--Records fair, except for estimated discharges, which are poor. During high stages the recession side of peaks are affected by backwater, and return flow from flooded fields. These periods are shown as estimated and are considered poor.

COOPERATION.--Gage operated jointly with the Memphis District U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft^3/s, Apr. 26, 27, gage height 33.05 ft; minimum daily discharge, 635 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	658	759	3,260	1,920	1,520	2,080	1,390	e2,100	3,030	2,050	794	818
2	653	740	2,150	3,150	1,670	2,720	1,320	e2,000	1,340	2,290	776	760
3	655	726	1,770	3,740	2,730	3,060	1,280	e2,600	1,240	1,770	761	730
4	661	721	1,710	2,420	2,290	4,870	1,210	e2,500	1,390	3,020	746	716
5	676	752	1,680	4,040	6,730	3,210	1,180	e2,100	1,230	1,650	741	707
6	679	762	1,560	3,270	10,500	4,660	1,150	e1,800	1,090	1,420	739	703
7	675	760	1,460	2,090	11,900	3,350	1,140	1,660	993	1,990	729	695
8	655	727	1,380	1,770	12,800	2,170	1,140	1,420	935	1,540	713	687
9	649	704	1,350	1,670	e8,400	1,840	1,110	1,280	893	1,260	705	681
10	642	697	1,540	1,580	e6,000	1,700	1,080	1,180	1,390	1,170	696	678
11	647	695	1,980	1,450	e4,600	1,530	1,060	1,350	1,070	1,090	692	675
12	644	705	1,620	1,390	e3,500	1,460	1,240	1,230	1,190	1,030	694	682
13	669	758	1,460	1,350	e3,000	1,380	3,680	1,280	3,750	990	691	782
14	705	747	1,480	1,300	e2,700	1,320	6,310	2,100	6,360	962	689	766
15	717	988	1,560	1,270	2,470	1,320	4,210	4,220	6,130	932	685	725
16	706	3,330	1,480	1,240	2,220	1,620	2,590	5,690	8,080	909	680	701
17	755	1,840	1,450	1,220	2,180	1,670	1,960	3,210	6,640	927	675	688
18	758	3,100	1,380	2,560	2,320	1,470	1,610	2,170	4,040	902	677	673
19	706	8,340	1,310	2,370	2,230	1,410	1,390	1,680	2,450	894	673	663
20	686	7,020	1,270	1,640	2,100	1,540	1,270	1,390	2,220	874	691	654
21	672	4,690	1,230	1,430	1,950	6,500	1,360	1,210	1,770	857	1,410	652
22	663	2,780	1,210	1,380	1,850	4,260	4,140	1,100	1,640	843	1,040	650
23	655	1,990	2,840	1,320	1,810	2,230	8,880	1,030	2,840	835	907	649
24	651	6,370	5,700	1,280	1,840	1,760	10,300	964	2,550	876	3,120	650
25	704	5,870	3,180	3,600	1,810	1,550	11,500	930	2,520	1,080	3,010	653
26	2,920	3,090	2,260	7,170	1,700	1,430	13,000	910	2,320	992	1,410	651
27	2,800	5,660	1,960	5,200	1,670	1,350	e11,000	895	1,750	898	942	644
28	1,200	9,250	1,690	3,380	1,630	1,300	e9,200	921	1,520	859	1,350	646
29	930	8,170	2,080	2,290	1,560	1,390	e4,400	905	1,520	830	4,360	647
30	827	5,490	3,380	1,920	---	1,760	e2,800	906	2,270	809	1,660	635
31	782	---	2,420	1,670	---	1,550	---	4,250	---	825	975	---
TOTAL	26,400	88,231	60,800	72,080	107,680	69,460	113,900	56,981	76,161	37,374	34,431	20,661
MEAN	852	2,941	1,961	2,325	3,713	2,241	3,797	1,838	2,539	1,206	1,111	689
MAX	2,920	9,250	5,700	7,170	12,800	6,500	13,000	5,690	8,080	3,020	4,360	818
MIN	642	695	1,210	1,220	1,520	1,300	1,060	895	893	809	673	635
CFSM	0.45	1.57	1.05	1.24	1.98	1.20	2.02	0.98	1.35	0.64	0.59	0.37
IN.	0.52	1.75	1.21	1.43	2.14	1.38	2.26	1.13	1.51	0.74	0.68	0.41

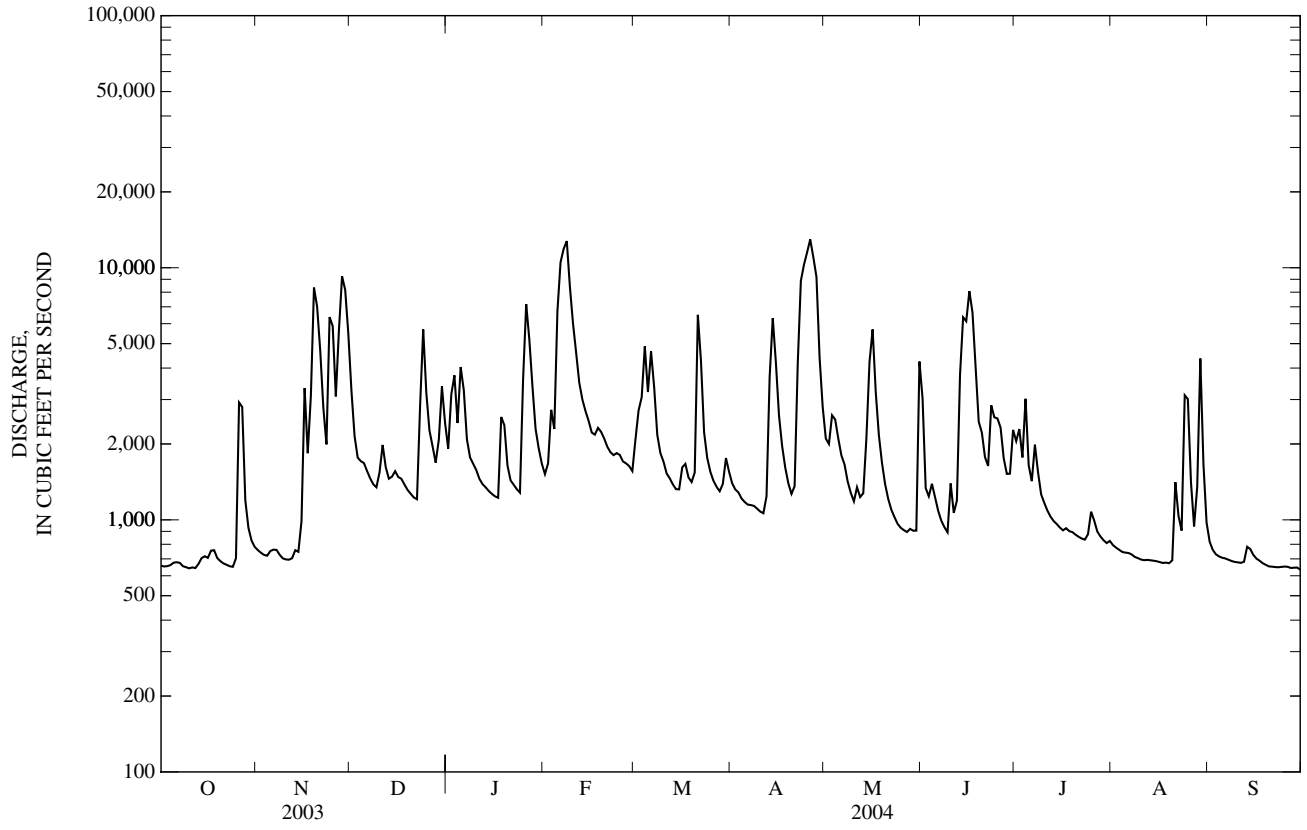
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	1,005	2,090	3,762	4,698	4,918	4,372	3,880	3,065	1,910	1,404	1,049	962
MAX	5,352	15,500	22,140	26,640	17,120	15,810	11,770	15,540	10,970	4,783	6,643	5,041
(WY)	(2003)	(1958)	(2002)	(1937)	(1990)	(1975)	(1973)	(1983)	(1970)	(1975)	(1971)	(1950)
MIN	249	372	495	587	543	628	678	487	323	301	277	264
(WY)	(1944)	(1955)	(1944)	(1944)	(1941)	(1941)	(1941)	(1936)	(1936)	(1944)	(1936)	(1956)

07026040 OBION RIVER AT U.S. HIGHWAY 51 NEAR OBION, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1929 - 2004	
ANNUAL TOTAL	1,212,860		764,159			
ANNUAL MEAN	3,323		2,088		2,756	
HIGHEST ANNUAL MEAN					5,351	1973
LOWEST ANNUAL MEAN					569	1941
HIGHEST DAILY MEAN	29,500	May 10	13,000	Apr 26	99,500	Jan 24, 1937
LOWEST DAILY MEAN	642	Oct 10	635	Sep 30	a15	Feb 4, 1937
ANNUAL SEVEN-DAY MINIMUM	654	Oct 7	647	Sep 24	233	Oct 6, 1943
MAXIMUM PEAK FLOW					99,500	Jan 24, 1937
MAXIMUM PEAK STAGE					b40.40	Jan 24, 1937
INSTANTANEOUS LOW FLOW					c230	Oct 7, 1943
ANNUAL RUNOFF (CFSM)	1.77		1.11		1.47	
ANNUAL RUNOFF (INCHES)	24.06		15.16		19.97	
10 PERCENT EXCEEDS	7,730		4,290		7,080	
50 PERCENT EXCEEDS	1,550		1,390		1,050	
90 PERCENT EXCEEDS	707		681		417	

* Statistics are based on the combination of present gage and gage prior to 1990 0702400 "at Obion" located 1.6 mi upstream of present location.
a Affected by backwater from Mississippi River.
b Present datum.
c Minimum under conditions of no backwater from Mississippi River.
e Estimated



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 mi^2.

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Data collection platform. Datum of gage is 270.22 ft above NGVD of 1929 based on Benchmark E-13, supplementary adjustment of 1958.

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 sea level.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.29 ft, Apr. 25, 26; minimum, 11.64 ft, Sept. 30.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.27	12.22	12.25	12.22	12.19	12.21	13.27	13.10	13.17	12.80	12.78	12.79
2	12.26	12.21	12.24	12.21	12.18	12.20	13.16	13.14	13.14	12.81	12.74	12.78
3	12.21	12.14	12.17	12.21	12.18	12.20	13.14	13.10	13.12	12.80	12.71	12.77
4	12.20	12.16	12.17	12.20	12.17	12.19	13.11	13.08	13.10	12.93	12.67	12.79
5	12.18	12.15	12.17	12.26	12.17	12.23	13.09	13.04	13.06	12.98	12.93	12.96
6	12.18	12.16	12.17	12.28	12.23	12.25	13.09	13.03	13.06	13.01	12.91	12.96
7	12.16	12.15	12.16	12.25	12.22	12.23	13.03	12.97	13.00	12.91	12.88	12.90
8	12.16	12.14	12.15	12.26	12.22	12.24	12.97	12.92	12.94	12.89	12.84	12.87
9	12.17	12.13	12.15	12.23	12.16	12.20	12.94	12.84	12.91	12.94	12.88	12.92
10	12.16	12.14	12.15	12.16	12.11	12.14	12.92	12.80	12.86	12.91	12.83	12.87
11	12.15	12.13	12.14	12.12	12.06	12.09	12.93	12.91	12.92	12.83	12.68	12.76
12	12.17	12.12	12.14	12.22	12.01	12.11	12.94	12.91	12.92	12.79	12.73	12.77
13	12.13	12.11	12.12	12.21	12.15	12.17	12.92	12.85	12.88	12.80	12.78	12.79
14	12.17	12.06	12.12	12.15	12.12	12.14	12.85	12.80	12.83	12.82	12.72	12.76
15	12.13	12.10	12.11	12.22	12.14	12.18	12.80	12.68	12.76	12.84	12.74	12.77
16	12.11	12.06	12.09	12.23	12.22	12.23	12.78	12.68	12.75	12.74	12.71	12.73
17	12.24	12.09	12.19	12.24	12.17	12.22	12.78	12.71	12.75	12.75	12.68	12.71
18	12.17	12.14	12.16	12.39	12.15	12.25	12.76	12.71	12.73	12.86	12.75	12.83
19	12.15	12.14	12.15	12.46	12.32	12.36	12.75	12.71	12.73	12.86	12.80	12.83
20	12.15	12.10	12.13	12.35	12.31	12.34	12.74	12.68	12.71	12.81	12.76	12.78
21	12.15	12.11	12.13	12.36	12.31	12.34	12.68	12.60	12.64	12.77	12.72	12.74
22	12.17	12.13	12.14	12.36	12.32	12.34	12.65	12.56	12.62	12.78	12.71	12.75
23	12.15	12.10	12.12	12.46	12.29	12.35	12.79	12.52	12.71	12.76	12.62	12.69
24	12.13	12.09	12.11	12.48	12.41	12.46	12.77	12.72	12.74	12.77	12.67	12.72
25	12.26	12.06	12.13	12.51	12.48	12.50	12.73	12.71	12.72	12.85	12.77	12.81
26	12.27	12.19	12.22	12.54	12.49	12.52	12.72	12.70	12.71	12.89	12.84	12.86
27	12.23	12.18	12.20	12.97	12.52	12.79	12.71	12.65	12.69	12.89	12.81	12.86
28	12.21	12.18	12.19	13.07	12.94	13.00	12.66	12.63	12.64	12.90	12.86	12.89
29	12.21	12.17	12.20	13.08	13.04	13.06	12.77	12.65	12.74	12.98	12.85	12.89
30	12.18	12.12	12.16	13.10	13.01	13.06	12.78	12.76	12.77	12.99	12.91	12.94
31	12.20	12.14	12.17	---	---	---	12.80	12.74	12.78	12.92	12.86	12.89
MONTH	12.27	12.06	12.16	13.10	12.01	12.35	13.27	12.52	12.84	13.01	12.62	12.82

07027000 REELFOOT LAKE NEAR TIPTONVILLE, TN—Continued

GAGE HEIGHT, FEET—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.86	12.82	12.84	12.66	12.52	12.62	12.76	12.73	12.74	13.05	12.94	12.99
2	12.86	12.82	12.85	12.73	12.66	12.70	12.75	12.71	12.74	13.02	12.90	12.95
3	12.88	12.82	12.86	12.82	12.72	12.77	12.77	12.69	12.71	12.91	12.79	12.86
4	12.94	12.88	12.91	12.81	12.72	12.79	12.76	12.68	12.71	12.79	12.67	12.73
5	13.02	12.90	12.99	12.86	12.64	12.79	12.68	12.65	12.66	12.74	12.68	12.72
6	13.05	12.99	13.02	12.88	12.85	12.86	12.65	12.62	12.63	12.71	12.63	12.68
7	13.11	13.04	13.07	12.91	12.86	12.88	12.62	12.59	12.61	12.69	12.66	12.68
8	13.13	13.08	13.10	12.88	12.81	12.85	12.63	12.59	12.61	12.68	12.61	12.65
9	13.10	13.07	13.09	12.95	12.82	12.89	12.62	12.58	12.59	12.64	12.60	12.62
10	13.10	13.08	13.09	12.86	12.79	12.82	12.66	12.57	12.59	12.65	12.59	12.63
11	13.08	13.06	13.07	12.82	12.75	12.78	12.65	12.59	12.61	12.63	12.59	12.62
12	13.10	13.06	13.07	12.82	12.76	12.78	12.73	12.59	12.67	12.66	12.57	12.60
13	13.07	13.00	13.02	12.77	12.73	12.75	12.75	12.56	12.66	12.67	12.60	12.63
14	13.01	12.98	13.00	12.74	12.72	12.73	12.56	12.53	12.55	12.74	12.64	12.71
15	13.07	12.99	13.04	12.73	12.70	12.72	12.53	12.48	12.51	12.76	12.72	12.74
16	12.99	12.89	12.94	12.73	12.69	12.72	12.51	12.45	12.48	12.73	12.66	12.71
17	12.89	12.87	12.88	12.72	12.68	12.70	12.49	12.42	12.46	12.70	12.64	12.68
18	12.87	12.80	12.84	12.74	12.67	12.70	12.45	12.38	12.42	12.72	12.68	12.70
19	12.80	12.72	12.76	12.72	12.65	12.68	12.44	12.35	12.41	12.72	12.65	12.70
20	12.75	12.54	12.68	12.75	12.52	12.65	12.45	12.30	12.39	12.70	12.60	12.66
21	12.80	12.75	12.77	12.87	12.75	12.81	12.49	12.36	12.43	12.68	12.63	12.66
22	12.78	12.75	12.76	12.81	12.78	12.79	12.59	12.49	12.54	12.65	12.54	12.60
23	12.75	12.73	12.74	12.78	12.73	12.75	12.89	12.58	12.78	12.59	12.48	12.54
24	12.86	12.73	12.81	12.74	12.65	12.71	13.12	12.89	12.99	12.58	12.53	12.56
25	12.88	12.75	12.82	12.73	12.69	12.72	13.29	13.12	13.19	12.58	12.45	12.52
26	12.75	12.65	12.69	12.72	12.60	12.69	13.29	13.27	13.28	12.53	12.41	12.48
27	12.65	12.63	12.64	12.72	12.67	12.70	13.28	13.20	13.24	12.49	12.40	12.44
28	12.63	12.60	12.61	12.76	12.63	12.68	13.20	13.08	13.13	12.50	12.41	12.48
29	12.61	12.50	12.56	12.76	12.70	12.74	13.09	13.01	13.04	12.50	12.46	12.48
30	---	---	---	12.83	12.71	12.75	13.06	12.98	13.02	12.61	12.31	12.44
31	---	---	---	12.80	12.76	12.77	---	---	---	12.68	12.59	12.62
MONTH	13.13	12.50	12.88	12.95	12.52	12.75	13.29	12.30	12.71	13.05	12.31	12.65
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.73	12.66	12.70	12.41	12.39	12.40	12.33	12.30	12.32	12.13	12.10	12.11
2	12.77	12.73	12.75	12.40	12.35	12.39	12.31	12.28	12.30	12.11	12.06	12.09
3	12.78	12.69	12.74	12.40	12.30	12.35	12.28	12.25	12.27	12.09	12.06	12.07
4	12.69	12.65	12.68	12.53	12.39	12.50	12.26	12.21	12.23	12.08	12.06	12.07
5	12.65	12.62	12.64	12.53	12.50	12.51	12.32	12.22	12.28	12.06	12.05	12.06
6	12.65	12.61	12.62	12.63	12.50	12.53	12.28	12.23	12.25	12.09	12.03	12.05
7	12.62	12.59	12.60	12.57	12.55	12.56	12.23	12.18	12.21	12.14	12.06	12.09
8	12.59	12.57	12.58	12.57	12.54	12.56	12.19	12.15	12.17	12.06	11.99	12.03
9	12.59	12.56	12.58	12.54	12.51	12.53	12.16	12.11	12.13	11.99	11.96	11.98
10	12.58	12.51	12.55	12.55	12.49	12.52	12.13	12.11	12.12	11.97	11.95	11.96
11	12.54	12.46	12.50	12.55	12.50	12.53	12.14	12.11	12.13	11.95	11.93	11.94
12	12.60	12.48	12.53	12.52	12.49	12.51	12.12	12.08	12.10	11.94	11.90	11.92
13	12.76	12.52	12.66	12.50	12.46	12.49	12.10	12.04	12.07	11.93	11.90	11.91
14	12.80	12.74	12.79	12.53	12.45	12.47	12.04	12.03	12.04	11.91	11.89	11.90
15	12.86	12.78	12.80	12.45	12.42	12.44	12.03	12.01	12.02	11.90	11.88	11.89
16	13.03	12.86	12.93	12.45	12.40	12.43	12.02	11.98	12.00	11.94	11.89	11.91
17	13.14	13.03	13.10	12.46	12.43	12.45	11.98	11.94	11.97	11.92	11.86	11.90
18	13.16	13.13	13.15	12.45	12.41	12.43	11.95	11.91	11.93	11.87	11.85	11.86
19	13.17	13.11	13.14	12.41	12.37	12.39	11.93	11.89	11.91	11.87	11.84	11.85
20	13.11	13.02	13.07	12.37	12.30	12.34	11.98	11.85	11.92	11.85	11.79	11.81
21	13.02	12.91	12.95	12.32	12.28	12.30	11.98	11.96	11.98	11.80	11.77	11.78
22	12.94	12.87	12.89	12.30	12.27	12.29	11.96	11.93	11.94	11.78	11.77	11.77
23	12.89	12.77	12.84	12.34	12.27	12.29	12.07	11.89	11.95	11.77	11.75	11.76
24	12.77	12.67	12.73	12.30	12.27	12.29	12.12	11.97	12.01	11.75	11.74	11.75
25	12.67	12.64	12.65	12.40	12.28	12.37	12.04	11.98	12.00	11.77	11.74	11.75
26	12.64	12.54	12.59	12.39	12.35	12.37	12.00	11.94	11.98	11.77	11.73	11.75
27	12.54	12.45	12.49	12.37	12.33	12.35	11.99	11.96	11.98	11.76	11.70	11.73
28	12.46	12.43	12.44	12.34	12.31	12.32	12.15	11.94	12.03	11.74	11.69	11.71
29	12.45	12.43	12.44	12.31	12.29	12.30	12.14	12.10	12.12	11.73	11.66	11.69
30	12.44	12.37	12.42	12.32	12.26	12.29	12.14	12.11	12.13	11.66	11.64	11.65
31	---	---	---	12.35	12.32	12.33	12.14	12.11	12.12	---	---	---
MONTH	13.17	12.37	12.72	12.63	12.26	12.41	12.33	11.85	12.08	12.14	11.64	11.89

07027720 SOUTH FORK FORKED DEER RIVER NEAR OWL CITY, TN

LOCATION.--Lat 35°43'07", long 89°12'43", Haywood County, Hydrologic Unit 08010205, on left bank downstream side of the State Highway 54 bridge, 9.2 mi north of Brownsville, and 1.2 miles southwest of Owl City, Tennessee.

DRAINAGE AREA.--718 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 2001 to current year.

GAGE.--Data collection platform. Datum of gage is 297 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 25	1200	3,890	17.52	Apr 13	1330	3,170	16.61
Feb 11	1345	5,500	18.69	Apr 28	1045	*6,380	*19.12

Minimum discharge, 213 ft^3/s, Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	366	695	1,240	851	779	494	3,880	1,910	1,740	296	328
2	283	356	618	1,140	799	1,490	456	2,730	1,260	1,290	285	297
3	280	350	579	934	785	1,750	432	1,930	1,400	833	276	289
4	276	342	733	811	864	1,570	417	1,350	1,850	612	266	289
5	278	336	842	879	3,430	1,120	396	999	1,590	532	302	285
6	277	355	727	870	4,490	1,470	386	785	1,000	473	310	276
7	282	362	645	718	4,160	1,820	385	663	667	835	290	261
8	283	349	600	640	4,140	1,650	391	588	558	823	268	250
9	280	343	577	639	4,470	1,070	386	544	652	741	261	239
10	284	346	836	653	5,070	813	372	611	721	573	256	236
11	291	349	1,330	609	5,420	694	370	637	535	461	252	232
12	294	357	1,050	580	5,160	642	532	488	447	404	248	284
13	287	375	775	566	3,960	606	2,340	797	412	401	247	302
14	306	390	828	562	2,330	590	2,540	1,160	574	447	242	482
15	379	452	938	546	1,450	584	2,350	2,280	459	369	238	565
16	379	607	786	536	1,270	575	2,070	2,190	641	358	238	410
17	351	651	710	531	1,230	586	1,210	1,510	559	386	235	319
18	352	981	657	671	1,110	558	809	981	460	371	234	288
19	341	1,690	612	889	1,070	541	616	761	628	360	233	260
20	323	1,820	575	734	914	525	533	632	466	335	499	244
21	316	1,980	545	619	816	729	652	559	393	314	768	235
22	309	2,110	536	585	744	614	3,670	507	386	301	515	233
23	300	1,900	1,430	556	684	533	4,750	471	826	292	408	231
24	293	2,080	1,860	539	654	506	4,720	438	715	476	2,020	233
25	311	1,680	1,640	2,550	675	479	5,120	419	828	576	1,170	235
26	1,000	1,260	1,080	2,850	716	470	5,520	409	976	415	667	233
27	883	1,190	805	2,740	710	470	5,980	390	785	361	454	228
28	643	1,370	699	2,880	698	476	6,260	385	536	332	422	222
29	508	1,090	1,020	2,950	630	459	5,770	393	448	307	395	219
30	428	839	1,740	2,200	---	491	5,040	401	1,270	296	394	216
31	386	---	1,720	1,160	---	508	---	2,070	---	304	388	---
TOTAL	11,488	26,676	28,188	34,377	59,300	25,168	64,967	31,958	23,952	16,318	13,077	8,421
MEAN	371	889	909	1,109	2,045	812	2,166	1,031	798	526	422	281
MAX	1,000	2,110	1,860	2,950	5,420	1,820	6,260	3,880	1,910	1,740	2,020	565
MIN	276	336	536	531	630	459	370	385	386	292	233	216
CFSM	0.52	1.24	1.27	1.54	2.85	1.13	3.02	1.44	1.11	0.73	0.59	0.39
IN.	0.60	1.38	1.46	1.78	3.07	1.30	3.37	1.66	1.24	0.85	0.68	0.44

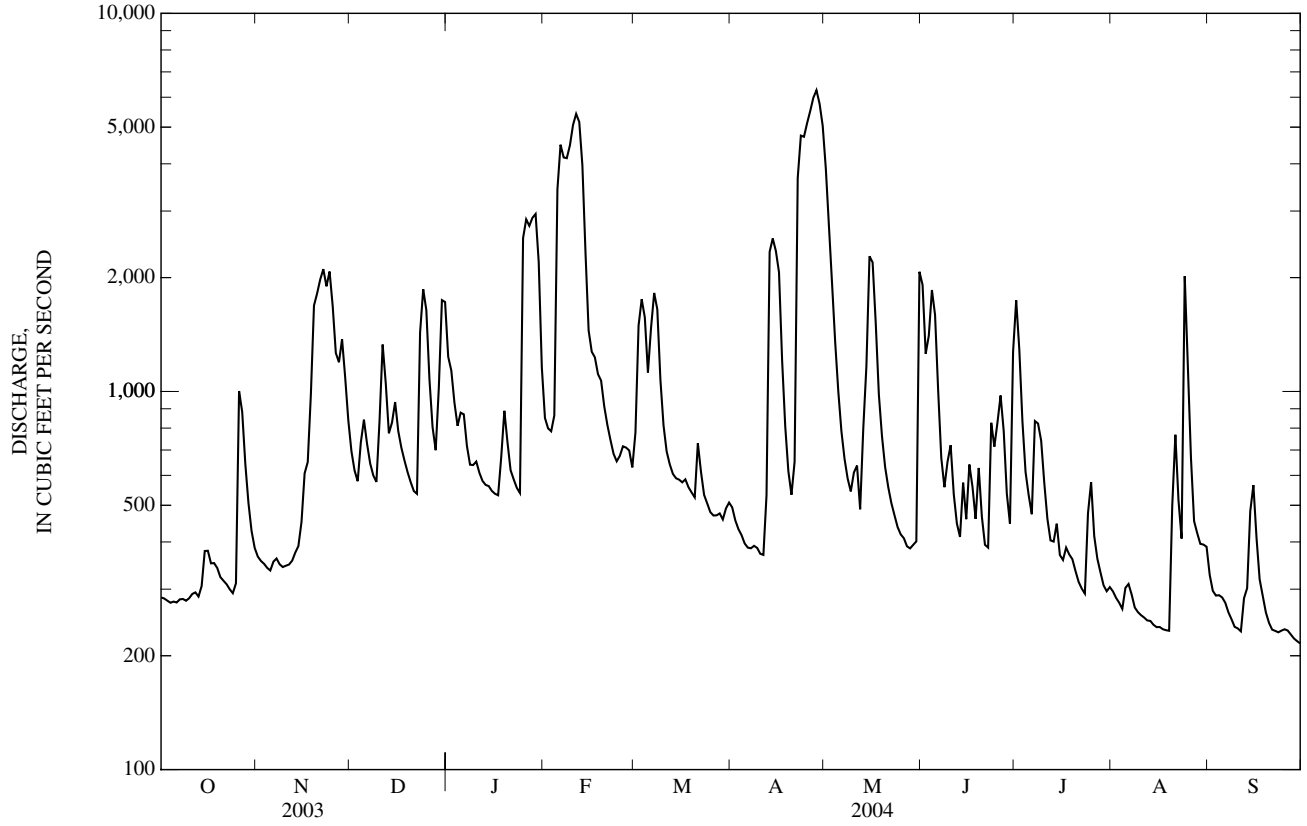
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	1,480	986	3,529	1,175	2,263	1,657	1,305	1,236	834	387	451	585
MAX	2,824	1,134	6,834	1,658	3,660	3,508	2,166	2,695	1,314	526	571	1,298
(WY)	(2003)	(2002)	(2002)	(2002)	(2003)	(2002)	(2004)	(2003)	(2001)	(2004)	(2003)	(2002)
MIN	371	889	909	758	1,091	812	788	509	379	289	323	281
(WY)	(2004)	(2004)	(2004)	(2003)	(2002)	(2004)	(2001)	(2001)	(2002)	(2001)	(2001)	(2004)

07027720 SOUTH FORK FORKED DEER RIVER NEAR OWL CITY, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	416,629		343,890			
ANNUAL MEAN	1,141		940		1,378	
HIGHEST ANNUAL MEAN					1,678	2002
LOWEST ANNUAL MEAN					940	2004
HIGHEST DAILY MEAN	8,970	Feb 19	6,260	Apr 28	25,000	Dec 3, 2001
LOWEST DAILY MEAN	268	Jul 28	216	Sep 30	120	Jul 16, 2001
ANNUAL SEVEN-DAY MINIMUM	279	Oct 3	227	Sep 24	131	Jul 14, 2001
MAXIMUM PEAK FLOW					25,800	Dec 1, 2001
MAXIMUM PEAK STAGE					a22.27	Dec 1, 2001
INSTANTANEOUS LOW FLOW					120	Jul 16, 2001
ANNUAL RUNOFF (CFSM)	1.59		1.31		1.92	
ANNUAL RUNOFF (INCHES)	21.59		17.82		26.08	
10 PERCENT EXCEEDS	2,720		2,040		3,680	
50 PERCENT EXCEEDS	657		575		622	
90 PERCENT EXCEEDS	309		280		284	

a Peak stage from crest-stage gage.



07027720 SOUTH FORK FORKED DEER RIVER NEAR OWL CITY, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC 04...	1245	689	83	8.5	52
JAN 21...	1055	607	83	4.5	48
MAR 29...	1255	459	77	18.5	50
MAY 14...	1045	1,120	76	21.0	381
JUN 16...	1335	647	91	25.0	263

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07028500 NORTH FORK FORKED DEER RIVER AT TRENTON, TN

LOCATION.--Lat 35°58'49", long 88°55'35", Gibson County, Hydrologic Unit 08010204, at bridge on State Highway 77, 104, 0.75 mi east of Trenton and 16.5 mi upstream from the confluence with Middle Fork Forked Deer River.

DRAINAGE AREA.--73.5 mi^2.

PERIOD OF RECORD.--October 1950 to September 1971, May 2003 to current year. Prior to December 1950 monthly discharge only, published in WSP 1731, 1979 to 1984 annual maximum at present site, 1987 to current year, annual maximum stage at site 0.5 mi downstream.

REVISED RECORDS.--WSP 1241: 1951. WSP 1920: Drainage area. WDR TN-71-1: 1965, 1966, 1969 (M).

GAGE.--Data collection platform. Datum of gage is 311.85 ft above NGVD of 1929, determined from elevation provided by Tennessee Department of Transportation. Prior to 1971 recording gage referenced to datum 8.44 ft lower than present datum, 1979 to 1984 annual maximum at datum 8.44 ft lower than present datum. July 1987 to current year annual maximum stage indicator located at site .5 mi downstream of present site at datum 5.0 ft lower than present datum.

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 CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1630	*3,320	*12.98	Apr 22	1630	3,040	12.78

Minimum discharge, 20 ft^3/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	29	40	42	48	96	36	55	51	30	25	29
2	27	28	36	157	53	71	35	91	35	30	24	29
3	27	28	37	68	54	59	34	62	33	28	24	28
4	26	27	42	55	48	61	33	48	32	28	24	28
5	26	28	39	117	2,280	62	33	42	30	28	27	28
6	26	28	36	51	1,800	79	32	38	29	29	25	28
7	27	27	34	40	178	50	33	35	29	34	25	28
8	26	27	33	38	86	42	33	33	28	32	25	27
9	26	27	33	39	70	41	32	32	27	28	24	26
10	26	27	77	35	62	38	32	37	27	28	23	26
11	25	27	46	33	54	37	32	46	28	27	22	26
12	25	28	38	34	60	37	71	35	37	27	23	27
13	27	30	38	32	52	35	737	49	295	26	22	28
14	30	28	49	31	49	35	229	96	123	26	22	27
15	28	306	40	30	46	36	72	477	45	26	22	27
16	26	174	38	29	42	39	53	91	44	26	22	26
17	30	59	35	30	42	38	45	55	35	27	22	26
18	28	370	34	63	40	36	41	45	32	26	22	26
19	28	132	33	42	41	36	39	39	30	26	22	25
20	27	53	31	34	41	129	38	37	28	26	300	25
21	27	41	31	33	38	191	120	34	27	25	56	25
22	26	37	31	31	37	59	2,120	33	30	25	30	28
23	27	41	376	30	36	50	2,340	32	142	25	162	26
24	26	351	113	30	36	43	777	31	41	25	331	26
25	38	66	51	882	35	40	1,460	30	33	27	49	26
26	233	45	40	177	35	38	183	30	30	26	38	26
27	46	438	36	98	34	37	88	29	27	26	36	26
28	36	234	35	65	33	37	65	29	27	25	35	26
29	32	66	147	58	33	39	54	30	44	25	32	25
30	30	47	112	53	---	38	85	47	37	25	31	26
31	29	---	52	49	---	36	---	412	---	26	30	---
TOTAL	1,088	2,849	1,813	2,506	5,463	1,665	8,982	2,180	1,456	838	1,575	800
MEAN	35.1	95.0	58.5	80.8	188	53.7	299	70.3	48.5	27.0	50.8	26.7
MAX	233	438	376	882	2,280	191	2,340	477	295	34	331	29
MIN	25	27	31	29	33	35	32	29	27	25	22	25
CFSM	0.48	1.29	0.80	1.10	2.56	0.73	4.07	0.96	0.66	0.37	0.69	0.36
IN.	0.55	1.44	0.92	1.27	2.76	0.84	4.55	1.10	0.74	0.42	0.80	0.40

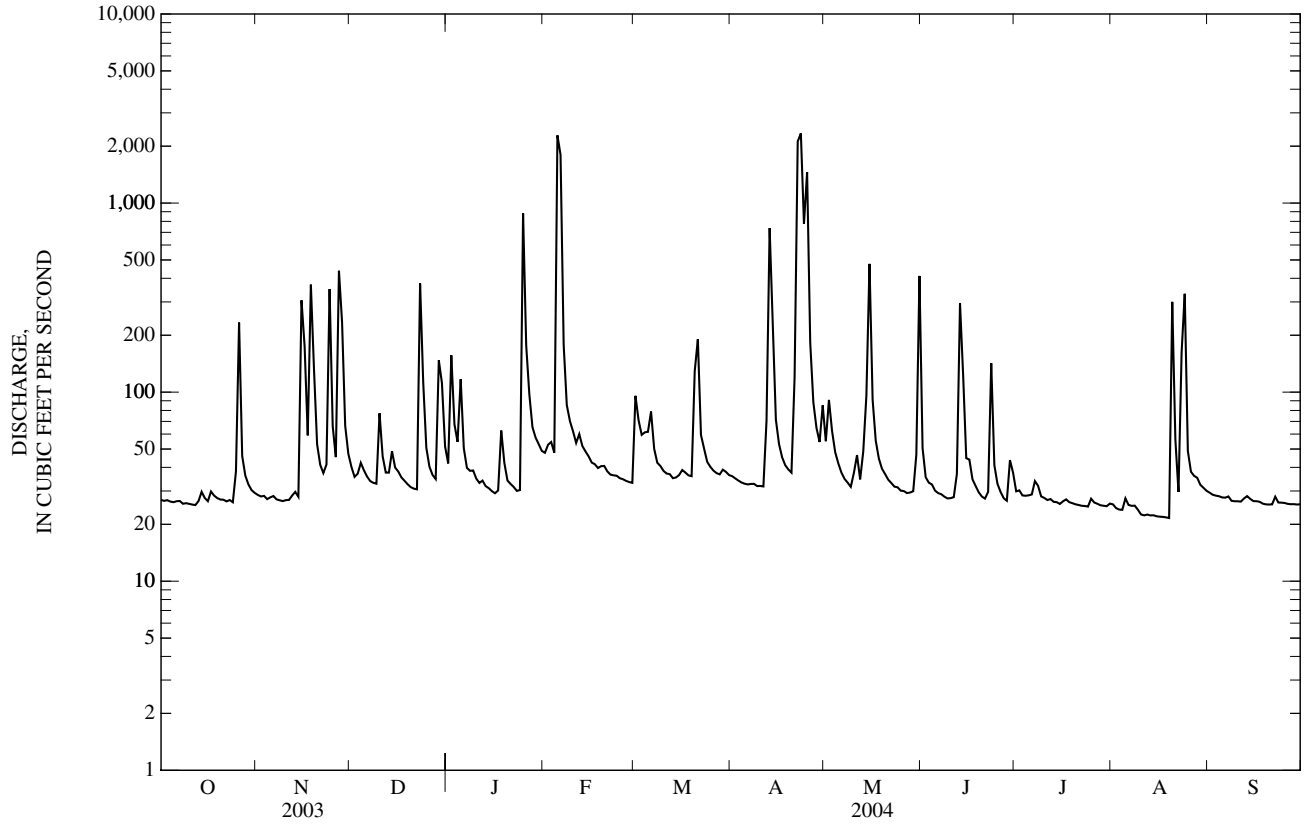
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	20.9	73.1	120	142	197	187	152	134	61.4	43.2	33.5	32.7
MAX	46.9	514	361	541	521	579	347	471	313	146	88.6	201
(WY)	(1956)	(1958)	(1952)	(1951)	(1956)	(1964)	(1964)	(1953)	(1970)	(1951)	(1964)	(1970)
MIN	10.9	14.5	14.9	16.9	19.4	38.7	21.4	12.6	10.9	7.89	9.81	10.4
(WY)	(1966)	(1955)	(1966)	(1963)	(1963)	(1966)	(1967)	(1969)	(1967)	(1970)	(1968)	(1969)

07028500 NORTH FORK FORKED DEER RIVER AT TRENTON, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	31,215			
ANNUAL MEAN	85.3		95.7	
HIGHEST ANNUAL MEAN			158	1962
LOWEST ANNUAL MEAN			50.9	1963
HIGHEST DAILY MEAN	2,340	Apr 23	8,000	Jan 30, 1956
LOWEST DAILY MEAN	22	Aug 11	5.2	Aug 3, 1970
ANNUAL SEVEN-DAY MINIMUM	22	Aug 13	5.8	Jul 16, 1970
MAXIMUM PEAK FLOW	3,320	Feb 5	a11,800	Jan 30, 1956
MAXIMUM PEAK STAGE	12.98	Feb 5	b14.00	Feb 12, 1965
INSTANTANEOUS LOW FLOW	20	Oct 1	d4.6	Aug 3, 1970
ANNUAL RUNOFF (CFSM)	1.16		1.30	
ANNUAL RUNOFF (INCHES)	15.80		17.70	
10 PERCENT EXCEEDS	112		169	
50 PERCENT EXCEEDS	34		21	
90 PERCENT EXCEEDS	26		12	

a From rating curve extended above 3,600 ft^3/s.
b Datum then in use.
c Also occurred Aug. 4, 1970.



07028960 MIDDLE FORK FORKED DEER RIVER NEAR FAIRVIEW, TN

LOCATION.--Lat 35°44'39", long 88°50'47", Madison County, Hydrologic Unit 08010204, at upstream side of bridge on Highway 45 bypass, 5 mi north of Jackson, and at mile 30.5.

DRAINAGE AREA.--211 mi^2.

PERIOD OF RECORD.--October 1967 and April 1989 (discharge measurements only), October 1997 to current year.

GAGE.--Data collection platform. Datum of gage is 327 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Periodic observations of specific conductance and water temperature are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1015	3,440	13.15	Apr 23	1315	3,530	13.31
Apr 22	0430	*3,690	*13.57				

Minimum daily discharge, 61 ft^3/s, Sept. 21-22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	98	132	398	195	271	140	374	258	137	86	80
2	62	96	126	374	190	324	136	362	354	168	82	78
3	63	95	123	324	190	421	127	308	312	181	79	89
4	65	95	141	349	192	358	121	273	226	139	78	84
5	65	98	151	311	2,380	289	116	240	179	119	95	81
6	83	98	154	256	2,180	308	113	194	157	110	94	77
7	81	98	143	226	2,060	463	113	155	148	117	89	75
8	75	98	135	194	1,780	570	116	134	139	118	86	72
9	73	97	131	186	827	446	111	122	136	118	82	68
10	73	99	211	176	531	290	108	114	130	114	80	67
11	71	101	241	166	376	221	108	112	129	104	80	67
12	71	103	284	158	353	179	205	108	134	99	81	95
13	70	110	207	150	326	161	716	109	199	95	e81	94
14	82	105	192	148	302	153	768	486	140	95	e79	85
15	95	123	203	145	258	150	671	1,370	137	92	e78	87
16	83	178	205	141	227	153	571	768	181	94	e80	79
17	93	171	177	146	206	151	367	570	158	101	e80	75
18	99	330	162	204	191	152	236	315	147	97	80	71
19	93	336	150	220	187	149	168	201	127	93	80	66
20	89	578	142	224	185	170	140	149	121	87	172	63
21	85	447	137	183	180	282	217	126	124	83	121	61
22	81	251	136	161	174	254	2,930	114	123	81	106	61
23	79	125	481	149	164	211	2,520	104	162	331	158	62
24	77	328	465	146	164	172	2,640	97	169	209	371	63
25	80	204	526	781	163	155	2,740	92	162	133	199	66
26	352	227	383	569	166	146	1,950	88	140	113	149	64
27	222	230	254	656	165	142	1,180	86	127	106	109	64
28	198	168	196	600	163	137	742	84	119	99	94	63
29	142	205	313	399	165	137	458	84	112	93	87	62
30	115	156	343	283	---	139	682	85	187	89	84	62
31	102	---	451	220	---	140	---	566	---	88	82	---
TOTAL	3,081	5,448	7,095	8,643	14,640	7,294	21,210	7,990	4,937	3,703	3,302	2,181
MEAN	99.4	182	229	279	505	235	707	258	165	119	107	72.7
MAX	352	578	526	781	2,380	570	2,930	1,370	354	331	371	95
MIN	62	95	123	141	163	137	108	84	112	81	78	61
CFSM	0.47	0.86	1.08	1.32	2.39	1.12	3.35	1.22	0.78	0.57	0.50	0.34
IN.	0.54	0.96	1.25	1.52	2.58	1.29	3.74	1.41	0.87	0.65	0.58	0.38

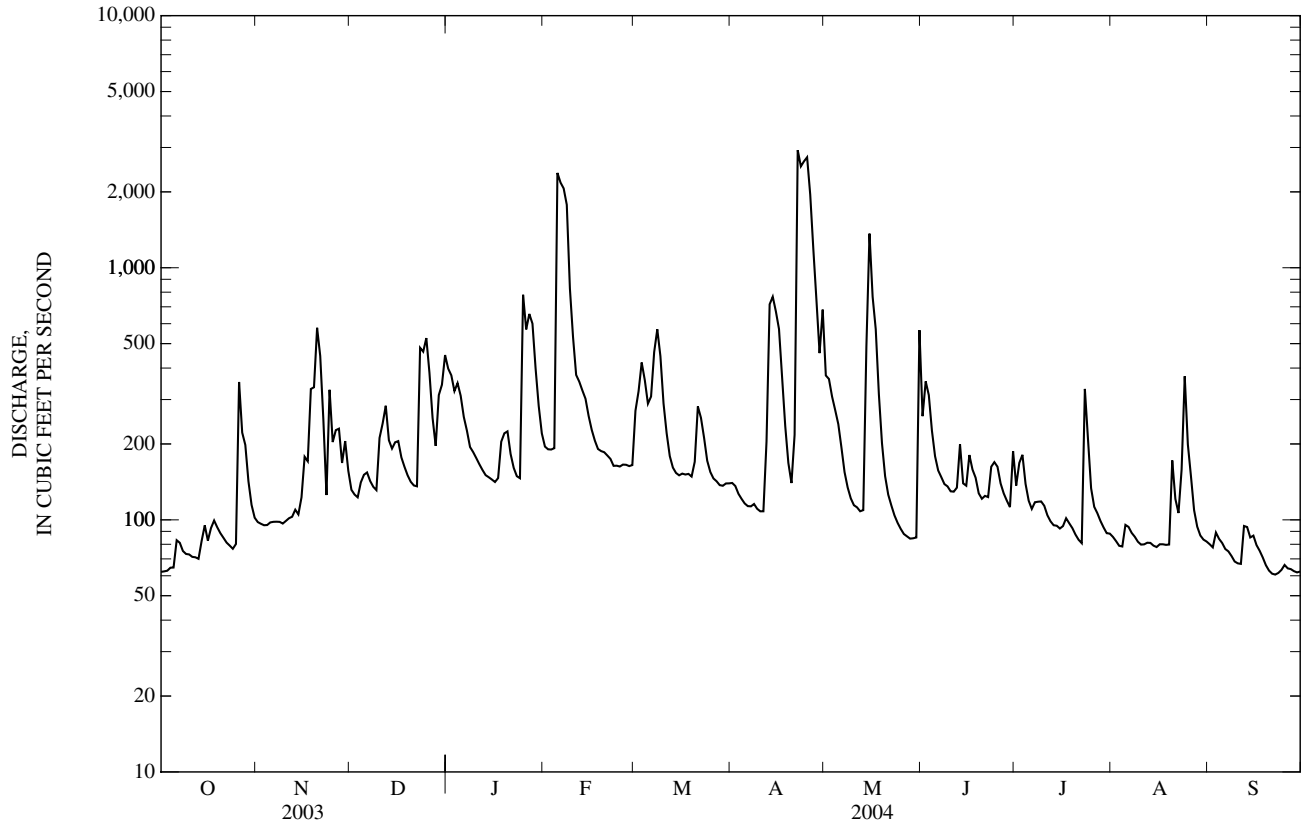
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	160	283	517	442	544	462	393	498	175	140	144	198
MAX	407	837	1,372	1,099	1,432	1,215	707	1,431	290	430	418	962
(WY)	(2003)	(2002)	(2002)	(1999)	(2003)	(2002)	(2004)	(1998)	(1998)	(1998)	(1998)	(2002)
MIN	60.1	97.5	128	121	201	189	199	120	93.7	63.4	58.6	56.6
(WY)	(2001)	(2001)	(2001)	(2001)	(2000)	(2001)	(2001)	(2000)	(2000)	(2000)	(1999)	(1999)

07028960 MIDDLE FORK FORKED DEER RIVER NEAR FAIRVIEW, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	135,775		89,524			
ANNUAL MEAN	372		245		329	
HIGHEST ANNUAL MEAN					515	2002
LOWEST ANNUAL MEAN					145	2000
HIGHEST DAILY MEAN	4,760	Feb 16	2,930	Apr 22	10,500	Sep 27, 2002
LOWEST DAILY MEAN	56	Aug 27	61	Sep 21	41	Jul 15, 2001
ANNUAL SEVEN-DAY MINIMUM	59	Aug 24	63	Sep 20	45	Jul 13, 2001
MAXIMUM PEAK FLOW					10,800	Sep 28, 2002
MAXIMUM PEAK STAGE					a19.21	Sep 28, 2002
INSTANTANEOUS LOW FLOW					40	Jul 15, 2001
ANNUAL RUNOFF (CFSM)	1.76		1.16		1.56	
ANNUAL RUNOFF (INCHES)	23.94		15.78		21.17	
10 PERCENT EXCEEDS	745		446		566	
50 PERCENT EXCEEDS	156		142		142	
90 PERCENT EXCEEDS	71		79		63	

a Peak stage determined from crest-stage gage.
e Estimated



07029500 HATCHIE RIVER AT BOLIVAR, TN

LOCATION.--Lat 35°16'30", long 88°58'35", Hardeman County, Hydrologic Unit 08010208, on left bank 25 ft upstream from 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 mi^2.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Data collection platform. Datum of gage is 323.49 ft above NGVD of 1929, determined using benchmark Q-64, April 14, 1966.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 9	1115	*17,700	*17.72

Date	Time	Discharge (ft^3/s)	Gage height (ft)
No other peak greater than base discharge.			

Minimum discharge, 430 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	875	656	2,880	2,970	5,800	3,160	1,400	3,250	1,230	3,730	860	1,850
2	734	630	2,570	3,000	5,160	3,870	1,290	2,660	1,260	4,420	1,330	1,820
3	657	605	2,290	2,970	4,520	4,230	1,190	2,580	1,350	5,050	1,840	1,670
4	610	586	2,160	2,800	3,880	4,510	1,110	2,640	1,490	5,360	2,230	1,390
5	573	573	2,240	2,560	5,510	4,800	1,030	2,610	1,390	5,340	2,480	1,120
6	548	567	2,380	2,350	8,020	5,390	966	2,440	1,340	5,040	2,620	978
7	529	611	2,430	2,160	9,100	5,850	910	2,050	1,160	4,710	2,680	858
8	525	637	2,390	1,990	13,900	6,150	887	1,550	991	4,400	2,550	765
9	544	609	2,280	1,850	17,400	6,050	875	1,180	893	4,010	2,040	702
10	559	583	2,360	1,770	15,600	5,860	858	994	887	3,650	1,240	647
11	571	572	2,560	1,740	12,500	5,650	841	903	806	3,370	837	602
12	549	569	2,630	1,660	10,200	5,300	1,070	840	723	3,260	726	567
13	524	566	2,630	1,530	8,600	4,800	2,330	800	674	3,130	1,030	551
14	538	575	2,690	1,420	7,450	4,300	3,810	795	760	2,840	1,370	684
15	559	592	2,680	1,340	6,760	3,800	3,860	1,530	856	2,510	1,290	717
16	572	700	2,600	1,280	6,460	3,300	3,710	2,470	1,100	2,330	1,010	644
17	572	856	2,480	1,230	6,200	2,690	3,650	2,770	1,380	2,420	813	607
18	593	1,710	2,330	1,290	6,070	2,310	3,620	2,770	1,660	2,590	698	604
19	685	3,990	2,100	1,510	6,030	2,040	3,460	2,810	1,560	2,820	621	622
20	698	4,440	1,830	1,770	6,180	1,830	3,090	2,940	1,500	2,980	656	599
21	619	4,000	1,580	1,860	6,180	1,730	2,530	3,070	1,310	3,160	744	553
22	563	3,660	1,390	1,810	5,840	1,610	4,190	3,160	1,120	3,350	836	527
23	534	3,600	1,390	1,650	5,300	1,470	5,150	3,140	1,250	3,450	947	515
24	512	3,880	1,680	1,470	4,730	1,320	5,990	2,850	1,580	3,380	888	507
25	497	3,940	2,060	2,780	4,210	1,210	5,540	2,220	2,120	3,090	969	496
26	608	3,870	2,250	4,390	3,860	1,150	5,340	1,400	2,550	2,420	1,230	488
27	728	3,740	2,220	4,920	3,540	1,100	5,160	952	2,670	1,690	1,400	475
28	957	3,590	2,060	4,950	3,250	1,050	4,780	811	2,700	1,190	1,330	461
29	922	3,390	1,960	5,410	3,060	1,040	4,310	766	2,920	962	1,370	448
30	785	3,160	2,380	5,980	---	1,140	3,840	750	3,250	810	1,680	436
31	702	---	2,760	6,180	---	1,330	---	1,160	---	764	1,830	---
TOTAL	19,442	57,457	70,240	80,590	205,310	100,040	86,787	60,861	44,480	98,226	42,145	22,903
MEAN	627	1,915	2,266	2,600	7,080	3,227	2,893	1,963	1,483	3,169	1,360	763
MAX	957	4,440	2,880	6,180	17,400	6,150	5,990	3,250	3,250	5,360	2,680	1,850
MIN	497	566	1,390	1,230	3,060	1,040	841	750	674	764	621	436
CFSM	0.42	1.29	1.53	1.76	4.78	2.18	1.95	1.33	1.00	2.14	0.92	0.52
IN.	0.49	1.44	1.77	2.03	5.16	2.51	2.18	1.53	1.12	2.47	1.06	0.58

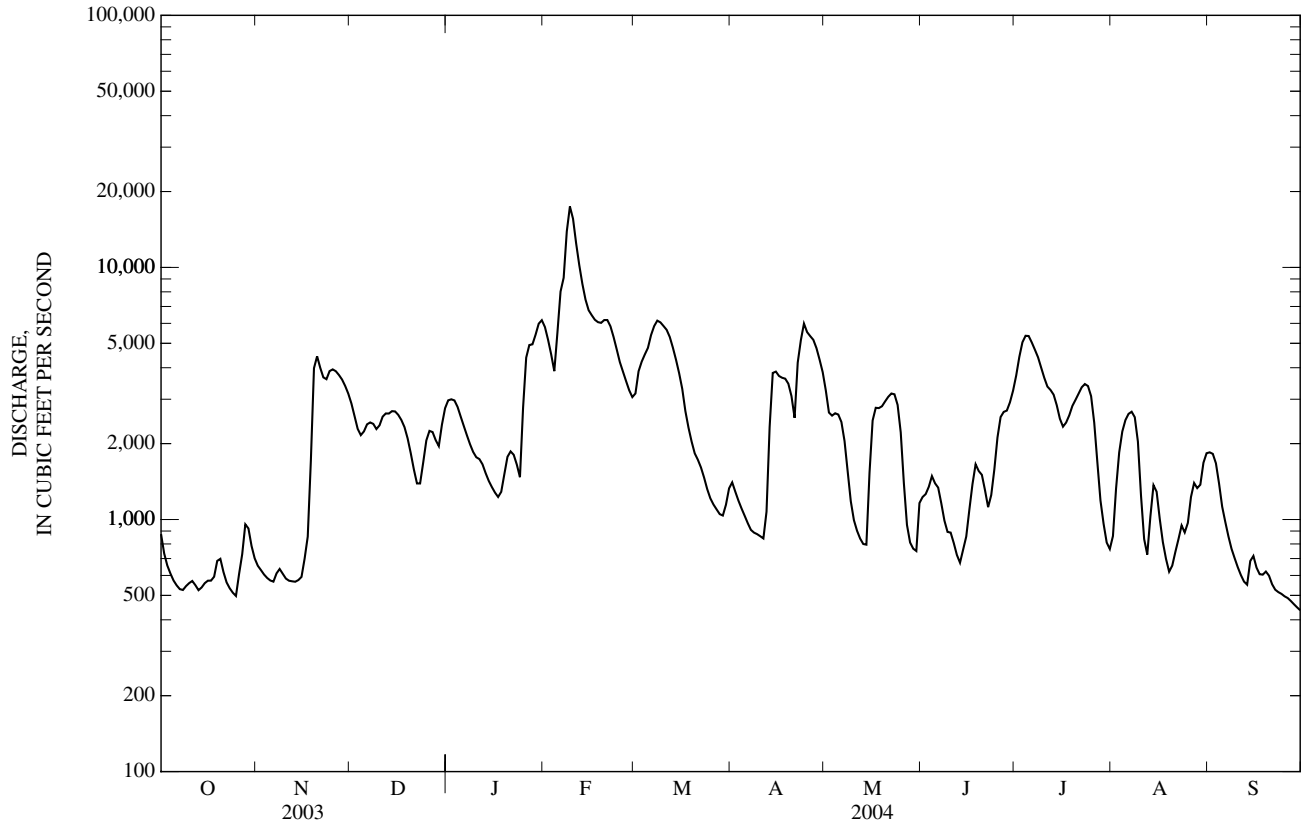
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	845	1,691	3,302	4,442	4,790	4,573	3,905	2,739	1,442	954	647	729
MAX	7,401	7,457	12,490	13,420	14,060	12,110	10,960	13,540	8,181	5,933	2,678	4,651
(WY)	(2003)	(1958)	(1983)	(1974)	(1948)	(1973)	(1979)	(1991)	(1997)	(1932)	(1931)	(1979)
MIN	150	233	422	555	829	1,053	711	444	209	189	193	127
(WY)	(1957)	(1957)	(1955)	(1955)	(1934)	(1941)	(1986)	(1942)	(1941)	(1943)	(1954)	(1956)

07029500 HATCHIE RIVER AT BOLIVAR, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	1,049,300		888,481			
ANNUAL MEAN	2,875		2,428		2,493	
HIGHEST ANNUAL MEAN					5,003	1973
LOWEST ANNUAL MEAN					971	1941
HIGHEST DAILY MEAN	15,800	May 9	17,400	Feb 9	59,300	Mar 18, 1973
LOWEST DAILY MEAN	388	Sep 21	436	Sep 30	80	Sep 1, 1943
ANNUAL SEVEN-DAY MINIMUM	417	Sep 15	473	Sep 24	85	Aug 26, 1943
MAXIMUM PEAK FLOW					a61,600	Mar 18, 1973
MAXIMUM PEAK STAGE					21.66	Mar 18, 1973
INSTANTANEOUS LOW FLOW					78	Sep 2, 1943
ANNUAL RUNOFF (CFSM)	1.94		1.64		1.68	
ANNUAL RUNOFF (INCHES)	26.37		22.33		22.89	
10 PERCENT EXCEEDS	6,510		5,160		6,090	
50 PERCENT EXCEEDS	1,940		1,790		1,140	
90 PERCENT EXCEEDS	572		585		275	

a From rating curve extended above 37,000 ft^3/s.



07030050 HATCHIE RIVER AT RIALTO, TN

LOCATION.--Lat 35°38'14", long 89°36'33", Lauderdale County, Hydrologic Unit 08010208, at bridge on U.S. Highway 51, 6.5 mi north of Covington, and 1.5 mi west of Rialto, and at mile 34.

DRAINAGE AREA.--2,308 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 2003 to current year. Low flow measurements, water year, 1977, 1978.

GAGE.--Data collection platform operated by Memphis District Corps of Engineers. Datum of gage is 239.81 ft above NGVD of 1929 determined by the Memphis District Corps of Engineers.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1937 reached a stage of 23.54 ft, discharge not determined, maximum discharge of 55,700 ft^3/s, determined on June 13, 1946. Minimum discharge 180 ft^3/s, determined on July 9, 1943 from reports by Memphis District Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 20,600 ft^3/s, Feb. 13, gage height 17.01 ft; minimum discharge, 721 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

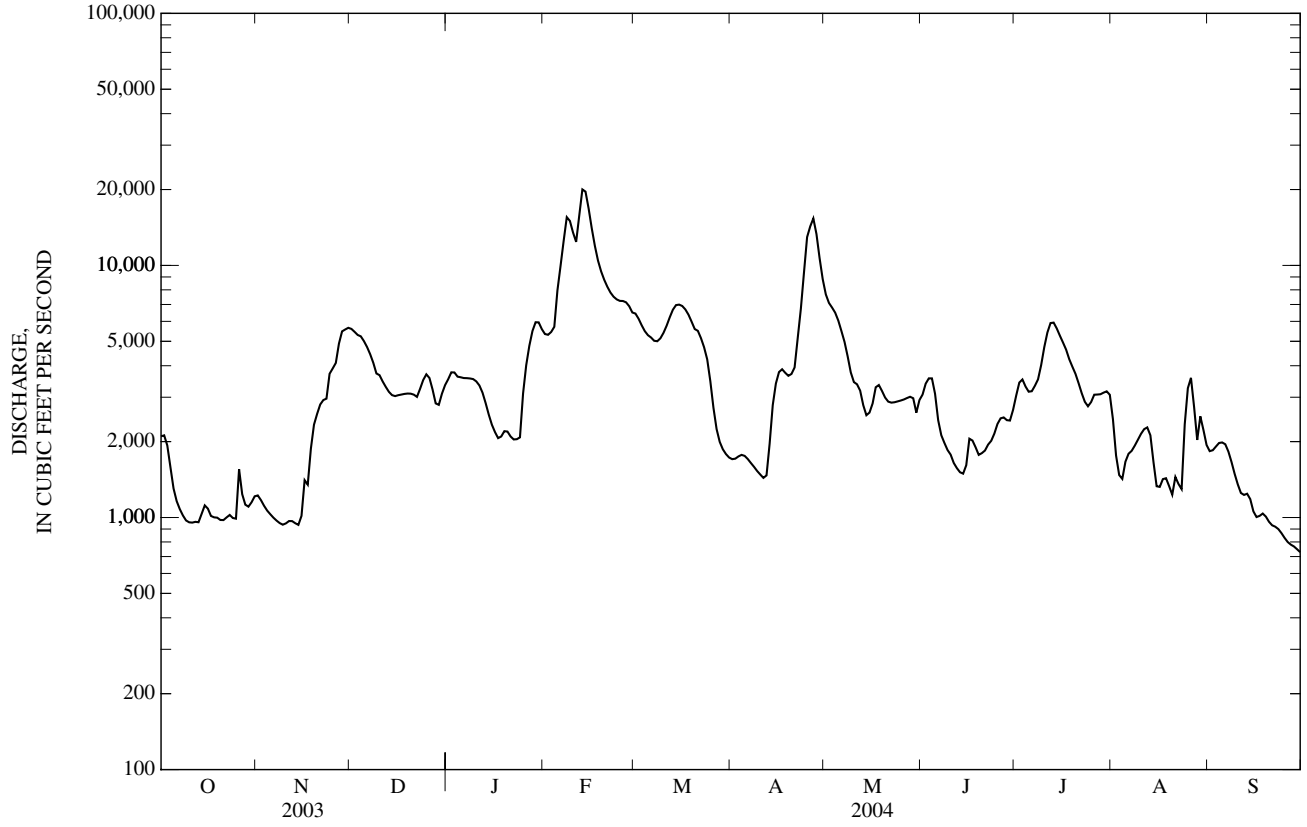
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,100	1,220	5,600	3,540	5,340	6,440	1,700	7,670	3,070	3,050	2,450	1,830
2	2,120	1,170	5,450	3,770	5,310	6,150	1,710	7,100	3,400	3,430	1,760	1,850
3	1,930	1,110	5,300	3,760	5,450	5,790	1,750	6,800	3,560	3,530	1,470	1,910
4	1,580	1,060	5,230	3,620	5,710	5,490	1,770	6,490	3,560	3,310	1,420	1,980
5	1,300	1,030	5,010	3,600	7,960	5,290	1,760	6,040	3,100	3,160	1,660	1,990
6	1,160	998	4,750	3,570	9,950	5,180	1,710	5,490	2,430	3,170	1,790	1,950
7	1,080	972	4,440	3,570	12,500	5,020	1,640	4,970	2,120	3,330	1,840	1,830
8	1,020	950	4,110	3,560	15,500	5,000	1,590	4,360	1,980	3,530	1,930	1,660
9	973	936	3,730	3,540	15,000	5,140	1,530	3,760	1,850	4,020	2,030	1,490
10	957	948	3,670	3,470	13,500	5,400	1,480	3,450	1,780	4,740	2,150	1,350
11	955	968	3,470	3,340	12,400	5,770	1,440	3,380	1,650	5,420	2,240	1,250
12	961	968	3,300	3,130	15,800	6,230	1,470	3,190	1,570	5,910	2,280	1,230
13	958	949	3,150	2,840	20,000	6,670	1,960	2,790	1,510	5,930	2,120	1,240
14	1,030	935	3,060	2,560	19,600	6,960	2,790	2,550	1,490	5,620	1,660	1,180
15	1,120	1,020	3,030	2,330	16,800	6,990	3,400	2,610	1,610	5,260	1,330	1,060
16	1,080	1,410	3,060	2,180	14,000	6,900	3,780	2,830	2,050	4,940	1,320	1,000
17	1,010	1,350	3,070	2,070	12,000	6,690	3,870	3,290	2,020	4,630	1,420	1,020
18	1,000	1,870	3,090	2,100	10,500	6,380	3,750	3,350	1,900	4,240	1,430	1,040
19	998	2,330	3,100	2,200	9,470	5,980	3,650	3,180	1,770	3,960	1,330	1,010
20	978	2,580	3,100	2,190	8,770	5,590	3,710	2,990	1,800	3,710	1,230	962
21	977	2,810	3,070	2,100	8,230	5,500	3,940	2,880	1,840	3,410	1,450	931
22	1,000	2,920	3,010	2,040	7,810	5,150	5,150	2,860	1,950	3,110	1,360	919
23	1,020	2,960	3,240	2,040	7,510	4,730	6,740	2,870	2,010	2,880	1,300	900
24	996	3,720	3,510	2,080	7,330	4,240	9,350	2,890	2,150	2,760	2,340	867
25	990	3,900	3,700	3,110	7,230	3,470	13,000	2,910	2,350	2,870	3,260	830
26	1,550	4,100	3,580	4,020	7,230	2,720	14,300	2,940	2,470	3,070	3,580	799
27	1,240	4,900	3,220	4,800	7,140	2,240	15,400	2,980	2,490	3,070	2,750	780
28	1,120	5,470	2,840	5,490	6,890	2,000	13,300	3,010	2,430	3,080	2,030	768
29	1,100	5,570	2,800	5,950	6,510	1,860	10,700	2,970	2,420	3,130	2,520	748
30	1,150	5,660	3,100	5,940	---	1,780	8,820	2,610	2,670	3,170	2,220	729
31	1,210	---	3,350	5,590	---	1,730	---	2,920	---	3,070	1,940	---
TOTAL	36,663	66,784	114,140	104,100	301,440	154,480	147,160	118,130	67,000	118,510	59,610	37,103
MEAN	1,183	2,226	3,682	3,358	10,390	4,983	4,905	3,811	2,233	3,823	1,923	1,237
MAX	2,120	5,660	5,600	5,950	20,000	6,990	15,400	7,670	3,560	5,930	3,580	1,990
MIN	955	935	2,800	2,040	5,310	1,730	1,440	2,550	1,490	2,760	1,230	729
CFSM	0.51	0.96	1.60	1.45	4.50	2.16	2.13	1.65	0.97	1.66	0.83	0.54
IN.	0.59	1.08	1.84	1.68	4.86	2.49	2.37	1.90	1.08	1.91	0.96	0.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	1,183	2,226	3,682	3,358	10,390	4,983	4,905	7,788	2,468	2,690	2,174	1,198
MAX	1,183	2,226	3,682	3,358	10,390	4,983	4,905	11,770	2,703	3,823	2,425	1,237
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2003)	(2004)
MIN	1,183	2,226	3,682	3,358	10,390	4,983	4,905	3,811	2,233	1,557	1,923	1,159
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	1,325,120			
ANNUAL MEAN	3,621		3,621	
HIGHEST ANNUAL MEAN			3,621	2004
LOWEST ANNUAL MEAN			3,621	2004
HIGHEST DAILY MEAN	20,000	Feb 13	24,000	May 12, 2003
LOWEST DAILY MEAN	729	Sep 30	729	Sep 30, 2004
ANNUAL SEVEN-DAY MINIMUM	789	Sep 24	789	Sep 24, 2004
ANNUAL RUNOFF (CFSM)	1.57		1.57	
ANNUAL RUNOFF (INCHES)	21.36		21.31	
10 PERCENT EXCEEDS	6,830		6,830	
50 PERCENT EXCEEDS	2,920		2,920	
90 PERCENT EXCEEDS	1,020		1,020	



07030050 HATCHIE RIVER AT RIALTO, TN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February to September 2004.
pH: February to September 2004.
WATER TEMPERATURE: February to September 2004.
DISSOLVED OXYGEN: February to September 2004.
TURBIDITY: February to September 2004.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the record were due to instrument malfunctions. Record for water temperature, specific conductance and pH are good. Records for dissolved oxygen and turbidity are fair.

EXTREMES FOR CURRENT PERIOD.--February to September 2004.
WATER TEMPERATURE: Maximum, 28.8°C, July 16; minimum, 3.3°C, Feb. 8-9.
SPECIFIC CONDUCTANCE: Maximum, 110 microsiemens, Apr. 13; minimum, 33 microsiemens, Feb. 13-14.
DISSOLVED OXYGEN: Maximum, 12.1 mg/L, Feb. 13; minimum, 4.9 mg/L, Apr. 23-24.
pH: Maximum, 7.6 units, Mar. 1; minimum, 6.1 units, Aug. 25-26.
TURBIDITY: Maximum, 350 NTU, May 31; minimum, 10 NTU, July 15.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	7.6	7.2	7.4	---	---	---
7	---	---	---	---	---	---	7.4	6.9	7.2	---	---	---
8	---	---	---	---	---	---	7.2	6.8	7.0	---	---	---
9	---	---	---	---	---	---	8.3	7.2	7.7	---	---	---
10	---	---	---	---	---	---	8.6	7.8	8.2	---	---	---
11	---	---	---	---	---	---	7.8	7.5	7.6	---	---	---
12	---	---	---	---	---	---	7.5	7.0	7.3	---	---	---
13	---	---	---	---	---	---	7.0	6.6	6.7	---	---	---
14	---	---	---	---	---	---	6.6	6.0	6.3	---	---	---
15	---	---	---	---	---	---	6.0	5.7	5.9	---	---	---
16	---	---	---	---	---	---	6.3	6.0	6.2	---	---	---
17	---	---	---	---	---	---	6.0	5.6	5.8	---	---	---
18	---	---	---	---	---	---	6.1	5.8	6.0	---	---	---
19	---	---	---	---	---	---	5.9	5.6	5.7	---	---	---
20	---	---	---	---	---	---	5.6	5.2	5.4	---	---	---
21	---	---	---	---	---	---	5.3	4.9	5.1	---	---	---
22	---	---	---	---	---	---	5.8	5.2	5.4	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	8.6	4.9	6.5	---	---	---

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	11.6	10.3	10.9	16.0	15.2	15.6	19.7	19.2	19.6
2	---	---	---	12.6	11.4	11.9	15.9	14.8	15.4	19.2	18.4	18.8
3	---	---	---	13.0	12.4	12.6	15.9	14.9	15.5	18.5	17.6	18.0
4	5.1	4.4	4.8	14.2	13.0	13.5	15.9	15.0	15.5	17.8	16.8	17.3
5	5.0	4.3	4.7	14.5	14.2	14.4	15.6	14.8	15.3	18.9	17.3	18.1
6	5.0	4.8	5.0	14.9	14.1	14.5	15.9	14.7	15.3	19.9	18.4	19.1
7	4.8	3.9	4.4	14.9	14.1	14.5	15.8	15.3	15.5	20.9	19.4	20.1
8	3.9	3.3	3.6	14.3	13.5	14.0	16.6	15.2	15.9	21.7	20.5	21.1
9	3.7	3.3	3.5	13.8	12.6	13.3	17.0	15.8	16.4	22.4	21.4	21.9
10	4.5	3.7	4.1	12.7	11.7	12.2	16.9	16.4	16.6	22.7	22.2	22.4
11	5.2	4.4	4.8	12.3	11.4	11.8	16.9	16.2	16.6	22.9	22.2	22.5
12	5.7	5.1	5.3	12.1	11.1	11.6	16.6	14.8	15.8	22.7	22.3	22.5
13	5.4	5.0	5.2	11.5	10.8	11.2	14.8	12.7	13.7	22.3	22.2	22.3
14	5.5	5.0	5.3	11.8	11.1	11.4	13.4	12.2	12.7	22.2	21.7	21.9
15	5.6	5.3	5.4	11.7	11.1	11.5	13.5	12.0	12.7	21.7	21.0	21.3
16	5.3	4.7	5.1	11.8	11.4	11.7	14.7	13.1	13.8	21.2	20.7	20.9
17	5.8	4.7	5.3	12.5	10.9	11.7	16.1	14.6	15.2	21.6	21.0	21.3
18	6.5	5.2	5.8	14.1	12.2	13.1	17.6	16.1	16.7	22.3	21.3	21.8
19	7.6	6.1	6.8	15.3	13.7	14.5	18.8	17.6	18.2	23.2	22.1	22.6
20	9.1	7.6	8.3	16.3	15.2	15.8	20.0	18.8	19.4	24.2	23.0	23.5
21	9.4	8.4	8.9	16.2	15.2	15.8	19.9	19.4	19.7	24.8	23.9	24.3
22	9.5	8.5	9.0	15.2	14.4	14.8	19.4	18.2	18.9	25.4	24.5	24.9
23	9.8	9.1	9.4	14.6	13.5	13.9	19.8	18.8	19.2	25.5	24.9	25.2
24	10.2	9.7	9.9	14.2	13.2	13.7	19.9	19.1	19.5	25.9	25.1	25.5
25	9.7	8.5	9.0	15.2	14.1	14.6	19.8	19.6	19.7	25.8	25.4	25.6
26	8.7	8.0	8.4	16.4	15.1	15.7	19.7	19.1	19.4	25.8	25.4	25.6
27	8.8	7.7	8.3	17.3	16.1	16.7	19.4	18.8	19.1	25.6	25.2	25.4
28	9.4	8.0	8.7	18.3	17.0	17.6	19.0	18.2	18.6	25.2	24.9	25.0
29	10.3	9.1	9.7	18.2	17.7	17.9	19.1	18.3	18.7	24.9	24.5	24.7
30	---	---	---	17.8	17.1	17.4	19.7	18.8	19.2	25.2	24.6	24.9
31	---	---	---	17.1	16.0	16.5	---	---	---	24.7	23.6	24.1
MONTH	10.3	3.3	6.5	18.3	10.3	13.9	20.0	12.0	16.8	25.9	16.8	22.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.8	24.1	24.4	24.8	24.4	24.5	26.3	25.2	25.7	25.5	24.7	25.2
2	24.9	24.1	24.5	24.8	24.3	24.5	---	---	---	25.5	24.9	25.2
3	24.6	24.0	24.3	25.2	24.5	24.8	---	---	---	25.2	24.8	25.0
4	24.3	23.6	23.9	---	---	---	---	---	---	25.2	24.4	24.8
5	24.5	23.6	24.1	---	---	---	---	---	---	25.4	24.5	25.0
6	24.3	23.9	24.0	---	---	---	---	---	---	25.8	24.8	25.3
7	24.3	23.8	24.0	---	---	---	---	---	---	25.6	25.0	25.3
8	25.0	23.8	24.3	---	---	---	---	---	---	25.4	24.5	25.0
9	25.2	24.5	24.8	---	---	---	---	---	---	25.4	24.6	25.0
10	25.8	24.7	25.3	---	---	---	---	---	---	25.3	24.3	24.9
11	26.6	25.4	26.0	---	---	---	25.8	25.2	25.5	25.2	24.2	24.8
12	27.4	26.1	26.7	---	---	---	25.2	24.6	24.9	25.3	24.5	24.9
13	27.0	26.4	26.7	---	---	---	24.7	23.8	24.2	24.8	23.8	24.2
14	27.4	26.0	26.7	---	---	---	24.0	23.0	23.6	25.0	24.0	24.5
15	27.3	26.1	26.7	---	---	---	24.1	23.1	23.6	25.5	24.5	25.0
16	26.5	25.9	26.1	28.0	26.8	27.3	24.1	22.8	23.5	25.2	24.8	25.0
17	26.8	25.9	26.3	27.2	26.4	26.8	24.0	23.0	23.6	25.2	24.2	24.7
18	27.4	26.1	26.8	27.0	26.4	26.7	24.8	23.5	24.2	24.8	23.9	24.4
19	27.6	27.0	27.3	26.6	25.9	26.3	25.0	24.0	24.6	24.4	23.4	23.9
20	27.4	26.6	27.0	26.6	25.9	26.3	24.9	24.4	24.7	23.8	22.8	23.3
21	27.1	26.3	26.7	26.9	26.1	26.5	24.7	24.0	24.3	23.2	22.1	22.8
22	26.3	25.9	26.0	27.2	26.4	26.8	24.9	23.9	24.5	23.1	22.0	22.6
23	26.1	25.6	25.8	27.5	26.7	27.1	25.8	24.1	25.0	23.0	22.2	22.7
24	25.6	25.0	25.3	27.6	27.0	27.3	24.8	23.5	24.1	23.0	22.4	22.7
25	25.4	24.8	25.0	27.4	26.4	26.9	24.7	24.3	24.5	23.4	22.5	23.0
26	25.0	24.4	24.7	26.4	25.3	25.8	25.8	24.4	25.1	23.2	22.5	22.8
27	25.2	24.4	24.8	25.6	24.9	25.2	26.5	25.6	26.0	22.5	21.5	22.1
28	25.5	24.7	25.1	25.3	24.6	24.9	26.5	25.4	26.2	22.2	21.4	21.8
29	25.7	25.1	25.4	24.7	24.2	24.5	25.4	25.0	25.2	21.9	21.1	21.6
30	25.4	24.8	25.1	24.7	24.3	24.5	25.4	24.9	25.2	21.5	20.5	21.0
31	---	---	---	25.5	24.6	25.0	25.5	24.6	25.1	---	---	---
MONTH	27.6	23.6	25.5	28.0	24.2	25.9	26.5	22.8	24.7	25.8	20.5	23.9

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	65	63	64	---	---	---
7	---	---	---	---	---	---	65	64	65	---	---	---
8	---	---	---	---	---	---	66	65	65	---	---	---
9	---	---	---	---	---	---	66	65	65	---	---	---
10	---	---	---	---	---	---	79	66	71	---	---	---
11	---	---	---	---	---	---	71	69	70	---	---	---
12	---	---	---	---	---	---	69	69	69	---	---	---
13	---	---	---	---	---	---	69	68	69	---	---	---
14	---	---	---	---	---	---	68	67	67	---	---	---
15	---	---	---	---	---	---	67	66	67	---	---	---
16	---	---	---	---	---	---	67	66	66	---	---	---
17	---	---	---	---	---	---	66	65	65	---	---	---
18	---	---	---	---	---	---	65	65	65	---	---	---
19	---	---	---	---	---	---	66	65	65	---	---	---
20	---	---	---	---	---	---	66	66	66	---	---	---
21	---	---	---	---	---	---	68	66	67	---	---	---
22	---	---	---	---	---	---	68	68	68	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	79	63	67	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	65	54	59	66	65	65	57	55	56
2	---	---	---	62	58	60	65	63	64	60	57	59
3	---	---	---	64	62	63	63	62	62	64	60	62
4	48	47	48	64	63	64	62	60	61	64	62	63
5	68	46	49	68	64	65	62	60	61	66	63	64
6	47	45	46	68	66	67	64	62	63	67	65	66
7	45	43	44	66	66	66	65	64	64	68	67	67
8	43	40	41	66	63	64	69	65	67	68	67	68
9	41	41	41	63	60	61	70	69	69	68	68	68
10	41	39	40	60	57	59	71	69	70	99	68	73
11	39	37	38	57	56	56	70	69	69	82	75	78
12	37	35	37	56	55	56	90	68	75	91	74	77
13	35	33	34	56	55	55	110	79	94	85	80	81
14	35	33	34	56	56	56	96	80	87	98	82	91
15	36	35	36	57	56	56	82	72	79	101	93	97
16	36	36	36	58	57	57	72	65	68	96	84	89
17	38	36	37	59	58	58	65	59	62	96	79	87
18	39	37	38	61	59	60	59	56	58	80	73	77
19	41	39	40	63	61	61	56	56	56	73	68	70
20	42	41	41	68	62	64	57	56	56	68	65	66
21	44	42	43	77	68	69	62	57	58	65	65	65
22	46	44	45	71	69	70	85	62	76	65	64	64
23	48	46	47	71	63	67	79	74	77	67	65	66
24	50	48	49	64	63	63	77	64	70	69	67	68
25	50	50	50	64	64	64	65	58	61	70	69	69
26	51	50	51	64	64	64	59	54	57	72	70	71
27	51	51	51	65	64	64	54	51	52	73	71	72
28	53	51	52	65	64	65	53	51	52	73	73	73
29	55	52	53	67	64	65	53	52	53	75	73	74
30	---	---	---	66	66	66	55	53	54	93	75	77
31	---	---	---	66	66	66	---	---	---	96	88	93
MONTH	68	33	43	77	54	62	110	51	65	101	55	73

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	95	82	87	67	62	64	79	74	77	70	67	69
2	82	72	77	65	62	63	---	---	---	72	70	71
3	72	67	69	62	59	61	---	---	---	73	70	72
4	69	66	67	---	---	---	---	---	---	74	68	71
5	72	69	70	---	---	---	---	---	---	69	67	68
6	71	69	70	---	---	---	---	---	---	71	69	69
7	69	63	66	---	---	---	---	---	---	72	68	70
8	67	63	64	---	---	---	---	---	---	73	70	71
9	77	67	72	---	---	---	---	---	---	76	73	74
10	83	76	80	---	---	---	---	---	---	77	74	76
11	81	75	78	---	---	---	62	61	61	76	74	75
12	75	74	75	---	---	---	62	61	61	76	75	75
13	75	72	73	---	---	---	65	62	63	87	76	82
14	78	73	75	---	---	---	71	65	68	87	80	83
15	84	70	74	---	---	---	76	71	74	80	79	79
16	84	80	83	73	72	72	76	72	74	79	78	79
17	84	75	77	75	73	74	72	69	70	79	77	78
18	76	72	73	76	75	76	69	59	65	77	73	74
19	73	71	72	78	76	77	62	58	60	73	72	72
20	73	70	71	78	77	77	70	62	65	73	71	72
21	72	63	67	78	76	77	89	68	72	72	69	71
22	69	61	64	76	70	73	77	70	74	72	69	70
23	74	65	69	70	66	68	74	70	73	72	70	71
24	76	72	73	66	65	65	73	63	67	72	71	72
25	74	71	73	67	64	65	67	59	63	72	71	72
26	72	66	70	68	64	66	67	58	63	72	71	72
27	70	69	70	68	67	67	70	67	68	75	72	74
28	70	68	69	68	67	68	80	70	72	76	75	75
29	79	67	69	69	68	69	71	69	71	78	74	76
30	71	66	68	71	69	70	71	69	70	79	76	77
31	---	---	---	74	71	72	75	70	72	---	---	---
MONTH	95	61	72	78	59	70	89	58	68	87	67	74

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	7.6	7.4
2	---	---	---	---	---	---	---	---	---	---	7.4	7.4
3	---	---	---	---	---	---	---	---	---	---	7.4	7.4
4	---	---	---	---	---	---	---	---	6.7	6.6	7.4	7.4
5	---	---	---	---	---	---	---	---	7.0	6.7	7.5	7.4
6	---	---	---	---	6.7	6.7	---	---	6.8	6.7	7.5	7.4
7	---	---	---	---	6.8	6.7	---	---	6.8	6.7	7.5	7.4
8	---	---	---	---	6.8	6.5	---	---	6.9	6.7	7.5	7.4
9	---	---	---	---	6.5	6.4	---	---	6.9	6.8	7.4	7.4
10	---	---	---	---	6.6	6.5	---	---	7.0	6.8	7.4	6.7
11	---	---	---	---	6.6	6.5	---	---	7.0	6.9	7.4	7.3
12	---	---	---	---	6.7	6.6	---	---	7.0	6.9	7.4	7.2
13	---	---	---	---	6.7	6.7	---	---	7.0	6.9	7.3	7.2
14	---	---	---	---	6.7	6.7	---	---	7.1	7.0	7.3	7.2
15	---	---	---	---	6.7	6.7	---	---	7.1	7.0	7.3	7.2
16	---	---	---	---	6.7	6.7	---	---	7.1	7.1	7.3	7.2
17	---	---	---	---	6.7	6.7	---	---	7.2	7.1	7.2	7.1
18	---	---	---	---	6.7	6.7	---	---	7.2	7.1	7.3	7.2
19	---	---	---	---	6.8	6.7	---	---	7.2	7.1	7.3	7.2
20	---	---	---	---	6.8	6.8	---	---	7.2	7.1	7.3	7.2
21	---	---	---	---	6.8	6.8	---	---	7.2	7.1	7.3	7.1
22	---	---	---	---	6.8	6.8	---	---	7.2	7.1	7.2	7.1
23	---	---	---	---	---	---	---	---	7.2	7.2	7.1	6.9
24	---	---	---	---	---	---	---	---	7.2	7.2	6.9	6.9
25	---	---	---	---	---	---	---	---	7.2	7.2	6.9	6.9
26	---	---	---	---	---	---	---	---	7.4	7.2	6.9	6.8
27	---	---	---	---	---	---	---	---	7.4	7.3	6.9	6.9
28	---	---	---	---	---	---	---	---	7.4	7.3	6.9	6.9
29	---	---	---	---	---	---	---	---	7.4	7.4	6.9	6.9
30	---	---	---	---	---	---	---	---	---	---	7.0	6.9
31	---	---	---	---	---	---	---	---	---	---	7.0	6.9
MONTH	---	---	---	---	6.8	6.4	---	---	7.4	6.6	7.6	6.7
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	7.0	6.8	6.8	7.2	6.9	6.7	6.6	6.8	6.7	6.5	6.4
2	7.0	7.0	6.9	6.8	7.1	7.0	6.7	6.7	---	---	6.5	6.5
3	7.0	7.0	7.0	6.9	7.0	7.0	6.7	6.7	---	---	6.5	6.5
4	7.0	7.0	7.2	6.6	7.0	6.9	---	---	---	---	6.5	6.5
5	7.0	7.0	7.2	7.1	7.0	6.9	---	---	---	---	6.5	6.5
6	7.0	7.0	7.2	7.1	6.9	6.8	---	---	---	---	6.5	6.5
7	7.0	7.0	7.2	7.1	6.9	6.8	---	---	---	---	6.8	6.5
8	---	---	7.1	7.0	6.8	6.8	---	---	---	---	6.8	6.7
9	---	---	7.1	7.0	6.9	6.8	---	---	---	---	6.7	6.7
10	---	---	7.1	6.9	6.8	6.8	---	---	---	---	6.7	6.7
11	---	---	7.0	6.9	6.8	6.7	---	---	6.4	6.4	6.7	6.7
12	---	---	6.9	6.7	6.8	6.6	---	---	6.5	6.4	6.7	6.7
13	---	---	6.8	6.7	6.7	6.6	---	---	6.5	6.5	6.7	6.6
14	---	---	6.8	6.7	6.6	6.5	---	---	6.5	6.4	6.7	6.6
15	---	---	6.8	6.7	6.8	6.5	---	---	6.5	6.4	6.7	6.6
16	---	---	6.7	6.6	6.8	6.6	6.6	6.6	6.6	6.4	6.7	6.7
17	---	---	6.7	6.5	6.8	6.7	6.6	6.6	6.7	6.5	6.7	6.6
18	---	---	6.5	6.5	6.7	6.7	6.7	6.6	6.7	6.6	6.7	6.6
19	---	---	6.6	6.5	6.8	6.7	6.7	6.7	6.6	6.5	6.7	6.6
20	---	---	6.6	6.6	6.9	6.8	6.7	6.7	6.5	6.4	6.7	6.6
21	7.0	6.9	6.7	6.6	6.9	6.8	6.9	6.7	6.6	6.4	6.6	6.3
22	7.1	6.9	6.7	6.7	6.8	6.8	6.9	6.9	6.5	6.4	6.6	6.5
23	6.9	6.8	6.7	6.7	6.8	6.8	6.9	6.9	6.6	6.5	6.6	6.6
24	6.9	6.7	6.9	6.7	6.9	6.8	6.9	6.9	6.6	6.3	6.6	6.6
25	6.8	6.7	6.9	6.8	6.8	6.8	6.9	6.8	6.3	6.1	6.6	6.6
26	6.7	6.7	7.0	6.9	6.8	6.7	6.8	6.8	6.2	6.1	6.6	6.6
27	6.8	6.7	7.0	7.0	6.8	6.7	6.9	6.8	6.3	6.2	6.7	6.6
28	6.8	6.8	7.0	7.0	6.8	6.8	6.9	6.9	6.5	6.3	6.7	6.6
29	6.8	6.8	7.1	7.0	6.8	6.8	6.9	6.9	6.4	6.3	6.7	6.6
30	6.8	6.8	7.1	7.0	6.8	6.7	6.9	6.9	6.4	6.4	6.7	6.6
31	---	---	7.1	6.9	---	---	6.9	6.8	6.4	6.4	---	---
MONTH	7.1	6.7	7.2	6.5	7.2	6.5	6.9	6.6	6.8	6.1	6.8	6.3

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	8.6	8.2	8.4	8.6	8.4	8.5	6.9	6.7	6.8
2	---	---	---	8.2	7.9	8.1	8.7	8.5	8.6	7.3	6.8	7.1
3	---	---	---	7.9	7.7	7.8	8.6	8.5	8.6	7.6	7.3	7.5
4	9.5	9.2	9.2	7.9	7.5	7.7	8.6	8.4	8.5	7.9	7.6	7.8
5	9.6	8.5	9.4	7.6	7.3	7.5	8.5	8.2	8.3	8.0	7.6	7.8
6	9.6	9.4	9.5	7.6	7.2	7.4	8.2	7.9	8.0	7.9	7.6	7.7
7	10.4	9.6	10.0	7.8	7.4	7.6	7.9	7.4	7.6	7.8	7.5	7.6
8	11.3	10.4	10.9	8.0	7.7	7.8	7.4	7.2	7.3	7.5	7.3	7.4
9	11.5	11.3	11.4	8.3	7.9	8.1	7.2	7.0	7.1	7.4	7.2	7.3
10	11.7	11.5	11.6	10.0	8.2	8.8	7.0	6.9	7.0	7.5	7.2	7.3
11	11.7	11.5	11.6	9.7	9.2	9.5	7.1	7.0	7.0	7.2	6.9	7.0
12	11.7	11.6	11.7	10.0	9.5	9.7	7.1	6.3	6.8	6.9	6.6	6.7
13	12.1	11.7	11.9	10.0	9.6	9.8	6.9	5.9	6.4	6.7	6.6	6.7
14	12.0	11.7	11.8	10.1	9.7	9.9	7.1	6.5	6.8	7.0	6.7	6.9
15	11.7	11.4	11.5	10.1	9.8	9.9	7.2	7.0	7.0	7.2	6.8	7.0
16	11.5	11.4	11.5	10.1	9.7	9.9	7.4	7.2	7.3	7.4	7.1	7.2
17	11.5	11.3	11.4	10.6	9.9	10.2	7.4	7.2	7.3	7.3	6.7	6.9
18	11.3	10.9	11.2	10.4	10.0	10.2	7.3	7.2	7.2	7.0	6.7	6.8
19	10.9	10.1	10.5	10.2	9.7	9.9	7.2	6.9	7.0	6.7	6.6	6.7
20	10.1	9.2	9.7	9.8	9.2	9.5	6.9	6.4	6.6	6.8	6.6	6.7
21	9.2	8.9	9.1	9.4	8.9	9.2	6.5	6.0	6.2	6.8	6.7	6.7
22	9.0	8.7	8.9	10.0	9.3	9.6	6.0	5.2	5.5	6.7	6.6	6.7
23	8.7	8.5	8.6	10.0	9.7	9.8	5.2	4.9	5.1	6.8	6.5	6.6
24	8.5	8.2	8.3	10.0	9.8	9.9	5.2	4.9	5.1	6.7	6.6	6.6
25	8.4	8.2	8.3	9.9	9.7	9.8	5.5	5.2	5.3	6.7	6.6	6.6
26	8.8	8.3	8.5	9.7	9.5	9.6	5.9	5.4	5.7	6.7	6.5	6.6
27	9.0	8.6	8.8	9.5	9.2	9.3	6.4	5.9	6.1	6.7	6.5	6.6
28	9.1	8.8	9.0	9.2	8.8	9.0	6.7	6.3	6.5	6.7	6.6	6.6
29	8.9	8.6	8.8	8.8	8.6	8.7	6.9	6.6	6.7	6.7	6.6	6.6
30	---	---	---	8.6	8.4	8.5	6.9	6.7	6.8	6.6	6.4	6.5
31	---	---	---	8.6	8.3	8.5	---	---	---	6.6	5.7	6.1
MONTH	12.1	8.2	10.1	10.6	7.2	9.0	8.7	4.9	6.9	8.0	5.7	6.9

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.3	5.7	6.0	6.8	6.3	6.7	6.4	6.0	6.2	7.0	6.7	6.9
2	5.8	5.6	5.7	6.4	6.2	6.3	---	---	---	7.1	7.0	7.0
3	6.2	5.8	6.0	6.4	6.4	6.4	---	---	---	7.2	7.0	7.1
4	6.3	6.2	6.3	---	---	---	---	---	---	7.2	7.1	7.2
5	6.5	6.3	6.4	---	---	---	---	---	---	7.3	7.2	7.2
6	6.8	6.5	6.6	---	---	---	---	---	---	7.2	7.2	7.2
7	7.0	6.8	6.9	---	---	---	---	---	---	7.3	6.5	7.0
8	7.1	7.0	7.0	---	---	---	---	---	---	6.7	6.5	6.6
9	7.1	6.9	7.1	---	---	---	---	---	---	6.7	6.6	6.6
10	7.1	6.9	7.0	---	---	---	---	---	---	6.9	6.6	6.7
11	7.1	6.9	7.0	---	---	---	7.0	6.9	7.0	6.9	6.7	6.8
12	7.1	7.0	7.0	---	---	---	7.3	7.0	7.1	7.1	6.7	6.9
13	7.0	6.9	7.0	---	---	---	7.4	7.3	7.3	6.9	6.0	6.4
14	6.9	6.7	6.8	---	---	---	7.6	7.3	7.5	7.0	6.0	6.7
15	6.9	6.3	6.8	---	---	---	7.7	7.4	7.5	7.1	6.8	6.9
16	6.5	5.8	6.1	5.3	5.1	5.2	8.0	7.6	7.8	7.0	6.8	6.9
17	6.4	6.0	6.2	5.4	5.1	5.2	8.3	8.0	8.1	7.3	6.9	7.1
18	6.3	6.1	6.2	5.4	5.3	5.3	8.2	8.2	8.2	7.6	7.3	7.4
19	6.6	6.3	6.5	5.7	5.4	5.6	8.2	7.8	8.1	7.8	7.5	7.6
20	6.7	6.6	6.7	5.9	5.7	5.8	7.8	7.4	7.6	7.9	7.7	7.8
21	6.8	6.7	6.8	6.5	5.8	6.2	7.5	6.6	7.1	7.8	7.5	7.7
22	6.8	6.6	6.7	6.5	6.3	6.4	7.3	6.8	7.1	7.7	7.4	7.6
23	6.8	6.7	6.7	6.6	6.4	6.5	7.4	6.4	7.2	7.8	7.5	7.6
24	7.0	6.7	6.9	6.5	6.4	6.5	7.1	6.0	6.5	7.7	7.5	7.6
25	6.8	6.6	6.7	6.6	6.2	6.5	6.5	5.3	5.9	7.6	7.4	7.5
26	6.7	6.4	6.6	6.4	6.2	6.3	5.8	5.3	5.6	7.8	7.5	7.6
27	6.9	6.5	6.7	6.5	6.4	6.5	6.0	5.6	5.8	7.9	7.6	7.8
28	7.0	6.8	6.9	6.8	6.5	6.7	6.6	5.6	6.0	8.1	7.7	7.9
29	7.1	6.7	7.0	6.8	6.7	6.7	6.1	5.8	5.9	8.2	7.8	8.0
30	7.0	6.7	6.9	6.8	6.6	6.8	6.5	6.1	6.3	8.4	7.9	8.1
31	---	---	---	6.6	6.4	6.5	6.9	6.5	6.8	---	---	---
MONTH	7.1	5.6	6.6	6.8	5.1	6.2	8.3	5.3	6.9	8.4	6.0	7.2

07030050 HATCHIE RIVER AT RIALTO, TN—Continued

TURBIDITY, WATER, UNFILTERED, FIELD, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	33	20
2	---	---	---	---	---	---	---	---	---	---	26	23
3	---	---	---	---	---	---	---	---	---	---	26	24
4	---	---	---	---	---	---	---	---	38	36	24	23
5	---	---	---	---	---	---	---	---	240	36	25	23
6	---	---	---	---	34	32	---	---	85	67	25	24
7	---	---	---	---	33	32	---	---	80	73	25	24
8	---	---	---	---	34	32	---	---	96	78	24	23
9	---	---	---	---	35	33	---	---	83	63	70	23
10	---	---	---	---	110	34	---	---	63	54	32	20
11	---	---	---	---	65	48	---	---	54	46	20	19
12	---	---	---	---	50	43	---	---	48	41	19	18
13	---	---	---	---	45	40	---	---	44	40	19	17
14	---	---	---	---	46	40	---	---	45	42	17	16
15	---	---	---	---	42	40	---	---	42	39	18	16
16	---	---	---	---	42	40	---	---	39	35	17	16
17	---	---	---	---	41	38	---	---	37	32	17	16
18	---	---	---	---	39	36	---	---	33	30	17	16
19	---	---	---	---	36	33	---	---	30	28	17	16
20	---	---	---	---	34	32	---	---	28	26	26	16
21	---	---	---	---	33	31	---	---	26	25	83	26
22	---	---	---	---	32	30	---	---	25	23	30	22
23	---	---	---	---	---	---	---	---	25	23	30	23
24	---	---	---	---	---	---	---	---	24	23	28	24
25	---	---	---	---	---	---	---	---	24	23	26	24
26	---	---	---	---	---	---	---	---	23	21	27	24
27	---	---	---	---	---	---	---	---	22	21	27	23
28	---	---	---	---	---	---	---	---	22	20	26	22
29	---	---	---	---	---	---	---	---	21	20	22	21
30	---	---	---	---	---	---	---	---	---	---	23	19
31	---	---	---	---	---	---	---	---	---	---	20	19
MONTH	---	---	---	---	110	30	---	---	240	20	83	16
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21	19	24	21	300	160	240	100	45	29	42	27
2	21	18	22	20	360	160	140	70	---	---	36	24
3	22	19	20	17	190	140	89	65	---	---	41	26
4	22	19	20	16	160	130	---	---	---	---	49	27
5	22	19	19	18	130	95	---	---	---	---	47	25
6	21	19	20	18	---	---	---	---	---	---	34	24
7	21	18	23	20	---	---	---	---	---	---	35	17
8	22	17	26	22	---	---	---	---	---	---	25	16
9	22	17	68	24	---	---	---	---	---	---	25	14
10	20	17	180	26	---	---	---	---	---	---	28	13
11	20	16	160	39	---	---	---	---	33	23	24	14
12	20	17	140	88	---	---	---	---	46	20	29	15
13	53	19	150	69	---	---	---	---	26	18	83	29
14	60	45	210	83	---	---	---	---	29	17	37	16
15	59	44	150	80	---	---	---	---	30	19	32	15
16	44	33	180	80	260	100	16	11	27	20	33	15
17	34	27	180	80	140	80	20	15	29	20	28	14
18	28	25	97	49	110	59	28	19	30	20	30	14
19	26	24	49	38	61	49	26	23	33	25	25	14
20	25	21	39	33	54	46	28	24	31	25	30	14
21	22	20	36	31	96	46	32	27	130	31	40	17
22	200	19	33	30	110	56	38	29	57	31	24	16
23	160	63	31	28	110	54	44	35	180	27	23	16
24	200	58	29	27	100	54	46	38	180	62	24	16
25	71	55	29	25	180	66	110	37	180	88	22	17
26	58	53	28	24	170	65	78	48	160	61	24	16
27	58	51	26	23	120	67	48	36	61	44	29	17
28	51	39	25	22	120	59	38	33	120	37	29	16
29	39	30	25	22	190	59	34	28	120	56	39	16
30	30	24	46	22	240	65	32	28	58	38	44	18
31	---	---	350	46	---	---	35	28	38	28	---	---
MONTH	200	16	350	16	360	46	240	11	180	17	83	13

07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TN

LOCATION.--Lat 35°18'39", long 89°38'22", 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 mi^2.

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

GAGE.--Data collection platform. Datum of the gage is 246.43 ft above NGVD of 1929, from reference mark, provided by FEMA.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 25	1015	8,160	17.79	Apr 22	0815	8,770	18.40
Feb 5	1700	*10,700	*19.70	Apr 24	0630	9,220	18.83
Mar 21	0330	6,700	15.99				

Minimum daily discharge, 99 ft^3/s, Nov. 9.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

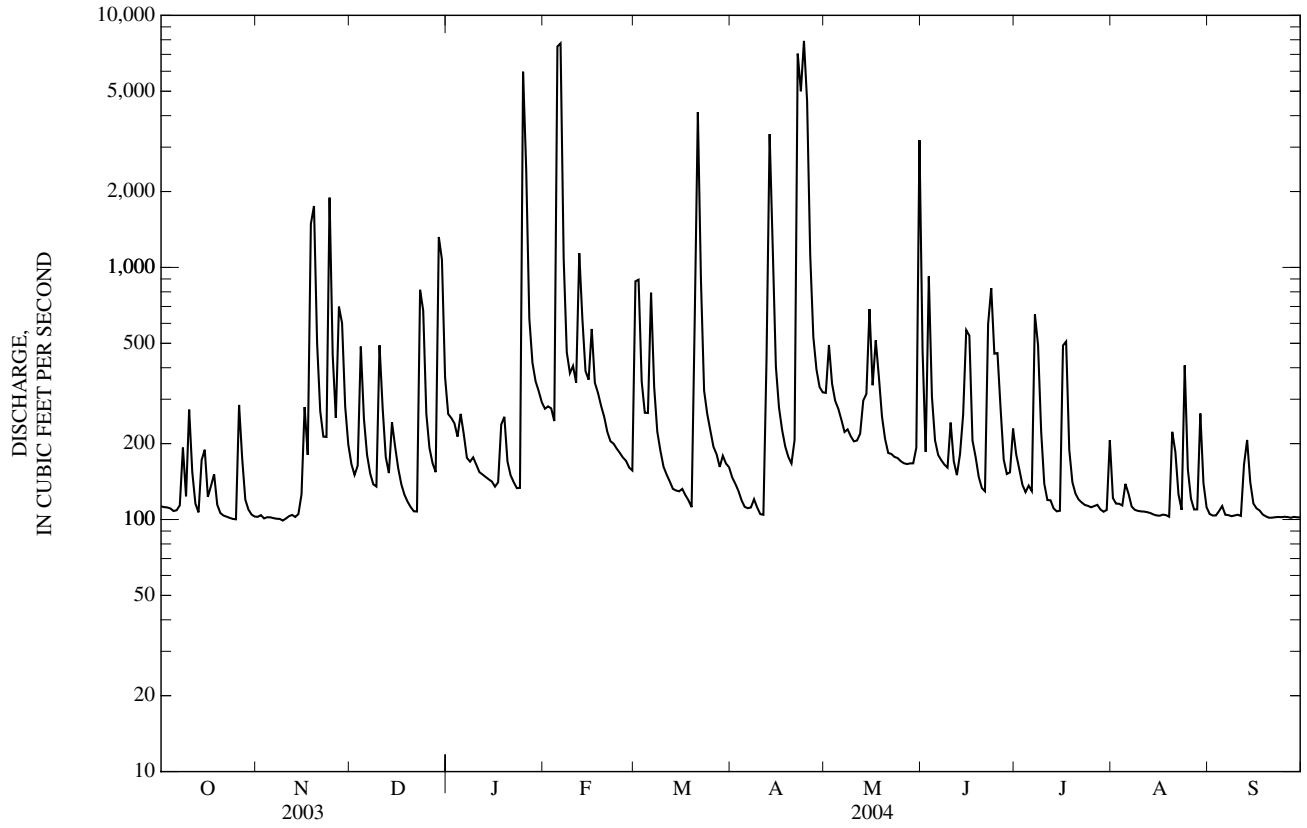
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	102	166	262	275	881	147	318	466	181	122	105
2	112	104	150	253	281	894	139	492	185	158	116	104
3	112	101	164	241	276	353	130	346	921	137	115	104
4	111	102	485	213	246	265	119	296	307	128	114	108
5	108	102	251	262	7,520	265	112	275	206	136	139	113
6	109	101	181	218	7,740	794	111	248	180	130	127	104
7	114	101	152	176	1,090	335	112	222	172	651	113	104
8	193	101	138	170	461	223	120	228	165	493	109	103
9	124	99	135	176	381	187	112	214	161	223	108	104
10	273	101	491	165	407	162	105	204	242	139	108	104
11	154	103	277	154	349	151	104	206	170	119	108	103
12	116	104	177	151	1,140	142	432	219	150	119	107	165
13	107	102	153	147	625	132	3,380	296	182	111	106	207
14	172	105	243	144	388	130	1,190	315	260	108	105	141
15	189	126	194	141	359	129	404	683	564	108	104	116
16	123	279	159	135	570	132	278	341	536	490	104	111
17	136	180	138	140	349	125	227	514	206	508	105	109
18	151	1,490	125	238	318	119	195	368	177	189	104	105
19	114	1,750	118	256	282	112	177	256	148	141	103	103
20	106	501	112	170	255	623	167	208	133	127	223	102
21	104	269	108	150	222	4,130	207	184	129	120	185	102
22	103	213	108	141	204	881	7,050	182	597	117	126	102
23	102	213	815	133	200	325	5,000	177	828	114	109	102
24	101	1,890	674	133	191	263	7,920	175	455	113	409	102
25	100	448	263	5,980	184	226	4,550	170	457	112	158	103
26	285	253	192	2,450	176	194	1,120	167	275	113	121	102
27	174	699	167	627	171	181	529	166	173	114	110	102
28	120	601	154	418	161	162	394	167	152	110	110	102
29	110	281	1,320	353	157	179	335	167	154	107	263	102
30	105	198	1,070	323	---	167	320	193	229	109	140	102
31	103	---	367	292	---	161	---	3,200	---	206	112	---
TOTAL	4,144	10,819	9,247	14,812	24,978	13,023	35,186	11,197	8,980	5,731	4,183	3,336
MEAN	134	361	298	478	861	420	1,173	361	299	185	135	111
MAX	285	1,890	1,320	5,980	7,740	4,130	7,920	3,200	921	651	409	207
MIN	100	99	108	133	157	112	104	166	129	107	103	102
MED	113	153	167	176	282	187	217	222	196	127	112	104
CFSM	0.51	1.38	1.14	1.82	3.29	1.60	4.48	1.38	1.14	0.71	0.52	0.42
IN.	0.59	1.54	1.31	2.10	3.55	1.85	5.00	1.59	1.28	0.81	0.59	0.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	179	349	633	498	671	659	574	399	274	203	163	171
MAX	1,133	1,517	1,962	1,479	2,064	2,038	2,306	1,626	1,609	1,155	521	885
(WY)	(2003)	(2002)	(1988)	(1974)	(1990)	(1997)	(1991)	(2003)	(1974)	(1989)	(1974)	(2002)
MIN	73.4	75.6	106	94.5	128	141	107	93.8	86.7	87.5	80.5	73.3
(WY)	(1970)	(1972)	(1977)	(1981)	(1995)	(1986)	(1978)	(1988)	(1972)	(1970)	(1999)	(1999)

07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	176,544		145,636			
ANNUAL MEAN	484		398		396	
HIGHEST ANNUAL MEAN					769	1989
LOWEST ANNUAL MEAN					154	1986
HIGHEST DAILY MEAN	15,300	Feb 15	7,920	Apr 24	19,900	Dec 26, 1987
LOWEST DAILY MEAN	99	Nov 9	99	Nov 9	66	Apr 7, 1974
ANNUAL SEVEN-DAY MINIMUM	101	Nov 3	101	Nov 3	68	Nov 5, 1982
MAXIMUM PEAK FLOW					27,400	Dec 25, 1987
MAXIMUM PEAK STAGE					25.27	Dec 25, 1987
INSTANTANEOUS LOW FLOW					66	Apr 6, 1974
ANNUAL RUNOFF (CFSM)	1.85		1.52		1.51	
ANNUAL RUNOFF (INCHES)	25.07		20.68		20.54	
10 PERCENT EXCEEDS	689		578		608	
50 PERCENT EXCEEDS	156		167		122	
90 PERCENT EXCEEDS	110		104		86	



07030280 LOOSAHATCHIE RIVER AT BRUNSWICK, TN

LOCATION.--Lat 35°16'52", long 89°45'56", Shelby County, Hydrologic Unit 08010209, at bridge on Brunswick Road, 1 mi north of Brunswick, TN.

DRAINAGE AREA.--505 mi^2.

PERIOD OF RECORD.--July 2004 to September 2004.

GAGE.--Water-stage recorder. Datum of the gage is 227.25 ft above NGVD of 1929, from reference mark provided by the Memphis District Corps of Engineers.

REMARKS.--Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT PERIOD OF RECORD.--June to September 2004: Maximum discharge during period 3,130 ft^3/s, July 16, 17, gage height 10.90 ft; minimum discharge 104 ft^3/s, Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	218	146	136
2	---	---	---	---	---	---	---	---	---	195	132	131
3	---	---	---	---	---	---	---	---	---	161	130	140
4	---	---	---	---	---	---	---	---	---	146	130	141
5	---	---	---	---	---	---	---	---	---	152	286	146
6	---	---	---	---	---	---	---	---	---	148	172	129
7	---	---	---	---	---	---	---	---	---	1,560	144	125
8	---	---	---	---	---	---	---	---	---	728	133	124
9	---	---	---	---	---	---	---	---	---	297	129	124
10	---	---	---	---	---	---	---	---	---	235	128	125
11	---	---	---	---	---	---	---	---	---	159	127	124
12	---	---	---	---	---	---	---	---	---	154	126	218
13	---	---	---	---	---	---	---	---	---	157	125	376
14	---	---	---	---	---	---	---	---	---	143	125	189
15	---	---	---	---	---	---	---	---	---	139	125	139
16	---	---	---	---	---	---	---	---	---	832	124	122
17	---	---	---	---	---	---	---	---	---	1,280	124	117
18	---	---	---	---	---	---	---	---	---	249	125	113
19	---	---	---	---	---	---	---	---	---	171	124	111
20	---	---	---	---	---	---	---	---	---	152	201	109
21	---	---	---	---	---	---	---	---	---	144	239	110
22	---	---	---	---	---	---	---	---	---	140	160	112
23	---	---	---	---	---	---	---	---	---	137	131	112
24	---	---	---	---	---	---	---	---	---	135	417	111
25	---	---	---	---	---	---	---	---	---	141	382	111
26	---	---	---	---	---	---	---	---	---	159	187	111
27	---	---	---	---	---	---	---	---	---	142	153	110
28	---	---	---	---	---	---	---	---	---	136	213	110
29	---	---	---	---	---	---	---	---	---	134	619	111
30	---	---	---	---	---	---	---	---	---	148	204	111
31	---	---	---	---	---	---	---	---	---	361	150	---
TOTAL	---	---	---	---	---	---	---	---	---	9,053	5,711	4,048
MEAN	---	---	---	---	---	---	---	---	---	292	184	135
MAX	---	---	---	---	---	---	---	---	---	1,560	619	376
MIN	---	---	---	---	---	---	---	---	---	134	124	109
CFSM	---	---	---	---	---	---	---	---	---	0.58	0.36	0.27
IN.	---	---	---	---	---	---	---	---	---	0.67	0.42	0.30

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07030356 LOOSAHATCHIE RIVER AT US HWY 51 AT MEMPHIS, TN

LOCATION.--Lat 35°15'34", long 89°59'38", Shelby County, Hydrologic Unit 08010209, at bridge on US Hwy 51, 1 mi south of Woodstock, TN.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to September 2004.

GAGE.--Water-stage recorder. Datum of the gage is 195.41 ft above NGVD of 1929, from reference mark provided by Memphis District Corp of Engineers.

REMARKS.--Records fair except for estimated discharges which are poor. Stages for September 23-30 were affected by backwater to the Mississippi River.

EXTREMES FOR CURRENT PERIOD.--July to September 2004: Maximum discharge 3,300 ft^3/s, July 17, gage height 12.24 ft; minimum discharge 133 ft^3/s, Sept. 9, but may have been lower during period affected by backwater.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e270	206	162
2	---	---	---	---	---	---	---	---	---	e260	163	154
3	---	---	---	---	---	---	---	---	---	e210	157	173
4	---	---	---	---	---	---	---	---	---	e190	156	194
5	---	---	---	---	---	---	---	---	---	e180	242	167
6	---	---	---	---	---	---	---	---	---	e175	263	156
7	---	---	---	---	---	---	---	---	---	1,820	176	144
8	---	---	---	---	---	---	---	---	---	996	160	142
9	---	---	---	---	---	---	---	---	---	458	154	141
10	---	---	---	---	---	---	---	---	---	298	151	142
11	---	---	---	---	---	---	---	---	---	221	149	142
12	---	---	---	---	---	---	---	---	---	188	148	144
13	---	---	---	---	---	---	---	---	---	193	144	508
14	---	---	---	---	---	---	---	---	---	180	145	242
15	---	---	---	---	---	---	---	---	---	172	146	192
16	---	---	---	---	---	---	---	---	---	338	144	158
17	---	---	---	---	---	---	---	---	---	1,940	143	149
18	---	---	---	---	---	---	---	---	---	378	145	143
19	---	---	---	---	---	---	---	---	---	228	145	141
20	---	---	---	---	---	---	---	---	---	188	148	139
21	---	---	---	---	---	---	---	---	---	178	301	143
22	---	---	---	---	---	---	---	---	---	171	207	140
23	---	---	---	---	---	---	---	---	---	166	160	e140
24	---	---	---	---	---	---	---	---	---	164	362	e140
25	---	---	---	---	---	---	---	---	---	178	483	e140
26	---	---	---	---	---	---	---	---	---	180	253	e140
27	---	---	---	---	---	---	---	---	---	175	195	e139
28	---	---	---	---	---	---	---	---	---	163	203	e139
29	---	---	---	---	---	---	---	---	---	157	661	e138
30	---	---	---	---	---	---	---	---	---	159	304	e138
31	---	---	---	---	---	---	---	---	---	372	187	---
MEAN	---	---	---	---	---	---	---	---	---	353	213	164
MAX	---	---	---	---	---	---	---	---	---	1,940	661	508
MIN	---	---	---	---	---	---	---	---	---	157	143	138

e Estimated

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07030392 WOLF RIVER AT LAGRANGE, TN

LOCATION.--Lat 35°01'57", long 89°14'48", Fayette County, Hydrologic Unit 08010210, on right bank upstream side of bridge on Yager Road, 0.95 mi south of LaGrange, and at mile 72.6.

DRAINAGE AREA.--210 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1995 to current year.

REVISED RECORD.--WDR TN-02-1: 1997, 1999, 2001 (M).

GAGE.--Data collection platform. Datum of gage is 350 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 19	0630	1,700	11.38	Mar 3	0730	1,730	11.41
Jan 27	0400	1,670	11.36	Apr 25	1345	2,820	12.12
Feb 6	1530	*6,560	*13.87				

Minimum discharge, 119 ft^3/s, Oct. 3-6.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	150	241	366	237	416	246	292	273	324	161	165
2	121	148	223	292	234	1,130	223	338	275	298	156	153
3	120	146	230	260	242	1,520	212	346	560	265	153	146
4	120	145	345	247	238	859	195	350	447	245	150	197
5	120	146	370	253	1,420	484	185	315	333	228	154	204
6	120	147	367	256	5,700	490	179	274	281	215	157	168
7	123	146	305	259	3,110	585	176	249	278	230	152	153
8	128	144	257	245	1,150	634	177	230	252	296	145	144
9	127	143	238	238	575	391	176	215	230	269	141	139
10	186	143	293	233	426	323	176	206	217	248	140	135
11	204	144	351	230	384	290	180	200	199	222	138	134
12	181	150	367	222	465	267	247	197	186	205	137	153
13	158	158	323	213	468	252	612	218	185	193	138	238
14	156	159	303	206	448	264	1,030	291	210	190	142	346
15	161	161	298	202	531	269	862	622	202	231	141	340
16	151	208	293	198	773	280	482	873	219	294	139	260
17	165	246	267	201	853	281	322	1,160	225	394	136	201
18	182	576	247	216	723	270	258	957	217	496	133	171
19	196	1,520	233	220	489	254	231	610	213	407	132	156
20	187	1,520	220	225	402	228	215	389	199	315	170	148
21	169	948	211	216	353	228	219	320	188	251	196	143
22	153	427	206	202	313	214	690	270	199	217	172	141
23	145	302	238	194	285	207	922	243	294	197	159	138
24	139	334	288	193	272	201	1,340	223	345	186	155	138
25	136	325	291	767	276	194	2,250	209	575	178	166	139
26	187	328	287	1,300	310	189	1,490	199	712	171	172	139
27	209	318	251	1,410	313	184	740	193	457	173	165	136
28	194	302	229	653	304	182	402	193	407	171	157	134
29	177	283	248	347	276	197	325	201	316	166	161	134
30	164	262	349	281	---	233	293	202	304	165	164	133
31	156	---	381	252	---	256	---	247	---	167	169	---
TOTAL	4,857	10,129	8,750	10,597	21,570	11,772	15,055	10,832	8,998	7,607	4,751	5,126
MEAN	157	338	282	342	744	380	502	349	300	245	153	171
MAX	209	1,520	381	1,410	5,700	1,520	2,250	1,160	712	496	196	346
MIN	120	143	206	193	234	182	176	193	185	165	132	133
CFSM	0.75	1.61	1.34	1.63	3.54	1.81	2.39	1.66	1.43	1.17	0.73	0.81
IN.	0.86	1.79	1.55	1.88	3.82	2.09	2.67	1.92	1.59	1.35	0.84	0.91

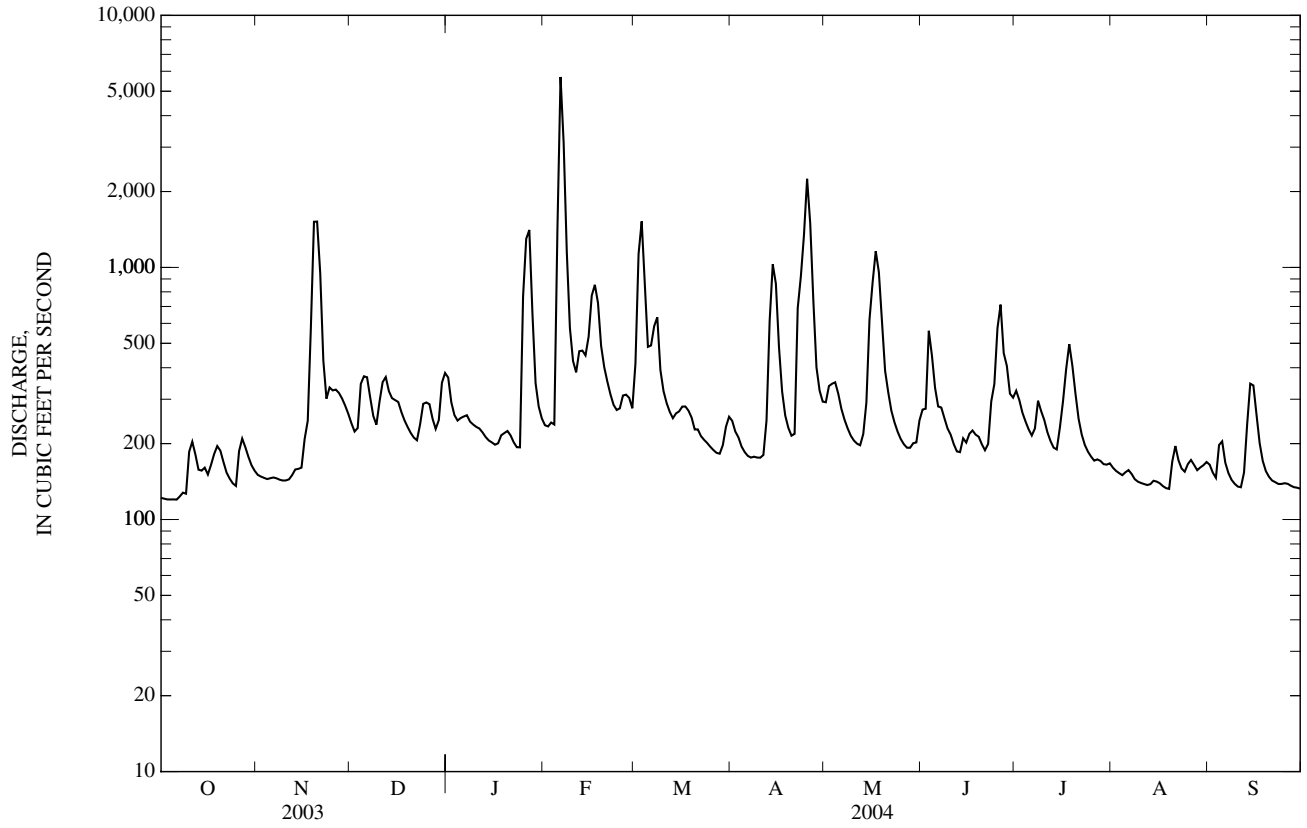
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	227	283	385	403	542	480	358	332	236	162	148	181
MAX	776	652	778	745	1,018	956	502	755	628	245	278	416
(WY)	(2003)	(2002)	(2002)	(1999)	(2001)	(1997)	(2004)	(2003)	(1997)	(2004)	(1998)	(2002)
MIN	69.9	149	176	173	233	227	261	116	112	79.7	80.5	68.4
(WY)	(2001)	(2001)	(2001)	(2000)	(1996)	(2000)	(1996)	(2001)	(2000)	(2001)	(2000)	(2000)

07030392 WOLF RIVER AT LAGRANGE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	121,491		120,044			
ANNUAL MEAN	333		328		311	
HIGHEST ANNUAL MEAN					419	2003
LOWEST ANNUAL MEAN					159	2000
HIGHEST DAILY MEAN	4,050	May 18	5,700	Feb 6	10,100	Feb 17, 2001
LOWEST DAILY MEAN	109	Sep 19	a120	Oct 3	59	Sep 1, 2000
ANNUAL SEVEN-DAY MINIMUM	112	Sep 15	121	Oct 1	60	Aug 31, 2000
MAXIMUM PEAK FLOW					11,300	Nov 30, 2001
MAXIMUM PEAK STAGE					15.43	Nov 30, 2001
INSTANTANEOUS LOW FLOW					56	Sep 1, 2000
ANNUAL RUNOFF (CFSM)	1.59		1.56		1.48	
ANNUAL RUNOFF (INCHES)	21.52		21.26		20.13	
10 PERCENT EXCEEDS	496		575		575	
50 PERCENT EXCEEDS	234		228		197	
90 PERCENT EXCEEDS	129		143		93	

a Also occurred on Oct. 4-5.



07030392 WOLF RIVER AT LAGRANGE, TN—Continued

WATER-QUALITY DATA

PERIOD OF RECORD.--October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
NOV 04...	1600	145	11	765	7.7	80	6.0	44	17.0	--	--	2.94
DEC 01...	1220	240	20	770	10.2	86	6.0	38	8.5	12	15	2.81
JAN 07...	0830	262	16	778	11.8	89	6.4	34	4.0	20	24	2.59
FEB 03...	1345	242	18	771	10.8	89	6.2	33	7.5	8	10	2.31
MAR 02...	1200	1,140	82	768	8.7	81	6.5	36	12.5	10	12	2.08
MAY 03...	1715	348	23	767	7.8	81	6.4	41	17.5	15	18	1.85
JUL 15...	1315	240	17	768	6.4	79	6.3	49	26.0	17	20	2.99
AUG 17...	1430	133	11	765	8.5	94	5.7	38	20.5	--	--	--
SEP 09...	0730	138	10	765	7.2	81	6.4	41	21.0	13	16	2.57

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
NOV 04...	.8	<.04	.20	<.008	E.005	.037	18
DEC 01...	1.6	<.04	.20	<.008	E.003	.048	24
JAN 07...	1.6	<.04	.19	<.008	E.005	.042	49
FEB 03...	1.8	<.04	.23	<.008	<.006	.042	28
MAR 02...	2.0	<.04	.13	<.008	.027	.19	68
MAY 03...	1.2	E.03	.22	E.004	E.005	.091	37
JUL 15...	.8	<.04	.21	<.008	.006	.058	38
AUG 17...	.8	--	--	--	--	--	19
SEP 09...	.5	<.04	.26	<.008	E.004	.051	48

E--Estimated

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07030500 WOLF RIVER AT ROSSVILLE, TN

LOCATION.--Lat 35°03'15", long 89°32'28", Fayette County, Hydrologic Unit 08010210, on left bank 85 ft downstream from county highway bridge, 0.3 mi upstream from Hurricane Creek, 0.4 mi north of Rossville, 5.0 miles downstream from Grissum Creek, and at mile 43.7.

DRAINAGE AREA.--503 mi^2.

PERIOD OF RECORD.--July 1929 to January 1972, May 2001 to current year.

REVISED RECORDS.--WSP 807: 1935. WSP 1117: 1930. WSP 1177: 1932. WSP 1281: 1935, 1946(M), drainage area. WSP 1391: 1937-38.

GAGE.--Data collection platform. Datum of gage is 300.74 ft above NGVD of 1929 determined from Tennessee Highway Department reference tablet. Prior to June 13, 1939, nonrecording gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 20	0030	3,370	9.46	Feb 6	1530	*8,730	*11.98
Jan 26	0030	4,460	10.25	Apr 25	0530	4,070	10.01

Minimum daily discharge, 257 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	383	549	656	e900	997	441	766	498	840	397	315
2	321	371	523	642	e800	1,560	451	730	513	714	378	307
3	305	360	553	634	567	1,610	446	641	787	646	361	307
4	296	357	911	568	537	1,670	431	579	791	598	351	326
5	289	362	779	540	3,290	1,880	413	553	784	612	349	304
6	289	349	713	518	7,780	1,990	400	532	753	537	347	315
7	e450	340	653	469	7,830	1,380	390	500	660	600	340	323
8	e500	337	621	456	6,060	1,040	392	460	562	1,150	335	308
9	e550	336	575	476	3,990	919	386	423	486	1,070	332	293
10	e600	338	640	465	2,510	882	381	401	439	692	327	281
11	489	342	639	443	1,540	751	386	383	406	547	322	272
12	427	348	573	431	1,440	662	497	372	380	513	321	272
13	405	371	564	425	1,350	592	1,490	450	358	494	313	277
14	396	365	655	414	1,190	549	1,970	807	400	443	312	361
15	388	375	630	404	1,300	533	1,830	1,100	507	462	312	366
16	375	663	582	392	1,680	544	1,620	944	549	495	313	403
17	379	675	543	395	1,630	541	1,340	947	582	702	313	439
18	412	1,310	515	466	1,570	549	1,040	1,090	482	745	312	416
19	392	2,590	481	485	1,510	570	750	1,250	413	720	311	370
20	378	3,190	452	437	1,420	559	607	1,300	383	e700	465	335
21	380	2,800	433	419	1,190	578	628	1,100	382	e650	617	303
22	378	2,140	416	417	937	595	2,040	800	484	621	516	286
23	368	1,640	484	410	787	512	2,730	600	1,130	539	415	277
24	353	1,830	590	408	687	437	3,290	496	1,510	494	354	275
25	340	1,460	563	2,770	633	420	4,020	430	1,300	470	337	273
26	606	1,050	528	4,100	667	410	3,840	392	1,180	419	317	271
27	697	834	480	3,460	652	413	3,160	371	975	415	307	266
28	524	812	470	2,460	600	397	2,520	360	927	394	324	262
29	451	680	684	1,810	579	410	1,690	369	901	382	391	259
30	417	590	958	1,410	---	419	1,070	358	1,020	376	378	257
31	396	---	745	927	---	424	---	492	---	392	345	---
TOTAL	12,888	27,598	18,502	28,307	55,626	24,793	40,649	19,996	20,542	18,432	11,112	9,319
MEAN	416	920	597	913	1,918	800	1,355	645	685	595	358	311
MAX	697	3,190	958	4,100	7,830	1,990	4,020	1,300	1,510	1,150	617	439
MIN	289	336	416	392	537	397	381	358	358	376	307	257
CFSM	0.83	1.83	1.19	1.82	3.81	1.59	2.69	1.28	1.36	1.18	0.71	0.62
IN.	0.95	2.04	1.37	2.09	4.11	1.83	3.01	1.48	1.52	1.36	0.82	0.69

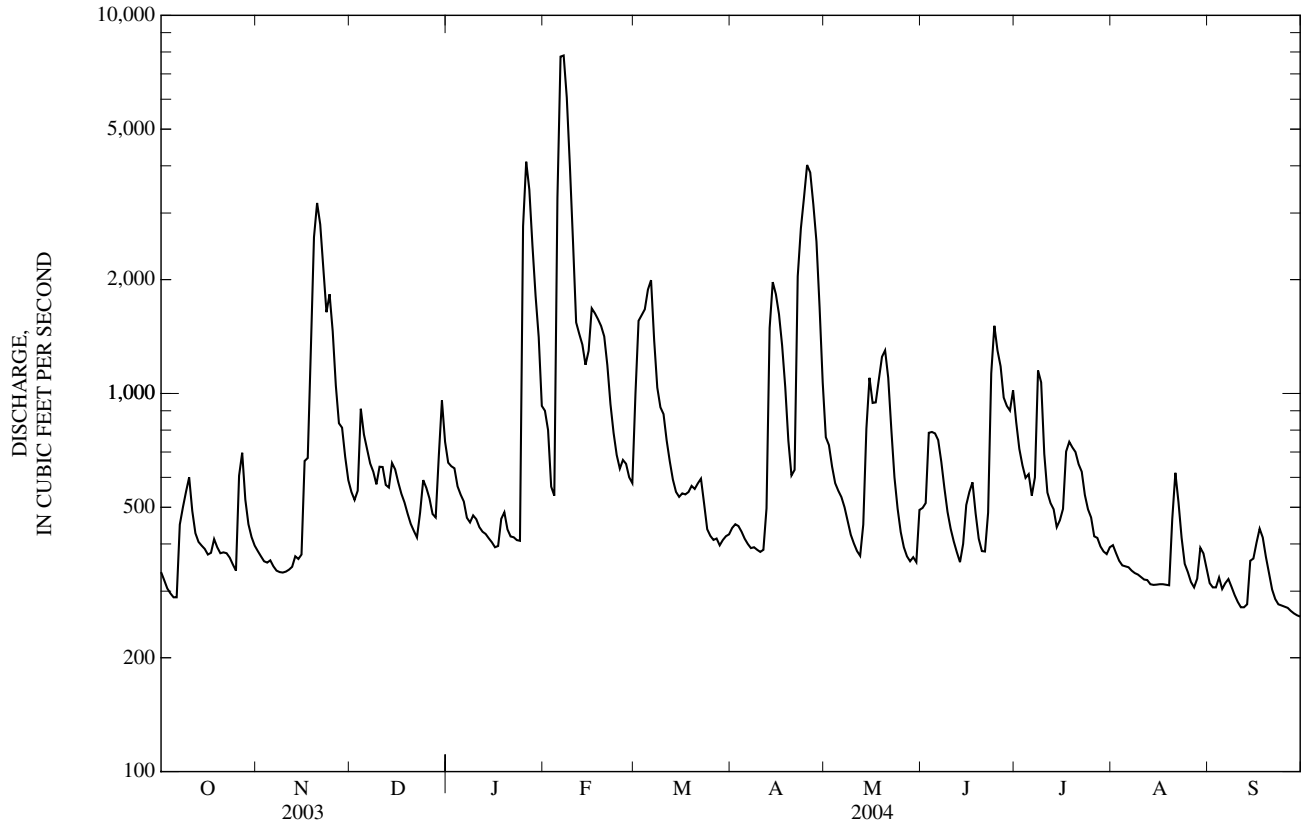
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	308	547	821	1,163	1,310	1,096	905	659	424	355	260	314
MAX	2,080	2,452	3,376	4,403	3,704	2,699	2,144	3,771	1,963	2,245	608	1,501
(WY)	(2003)	(1946)	(2002)	(1937)	(1948)	(2002)	(1955)	(1953)	(1949)	(1932)	(1950)	(2002)
MIN	132	181	226	245	288	286	237	181	144	129	121	121
(WY)	(1932)	(1957)	(1966)	(1940)	(1941)	(1941)	(1930)	(1942)	(1941)	(1942)	(1943)	(1942)

07030500 WOLF RIVER AT ROSSVILLE, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL TOTAL	310,272		287,764			
ANNUAL MEAN	850		786		680	
HIGHEST ANNUAL MEAN					1,269	2002
LOWEST ANNUAL MEAN					277	1941
HIGHEST DAILY MEAN	10,800	May 7	7,830	Feb 7	31,000	Jan 21, 1935
LOWEST DAILY MEAN	222	Jul 16	257	Sep 30	100	Sep 16, 1942
ANNUAL SEVEN-DAY MINIMUM	230	Jul 11	266	Sep 24	105	Aug 27, 1943
MAXIMUM PEAK FLOW					40,000	Jan 20, 1935
MAXIMUM PEAK STAGE					14.57	Nov 30, 2001
INSTANTANEOUS LOW FLOW					100	Sep 16, 1942
ANNUAL RUNOFF (CFSM)	1.69		1.56		1.35	
ANNUAL RUNOFF (INCHES)	22.95		21.28		18.37	
10 PERCENT EXCEEDS	1,580		1,550		1,390	
50 PERCENT EXCEEDS	450		500		303	
90 PERCENT EXCEEDS	276		322		166	

e Estimated



07031650 WOLF RIVER AT GERMANTOWN, TN

LOCATION.--Lat 35°06'59", long 89°48'05", Shelby County, Hydrologic Unit 08010210, on left bank, 30 ft downstream of bridge on Germantown Road, 1.7 mi north of U.S. Hwy 72, 3.6 mi downstream of Grays Creek, 4.0 mi northeast of I-240 and U.S. Highway 72 interchange, and at mile 18.9.

DRAINAGE AREA.--699 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to September 1986, October 1990 to current year. Prior to September 1977 published as "near Germantown".

GAGE.--Data collection platform. Datum of gage is 235.76 ft above NGVD of 1929, determined from Tennessee Department of Transportation brass disc, and from BM-79-4-19. Apr. 21, 1986, to Dec. 30, 1990, water-stage recorder at site 2.1 mi downstream at datum 9.94 ft lower.

REMARKS.--Records good, except for periods of estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data. National Weather Service rain gage at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 25	0915	7,190	14.04	Feb 5	1230	*10,500	*16.74

Minimum discharge, 271 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	439	730	892	1,020	1,940	594	1,330	862	995	453	392
2	400	427	662	793	901	2,080	605	1,080	758	895	452	372
3	384	416	699	763	827	2,020	605	916	1,180	784	430	425
4	371	406	900	733	761	1,860	598	792	1,100	755	416	461
5	361	406	953	732	6,890	1,890	582	726	957	720	508	397
6	357	400	880	668	6,190	2,100	564	684	934	694	413	369
7	368	392	779	618	7,690	2,070	553	647	875	858	400	373
8	637	384	727	580	7,600	1,650	574	608	795	900	393	372
9	518	381	715	588	5,870	1,270	552	567	702	1,220	389	359
10	759	382	1,080	581	4,010	1,140	539	532	637	1,010	386	347
11	641	384	818	558	e2,970	1,060	539	501	597	743	380	337
12	536	429	739	542	e2,490	938	904	519	562	636	371	360
13	479	411	706	531	e2,140	831	2,020	900	558	607	365	393
14	547	416	767	e605	e1,870	770	2,200	999	634	581	361	371
15	479	703	767	505	e1,740	743	2,160	1,310	832	658	359	409
16	447	1,170	717	492	e1,860	732	1,820	1,180	991	723	359	404
17	553	861	665	501	e1,990	728	1,610	1,160	764	707	358	439
18	471	1,680	627	582	e1,950	742	1,340	1,020	714	783	359	458
19	468	2,220	596	606	1,830	722	1,060	1,070	621	760	357	429
20	446	2,230	567	563	1,770	1,000	840	1,150	565	750	476	390
21	435	2,530	544	516	1,650	1,180	912	1,150	669	746	611	364
22	434	2,460	532	500	1,420	818	4,620	973	1,320	709	650	340
23	428	2,240	845	494	1,190	758	4,590	751	1,800	753	607	327
24	417	2,560	773	522	1,040	688	5,370	613	2,040	948	529	318
25	417	2,010	710	4,790	959	647	4,800	536	2,090	592	572	315
26	621	1,710	636	4,020	957	631	3,850	479	1,580	536	448	311
27	714	1,530	600	3,770	948	612	3,340	442	1,230	485	414	307
28	640	1,220	590	3,000	903	598	2,820	416	1,040	471	870	302
29	544	993	1,670	2,420	870	603	2,390	412	978	451	867	297
30	488	838	1,650	1,900	---	614	1,860	587	1,000	464	478	291
31	460	---	1,260	1,450	---	600	---	2,090	---	467	430	---
TOTAL	15,247	32,628	24,904	35,815	72,306	34,035	54,811	26,140	29,385	22,401	14,461	11,029
MEAN	492	1,088	803	1,155	2,493	1,098	1,827	843	980	723	466	368
MAX	759	2,560	1,670	4,790	7,690	2,100	5,370	2,090	2,090	1,220	870	461
MIN	357	381	532	492	761	598	539	412	558	451	357	291
CFSM	0.70	1.56	1.15	1.65	3.57	1.57	2.61	1.21	1.40	1.03	0.67	0.53
IN.	0.81	1.74	1.33	1.91	3.85	1.81	2.92	1.39	1.56	1.19	0.77	0.59

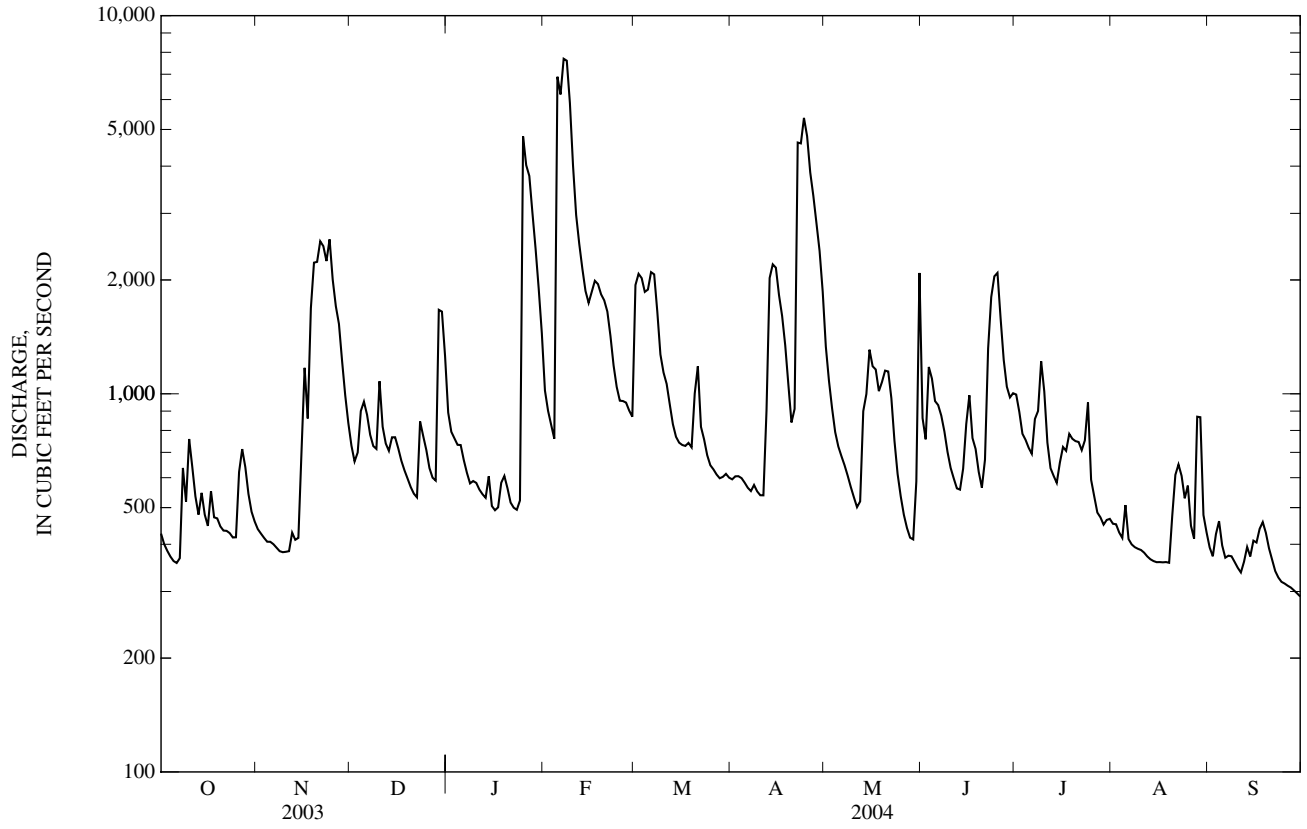
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	556	786	1,589	1,350	1,470	1,710	1,518	1,283	782	469	451	491
MAX	3,570	1,991	5,200	3,504	3,872	4,854	4,805	4,542	1,986	985	1,199	1,753
(WY)	(2003)	(1980)	(2002)	(1974)	(2003)	(1980)	(1991)	(1991)	(1974)	(1994)	(1998)	(2002)
MIN	213	239	439	372	532	569	448	364	271	251	240	244
(WY)	(1970)	(1972)	(1981)	(1981)	(1995)	(1986)	(1986)	(1992)	(1972)	(2001)	(1986)	(1986)

07031650 WOLF RIVER AT GERMANTOWN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1970 - 2004	
ANNUAL TOTAL	450,550		373,162			
ANNUAL MEAN	1,234		1,020		1,036	
HIGHEST ANNUAL MEAN					1,807	1991
LOWEST ANNUAL MEAN					497	1986
HIGHEST DAILY MEAN	15,300	Feb 16	7,690	Feb 7	30,400	Mar 14, 1975
LOWEST DAILY MEAN	355	Sep 20	291	Sep 30	196	Sep 15, 1972
ANNUAL SEVEN-DAY MINIMUM	381	Oct 1	306	Sep 24	199	Sep 12, 1972
MAXIMUM PEAK FLOW					33,400	Mar 14, 1975
MAXIMUM PEAK STAGE					27.98	Mar 14, 1975
INSTANTANEOUS LOW FLOW					176	Jul 29, 2000
ANNUAL RUNOFF (CFSM)	1.77		1.46		1.48	
ANNUAL RUNOFF (INCHES)	23.98		19.86		20.14	
10 PERCENT EXCEEDS	2,220		2,030		2,190	
50 PERCENT EXCEEDS	676		691		540	
90 PERCENT EXCEEDS	397		384		282	

* Calculations of statistics do not include flow data from 1987 - 1990 water years.
e Estimated



07031650 WOLF RIVER AT GERMANTOWN, TN—Continued

WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC 02...	1330	460	63	9.0	147
MAR 01...	1510	2,510	63	12.5	680
APR 15...	1330	2,100	43	13.5	203
MAY 05...	1320	721	54	21.0	931
JUN 15...	1110	810	63	26.0	633

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07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN

LOCATION.--Lat 35°10'09", long 89°51'57", Shelby County, Hydrologic Unit 08010210, on Sycamore View Road, 0.4 miles northwest of Interstate 40.

DRAINAGE AREA.--30.5 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR TN-02-1: 1996-2001 (M).

GAGE.--Data collection platform. Datum of gage is 229.00 ft above NGVD of 1929 provided by Tennessee Department of Transportation.

REMARKS.--Records rated poor below 10 ft^3/s and fair above 10 ft^3/s. During high stages on the Wolf River gage heights are affected by backwater and discharges are shown as estimated. All estimated discharges are considered poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	0530	*5,210	*12.13	Apr 22	0300	4,830	11.69

Minimum discharge, 0.36 ft^3/s, Oct. 6.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.50	0.73	1.7	3.6	1.4	229	2.4	41	7.3	9.6	e2.6	2.6
2	0.46	0.68	1.4	7.7	15	11	1.9	22	4.7	8.0	e1.9	2.5
3	0.45	0.67	49	3.4	6.3	4.6	1.7	9.0	6.5	7.2	1.7	266
4	0.44	0.67	17	8.4	2.5	3.2	1.6	4.6	3.5	17	1.6	38
5	0.41	0.69	5.3	28	e1,800	9.8	1.5	3.1	2.8	8.6	22	8.8
6	0.40	0.74	2.7	4.2	e30	9.3	1.5	2.8	4.2	4.2	5.4	4.1
7	51	1.0	1.8	2.2	e20	3.7	1.4	2.7	5.5	24	2.8	3.1
8	11	1.1	1.3	2.3	e13	2.4	28	3.1	4.1	5.1	2.2	2.8
9	170	0.87	6.6	6.3	e9.2	1.9	4.8	3.7	4.0	2.7	2.0	2.8
10	49	0.81	79	2.4	8.9	1.8	4.4	4.8	9.4	2.5	1.9	2.8
11	5.6	0.78	5.9	1.7	11	1.8	5.6	4.8	11	2.7	1.8	2.8
12	2.3	5.7	3.2	e1.3	123	2.0	218	9.5	6.4	1.7	1.8	328
13	1.3	5.3	4.1	e1.4	8.5	2.0	170	18	12	1.4	2.0	38
14	20	1.9	6.1	e1.6	4.7	1.9	9.1	110	21	1.4	2.0	6.7
15	3.7	259	2.5	e1.2	11	2.3	4.2	67	107	20	2.0	4.3
16	1.4	69	1.8	e1.1	5.2	2.4	2.9	6.2	43	109	2.1	3.6
17	31	7.9	1.9	6.9	3.1	2.4	2.4	4.3	4.7	8.7	2.1	3.1
18	3.2	304	1.6	24	2.4	6.7	2.2	3.7	2.5	2.9	2.4	2.9
19	1.4	138	1.3	4.7	2.1	3.6	1.8	3.1	2.5	1.9	2.6	2.6
20	0.99	8.4	1.1	2.1	2.0	89	1.8	2.9	1.8	1.8	16	2.6
21	0.86	4.0	1.0	1.4	1.8	21	153	3.2	16	1.8	21	2.4
22	0.79	2.0	1.0	1.4	1.8	3.8	1,300	3.3	134	2.0	4.6	2.1
23	0.70	152	270	1.2	1.7	2.5	691	3.2	26	2.8	23	2.0
24	0.65	115	11	23	2.5	2.1	288	3.1	8.7	8.0	22	2.0
25	0.60	6.6	5.6	1,090	4.1	2.0	189	2.5	11	57	25	2.0
26	2.1	3.3	3.0	14	6.7	1.9	9.8	2.4	6.4	e15	4.4	2.0
27	1.7	102	1.9	8.6	3.4	1.8	6.2	2.4	3.4	e5.4	2.7	2.0
28	1.2	26	1.7	4.0	2.4	1.8	4.2	7.9	2.6	2.4	162	1.9
29	0.95	5.4	298	2.8	2.0	8.7	3.5	4.0	2.1	1.9	19	1.9
30	0.82	2.9	14	2.5	---	4.0	4.5	173	1.9	1.6	4.8	1.9
31	0.79	---	6.5	1.8	---	3.1	---	439	---	e8.5	3.1	---
TOTAL	365.71	1,227.14	809.0	1,265.2	2,105.7	443.5	3,116.4	970.3	476.0	346.8	370.5	748.3
MEAN	11.8	40.9	26.1	40.8	72.6	14.3	104	31.3	15.9	11.2	12.0	24.9
MAX	170	304	298	1,090	1,800	229	1,300	439	134	109	162	328
MIN	0.40	0.67	1.0	1.1	1.4	1.8	1.4	2.4	1.8	1.4	1.6	1.9
CFSM	0.39	1.34	0.86	1.34	2.38	0.47	3.41	1.03	0.52	0.37	0.39	0.82
IN.	0.45	1.50	0.99	1.54	2.57	0.54	3.80	1.18	0.58	0.42	0.45	0.91

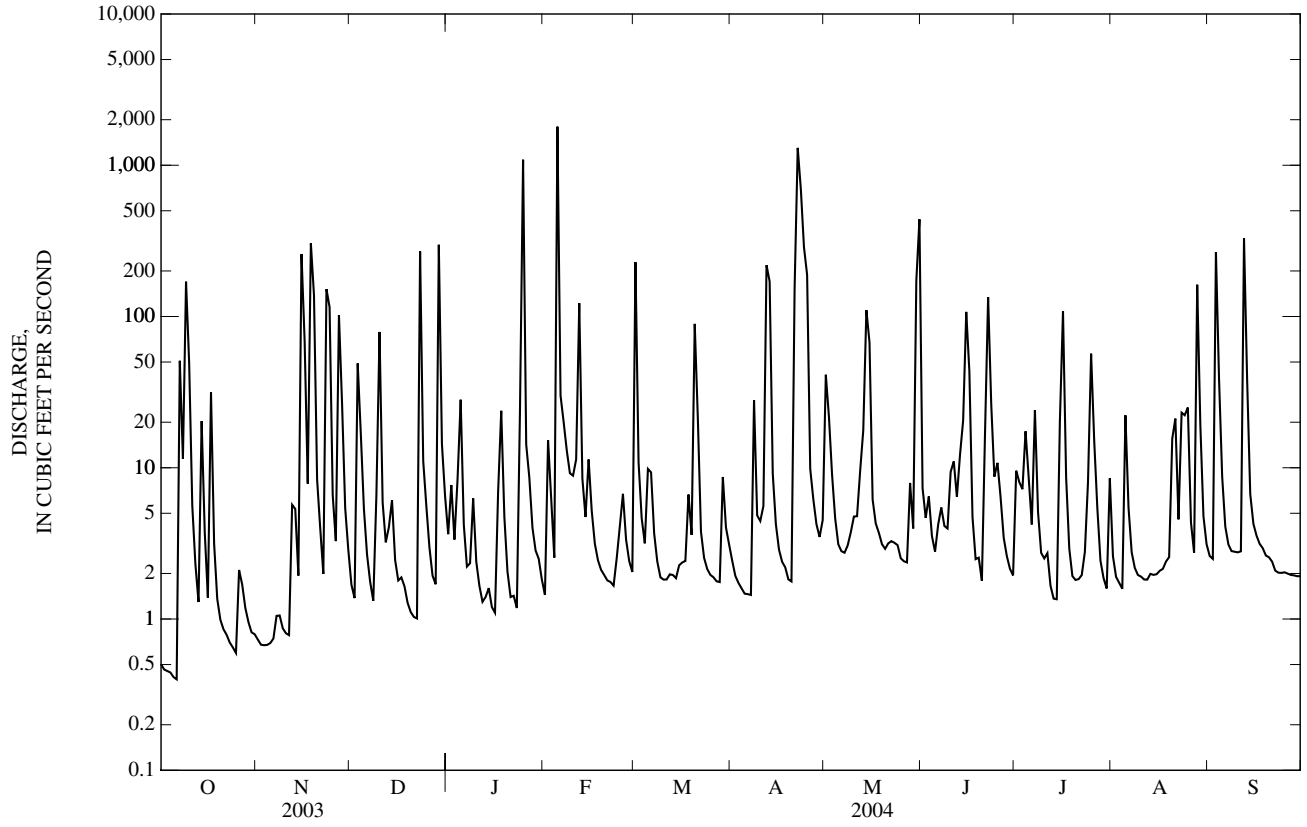
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	58.4	83.8	104	39.0	85.2	120	62.3	59.4	37.0	28.9	24.2	48.2
MAX	210	357	388	70.0	206	357	131	186	99.2	56.5	79.4	168
(WY)	(2003)	(2002)	(2002)	(1998)	(2003)	(1997)	(1999)	(2003)	(1996)	(1998)	(1998)	(2002)
MIN	3.75	6.32	21.3	5.71	13.5	14.3	12.8	23.2	9.24	11.2	3.46	5.45
(WY)	(2001)	(1998)	(1998)	(2000)	(1999)	(2004)	(1996)	(1998)	(1998)	(2004)	(1996)	(2000)

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	18,138.86		12,244.55			
ANNUAL MEAN	49.7		33.5		63.2	
HIGHEST ANNUAL MEAN					130	2002
LOWEST ANNUAL MEAN					30.2	2000
HIGHEST DAILY MEAN	3,400	Feb 14	a1,800	Feb 5	5,950	Nov 29, 2001
LOWEST DAILY MEAN	0.40	Oct 6	0.40	Oct 6	0.00	Oct 1, 2000
ANNUAL SEVEN-DAY MINIMUM	0.46	Sep 30	0.71	Oct 31	0.01	Sep 29, 2000
MAXIMUM PEAK FLOW					12,500	Nov 28, 2001
MAXIMUM PEAK STAGE					18.99	Nov 28, 2001
INSTANTANEOUS LOW FLOW					b0.00	May 20, 1999
ANNUAL RUNOFF (CFSM)	1.63		1.10		2.07	
ANNUAL RUNOFF (INCHES)	22.12		14.93		28.16	
10 PERCENT EXCEEDS	85		49		104	
50 PERCENT EXCEEDS	4.3		3.2		4.3	
90 PERCENT EXCEEDS	1.0		1.3		0.34	

a Occurred during period affected by backwater.
b May occur many days most years.
e Estimated



07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN—Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)
NOV													
05...	1000	.69	6.0	767	3.4	35	6.1	125	17.0	--	--	3.77	6.2
DEC													
01...	1440	1.4	91	768	7.8	67	6.3	101	9.0	31	38	3.46	6.8
JAN													
06...	1600	4.3	57	779	7.3	62	7.3	115	9.0	36	44	4.43	7.5
FEB													
03...	1600	4.1	85	770	10.7	86	6.8	167	6.5	56	68	7.26	14.7
MAR													
02...	1415	9.8	120	765	9.4	89	7.1	93	13.0	30	37	3.24	6.9
APR													
07...	1115	1.4	9.0	758	7.9	80	7.4	213	16.0	77	94	9.01	10.9
MAY													
04...	0840	4.3	34	765	6.2	64	7.1	130	17.5	41	50	3.49	7.4
JUN													
16...	1130	29	170	761	4.3	53	6.8	78	26.0	28	34	2.31	3.7
JUL													
15...	1600	10	70	770	3.6	47	6.9	132	30.5	42	52	5.27	6.3
SEP													
08...	1550	2.8	34	765	4.8	62	6.9	118	29.0	41	50	4.49	5.1

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)
NOV													
05...	.05	.10	.11	.014	.045	.112	<.006	<.006	<.006	<.005	<.005	.034	<.050
DEC													
01...	.05	.39	.40	.010	.214	.43	--	--	--	--	--	--	--
JAN													
06...	.04	.34	.36	.011	.092	.26	<.006	E.013	<.006	<.005	<.005	.106	<.050
FEB													
03...	.07	.54	.55	.010	.049	.22	--	--	--	--	--	--	--
MAR													
02...	.07	.70	.72	.022	.133	.38	<.006	E.458	<.006	<.005	<.005	E36.4	<.050
APR													
07...	--	--	--	--	--	--	<.006	E.349	.028	<.005	<.005	3.98	<.050
MAY													
04...	.09	.52	.56	.040	.068	.21	<.006	E.146	.012	<.005	<.005	.725	<.050
JUN													
16...	E.04	.32	.34	.020	.140	.41	<.006	E.037	<.006	<.005	<.005	.296	<.050
JUL													
15...	.17	.43	.49	.056	.108	.29	<.006	E.020	<.006	<.005	<.005	.175	<.050
SEP													
08...	.58	.24	.28	.047	.205	.40	<.006	E.011	<.006	<.005	<.005	.079	<.050

E--Estimated

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)
NOV													
05...	<.010	<.004	E.026	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
06...	<.010	<.004	E.018	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009
FEB													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
02...	E.006	<.004	E.074	<.020	.010	<.006	<.018	<.003	.034	<.009	<.02	<.004	<.009
APR													
07...	<.010	<.004	E.048	<.020	<.005	<.006	<.018	<.003	<.005	<.009	<.02	<.004	<.009
MAY													
04...	<.010	<.004	E.088	<.020	<.005	<.006	<.018	<.003	.014	<.009	<.02	E.004	<.009
JUN													
16...	<.010	<.004	E.456	<.020	.015	<.006	<.018	<.003	.025	<.009	<.02	<.004	<.009
JUL													
15...	<.010	<.004	E.123	<.020	<.005	<.006	<.018	<.003	.021	<.009	<.02	<.004	<.009
SEP													
08...	<.010	<.004	E.132	<.020	<.005	<.006	<.018	<.003	.008	<.009	<.02	<.004	<.009

Date	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)
NOV													
05...	<.005	<.003	<.004	<.035	<.027	<.015	.025	<.006	<.003	<.007	<.003	<.010	<.004
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
06...	<.005	<.003	<.030	<.035	<.027	<.015	E.010	<.006	<.003	<.007	<.003	<.010	<.004
FEB													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
02...	<.005	<.003	<.004	<.035	<.020	<.015	.036	<.006	<.003	<.007	<.003	<.010	<.004
APR													
07...	<.005	<.003	<.004	<.035	<.027	<.026	.072	<.006	<.003	<.007	<.003	<.010	<.004
MAY													
04...	<.005	<.003	<.004	<.035	<.027	<.015	.037	<.006	<.007	<.007	<.003	<.010	<.004
JUN													
16...	<.005	<.003	<.004	<.035	.043	<.015	.025	.013	<.003	<.007	<.003	<.010	<.004
JUL													
15...	<.005	<.003	<.004	<.035	.736	<.015	.055	<.006	<.003	<.007	<.003	<.010	<.004
SEP													
08...	<.005	<.003	<.020	<.035	.280	<.015	E.009	.025	<.003	<.007	<.003	<.010	<.004

07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
NOV													
05...	<.022	<.011	.03	<.004	<.025	<.011	<.02	2.18	<.02	<.034	<.02	<.010	<.002
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
06...	<.022	<.011	.02	.337	<.025	<.011	<.02	5.77	<.02	<.034	<.02	<.010	<.002
FEB													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
02...	.538	<.011	.01	.924	<.025	<.011	<.02	19.8	<.02	<.034	<.02	<.010	<.002
APR													
07...	<.022	<.011	.08	.162	<.025	<.011	<.02	3.68	<.02	<.034	<.02	<.010	<.002
MAY													
04...	<.022	<.011	.03	.047	<.025	<.011	<.02	2.09	<.02	<.034	<.02	<.010	<.002
JUN													
16...	.094	<.011	.04	.040	<.025	E.009	<.02	.666	<.02	<.034	<.02	<.010	<.002
JUL													
15...	.032	<.011	.12	<.004	<.025	<.011	<.04	.699	<.02	<.034	<.02	<.010	<.002
SEP													
08...	<.022	<.011	.02	<.040	<.025	<.011	<.02	2.37	<.02	<.100	<.02	<.010	<.002

Date	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)
NOV		
05...	<.009	23
DEC		
01...	--	72
JAN		
06...	<.009	51
FEB		
03...	--	84
MAR		
02...	E.006	82
APR		
07...	<.009	29
MAY		
04...	<.009	52
JUN		
16...	E.004	133
JUL		
15...	<.009	53
SEP		
08...	<.009	34

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07031740 WOLF RIVER AT HOLLYWOOD STREET AT MEMPHIS, TN

LOCATION.--Lat 35°11'16", long 89°58'32", Shelby County, Hydrologic Unit 08010210, at bridge on Hollywood Street, 0.2 mi south of Interstate 240, 6.1 mi upstream of Mississippi River, and at mile 5.2.

DRAINAGE AREA.--788 mi^2.

PERIOD OF RECORD.--October 2000 to current year. October 1985 to May 1989, continuous stage only, February 1995 to September 2000, unpublished stage and discharge.

GAGE.--Water-stage recorder. Datum of gage is 191.2 ft above NGVD of 1929 from reference mark provided by the City of Memphis.

REMARKS.--Records poor. During medium to high stages on the Mississippi River the stages are affected by backwater.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft^3/s, Feb. 5, gage height, 23.98 ft; minimum daily discharge, 310 ft^3/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	455	492	1,540	1,160	1,180	2,090	535	1,840	e1,750	e980	471	e620
2	421	478	1,370	1,000	996	2,320	538	1,480	e800	e940	521	e510
3	406	468	1,250	865	891	2,140	546	1,060	e640	e860	495	e560
4	395	458	1,480	842	767	1,940	547	850	e1,000	e840	482	e580
5	385	454	1,490	995	3,990	1,960	537	754	e900	815	476	e500
6	381	456	1,350	760	e7,500	2,200	529	707	e840	723	501	e430
7	379	457	1,080	702	e9,000	2,210	524	676	e800	965	656	e410
8	670	452	864	e700	e9,000	1,890	626	634	e720	870	550	e400
9	630	446	789	e730	e7,400	1,390	589	586	e640	1,310	456	e390
10	1,360	445	1,530	e720	e5,500	e1,250	594	548	e580	1,310	445	e385
11	766	447	1,060	e650	3,740	e1,110	607	523	e540	894	440	e380
12	595	479	880	e620	e3,000	e1,000	e900	528	e520	692	436	e390
13	520	562	805	e640	e2,600	e880	e2,400	932	e530	640	426	e460
14	600	465	881	e690	e2,250	e700	2,420	1,860	e540	614	414	e440
15	555	897	898	e620	e2,100	e560	2,510	1,790	e840	774	407	e500
16	470	2,210	848	e570	e2,300	e540	2,050	1,450	e1,100	970	402	e470
17	655	1,140	787	e600	e2,350	e540	1,780	1,350	e880	1,020	398	e530
18	535	2,260	742	e660	e2,200	e540	1,500	1,150	e760	814	397	e590
19	495	3,330	706	e700	e2,100	e790	1,170	1,150	e700	e800	393	e490
20	479	2,560	673	e640	e2,000	e1,100	867	1,260	e670	e790	386	e430
21	463	2,850	644	e600	1,840	e1,400	1,130	1,300	e900	e790	426	e400
22	462	2,890	627	e550	1,520	902	6,820	1,160	e1,650	796	506	e370
23	463	2,670	1,520	e540	1,230	705	6,700	876	e2,000	776	569	e365
24	457	3,650	1,150	561	1,030	635	7,810	667	e2,200	780	563	e340
25	454	2,350	865	6,170	938	587	6,300	567	e2,200	742	564	e335
26	588	2,130	773	4,420	886	566	4,850	512	e1,800	1,290	595	e330
27	708	2,130	689	4,590	854	551	4,230	477	e1,400	1,060	473	e325
28	751	1,820	661	3,450	808	539	3,620	474	e1,200	708	436	e320
29	618	1,540	1,800	2,860	760	577	3,050	470	e1,050	630	557	e315
30	547	1,540	2,400	2,180	---	569	2,460	903	e1,000	551	e580	e310
31	515	---	1,700	1,710	---	560	---	4,150	---	499	e700	---
TOTAL	17,178	42,526	33,852	42,495	80,730	34,741	68,739	32,684	31,150	26,243	15,121	12,875
MEAN	554	1,418	1,092	1,371	2,784	1,121	2,291	1,054	1,038	847	488	429
MAX	1,360	3,650	2,400	6,170	9,000	2,320	7,810	4,150	2,200	1,310	700	620
MIN	379	445	627	540	760	539	524	470	520	499	386	310
CFSM	0.70	1.80	1.39	1.74	3.53	1.42	2.91	1.34	1.32	1.07	0.62	0.54
IN.	0.81	2.01	1.60	2.01	3.81	1.64	3.25	1.54	1.47	1.24	0.71	0.61

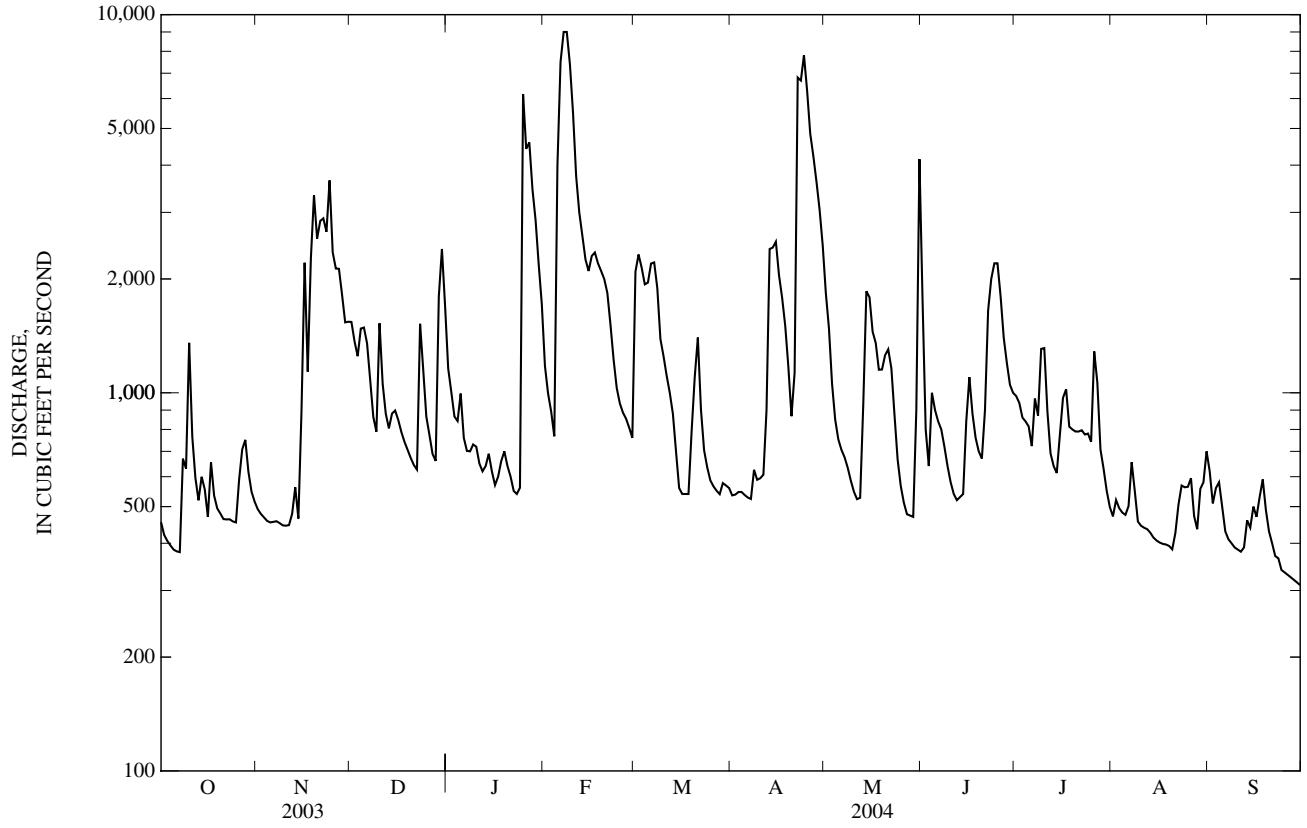
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	1,097	966	1,878	1,411	2,262	2,303	1,364	1,500	878	651	701	742
MAX	3,754	1,755	5,792	2,375	4,406	4,847	2,291	4,089	2,211	858	1,468	2,276
(WY)	(2003)	(1997)	(2002)	(1999)	(2003)	(1997)	(2004)	(2003)	(1997)	(1997)	(1998)	(2002)
MIN	248	348	573	452	554	1,038	733	589	452	391	334	268
(WY)	(2001)	(2000)	(2001)	(2000)	(1995)	(2001)	(1995)	(2000)	(2002)	(2001)	(2000)	(2000)

07031740 WOLF RIVER AT HOLLYWOOD STREET AT MEMPHIS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	528,722		438,334			
ANNUAL MEAN	1,449		1,198		1,345	
HIGHEST ANNUAL MEAN					1,919	2003
LOWEST ANNUAL MEAN					616	2000
HIGHEST DAILY MEAN	13,800	May 8	a9,000	Feb 7	a27,000	Dec 1, 2001
LOWEST DAILY MEAN	351	Sep 20	a310	Sep 30	190	May 26, 2002
ANNUAL SEVEN-DAY MINIMUM	398	Jul 7	325	Sep 24	209	May 21, 2002
ANNUAL RUNOFF (CFSM)	1.84		1.52		1.71	
ANNUAL RUNOFF (INCHES)	24.96		20.69		23.20	
10 PERCENT EXCEEDS	2,550		2,330		2,940	
50 PERCENT EXCEEDS	760		736		674	
90 PERCENT EXCEEDS	420		440		321	

a Occurred during period of estimated record.
e Estimated



07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN

LOCATION.--Lat 35°02'59", long 89°49'08", Shelby County, Hydrologic Unit 08010211, on right bank, 100 ft upstream from bridge on Winchester Road, 2.6 mi south of Germantown, and at mile 17.3.

DRAINAGE AREA.--68.2 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, 1959-1964 and 1969; October 1969 to May 1985, October 1985 to January 1995, June 1996 to current year.

REVISED RECORDS.--WRD TN-74-1: Drainage area, WRD TN-87-1 (P).

GAGE.--Data collection platform. Datum of gage is 262.92 ft above NGVD of 1929, (from levels by National Resources Conservation Service).

REMARKS.--Records fair except for flows below 1.0 ft^3/s and estimated discharges which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 25	0445	5,630	15.88	Apr 22	1145	4,030	14.24
Feb 5	1045	7,460	17.68	Apr 24	0200	*8,910	*19.08
Mar 20	2015	7,730	17.94				

Minimum discharge, 0.04 ft^3/s, Aug. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.8	14	45	10	1,130	5.1	123	34	39	4.7	2.2
2	1.5	3.5	7.6	29	63	392	7.8	78	7.0	40	2.4	1.7
3	1.2	2.8	82	19	48	82	4.3	30	3.1	6.5	1.4	55
4	1.4	3.1	141	22	22	48	3.2	13	2.9	85	1.1	28
5	1.2	3.8	63	56	4,300	111	2.9	9.2	1.3	9.1	2.7	34
6	1.3	3.6	27	26	751	229	3.0	7.3	5.0	2.0	1.4	8.4
7	55	3.7	13	13	100	64	4.4	6.0	4.4	46	0.77	4.4
8	179	7.2	8.4	12	48	30	4.3	5.5	1.8	23	0.47	3.2
9	143	2.4	55	18	46	16	3.2	4.2	1.6	3.9	0.30	3.2
10	370	2.3	465	9.8	56	9.4	7.2	4.2	1.4	2.1	0.26	4.6
11	53	3.6	107	7.2	65	7.1	8.6	3.7	1.8	1.3	0.17	3.8
12	8.4	5.7	38	5.8	536	5.7	332	72	1.0	72	0.09	24
13	2.8	7.6	52	5.2	124	5.5	853	170	12	13	0.06	107
14	59	4.7	118	4.7	57	6.0	230	e247	33	3.0	0.35	185
15	10	208	54	3.4	340	6.0	50	e275	60	53	1.3	30
16	2.0	656	26	3.0	302	5.7	27	66	29	127	1.5	8.4
17	28	120	16	13	75	4.9	14	35	8.5	37	1.7	6.6
18	3.6	1,050	10	98	43	23	8.0	16	59	3.6	3.1	4.4
19	1.1	711	6.6	47	30	7.7	5.7	10	84	1.2	3.0	e4.0
20	0.94	141	4.7	25	21	1,270	4.5	7.1	5.3	0.46	106	e3.5
21	1.1	45	4.0	17	13	1,110	288	5.1	59	0.33	30	3.2
22	0.83	24	6.6	15	10	99	2,630	4.3	550	0.45	5.8	2.3
23	1.0	238	168	6.3	8.4	42	765	3.9	439	86	3.7	2.2
24	0.82	714	83	92	13	24	3,400	3.6	255	598	45	1.8
25	12	127	31	3,290	16	14	1,010	3.0	338	58	96	1.7
26	254	45	15	504	43	14	141	3.7	94	13	18	1.5
27	31	336	9.0	124	25	8.5	55	4.0	19	4.8	4.5	1.6
28	6.9	191	7.2	53	13	7.1	31	6.6	16	3.1	197	1.5
29	3.3	57	1,120	33	8.9	31	20	6.0	4.8	2.6	51	1.4
30	2.8	26	439	21	---	11	20	251	3.0	16	6.9	2.3
31	2.8	---	116	14	---	5.9	---	510	---	29	4.3	---
TOTAL	1,240.69	4,746.8	3,307.1	4,631.4	7,187.3	4,819.5	9,938.2	1,983.4	2,133.9	1,379.44	594.97	540.9
MEAN	40.0	158	107	149	248	155	331	64.0	71.1	44.5	19.2	18.0
MAX	370	1,050	1,120	3,290	4,300	1,270	3,400	510	550	598	197	185
MIN	0.82	2.3	4.0	3.0	8.4	4.9	2.9	3.0	1.0	0.33	0.06	1.4
CFSM	0.59	2.32	1.56	2.19	3.63	2.28	4.86	0.94	1.04	0.65	0.28	0.26
IN.	0.68	2.59	1.80	2.53	3.92	2.63	5.42	1.08	1.16	0.75	0.32	0.30

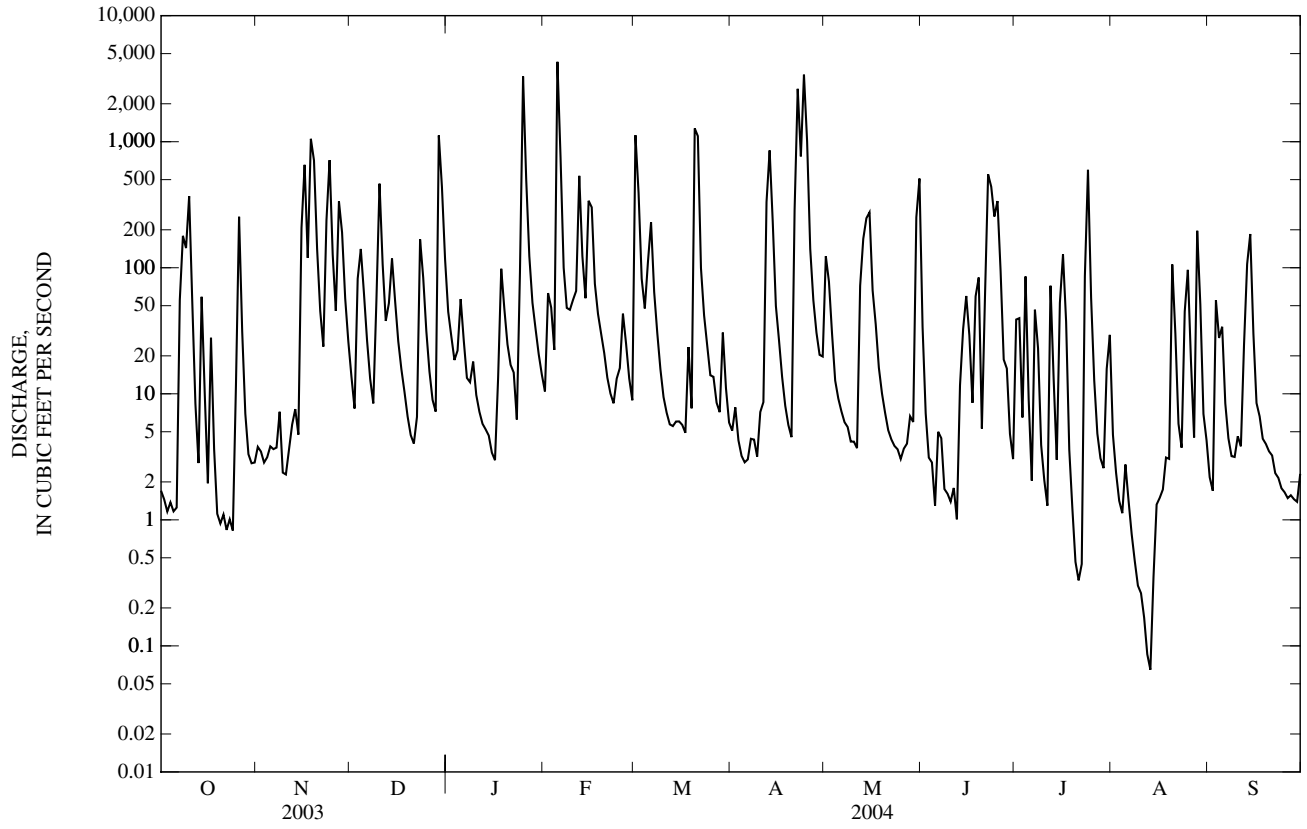
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	33.5	104	179	152	200	205	182	121	64.4	42.6	19.7	29.9
MAX	429	418	616	531	604	659	834	525	300	354	91.9	232
(WY)	(2003)	(2002)	(1983)	(1974)	(1989)	(1980)	(1991)	(2003)	(1974)	(1989)	(2002)	(2002)
MIN	0.00	0.21	2.25	0.41	14.6	15.2	9.44	3.74	3.09	0.70	0.37	0.09
(WY)	(1970)	(1972)	(1977)	(1986)	(1978)	(1986)	(1978)	(1988)	(1988)	(1976)	(1980)	(1984)

07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	52,908.49		42,503.60			
ANNUAL MEAN	145		116		111	
HIGHEST ANNUAL MEAN					215	1979
LOWEST ANNUAL MEAN					22.4	1986
HIGHEST DAILY MEAN	4,470	May 6	4,300	Feb 5	9,590	Oct 10, 2002
LOWEST DAILY MEAN	0.82	Oct 24	0.06	Aug 13	0.00	Oct 1, 1969
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 18	0.24	Aug 8	0.00	Oct 1, 1969
MAXIMUM PEAK FLOW					14,600	Oct 10, 2002
MAXIMUM PEAK STAGE					27.11	Mar 12, 1975
INSTANTANEOUS LOW FLOW					a0.00	Oct 1, 1969
ANNUAL RUNOFF (CFSM)	2.13		1.70		1.63	
ANNUAL RUNOFF (INCHES)	28.86		23.18		22.20	
10 PERCENT EXCEEDS	337		248		208	
50 PERCENT EXCEEDS	10		13		5.7	
90 PERCENT EXCEEDS	2.1		1.6		0.18	

a May occur many days most years.
e Estimated



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 hydrologic studies 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 that 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.

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN					
Whiteoak Creek at Sunbright, TN (03409000)	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 NGVD of 1929. Drainage area is 13.5 mi^2.	1934, 1955-82, 1985-99 2000-04	9-17-04	9.22	-	5-27-73	17.24a	5,560
Wolf River near Byrdstown, TN (03416000)	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 mi 26.2. Datum of gage is 707.54 ft, Sandy Hook Datum. Drainage area is 106 mi^2.	1942-91†, 1992-99 2000-04	2-6-04	10.93	11,900	9-2-82	17.14	23,500
Cane Creek near Spencer, TN (03419200)	Lat 35°44'36", long 85°23'33", Van Buren County, Hydrologic Unit 05130108, at bridge on State Highway 30, 4.0 mi east of Spencer. Drainage area is 134 mi^2.	1997-99 2000-04	6-25-04	10.92	-	1-23-02	13.10	-
Charles Creek near McMinnville, TN (03421200)	Lat 35°43'00", long 85°46'05", Warren County, Hydrologic Unit 05130107, at bridge on county road at Faulkner Springs, 2.7 mi north of McMinnville. Drainage area is 31.1 mi^2.	1955-99 2000-04	2-5-04	10.16	4,030	6-22-89	17.03	24,800
Mulherrin Creek near Gordonsville, TN (03424900)	Lat 36°11'28", long 85°57'11", Smith County, Hydrologic Unit 05130108, at bridge on State Highway 53, 1.3 mi upstream from mouth, 1.5 mi northwest of Gordonsville. Drainage area is 26.9 mi^2.	1982, 1986-99 2000-04	2-5-04	20.39	-	2-14-89	23.85	-

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Peyton Creek near Monoville, TN (03425040)	Lat 36°18'37", long 85°59'21", Smith County, Hydrologic Unit 05130201, at county road bridge 1.3, mi north of Monoville. Drainage area is 40.0 mi^2.	1986-99 2000-04	2-5-04	17.07	-	3-17-02	16.98	-
Second Creek near Walnut Grove, TN (03425365)	Lat 36°24'01", long 86°12'48", Trousdale County, Hydrologic Unit 05130201, at culvert on State Highways 10 and 25, 2.6 mi west of Hartsville. Drainage area is 3.47 mi^2.	1986-99 2000-04	2-5-04	24.10	-	6-10-98	29.48	-
Station Camp Creek at Cottontown, TN (03425637)	Lat 36°27'06", long 86°32'16", Sumner County, Hydrologic Unit 05130201, at State Highway 25 bridge in Cottontown.	1995-99 2000-04	2-5-04	14.19	-	6-9-98	16.74	-
East Fork Stones River at Woodbury, TN (03426800)	Lat 35°49'41", long 86°04'37", Cannon County, Hydrologic Unit 05130203, at bridge on U.S. Highway 70S at Woodbury. Datum of gage is 676.23 ft above NGVD of 1929. Drainage area is 39.1 mi^2.	1962-89† 1990-99 2000-04	2-5-04	10.88	2,990	3-15-73	16.75	13,200
Brawleys Fork below Bradyville, TN (03426874)	Lat 35°44'44", long 86°10'14", Cannon County, Hydrologic Unit 05130203, at bridge on Bradyville Pike, 0.5 mi northwest of Bradyville. Drainage area is 15.4 mi^2.	1983-99 2000-04	6-25-04	24.84	2,080	5-7-03	28.02	2,860
Reed Creek near Bradyville, TN (034269424)	Lat 35°44'44", long 86°12'31", Rutherford County, Hydrologic Unit 05130203, at bridge on Bradyville Pike, 2.4 mi northwest of Bradyville. Drainage area is 3.52 mi^2.	1983-99 2000-04	6-25-04	2.68	-	4-20-95	5.86	-
Bushman Creek at Pitts Lane Ford near Compton, TN (03427690)	Lat 35°53'09", long 86°20'45", Rutherford County, Hydrologic Unit 05130203, on right bank 75 ft upstream of bridge on De Jarnett Lane, 0.1 mi west of intersection of De Jarnett Lane and State Highway 96, 1.6 mi southwest of Compton. Datum of gage is 569.74 ft above NGVD of 1929. Drainage area is 9.67 mi^2.	1989-92†, 1993-99 2000-04	2-5-04	5.36	1,170	7-21-96	7.24	2,020
Lytle Creek at Sanbyrne Drive at Murfreesboro, TN (03428043)	Lat 35°49'38", long 86°23'28", Rutherford County, Hydrologic Unit 05130203, at bridge on Sanbyrne Drive, 1 mi south of intersection of Highways 41 and 231 in Murfreesboro. Datum of gage is 589.73 ft above NGVD of 1929. Drainage area is 17.6 mi^2.	1978-90, 1991-92†, 1993-99 2000-01 2002c 2003 2004k	2-5-04	6.21	--	2-5-04	6.21	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
West Fork Stones River near Smyrna, TN (03428500)	Lat 35°56'25", long 86°27'57", 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 mi 6.4. Datum of gage is 500 ft, above NGVD of 1929. Drainage area is 237 mi^2, includes 43 mi^2 without surface drainage.	1965-91†, 1992-99 2000-04	2-6-04	15.41	18,900	3-13-75	19.18	63,800
McCrory Creek at Ironwood Drive at Donelson, TN (03430118)	Lat 36°09'08", long 86°39'01", Davidson County, Hydrologic Unit 05130203, at bridge under Ironwood Drive, 1.3 mi southeast of intersection of U.S. Highway 70 (Lebanon Road) and Donelson Pike in Donelson. Datum of gage is 430.63 ft above NGVD of 1929. Drainage area is 7.31 mi^2.	1977-99d 2000-04b	2-5-04	7.34	1,520	5-6-84	9.87	2,850
Mill Creek at Nolensville, TN (03430400)	Lat 35°57'32", long 86°40'31", Williamson County, Hydrologic Unit 05130202, at bridge on Sunset Road, 0.6 mi northwest of Nolensville. Datum of gage is 586.18 ft above NGVD of 1929. Drainage area is 12.0 mi^2.	1965-99 2000-04b	2-5-04	7.35	4,710	5-7-84	9.82	11,400
Mill Creek near Antioch, TN (03431000)	Lat 36°04'54", long 86°40'51", 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 NGVD of 1929. Drainage area is 64.0 mi^2.	1954-61†, 1962-63, 1964-75†, 1976-92, 1993-96† 1997-99 2000-04	2-5-04	16.71	9,890	5-4-79	23.78	30,100
Sevenmile Creek at Blackman Road, near Nashville, TN (03431040)	Lat 36°04'21", long 86°44'00", Davidson County, Hydrologic Unit 05130202, at bridge on Blackman Road, 7.0 mi southeast of State capitol in Nashville. Datum of gage is 499.08 ft above NGVD of 1929. Drainage area is 12.2 mi^2.	1965-99 2000-03d 2004b	2-5-04	5.72	1,710	6-4-98	10.57	10,500
Mill Creek tributary at Glenrose Avenue, at Woodbine, TN (03431062)	Lat 36°07'02", long 86°43'37", Davidson County, Hydrologic Unit 05130202, at culvert under Glenrose Avenue, 1.1 mi 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 NGVD of 1929. Drainage area is 1.17 mi^2.	1977-99d 2000-03d 2004b	8-5-04	4.67	280	5-6-84	9.12	833

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
West Fork Browns Creek at General Bates Drive, at Nashville, TN (03431120)	Lat 36°06'29", long 86°47'07", Davidson County, Hydrologic Unit 05130202, at bridge on General Bates Drive, 4.0 mi south of State capitol in Nashville. Datum of gage is 499.94 ft above NGVD of 1929. Drainage area is 3.30 mi^2.	1965-99 2000-03 2004b	3-5-04	4.39	511	3-29-75	7.00	2,110
East Fork Browns Creek at 100 Oaks Mall, at Nashville, TN (03431242)	Lat 36°06'36", long 86°46'03", Davidson County, Hydrologic Unit 05130202, at culvert on access road to CarMax, 300 ft ft west of 100-Oaks Shopping Center, and 4.0 mi southeast and of State capitol in Nashville. Datum of gage is 496.69 ft above NGVD of 1929. Drainage area is 1.58 mi^2.	2000-03 2004b	11-18-03	498.85	-	8-3-01	501.80	-
Browns Creek at Factory Street, at Nashville, TN (03431340)	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 mi southeast of State capitol in Nashville. Datum of gage is 420.66 ft above NGVD of 1929. Drainage area is 13.2 mi^2.	1965-99 2000-03 2004b	2-5-04	6.02	1,010	9-13-79	10.89	7,800
Pages Branch at Avondale, TN (03431490)	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 mi upstream from mouth. Drainage area is 2.01 mi^2.	1977-99d 2000-03d 2004b	2-5-04	4.79	363	6-5-98	6.32	1,430
Earthman Fork at Whites Creek, TN (03431550)	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. Drainage area is 6.29 mi^2.	1965-99 2000-03 2004b	8-5-04	5.90	850	5-3-93	9.43	2,510
Ewing Creek below Knight Road, near Bordeaux, TN (03431581)	Lat 36°13'55", long 86°48'14", Davidson County, Hydrologic Unit 05130202, at downstream side of bridge on Knight Road, 3.0 mi northeast of Bordeaux. Datum of gage is NGVD of 1929. Drainage area is 13.3 mi^2.	1976-99 2000-03 2004b	2-5-04	446.79	-	6-9-86	449.80	-
Sugartree Creek at YMCA Access Road, at Green Hills, TN (03431677)	Lat 36°06'13", long 86°49'12", Davidson County, Hydrologic Unit 05130202, at bridge on YMCA Access Road, 0.5 mi southwest of Hillsboro High School, at Green Hills. Datum of gage is NGVD of 1929. Drainage area is 1.51 mi^2.	1976-99 2000-03 2004b	4-22-04	542.86	-	9-13-79	545.23	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Sugartree Creek at Abbott Martin Road, at Green Hills, TN (03431679)	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 NGVD of 1929. Drainage area is 2.19 mi^2.	1976-99 2000-03 2004b	4-22-04	529.54	-	11-27-94	531.54	-
Sycamore Creek near Ashland City, TN (03431800)	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 mi 8.6. Elevation of gage is 400 ft above NGVD of 1929, from topograhic map. Drainage area is 97.2 mi^2.	1961-87†, 1988-91†, 1992-99 2000-03 2004b	2-5-04	9.89	5,240	2-21-89	13.50	18,500
Murfrees Fork above Burwood, TN (03432470)	Lat 35°48'58", long 86°57'20", Williamson County, Hydrologic Unit 05130204, at county road bridge, just downstream from Cayce Branch, 1.6 mi east of Burwood. Drainage area is 7.43 mi^2.	1986-99 2000-04	2-5-04	20.88	-	4-86	26.85	-
Little Harpeth River at Granny White Pike, at Brentwood, TN (03432925)	Lat 36°01'30", long 86°49'09", Williamson County, Hydrologic Unit 05130204, at bridge on Granny White Pike, 2.0 mi southwest of Brentwood. Datum of gage is 618.29 ft above NGVD of 1929. Drainage area is 22.0 mi^2.	1978-99 2000-03 2004b	2-3-04	12.74	unknown	5-4-79	17.55	9,260
Jones Creek near Burns, TN (03434590)	Lat 36°06'15", long 87°19'05", Dickson County, Hydrologic Unit 05130204, at bridge on Rock Church Road, 3.5 mi north of Burns and at mi 21.9. Drainage area is 13.3 mi^2.	1984-99 2000-04	5-30-04	9.07	3,000	5-6-84	9.87	3,750
Bartons Creek near Cumberland Furnace, TN (034350021)	Lat 36°15'02", long 87°20'00" Dickson County, Hydrologic Unit 05130205, at bridge on Stayton road, 1.9 mi southeast of Cumberland Furnace. Drainage area is 22.3 mi^2.	1984-99 2000-04	7-31-04	14.29	-	4-16-98	15.88	-
Louise Creek near Grays Chapel, TN (034350035)	Lat 36°21'52", long 87°20'30", Montgomery County, Hydrologic Unit 05130206, at bridge on old State Highway 48, 2.8 mi south of Liverworth. Drainage area is 12.7 mi^2.	1995-99 2000-04	4-22-04	8.69	-	9-22-03	12.21	-
Honey Run Creek near Cross Plains, TN (034351105)	Lat 36°31'52", long 87°40'10" Robertson County, Hydrologic Unit 05130206, at county road bridge, 1.2 mi north-northwest of Calistia. Drainage area is 17.0 mi^2.	1995-99 2000-04	2-5-04	12.74	-	6-9-98	16.66	-

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			CUMBERLAND RIVER BASIN--Continued					
Honey Run Creek below Cross Plains, TN (034351113)	Lat 36°32'31", long 86°42'14", Robertson County, Hydrologic Unit 05130206, at Empson Bridge on county road, 0.4 mi above mouth of Empson branch, 0.6 mi southwest of Cross Plains. Drainage area is 20.0 mi^2.	1986-99 2000-04	2-5-04	21.71	-	9-22-03	23.93	-
Beaver Dam Creek above Springfield (03435739)	Lat 36°31'40", long 86°49'29" Robertson County, Hydrologic Unit 05130206, at county road bridge, 3.6 miles northeast of Springfield, and at mile 1.6. Drainage area is 12.9 mi^2.	1995-99 2000-04	4-22-04	12.06	-	6-9-98	15.17	-
Sulphur Fork Red River above Springfield, TN (03435770)	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. Datum of gage is 538.17 ft above NGVD of 1929. Drainage area is 65.6 mi^2.	1975-88†, 1988-99 2000-04	4-22-04	11.27	4,020	3-3-97	14.52	12,100
Spring Creek tributary near Cedar Hill, TN (03435930)	Lat 36°32'08", long 86°59'26", Robertson County, Hydrologic Unit 05130206, at culvert on Kinney Road, 1.2 mi southeast of Cedar Hill. Drainage area is 1.40 mi^2.	1986-99 2000-04	4-22-04	20.72	96.8	5-17-90	22.23	141
Sulphur Fork Red River above Port Royal, TN (03436082)	Lat 36°32'23", long 87°06'51", Robertson County, Hydrologic Unit 05130206, at bridge on State Highway 76 1.7 miles southeast of Port Royal. Drainage area is 214 mi^2.	1995-99 2000-04	4-22-04	31.41	-	3-3-97	42.06	-
			TENNESSEE RIVER BASIN					
Yellow Creek near Shiloh, TN (03436700)	Lat 36°20'55", long 87°32'20", Montgomery County, Hydrologic Unit 05130205, at bridge on State Highway 13, 2.6 mi west of Shiloh, 3.0 mi downstream from Leatherwood Creek, 9.0 mi east of Erin. Datum of gage is 390.13 ft above NGVD of 1929. Drainage area is 124 mi^2.	1957-80† 1982-98 2000c 2001-03	4-23-04	9.91	--	5-6-84	17.75	16,200

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Clear Fork near Fairview, TN (03465780)	Lat 36°19'33", long 82°33'47", Washington County, Hydrologic Unit 06010108, at culvert on State Highway 81, 2.0 mi southwest of Sulfur Springs, and at mi 3.8. Drainage area is 10.5 mi^2.	1983-99 2000-04	11-19-03	>5.63	-	1-23-02	7.67	-
Lick Creek near Albany, TN (03466890)	Lat 36°14'54", long 82°55'34", Greene County, Hydrologic Unit 06010108, at State Highway 70 bridge, 0.3 mi downstream from Puncheon Camp Creek, 1.0 mi northwest of Albany, and at mi 33.7. Drainage area is 172 mi^2.	1984-99 2000-04	11-19-03	15.20	6,020	3-27-94	17.41	10,800
Bent Creek at Taylor Gap, TN (03467480)	Lat 36°14'08", long 83°06'41", Hamblen County, Hydrologic Unit 06010108, at bridge on county road (Mountain Valley Road), 2.1 mi southwest of Bulls Gap, 5.0 mi southeast of Russellyille. Drainage area is 2.18 mi^2.	1986-99 2000-04	11-19-03	12.56	1,460	3-27-94	15.56	2,550
Cedar Creek near Valley Home, TN (03467993)	Lat 36°08'03", long 83°18'47", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 1.7 mi southeast of Valley Home, 1.9 mi southeast of Witt, 2.2 mi northwest of White Pine. Drainage area is 2.01 mi^2.	1986-99 2000-04	5-31-04	13.05	182	4-29-97	13.38	210
Sinking Fork at White Pine, TN (03467998)	Lat 36°07'21", long 83°17'44", Jefferson County, Hydrologic Unit 06010108, at culvert on county road, 0.9 mi northwest of White Pine, 2.7 mi northeast of Kimbrough Crossroad. Drainage area is 6.38 mi^2.	1986-99 2000-04	11-19-03	6.06	803	7-13-00	7.42	1,740
Dumplin Creek at Mt. Hareb, TN (03470215)	Lat 36°04'59", long 83°25'51", Jefferson County, Hydrologic Unit 06010107, at culvert on county road, 0.8 mi southeast of Mt. Hareb, 4.3 mi southeast of Jefferson City, 4.6 mi north of Dandridge. Drainage area is 3.65 mi^2.	1986-99 2000-04	11-19-03	10.15	95	3-18-02	11.11	250
Indian Creek at Childress, TN (03476960)	Lat 36°25'38", long 82°15'54", Sullivan County, Hydrologic Unit 06010102, at bridge on U.S. Highway 19, 3.3 mi south of Bluff City, and at mi 4.6. Drainage area is 6.79 mi^2.	1983-99 2000-04	11-19-03	9.75	-	5-7-84	10.73	-

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Reedy Creek at Orebank, TN (03487550)	Lat 36°33'42", long 82°27'35", Sullivan County, Hydrologic Unit 06010102, 80 ft upstream from culvert, 0.3 mi north of Orebank, 1.0 mi upstream from Gaines Branch, and at mi 9.8. Drainage area is 36.3 mi^2.	1963-89†, 1990-99 2000-04	4-13-04	7.49	1,020	10-2-77	11.61	4,940 e
Forgey Creek at Zion Hill, TN (03490522)	Lat 36°29'12", long 82°53'08", Hawkins County, Hydrologic Unit 06010104, at culvert on county road (Carter Valley Road), 0.9 mi north of Zion Hill, 7.8 mi northeast of Rogersville. Drainage area is 0.86 mi^2.	1986-99 2000-04	4-13-04	16.22	<56	7-21-99	21.93	321
Robertson Creek near Persia, TN (03491540)	Lat 36°20'24", long 83°02'27", Hawkins County, Hydrologic Unit 06010104, at bridge on State Highway 113, 0.25 mi below Mooney Branch, and at mi 3.0. Drainage area is 14.6 mi^2.	1986-99 2000-04	11-19-03	11.03	742	8-13-93 3-27-94	12.50 12.50	1,120 1,120
Little Ellejoy Creek at Prospect, TN (03498010)	Lat 35°48'23", long 83°47'57" Blount County, Hydrologic Unit 06010201, at bridge on county road, 0.4 mi south of Prospect, at mile 1.93. Drainage area is 5.48 mi.	1995-99 2000-04	6-25-04	6.47	-	5-19-95	6.98	-
Stock Creek at Pickins Gap Road near High Bluff, TN (034991105)	Lat 35°53'03", long 83°50'18" Knox County, Hydrologic Unit 06010201, at bridge on Pickins road, near High Bluff, TN.	2000-04d	3-6-04	8.05	260	8-7-03	9.59	-
Ten Mile Creek at Robinson Road near Knoxville, TN (03499175)	Lat 35°56'42", long 84°03'24" Knox County, Hydrologic Unit 06010201, at bridge on Robinson Creek road, near Cedar Bluff, TN.	2000-04d	3-6-04	6.91	-	3-17-02 9-22-02	7.68 7.68	-
Big War Creek at Luther, TN (03527800)	Lat 36°27'18", long 83°14'29", Hancock County, Hydrologic Unit 06010205, at bridge on county road, 0.4 mi south of Luther 0.8 mi northwest of Yount Town, 6.0 mi southwest of Sneedville. Drainage area is 22.3 mi^2.	1986-99 2000-04	11-19-03	7.47	1,300	4-17-98	10.61	4,100
Crooked Creek near Maynard-ville, TN (03528390)	Lat 36°15'56", long 83°50'25", Union County, Hydrologic Unit 06010205, at culvert on State Highway 170, 2.5 mi northwest of Maynardville, 5.5 mi north-east of Paulette. Drainage area is 2.23 mi^2.	1986-99 2000-04	3-6-04	2.98	203	4-17-98	9.76	1,400

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Coal Creek at Lake City, TN (03534000)	Lat 36°13'15", long 84°09'26" Anderson County, Hydrologic Unit 06010207, at bridge on U.S. Highway 25-W, at Lake City. Datum of gage is 842.76 ft above sea level. Drainage area is 24.5 mi^2.	1932-34†, 1955-99 2000-04	9-17-04	7.80	4,630	4-17-98	10.65	8,080
Willow Fork near Halls Crossroads, TN (03535180)	Lat 36°05'59", long 83°54'27", Knox County, Hydrologic Unit 06010207, at culvert under Quarry Road, 1.7 mi northeast of Halls Crossroads. Datum of gage is 1,027.82 ft above NGVD of 1929. Drainage area is 3.23 mi^2.	1967-99 2000-04	3-6-04	6.09	297	4-17-98	8.40	990
Beaver Creek near Willow Fork at Halls Crossroads, TN (035351830)	Lat 36°04'57", long 83°55'34", Knox County, Hydrologic Unit 06010207, at bridge on Old Andersonville Pike.	1998-99d 2000-04d	3-6-04	12.47	1,240	2-16-03	16.62	3,200
Beaver Creek at Brickyard Road near Powell, TN (03535195)	Lat 36°01'37", long 84°01'39", Knox County, Hydrologic Unit 06010207, at bridge on Brickyard Road, near Powell High School. Drainage area is 52.5 mi^2.	1998-99d 2000-04d	2-6-04	10.40	-	2-16-03	15.16	-
Conner Creek at Steele Road near Solway, TN (03535617)	Lat 35°56'05", long 84°11'18" Knox County, Hydrologic Unit 06010201, at bridge on Steele road near Solway	2000-04d	3-6-04	8.46	-	3-6-04	8.46	-
Coker Creek near Ironsburg, TN (03555900)	Lat 35°13'05", long 84°20'28", Monroe County, Hydrologic Unit 06020002, at bridge on State Highway 68, 4.2 mi southwest of Coker Creek. Drainage area is 22.4 mi^2.	1983-93f 1997-99 2000-04	9-17-04	10.98	-	5-5-03	14.44	-
Oostanaula Creek above dam at Athens, TN (03565432)	Lat 35°27'38", long 84°34'21", McMinn County, Hydrologic Unit 06020002, 600 ft above dam on right bank of old water storage lake, 1.1 mi northeast of Athens, TN.	2003-04	4-13-04	-	<3.06	5-6-04	5.69	-
Oostanaula Creek at Long Mill Road near Athens, TN (03565448)	Lat 35°24'34", long 84°35'59", McMinn County, Hydrologic Unit 06020002, at bridge on County Road, 1.9 mi southwest of sewage treatment plant, 1.7 mi south of Athens, TN	2003-04	4-16-04	10.98	-	5-5-03	14.44	-
Wolftever Creek near Ooltewah, TN (03566420)	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 mi 16.1. Drainage area is 18.8 mi^2.	1964-89†, 1992-99 2000-04	9-17-04	9.84	-	5-6-03	>12.64	-

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
North Chickamauga Creek at Greens Mill, near Hixson, TN (03566599)	Lat 35°10'30", long 85°13'40", Hamilton County, Hydrologic Unit 06020001, at bridge on Boy Scout Road, 2.3 mi north of Hixson. Drainage area is 99.5 mi^2.	1925,1944, 1953-56, 1980-99 2000-04	9-17-04	35.50	-	10-5-95	36.19	-
Stringers Branch at Leawood Drive, at Red Bank, TN (03569168)	Lat 35°07'00", long 85°17'28", Hamilton County, Hydrologic Unit 06020001, at bridge on Leawood Drive at Red Bank. Drainage area is 1.54 mi^2.	1980-99 2000-04	2-6-04	23.96	-	8-11-96	28.24	-
Little Sequatchie River at Sequatchie, TN (03571500)	Lat 35°07'47", long 85°35'10", Marion County, Hydrologic Unit 06020004, at Highway 27 bridge, 1.0 mi northeast of Sequatchie. Drainage area is 116 mi^2.	1925,1929, 1930, 1932-34†, 1944, 1951-54, 1965, 1979-99 2000-04	2-7-04	10.87	9,040	12-22-90	11.78	10,600
Standifer Branch at Jasper, TN (03571730)	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 mi east of courthouse, 0.8 mi above Town Creek, at Jasper. Drainage area is 15.3 mi^2.	1982-99 2000-04	2-7-04	16.97	-	5-6-03	20.40	-
Battle Creek near Monteagle, TN (03571800)	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 mi southeast of Monteagle. Datum of gage is 621.51 ft above NGVD of 1929. Drainage area is 50.4 mi^2.	1955-99 2000-04	2-7-04	9.40	5,180	3-12-63	12.20	10,200
Richland Creek near Cornersville, TN (03583300)	Lat 35°19'10", long 86°52'20", Marshall County, Hydrologic Unit 06030004, at bridge on U.S. Highway 31-A, 3.4 mi southwest of Cornersville. Datum of gage is 754.28 ft above NGVD of 1929. Drainage area is 47.5 mi^2.	1962-68†, 1969-99 2000-04	6-25-04	12.85	5,520	7-11-89	16.58	11,400
Indian Creek near Olivehill, TN (03594153)	Lat 35°16'33", long 88°01'12", Hardin County, Hydrologic Unit 06040001, on State Highway 64, 14 mi east of Savannah. Datum of gage is 440.00 ft above NGVD of 1929. Drainage area is 158 mi^2.	1997-99 2000-04	2-6-04	11.83	-	1-22-99	17.06	-
Wartrace Creek above Bell Buckle, TN (03597300)	Lat 35°37'45", long 86°21'22", Bedford County, Hydrologic Unit 06040002, at culvert under county road, 2.7 mi north of Bell Buckle. Drainage area is 4.99 mi^2.	1966-99 2000-04	6-25-04	4.67	353	3-15-73	12.64	3,220

See footnotes at the end of the table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			TENNESSEE RIVER BASIN--Continued					
Fountain Creek near Culleoka, TN (03599430)	Lat 35°28'18", long 86°57'23", Maury County, Hydrologic Unit 0604002, on upstream side of bridge on State Highway 50-A, 1.6 mi southeast of Culleoka. 2.7 mi upstream from Globe Creek, and 9.7 mi west of courthouse in Lewisburg. Drainage area is 26.9 mi^2.	1966-68†, 1997-99 2000-04	2-5-04	10.49	4,060	5-6-03	15.89	12,700
West Piney River at Hwy 70 near Dickson, TN (03602170)	Lat 36°05'21", long 87°28'12", Dickson County, Hydrologic Unit 06040003, at U.S. Highway 70 bridge, 4.0 mi west of Dickson. Drainage area is 2.16 mi^2	1984-99 2000-04	4-22-04	23.74	333	5-6-84	28.17	1,230
Coon Creek above Chop Hollow, near Hohenwald, TN (03604090)	Lat 35°35'19", long 87°41'09", Perry County, Hydrologic Unit 06040004, at bridge on State Highway 20, 9.0 mi northwest of Hohenwald. Datum of gage is 247.34 ft above NGVD of 1929, as determined from USGS topographic map. Drainage area is 6.02 mi^2.	1967-99 2000-04	2-6-04	4.09	-	12-9-72	6.80	3,150
Blue Creek near New Hope, TN (03604580)	Lat 36°03'52", long 87°38'58", Humphreys County, Hydrologic Unit 06040003, at county road bridge, 1.8 mi northwest of New Hope, 3.1 mi southeast of McEwen, and at mi 3.9. Drainage area is 13.2 mi^2.	1984-99 2000-04	-	<17.07	-	6-13-89	18.82	-
Trace Creek above Denver, TN (03605555)	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 northeast of New Johnsonville. Datum of gage is 377.05 ft above NGVD of 1929. Drainage area is 31.9 mi^2.	1963-88†, 1989-99 2000-04	2-5-04	6.90	1,740	5-6-84	13.61	11,700
			OBION RIVER BASIN					
Middle Fork Obion River near Gleason, TN (07024705)	Lat 36°15'02", long 88°34'16", Weakly County, Hydrologic Unit 08010203, at bridge on State Route 190, 3.2 mi northeast of Gleason. Datum of gage is 360.00 ft above NGVD of 1929.	2004	4-23-04	14.74	-	4-23-04	14.74	-
Spring Creek near Greenfield, TN (07024760)	Lat 36°11'24", long 88°45'53", Weakley County, Hydrologic Unit 08010203, on State Highway 54, 3.2 mi northeast of Greenfield. Datum of gage is 300.00 ft above NGVD of 1929. Drainage area is 93.4 mi^2.	1997-99 2000-04	6-13-04	25.11	1,780	11-30-01	28.42	8,800

See footnotes at the end of table.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			OBION RIVER BASIN--Continued					
North Fork Obion River River near Union City, TN (07025500)	Lat 36°23'59", long 88°59'43", Obion County, Hydrologic Unit 08010202, at bridge on State Highway 22, 3.9 mi southeast of Union City. Datum of gage is 285.80 ft above NGVD of 1929. Drainage area is 480 mi^2.	1929-66†, 1967-71†, 1989-93†, 1994-99 2000-04	2-6-04	17.05	5,400	1-22-37	23.08	49,200
North Fork Forked Deer River at U.S. Highway 45W Bypass at Trenton, TN (07028505)	Lat 35°58'58", long 88°55'49", Gibson County, Hydrologic Unit 08010204, at bridge on U.S. Highway 45W Bypass, 0.25 mi north of intersection of U.S. Highway 45W Bypass and State Highways 77 and 104 in Trenton. Datum of gage is 306.85 ft above NGVD of 1929. Drainage area is 73.9 mi^2.	1987-99 2000-04	2-5-04	6.90	3,340	12-21-90	12.00	-
Lewis Creek near Dyersburg, TN (07029090)	Lat 36°03'14", long 89°21'42", Dyer County, Hydrologic Unit 08010204, at bridge on U.S. Highway 51 (Business Route), 2.1 mi northeast of square in Dyersburg. Datum of gage is 276.52 ft above NGVD of 1929. Drainage area is 25.5 mi^2.	1955-78, 1980-83, 1985-99 2000-04	4-24-04	17.04	6,380	3-9-64	19.31	5,450
Hatchie River near Stanton, TN (07030000)	Lat 35°31'22", long 89°20'53", Haywood County, Hydrologic Unit 08010208, at bridge on US Highway 70 and 79, 4.6 mi northeast of Stanton. Datum of gage is 267.34 ft above NGVD of 1929. Drainage area is 1940 mi^2	1929-58† 2004	2-11-04	17.15	20,300	1-22-35	20.35	59,000
Cane Creek at Ripley, TN (07030100)	Lat 35°45'25", long 89°33'05", Lauderdale County, Hydrologic Unit 08010208, at bridge on State Highway 19, 1.3 mi upstream from Hyde Creek, 1.5 mi northwest of Ripley. Datum of gage is 295.93 ft above NGVD of 1929. Drainage area is 33.9 mi^2.	1957-62†, 1963-70,j 1986-88†, 1989-99 2000-04	4-24-04	16.14	-	7-1-89	23.16	6,360

† Operated as a continuous-record gaging station.
a A gage height of 17.45 ft occurred on 3-23-29.
b Discontinued
c Gage destroyed
d Operated as a flood hydrograph station.
e A peak discharge of 11,000 ft^3/s occurred on 5-30-27, from reports of Tennessee Valley Authority.
f Datum of gage prior to 1995 water year unknown due to bridge replacement.
g Peak likely exceeded on 12-02-02, during period when gage was not operational.
h Not previously published.
i Revised.
j Operated as crest-stage partial-record station.

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 2004

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		TENNESSEE RIVER BASIN				
03594153 Indian Creek	Tennessee River	Lat 35°16'33", long 88°01'12", Hardin County, Hydrologic Unit 06040001, at bridge on U.S. Hwy 64, .75 mi east of Olivehill, 14 mi east of Savannah.	158	2002-03	6-9-04	128
03600085 Carters Creek	Duck River to Tennessee River	Lat 35°43'39", long 86°59'19", Maury County, Hydrologic Unit 06040003, at bridge on Petty Lane, 0.8 mi north of Carters Creek, and at mile 4.7.	16.6	1986-99 2000-03	11-24-03 3-3-04 5-26-04 7-27-04	59.4 76.0 6.14 1.05
03600086 Carters Creek Tributary	Carters Creek to Duck River to Tennessee River	Lat 35°43'34", long 86°59'19", Maury County, Hydrologic Unit 06040003, at culvert on Carters Creek Road, 0.7 mi north of Carters Creek.	2.94	1986-99 2000-03	11-24-03 3-3-04 5-26-04 7-27-04	25.8 15.3 .93 1.26
03604090 Coon Creek	Buffalo River to Tennessee River	Lat 35°35'19", long 87°41'09", Perry County, Hydrologic Unit 06040004, at bridge on State Hwy 20 and 9.0 mi northwest of Hohenwald.	6.02	1966-03a	2-5-04 2-5-04	261 273
03605555 Trace Creek	Tennessee River	Lat 35°03'08", long 87°54'27", Humphreys County, Hydrologic Unit 06040005, at bridge on US Hwy 70, 1.0 mi east of Denver and 3.4 mi northeast of New Johnsonville.	31.9	1963-88† 1989-99a 2000-03a	2-5-04	1990 †
		OBION RIVER BASIN				
07024705 Middle Fork Obion River	Obion River to Mississippi River	Lat 36°15'02", long 88°34'16", Weakly County, Hydrologic Unit 08010203, at bridge on State Route 190, 3.2 mi northeast of Gleason.			5-25-04	73.7*a
07024760 Spring Creek	Middle Fork Obion River to Obion River to Mississippi River	Lat 36°11'24", long 88°45'53", Weakly County, Hydrologic Unit 08010203, at bridge on State Hwy 54, 3.2 mi northeast of Greenfield.	93.4	1997-99a 2000-03a	5-24-04	34.9*
07025500 North Fork Obion River	Obion River to Mississippi River	Lat 36°23'59", long 88°59'43", Obion County, Hydrologic Unit 08010202, at bridge on State Route 22, 3.9 mi southeast of Union City.	480	1929-66† 1967-71† 1989-93† 1994-99a 2000-03a	5-26-04	298*

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites--Continued

Discharge measurements made at miscellaneous sites during water year 2004

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		OBION RIVER BASIN--Continued				
07029090 Lewis Creek	North Fork Forked Deer to Mississippi River	Lat 36°03'14", long 89°21'42", Dyer County, Hydrologic Unit 08010204, at bridge on US Hwy 51 (bypass route), 2.1 mi northeast of square in Dyersburg.	22.5	1955-78a 1980-83a 1985-99a 2000-03a	5-26-04	2.88*
07030000 Hatchie River	Mississippi River	Lat 35°31'22", long 89°20'53" Haywood County, Hydrologic Unit 08010208, at bridge on US Hwy 70 and 79, 4.6 mi northeast of Stanton.	1940	1929-58†, 2003a	4-30-04 7-21-04	6960 3050
		WOLF RIVER BASIN				
07030255 Loosahatchie River	Wolf River to Mississippi River	Lat 35°18'25", long 89°40'05", Shelby County, Hydrologic Unit 08010209, at bridge on State Route 205, 0.7 mi north of Arlington.		2003	6-2-04 9-22-04	213 103*
07030256 Loosahatchie River	Wolf River to Mississippi River	Lat 35°18'12", long 89°40'49", Shelby County, Hydrologic Unit 08010209, 0.1 mi downstream from Arlington sewage disposal, 1.2 mi northwest of Arlington.		2003	6-2-04	225
07030258 Loosahatchie River	Wolf River to Mississippi River	Lat 35°17'55", long 89°41'27", Shelby County, Hydrologic Unit 08010209, at bridge on State Route 385, 1.6 mi west of Arlington.		2003	6-22-04 9-22-04	234 119*
07030274 Loosahatchie River	Wolf River to Mississippi River	Lat 35°17'09", long 89°43'14", Shelby County, Hydrologic Unit 08010209, 0.6 mi below Clear Creek and 3.4 mi southwest of Arlington.			9-22-04	113*
07030282 Loosahatchie River	Wolf River to Mississippi River	Lat 35°16'47", long 89°47'34", Shelby County, Hydrologic Unit 08010209, 0.8 mi above confluence with Franks Branch and 2.0 mi northwest of Brunswick.			9-30-04	115*

Miscellaneous Sites--Continued

Discharge measurements made at miscellaneous sites during water year 2004

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		WOLF RIVER BASIN--Continued				
07030285 Loosahatchie River	Wolf River to Mississippi River	Lat 35°16'35", long 89°51'15", Shelby County, Hydrologic Unit 08010209, at bridge on State Hwy 14, 5.0 mi north of Bartlett.			6-2-04 9-30-04	276 130*
07030290 Loosahatchie River	Wolf River to Mississippi River	Lat 35°16'30", long 89°22'14", Shelby County, Hydrologic Unit 08010209, at bridge on Singleton Parkway, 5.2 mi northwest of Bartlett.			6-2-04 9-30-04	268 120*

‡ Operated as continuous record station.
a Operated as crest-stage gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03408500 NEW RIVER AT NEW RIVER, TN									
OCT 2003					APR 2004				
02...	1150	250	193	13.5	06...	1550	517	161	12.0
DEC					MAY				
10...	1045	618	168	7.0	25...	1440	960	243	27.5
JAN 2004									
28...	1500	1,080	158	4.0					
03409500 CLEAR FORK NEAR ROBBINS, TN									
OCT 2003					JUN 2004				
02...	0830	220	48	12.5	16...	1400	130	58	24.5
APR 2004					SEP				
06...	1820	352	40	15.5	14...	1800	126	62	22.0
03410210 SOUTH FORK CUMBERLAND RIVER AT LEATHERWOOD FORD, TN									
OCT 2003					APR 2004				
01...	1615	606	121	14.5	06...	1335	1,180	97	12.5
DEC					MAY				
10...	1010	1,240	111	7.0	25...	1800	344	98	26.0
03414500 EAST FORK OBEY RIVER NEAR JAMESTOWN, TN									
OCT 2003					APR 2004				
01...	1320	135	189	15.0	07...	0715	301	141	10.0
DEC					MAY				
09...	1400	373	125	9.0	24...	1335	86	195	21.5
03415000 WEST FORK OBEY RIVER NEAR ALPINE, TN									
OCT 2003					APR 2004				
01...	1045	51	290	13.5	07...	0910	139	273	12.0
DEC					MAY				
09...	1200	163	222	13.0	24...	1415	31	327	22.0
JAN 2004									
28...	1030	300	215	7.5					
03418070 ROARING RIVER ABOVE GAINESBORO, TN									
OCT 2003					JUN 2004				
05...	1230	299	257	9.0	02...	1940	165	243	21.0
JAN 2004					AUG				
28...	1320	493	238	5.5	02...	1240	27	244	23.5
APR									
09...	0910	97	260	13.0					
03421000 COLLINS RIVER NEAR MCMINNVILLE, TN									
OCT 2003					JUN 2004				
01...	1650	467	193	16.5	02...	1510	539	224	23.0
JAN 2004					SEP				
27...	1430	2,340	484	8.5	30...	1100	339	259	18.0
APR									
14...	1220	6,040	135	13.0					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03424730 SMITH FORK AT TEMPERANCE HALL, TN									
DEC 2003					JUN 2004				
08...	1530	182	390	7.5	08...	1345	206	324	24.5
JAN 2004					AUG				
26...	1115	1,240	320	12.0	05...	1315	69	302	27.0
APR					SEP				
08...	0955	147	353	15.0	29...	1130	46	310	21.0
03426385 MANSKER CREEK ABOVE GOODLETTSVILLE, TN									
DEC 2003					JUN 2004				
08...	1400	13	465	10.0	08...	1120	6.2	367	29.5
JAN 2004					AUG				
27...	1045	99	385	7.0	05...	1240	26	375	23.5
APR									
20...	1130	30	394	17.0					
03426470 DRY CREEK NEAR EDENWOLD, TN									
DEC 2003					JUN 2004				
10...	1435	16	518	12.0	08...	1310	1.4	542	27.0
JAN 2004					AUG				
27...	1215	20	523	8.0	11...	0900	.62	738	21.0
APR									
08...	1540	3.4	448	23.0					
03427500 EAST FORK STONES RIVER NEAR LASCASSAS, TN									
OCT 2003					JUN 2004				
06...	1110	39	357	17.0	09...	1100	51	348	24.5
DEC					AUG				
11...	1300	656	383	9.0	10...	1035	28	330	25.0
FEB 2004					SEP				
03...	1220	325	427	7.5	30...	0930	31	377	19.0
03430147 STONERS CREEK NEAR HERMITAGE, TN									
DEC 2003					JUN 2004				
11...	1150	37	444	10.0	08...	1415	6.8	462	24.5
JAN 2004					AUG				
29...	1230	40	488	7.0	11...	0725	1.1	573	21.0
MAR					SEP				
30...	1150	39	402	15.0	28...	1530	1.3	575	22.5
03430550 MILL CREEK NEAR NOLENSVILLE, TN									
OCT 2003					MAR 2004				
20...	1100	5.6	622	16.0	29...	1300	91	476	15.0
29...	1040	7.9	596	14.5	JUN				
NOV					09...	1245	8.8	521	25.5
18...	0730	20	579	17.0	AUG				
DEC					10...	1710	8.5	565	23.5
08...	0840	23	614	5.0					
JAN 2004									
29...	1030	66	520	5.0					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03431060 MILL CREEK AT THOMPSON LANE NEAR WOODBINE, TN									
NOV 2003					MAR 2004				
04...	0825	7.8	576	16.0	20...	1400	224	393	15.5
DEC					JUN				
08...	1115	47	560	8.5	22...	0950	28	510	25.0
JAN 2004					AUG				
29...	1230	145	610	7.0	09...	1045	30	588	22.0
03431300 BROWNS CREEK AT STATE FAIRGROUNDS AT NASHVILLE, TN									
DEC 2003					JUN 2004				
11...	0955	17	580	11.0	08...	1055	6.3	520	22.0
JAN 2004					AUG				
27...	0900	42	560	9.0	09...	0930	5.1	559	21.0
MAR									
29...	1030	101	167	15.5					
034315005 CUMBERLAND RIVER AT WOODLAND STREET AT NASHVILLE, TN									
FEB 2004									
09...	1200	88,700	225	6.0					
03431599 WHITES CREEK NEAR BORDEAUX, TN									
DEC 2003					JUN 2004				
10...	1205	81	440	11.5	08...	1245	16	513	24.0
JAN 2004					AUG				
29...	1000	85	327	5.5	05...	0930	322	326	22.5
APR					05...	1030	198	326	22.5
08...	1315	28	380	20.0					
03431700 RICHLAND CREEK AT CHARLOTTE AVE, AT NASHVILLE, TN									
DEC 2003					JUN 2004				
10...	0955	57	432	11.5	09...	1345	12	525	22.0
JAN 2004					AUG				
29...	1250	45	580	8.5	11...	1430	10	520	24.0
APR					SEP				
07...	1100	16	495	16.0	28...	1300	5.5	511	21.0
03432350 HARPETH RIVER AT FRANKLIN, TN									
DEC 2003					JUN 2004				
01...	1045	410	377	10.0	09...	0925	31	388	23.5
FEB 2004					AUG				
02...	1012	185	405	6.0	13...	0927	56	434	20.5
MAR									
29...	1335	231	316	16.0					
034323531 HARPETH RIVER TRIB AT MACK HATCHER PARKWAY									
OCT 2003					MAR 2004				
06...	1113	.26	581	16.5	31...	1339	1.3	487	14.5
DEC					JUN				
11...	0950	.90	576	11.0	09...	0945	.20	470	21.0
JAN 2004					AUG				
30...	1350	1.1	570	10.5	10...	1230	.45	512	21.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03432376 HARPETH RIVER TRIB AT MT. HOPE R0AD AT FRANKLIN, TN									
OCT 2003					MAR 2004				
06...	1349	1.6	781	17.0	31...	1204	3.5	587	13.0
DEC					JUN				
04...	1300	2.8	725	11.5	09...	1030	1.1	520	23.0
JAN 2004					AUG				
30...	0940	4.3	888	7.5	10...	1100	1.9	900	21.0
03432387 SOUTH PRONG SPENCER CREEK NEAR FRANKLIN, TN									
OCT 2003					MAR 2004				
06...	0956	1.1	760	16.5	30...	0950	6.4	523	13.5
DEC					JUN				
01...	1405	3.6	695	12.5	09...	0825	2.4	520	24.0
FEB 2004					AUG				
02...	1318	17	601	10.0	10...	1400	1.9	710	21.0
03432390 SPENCER CREEK NEAR FRANKLIN, TN									
DEC 2003					JUN 2004				
01...	1225	16	652	12.0	09...	1030	8.9	530	21.5
JAN 2004					AUG				
30...	1137	20	607	8.0	10...	1515	7.8	634	23.5
MAR									
30...	1118	26	520	15.0					
03432400 HARPETH RIVER BELOW FRANKLIN, TN									
DEC 2003					JUN 2004				
01...	1258	453	408	10.5	09...	1220	58	425	24.0
FEB 2004					AUG				
02...	1205	232	441	7.0	13...	1056	85	486	19.5
MAR									
29...	1105	155	423	17.0					
03433500 HARPETH RIVER AT BELLEVUE, TN									
DEC 2003					JUN 2004				
03...	1505	479	450	10.0	07...	1435	145	425	24.0
FEB 2004					AUG				
02...	0935	503	427	6.0	10...	0830	140	436	23.0
APR					SEP				
07...	0850	284	412	13.0	28...	0840	94	464	20.0
03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN									
DEC 2003					AUG 2004				
04...	0815	670	400	8.5	12...	1040	235	372	22.5
APR 2004					SEP				
21...	1200	827	310	15.0	28...	1335	177	370	23.0
MAY									
18...	1222	1,510	320	21.0					
03435305 RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAIN, TN									
DEC 2003					AUG 2004				
09...	1350	445	429	11.5	11...	0805	237	438	21.0
APR 2004					SEP				
08...	1315	390	382	18.0	29...	1100	129	480	18.5
JUN									
07...	1210	871	340	26.5					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03435970 MILLERS CREEK AT TURNERSVILLE, TN									
DEC 2003					JUN 2004				
09...	0820	8.9	415	12.0	08...	0900	10	365	22.0
JAN 2004					AUG				
28...	0920	49	283	4.0	10...	1445	7.0	395	24.0
APR					SEP				
08...	1110	18	346	16.5	22...	0925	3.7	431	17.0
03436100 RED RIVER AT PORT ROYAL, TN									
DEC 2003					AUG 2004				
09...	1050	708	396	11.0	11...	1140	484	410	24.0
APR 2004					SEP				
08...	0900	677	330	17.0	29...	0855	220	480	18.0
JUN									
07...	0920	1,340	356	26.0					
03436690 YELLOW CREEK AT ELLIS MILLS, TN									
OCT 2003					MAR 2004				
01...	1405	81	270	19.0	29...	1400	133	253	13.0
DEC					AUG				
01...	1100	151	262	12.5	09...	1025	71	275	24.0
JAN 2004					SEP				
26...	1015	564	205	12.0	27...	0950	40	295	19.0
03455000 FRENCH BROAD RIVER NEAR NEWPORT, TN									
NOV 2003					AUG 2004				
03...	1130	1,610	80	14.0	31...	1535	2,310	69	25.5
JUL 2004									
01...	1115	2,510	84	22.5					
03461500 PIGEON RIVER AT NEWPORT, TN									
					MAY				
OCT 2003				2004					
31...	1005	498	233	13.5	10...	1025	565	140	16.0
03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN									
NOV 2003					JUL 2004				
10...	1325	656	68	12.0	23...	1030	558	94	23.0
MAY 2004									
21...	1530	765	74	24.5					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03466208 BIG LIMESTONE CREEK NEAR LIMESTONE, TN				
OCT 2003				
03...	1210	66	472	12.0
NOV				
05...	1530	39	451	22.5
DEC				
16...	1200	109	460	8.0
JAN 2004				
22...	1115	93	463	5.0
26...	1433	131	451	7.0
FEB				
17...	1200	166	428	7.5
MAR				
25...	1045	106	422	12.5
APR				
20...	1115	130	447	16.0
MAY 2004				
04...	0945	105	464	12.0
13...	1200	19	443	18.5
JUN				
10...	1115	61	454	20.0
JUL				
12...	1202	71	462	22.0
27...	1115	147	366	21.0
AUG				
18...	1115	39	440	19.5
SEP				
03...	1045	26	456	20.5
07...	1530	31	456	21.5
03467609 NOLICHUCKY RIVER NEAR LOWLAND				
OCT 2003				
28...	1125	896	210	13.0
NOV				
05...	0900	872	198	15.5
05...	1130	824	200	16.0
JAN 2004				
23...	1200	1,820	241	2.5
FEB				
18...	1115	3,650	242	6.0
MAR				
24...	1100	2,180	210	10.0
29...	1230	1,900	228	16.5
APR 2004				
19...	1115	2,950	181	16.0
MAY				
14...	1130	1,640	207	21.5
JUN				
09...	1145	1,340	203	22.0
JUL				
28...	1100	5,140	150	22.5
AUG				
11...	1010	917	229	24.0
03469175 LITTLE PIGEON RIVER ABOVE SEVIERVILLE, TN				
NOV 2003				
14...	0905	126	104	9.0
APR 2004				
02...	1120	379	102	9.0
JUN 2004				
10...	1055	218	81	20.5
03491000 BIG CREEK NEAR ROGERSVILLE, TN				
MAR 2004				
18...	1002	84	291	9.0
MAY				
05...	1120	39	323	14.0
JUL 2004				
19...	1220	13	385	21.0
SEP				
27...	1542	9.0	42	20.5
03497300 LITTLE RIVER ABOVE TOWNSEND, TN				
OCT 2003				
21...	1030	56	24	12.0
MAR 2004				
11...	1045	370	16	5.0
JUN 2004				
21...	1120	109	21	20.0
AUG				
13...	1105	258	16	16.0
03498500 LITTLE RIVER NEAR MARYVILLE, TN				
DEC 2003				
23...	1000	489	103	4.5
JUN 2004				
09...	1040	268	104	20.5
AUG 2004				
16...	1035	270	84	19.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03498850 LITTLE RIVER NEAR ALCOA, TN									
JUN 2004					AUG 2004				
07...	1045	308	118	20.0	17...	1115	268	111	20.5
03518500 TELLICO RIVER AT TELLICO PLAINS, TN									
JAN 2004					AUG 2004				
21...	1330	271	20	2.5	27...	1440	122	27	24.5
JUN									
08...	1220	112	26	20.0					
03527800 BIG WAR CREEK AT LUTHER, TN									
MAR 2004									
18...	1537	45	307	12.0					
03528000 CLINCH RIVER ABOVE TAZEWELL, TN									
OCT 2003					JUL 2004				
14...	1210	303	395	19.5	20...	1140	643	375	24.0
03532000 POWELL RIVER NEAR ARTHUR, TN									
OCT 2003									
10...	1025	163	452	17.0					
03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN									
OCT 2003					JUL 2004				
22...	1347	17	399	15.0	30...	1040	20	357	22.5
DEC					SEP				
03...	1150	49	376	5.5	23...	1055	34	391	17.5
MAY 2004									
26...	1215	22	380	23.0					
03535400 BEAVER CREEK AT SOLWAY, TN									
					MAY				
OCT 2003				2004					
21...	1430	50	419	16.0	25...	1455	46	406	23.0
DEC					AUG				
02...	1400	112	367	9.0	18...	1305	46	420	21.0
MAR 2004					SEP				
04...	1330	165	344	14.0	22...	1416	114	370	18.0
03538235 EF POPLAR CR AT BEAR CR RD AT OAK RIDGE, TN									
OCT 2003					MAY 2004				
02...	1056	11	348	19.0	03...	1130	11	352	16.0
MAR 2004					SEP				
15...	1030	11	340	13.0	02...	1052	12	341	20.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03539600 DADDYS CREEK NEAR HEBBERTSBURG, TN									
OCT 2003					AUG 2004				
03...	1305	45	98	11.5	24...	1025	19	120	23.0
MAR 2004					SEP				
24...	1215	218	69	9.0	20...	1330	420	70	18.0
JUN									
23...	1215	27	94	24.0					
03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN									
JAN 2004					JUN 2004				
21...	1225	297	41	2.5	08...	1230	140	40	20.0
FEB					16...	1415	65	48	25.5
19...	1115	340	39	4.5	AUG				
MAR					04...	1425	104	39	24.5
23...	1200	466	38	7.5	27...	1100	43	47	23.5
MAY									
05...	1130	182	36	13.5					
13...	1035	86	40	18.5					
035661285 NORTH MOUSE CRK NR ROCKY MT HOLLOW NR ATHENS, TN									
OCT 2003					MAY 2004				
29...	1315	24	333	13.0	19...	1200	36	323	19.0
JAN 2004					JUL				
06...	1650	104	286	10.0	13...	1025	25	324	21.5
MAR					AUG				
11...	1000	104	283	10.5	23...	1040	22	333	20.5
APR									
21...	0910	55	302	16.0					
03566525 NORTH CHICKAMAUGA CREEK NEAR MONTLAKE, TN									
OCT 2003					JUN 2004				
28...	1350	5.4	45	12.0	03...	1710	20	36	23.0
JAN 2004					JUL				
22...	1420	74	31	3.5	15...	1100	19	42	22.5
APR					AUG				
20...	1055	46	29	15.0	26...	1020	3.2	67	23.5
0356653019 NORTH CHICKAMAUGA CREEK AT HWY 27 NEAR DAISY, TN									
JAN 2004					APR 2004				
22...	1735	57	31	4.5	20...	1345	30	29	18.0
03570835 SEQUATCHIE RIVER NEAR DUNLAP									
DEC 2003					APR 2004				
10...	1111	1,160	147	10.5	05...	1410	517	191	16.0
FEB 2004					JUN				
06...	1300	10,100	65	9.5	02...	1120	150	257	20.5
09...	1225	2,050	160	9.0					
03571000 SEQUATCHIE RIVER NEAR WHITWELL, TN									
OCT 2003					APR 2004				
02...	0850	231	245	14.5	05...	1130	927	175	15.5
DEC					JUN				
10...	0840	777	195	10.5	02...	0910	280	251	20.5
JAN 2004									
27...	1051	1,630	188	7.0					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03578000 ELK RIVER NEAR PELHAM, TN									
OCT 2003					APR 2004				
02...	1340	41	210	16.5	07...	1042	64	173	12.0
DEC					JUN				
09...	1301	146	160	10.5	01...	1911	157	155	18.0
JAN 2004					AUG				
26...	1535	439	130	10.5	01...	1145	63	175	20.0
03584020 RICHLAND CREEK AT HWY 64 NEAR PULASKI, TN									
OCT 2003					JUN 2004				
02...	0946	166	309	13.5	03...	1420	416	269	20.0
DEC					AUG				
11...	1130	1,060	292	8.5	12...	1010	124	274	21.5
JAN 2004					SEP				
27...	1515	1,340	263	8.0	29...	1340	199	315	19.0
APR									
06...	1451	294	228	14.5					
03584600 ELK RIVER AT PROSPECT, TN									
DEC 2003					JUN 2004				
11...	1505	5,010	268	10.5	09...	1120	1,260	265	24.0
JAN 2004					AUG				
29...	1330	2,550	304	7.0	12...	1445	1,270	212	19.0
APR					SEP				
07...	1255	930	265	15.5	30...	1110	1,760	234	17.0
03588500 SHOAL CREEK AT IRON CITY, TN									
OCT 2003					JUN 2004				
01...	1025	254	123	17.0	03...	1120	539	111	21.0
DEC					AUG				
10...	1039	622	104	10.5	11...	1112	219	133	23.5
JAN 2004					SEP				
27...	1135	1,280	90	8.5	29...	1045	235	134	19.5
APR									
06...	1205	417	104	13.5					
03596100 CRUMPTON CREEK AT RUTLEDGE FALLS, TN									
OCT 2003					FEB 2004				
02...	1800	7.0	177	16.0	06...	0950	1,530	60	8.5
DEC					09...	1435	76	62	9.0
09...	0820	13	147	10.0	APR				
JAN 2004					07...	1540	18	154	17.5
26...	0940	52	75	8.0	JUN				
					01...	1056	22	111	20.0
03597210 GARRISON FORK ABOVE L&N RAILROAD AT WARTRACE, TN									
OCT 2003					APR 2004				
30...	1025	15	329	14.5	01...	0959	68	285	11.0
NOV					JUN				
14...	1055	18	314	10.0	02...	1110	32	283	22.0
DEC					AUG				
03...	1055	64	357	7.5	10...	1350	19	288	24.0
JAN 2004									
28...	1048	134	327	5.5					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03597590 WARTRACE CREEK BELOW COUNTY ROAD AT WARTRACE, TN									
OCT 2003					APR 2004				
30...	0749	2.2	444	12.5	01...	0814	18	397	10.5
DEC					JUN				
03...	0855	22	423	6.5	02...	0935	6.4	320	21.0
JAN 2004					AUG				
28...	0815	48	419	3.5	10...	1521	1.9	333	24.0
03597898 FLAT CREEK AT HWY 231 BELOW SHELBYVILLE, TN									
OCT 2003					MAR 2004				
28...	0930	9.1	355	13.0	25...	1030	32	277	13.5
NOV					JUN				
04...	1330	4.9	336	17.0	08...	1015	37	331	21.0
JAN 2004					SEP				
06...	0830	176	325	8.5	09...	1030	18	360	21.5
FEB									
04...	0830	38	324	4.5					
03598000 DUCK RIVER NEAR SHELBYVILLE, TN									
DEC 2003					JUN 2004				
12...	0750	702	280	7.5	07...	1550	245	261	23.5
JAN 2004					AUG				
28...	1230	1,220	232	6.0	04...	1115	230	170	25.0
MAR									
30...	1115	291	260	17.0					
03598250 NORTH FORK CREEK NEAR POPLINS CROSSROADS, TN									
OCT 2003					MAR 2004				
28...	1200	4.6	445	13.5	25...	0900	21	360	12.5
JAN 2004					JUN				
06...	1115	184	329	7.5	08...	1400	3.5	391	23.0
03599100 BIG ROCK CREEK AT DOUBLE BRIDGES, TN									
OCT 2003					MAR 2004				
30...	0945	7.8	485	16.0	24...	1230	43	402	14.0
DEC					JUN				
11...	1400	99	408	10.5	04...	1045	156	363	19.5
JAN 2004					24...	0930	183	412	20.0
06...	1330	117	420	9.5	25...	1000	2,610	138	21.0
FEB					SEP				
04...	1130	49	437	8.5	09...	1217	8.7	450	23.0
03599240 DUCK RIVER ABOVE MILLTOWN, TN									
OCT 2003					JUN 2004				
30...	1430	411	214	15.5	30...	1545	20,700	198	21.0
APR 2004					AUG				
13...	1345	12,300	224	11.0	04...	1040	256	265	27.0
MAY					SEP				
11...	0845	6,720	224	20.0	10...	1315	265	178	24.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03599450 FOUNTAIN CREEK NEAR FOUNTAIN HEIGHTS, TN									
OCT 2003					MAR 2004				
29...	1424	14	410	14.5	24...	1020	62	326	12.5
DEC					JUN				
11...	1130	126	369	8.5	03...	1025	26	368	22.0
JAN 2004					25...	1130	4,690	116	21.0
06...	1530	126	375	7.5	SEP				
FEB					09...	1355	11	413	23.0
04...	1330	83	378	6.5					
03599500 DUCK RIVER AT COLUMBIA, TN									
OCT 2003					JUN 2004				
03...	0927	367	350	16.5	08...	1620	492	270	25.0
JAN 2004					AUG				
29...	1350	2,540	330	8.0	04...	1210	343	305	27.5
APR					SEP				
01...	1510	847	352	14.5	27...	1515	385	362	23.0
03601990 DUCK RIVER AT HWY 100 AT CENTERVILLE, TN									
OCT 2003					APR 2004				
02...	1340	962	330	15.5	01...	1315	2,320	200	13.0
DEC					AUG				
03...	1340	3,320	290	11.5	10...	0830	670	322	22.0
FEB 2004									
10...	1230	15,700	265	11.0					
03602219 PINEY RIVER AT CEDAR HILL, TN									
OCT 2003					MAR 2004				
01...	0940	33	275	14.5	29...	1100	79	230	15.0
DEC					AUG				
03...	0815	53	310	9.5	09...	1300	24	256	24.0
JAN 2004					SEP				
26...	1330	195	230	15.0	27...	1245	14	300	19.0
03602500 PINEY RIVER AT VERNON, TN									
OCT 2003					JUN 2004				
02...	1610	168	225	18.0	03...	1105	455	205	19.0
DEC					AUG				
03...	0955	250	225	10.5	10...	1045	132	236	23.0
JAN 2004					SEP				
27...	0950	617	215	6.5	27...	1430	92	235	22.0
MAR									
30...	1350	342	208	15.5					
03604000 BUFFALO RIVER NEAR FLAT WOODS, TN									
OCT 2003					APR 2004				
01...	1200	331	99	17.0	21...	1625	538	88	19.0
FEB 2004					AUG				
04...	1115	674	87	4.5	26...	0940	364	101	24.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
03605078 CYPRESS CREEK AT CAMDEN, TN									
DEC 2003					APR 2004				
10...	1315	62	113	9.5	27...	1355	29	111	18.0
FEB 2004					AUG				
04...	1600	24	94	5.0	25...	1400	7.5	86	24.0
MAR									
16...	1450	25	93	11.5					
03606500 BIG SANDY RIVER AT BRUCETON, TN									
DEC 2003					APR 2004				
10...	1500	389	41	9.5	21...	1300	152	40	18.5
FEB 2004					JUN				
11...	1420	258	39	6.5	08...	1205	123	40	22.0
MAR					AUG				
17...	0930	171	35	11.0	25...	1610	134	37	23.0
07024305 BEAVER CREEK AT HWY 22 BYPASS NEAR HUNTINGDON, TN									
DEC 2003					JUN 2004				
10...	1020	234	74	10.5	08...	1020	34	62	21.5
FEB 2004					23...	1130	712	53	22.0
11...	1500	75	79	7.0	AUG				
MAR					25...	1140	42	72	23.0
16...	1235	60	74	12.0					
APR									
21...	1045	46	75	18.5					
07024500 SOUTH FORK OBION RIVER NEAR GREENFIELD, TN									
DEC 2003					JUL 2004				
02...	1230	473	64	17.5	08...	1350	366	70	24.0
APR 2004					AUG				
20...	1200	379	70	20.0	04...	1335	152	50	23.0
MAY									
25...	1150	222	71	24.0					
07024760 SPRING CREEK NEAR GREENFIELD, TN									
MAY									
2004									
25...	1325	35	57	22.0					
07025400 NORTH FORK OBION RIVER NEAR MARTIN, TN (CE)									
MAR 2004					JUL 2004				
03...	1000	339	62	12.5	08...	1600	231	56	24.0
APR					AUG				
20...	1455	232	58	21.5	11...	1610	168	47	21.5
MAY									
25...	1635	223	51	23.0					
07027720 SOUTH FORK FORKED DEER RIVER NEAR OWL CITY, TN									
OCT 2003					MAY 2004				
21...	1245	317	96	18.5	14...	1045	1,120	76	21.0
DEC					JUN				
04...	1245	689	83	8.5	16...	1335	647	91	25.0
JAN 2004					AUG				
21...	1055	607	83	4.5	30...	1115	387	81	22.5
MAR									
29...	1255	459	77	18.5					

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
07028500 NORTH FORK FORKED DEER RIVER AT TRENTON, TN				
DEC 2003				
02...	1015	36	56	17.5
FEB 2004				
06...	1205	2,250	48	5.0
26...	1245	36	55	10.5
APR				
20...	1705	38	62	21.5
MAY 2004				
25...	1030	32	59	21.0
JUL				
09...	1215	27	49	24.0
AUG				
12...	1305	23	29	21.0
07028960 MIDDLE FORK FORKED DEER RIVER NEAR FAIRVIEW				
MAR 2004				
12...	1000	166	53	10.0
MAY				
19...	1330	199	59	22.0
JUL 2004				
08...	0930	119	49	21.0
AUG				
11...	1140	80	41	20.5
07029500 HATCHIE RIVER AT BOLIVAR, TN				
OCT 2003				
31...	0915	742	51	15.0
JAN 2004				
13...	1100	1,560	74	6.5
MAR				
04...	1210	4,630	54	15.0
APR				
19...	1120	3,510	65	18.0
MAY 2004				
24...	1125	2,880	79	25.0
JUL				
19...	1145	2,840	57	25.0
SEP				
01...	1335	1,830	61	24.0
07030050 HATCHIE RIVER AT RIALTO, TN				
NOV 2003				
10...	1215	967	70	14.0
JAN 2004				
08...	1215	3,430	67	6.5
MAR				
11...	1030	5,710	55	11.5
APR				
08...	1200	1,550	69	15.5
JUN 2004				
10...	1100	1,810	79	25.0
JUL				
21...	1045	3,510	78	26.0
SEP				
03...	1145	1,910	68	25.0
07030240 LOOSAHATCHIE RIVER NEAR ARLINGTON, TN				
OCT 2003				
01...	0945	110	58	15.0
MAR 2004				
08...	1120	216	69	13.5
09...	0940	187	67	12.5
APR				
02...	0850	138	72	12.5
MAY				
17...	1625	392	74	22.0
JUN 2004				
02...	0830	185	70	21.0
JUL				
14...	1700	113	62	25.0
AUG				
30...	1340	131	56	21.5
SEP				
15...	1030	117	56	21.0
07030280 LOOSAHATCHIE RIVER AT BRUNSWICK, TN				
JUN 2004				
02...	1400	257	96	26.0
JUL				
15...	1605	145	91	27.0
AUG 2004				
12...	1215	126	86	23.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
07030392 WOLF RIVER AT LAGRANGE, TN									
FEB 2004					JUL 2004				
03...	1345	E243	33	7.5	22...	1300	225	45	25.0
MAR					AUG				
02...	1110	1,100	37	13.0	31...	1300	163	44	22.0
APR					SEP				
16...	1030	466	32	15.0	01...	1115	229	38	6.5
JUN									
07...	1000	284	43	20.5					
07030500 WOLF RIVER AT ROSSVILLE, TN									
NOV 2003					JUN 2004				
20...	1420	3,150	43	5.0	07...	1230	681	43	22.0
JAN 2004					JUL				
09...	1330	461	43	5.0	22...	1045	618	45	26.0
MAR					AUG				
02...	1345	1,510	45	14.0	31...	1100	354	45	22.5
APR									
16...	1330	1,660	40	17.5					
07031650 WOLF RIVER AT GERMANTOWN, TN									
DEC 2003					MAY 2004				
02...	1330	460	63	9.0	05...	1320	721	54	21.0
MAR 2004					JUN				
01...	1510	2,510	63	12.5	15...	1110	810	63	26.0
APR									
15...	1330	2,100	43	13.5					
07031692 FLETCHER CREEK AT SYCAMORE VIEW ROAD AT MEMPHIS, TN									
MAR 2004					JUN 2004				
31...	1150	3.2	205	16.0	15...	1010	10	144	27.5
MAY					AUG				
05...	0940	3.2	96	19.0	30...	1500	4.6	85	27.5
07031740 WOLF RIVER AT HOLLYWOOD STREET AT MEMPHIS, TN									
DEC 2003					APR 2004				
09...	1335	788	54	9.5	12...	1115	1,520	116	14.0
JAN 2004					MAY				
22...	1040	558	83	4.5	17...	1300	1,460	65	22.0
MAR					AUG				
08...	1520	1,800	51	15.5	03...	1415	582	86	25.0
15...	1115	567	54	12.0					
07032200 NONCONNAH CREEK NEAR GERMANTOWN, TN									
FEB 2004					MAY 2004				
27...	1440	21	158	8.0	05...	1140	9.5	74	19.0
APR					JUN				
02...	1125	9.5	271	13.5	16...	1300	22	124	26.0
13...	1220	1,270	62	9.0					

E--estimated

352515086011702. Local number, Cf:G-028.

LOCATION.--Lat 35°25'15", long 86°01'17", Hydrologic Unit 06040002, on northeast side of Arnold Engineering Development Center access road, .4 mi northwest of Arnold Center Road, 300 ft southwest of Interstate 24.

AQUIFER.--Fort Payne Formation of early Mississipian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 127 ft.

INSTRUMENTATION.--Electronic data logger at 60-minute interval and data collection platform at 30-minute interval.

DATUM.--Altitude of land-surface datum is 1088.40. Measuring point: Top of casing 1.24 ft above land-surface datum.

REMARKS.--Records good except for Nov. 13 to May 10, which are fair. Missing record was due to recorder malfunction.

PERIOD OF RECORD.--November 2003 to September 2004.

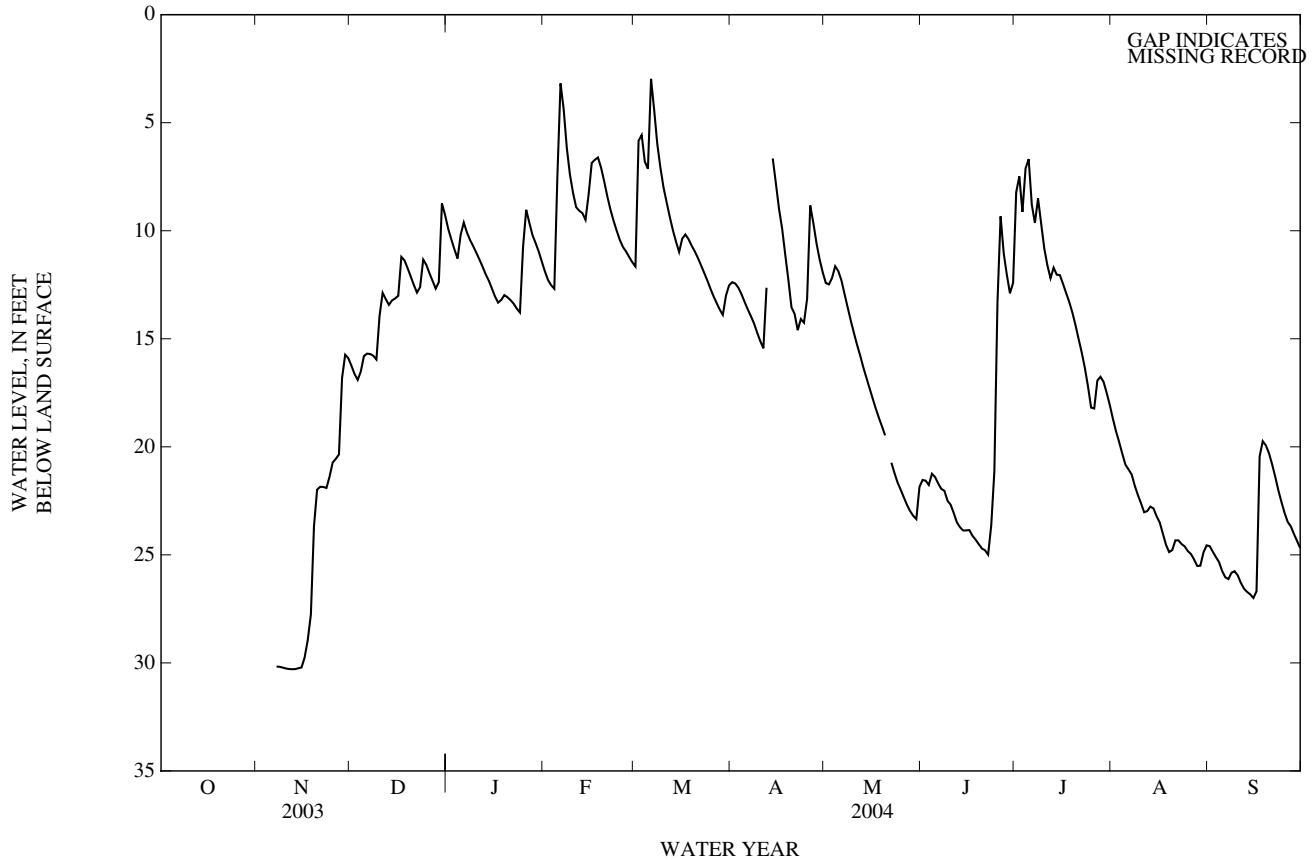
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.71 ft below land-surface datum, March 6, 2004; lowest, 30.30 ft below land-surface datum, Nov. 11, 12, 13, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	15.99	11.50	12.73	7.87	13.48	12.07	21.54	7.95	21.04	26.01
10	---	30.28	16.01	11.18	8.59	8.36	15.28	15.02	22.93	11.29	22.95	26.22
15	---	30.23	13.18	12.86	9.72	11.15	8.46	17.54	24.06	12.31	23.38	27.17
20	---	22.21	12.33	13.15	8.08	11.08	13.71	19.79	24.78	14.74	25.16	20.59
25	---	20.93	11.77	13.89	10.65	12.85	14.42	22.23	21.01	18.60	24.96	23.41
EOM	---	16.05	9.62	11.66	11.56	12.72	12.22	23.37	13.75	18.45	24.72	24.81
MAX	---	30.30	17.03	13.89	12.73	14.00	15.58	23.58	25.31	18.84	25.66	27.17

WTR YR 2004 HIGHEST 2.71 MAR 06, 2004 LOWEST 30.30 NOV. 11, 12, 13, 2003

LOWEST MONTHLY WATER LEVEL



HAMILTON COUNTY

351428085003600. Local number, Hm:O-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 intervals.

DATUM.--Elevation of land-surface datum is 735 ft above NGVD of 1929, from topographic map. Measuring point: Instrument shelf, 5.66 ft above land-surface datum.

REMARKS.--Records good. No missing record. Well previously published as "at Savannah Valley". Water level affected 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.

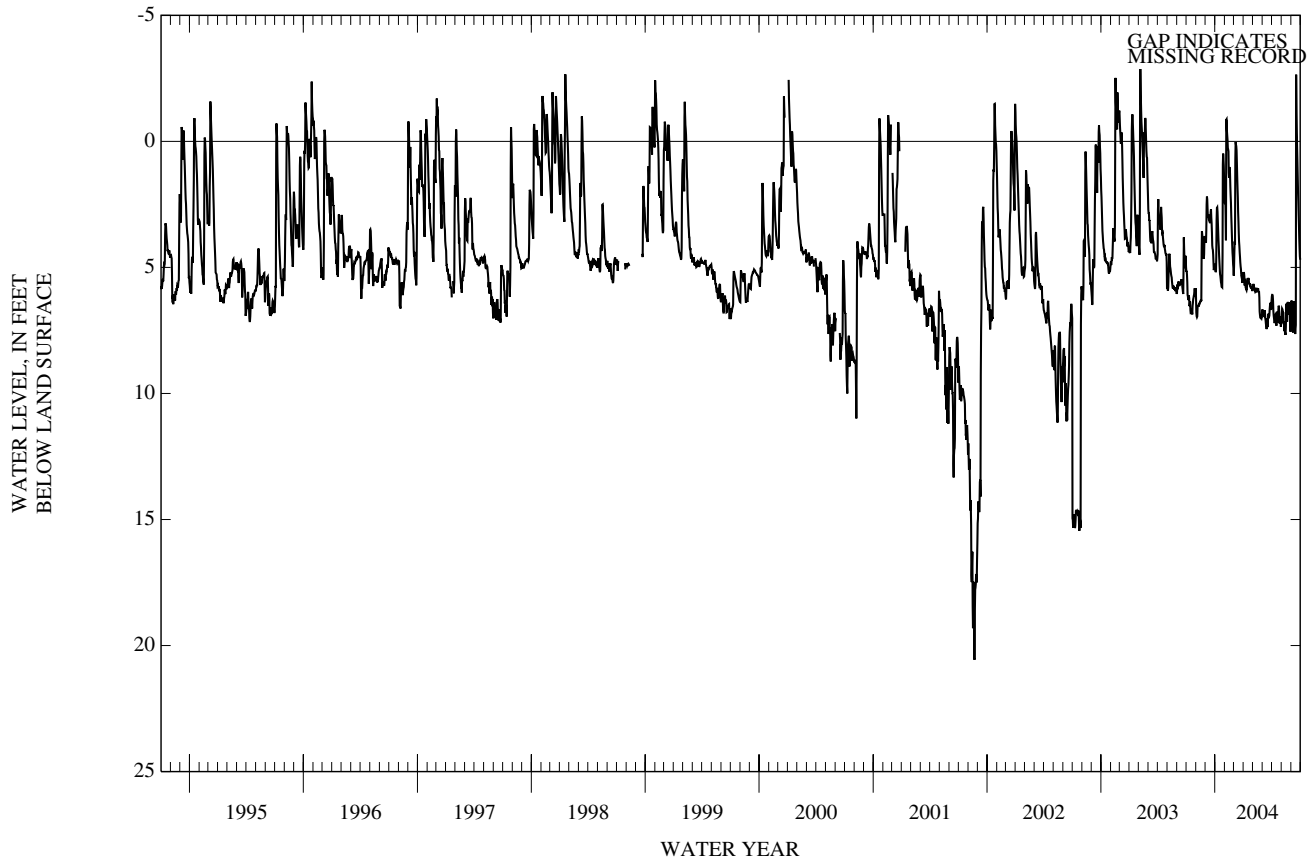
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.99 ft above land-surface datum, Feb. 11, 1994 and May 6, 2003; lowest, 22.45 ft below land-surface datum, Sept. 3, 1988.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.13	7.24	2.88	5.21	3.99	4.39	5.78	5.87	6.95	6.62	7.28	7.40
10	6.44	6.72	3.13	3.48	0.27	0.52	5.93	5.98	7.10	7.30	7.76	6.77
15	6.99	6.36	3.35	4.96	1.64	3.00	5.49	6.04	7.62	7.40	7.79	7.86
20	7.00	3.71	3.20	5.69	2.32	4.58	5.68	6.09	7.21	7.06	7.13	0.53
25	6.28	4.70	4.65	5.78	4.36	5.45	5.85	7.04	6.69	7.26	6.58	3.19
EOM	5.94	4.00	5.16	2.28	5.29	5.43	5.96	6.97	6.51	7.25	7.18	4.81
MAX	7.00	7.24	5.28	5.95	5.29	5.72	5.97	7.06	7.62	7.58	7.89	8.16

WTR YR 2004 HIGHEST -4.49 SEPT 17, 2004 LOWEST 8.16 SEPT 16, 2004

LOWEST MONTHLY WATER LEVEL



350750085045802. Local number, Hm:O-19.

LOCATION.--Lat 35°07'50", long 85°04'58", Hydrologic Unit 06020001, at Short Trail Spring Road 5.5 mi northwest of Ooltewah. Owner: Eastside Utility District.

AQUIFER.--Chepultepec Dolomite of Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 8 in., depth 72.96 ft, cased to 26 ft, open end; former production well.

INSTRUMENTATION.--Water-level recorder -- 15-minute intervals.

DATUM.--Elevation of land-surface datum is 698.5 ft above NGVD of 1929. Measuring point: Instrument shelf, 1.50 ft above land-surface datum.

REMARKS.--Records fair. Missing records March 20 to March 25. Water level affected by pumping from nearby municipal supply wells.

PERIOD OF RECORD.--May 1989 to current year.

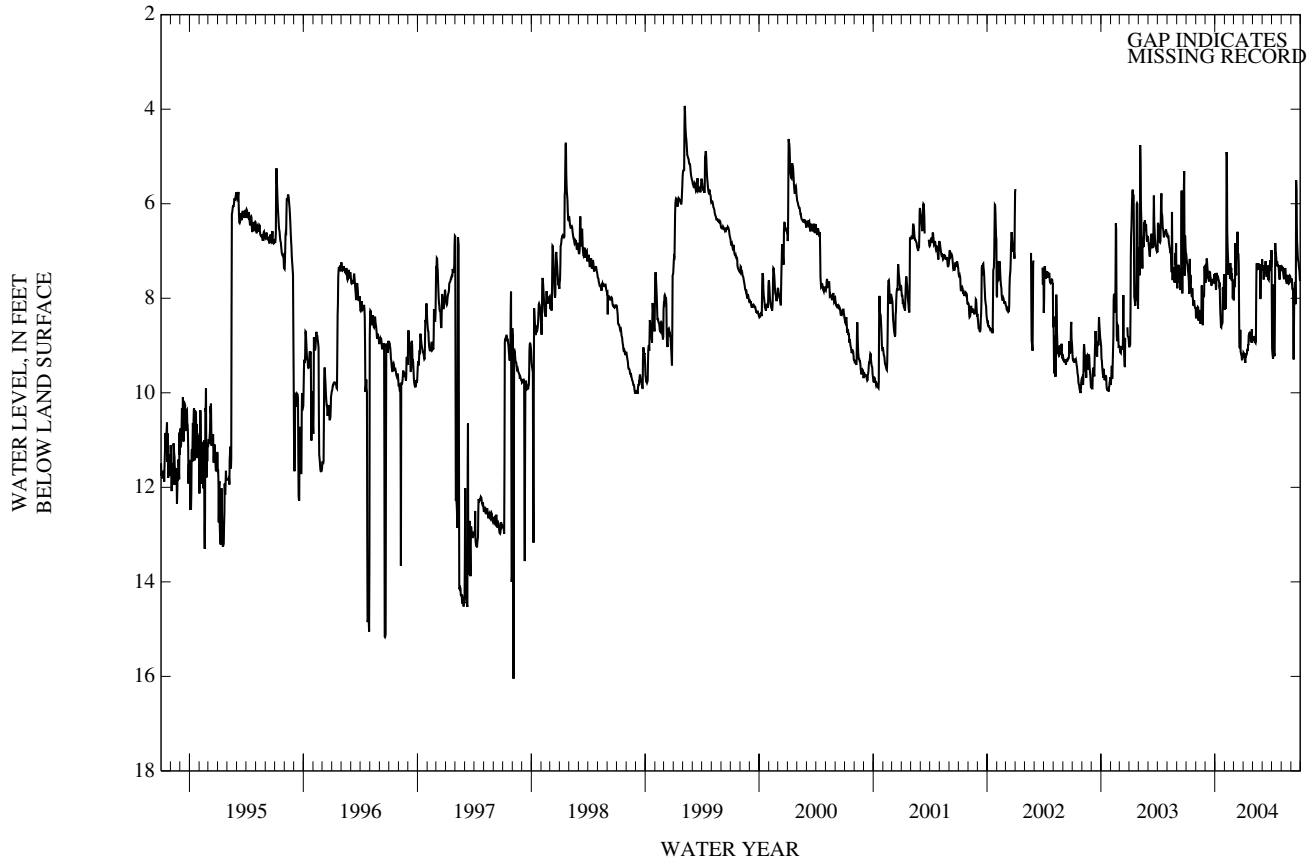
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.65 ft below land-surface datum, June 22, 1989; lowest, 54.29 ft below land-surface datum, Apr. 18, 1990.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.11	8.86	8.02	8.59	8.49	8.22	9.81	9.38	7.97	9.33	8.03	8.50
10	8.30	8.94	8.33	8.39	7.62	7.64	9.78	9.43	8.10	9.26	8.20	9.90
15	8.35	8.97	8.25	8.42	8.05	7.92	9.60	8.00	8.20	7.84	8.30	8.63
20	8.53	8.44	8.46	8.74	8.02	9.69	9.35	7.92	8.16	8.02	8.22	7.58
25	8.69	8.69	8.42	8.78	8.24	9.79	9.36	9.43	8.05	8.17	8.34	8.00
EOM	8.82	8.37	8.30	8.31	8.40	9.79	9.44	8.01	7.82	8.12	8.41	8.32
MAX	8.82	9.04	8.50	8.83	9.88	9.92	9.81	9.48	8.21	9.35	8.41	9.90

WTR YR 2004 HIGHEST 4.71 SEPT 17, 18, 2004 LOWEST 9.92 MAR 28, 2004

LOWEST MONTHLY WATER LEVEL



HAYWOOD COUNTY

353232089115601. Local number, Ha:H-007.

LOCATION.--Lat 35°32'32", long 89°11'56", Hydrologic Unit 08010208, 250 ft north of Beech Grove Road, 1.1 miles west of State Route 19, near Brownsville. Owner: Brownsville Power.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 290 ft, cased to 375 ft, screened 240 to 290 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute intervals.

DATUM.--Elevation of land-surface datum is 330 ft above NGVD of 1929. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS.--Records good. Missing record Dec. 3. Water level affected by short periods of pumping at nearby wells.

PERIOD OF RECORD.--April 2003 to current year.

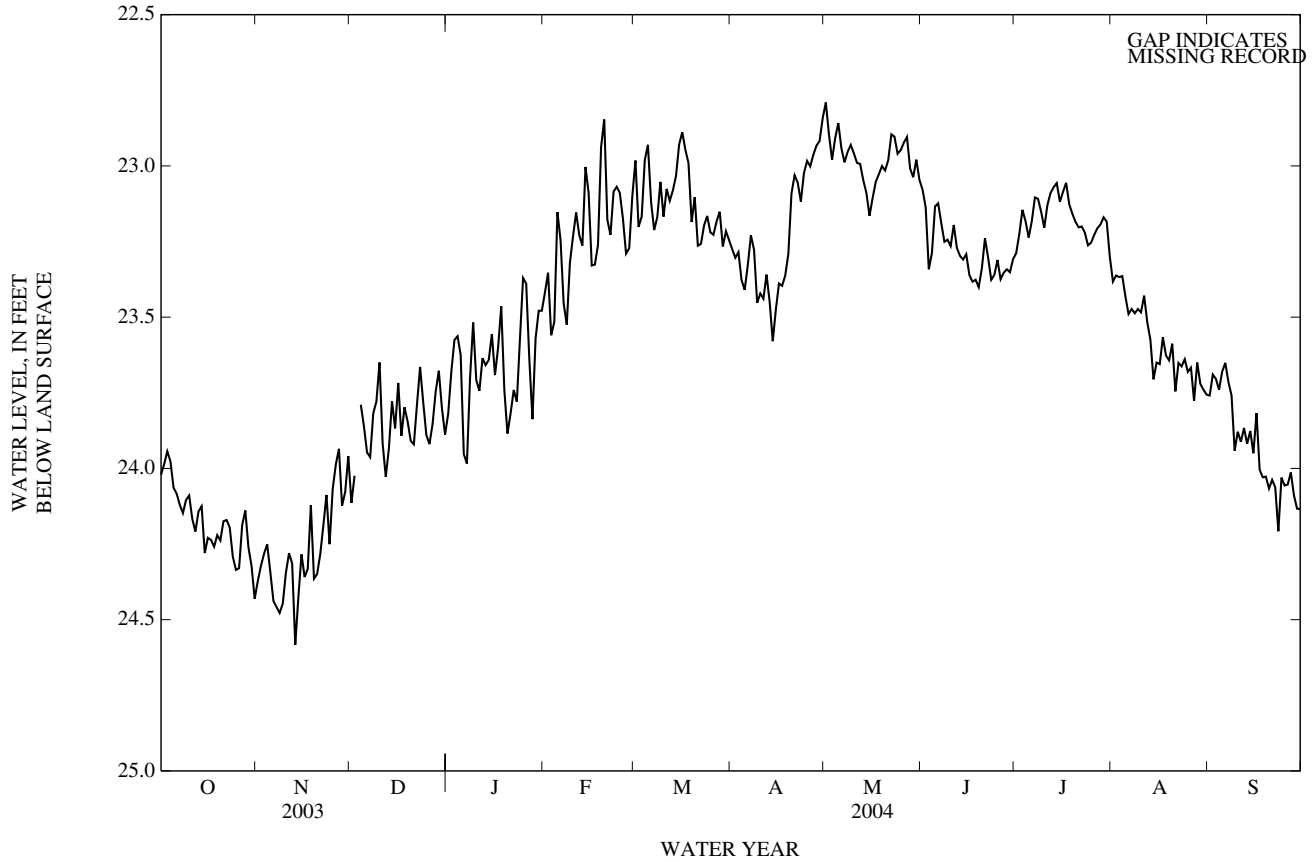
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.54 ft below land-surface datum, May 31, 2003; lowest, 26.02 ft below land-surface datum, Sept. 23, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.09	24.41	23.89	23.85	23.36	22.98	23.46	22.90	23.18	23.27	23.49	23.72
10	24.14	24.39	23.83	23.81	23.28	23.23	23.45	22.99	24.77	23.84	24.76	23.92
15	24.32	24.32	23.88	23.73	23.31	23.04	23.55	23.21	23.34	23.16	23.69	25.59
20	24.29	24.42	24.00	23.92	23.07	23.17	23.22	23.06	23.38	23.21	23.63	24.69
25	24.38	24.21	23.95	23.57	23.11	23.26	23.01	22.98	23.34	23.27	24.58	24.09
EOM	24.90	24.00	23.98	23.54	23.19	23.29	22.88	23.10	23.34	23.36	23.79	24.17
MAX	24.90	24.82	24.17	24.06	23.62	23.33	23.64	23.21	25.25	23.84	25.49	26.02

WTR YR 2004 HIGHEST 22.74 MAY 01, 2004 LOWEST 26.02 SEPT 23, 2004

LOWEST MONTHLY WATER LEVEL



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 off Crutcher Lake Rd, 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 artesian observation 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 interval.

DATUM.--Elevation of land-surface datum is 437.05 ft above NGVD of 1929. Measuring point: Top of casing, 2.80 ft above land-surface datum.

REMARKS.--Missing records Nov. 17-19.

PERIOD OF RECORD.--April 1966 to current year.

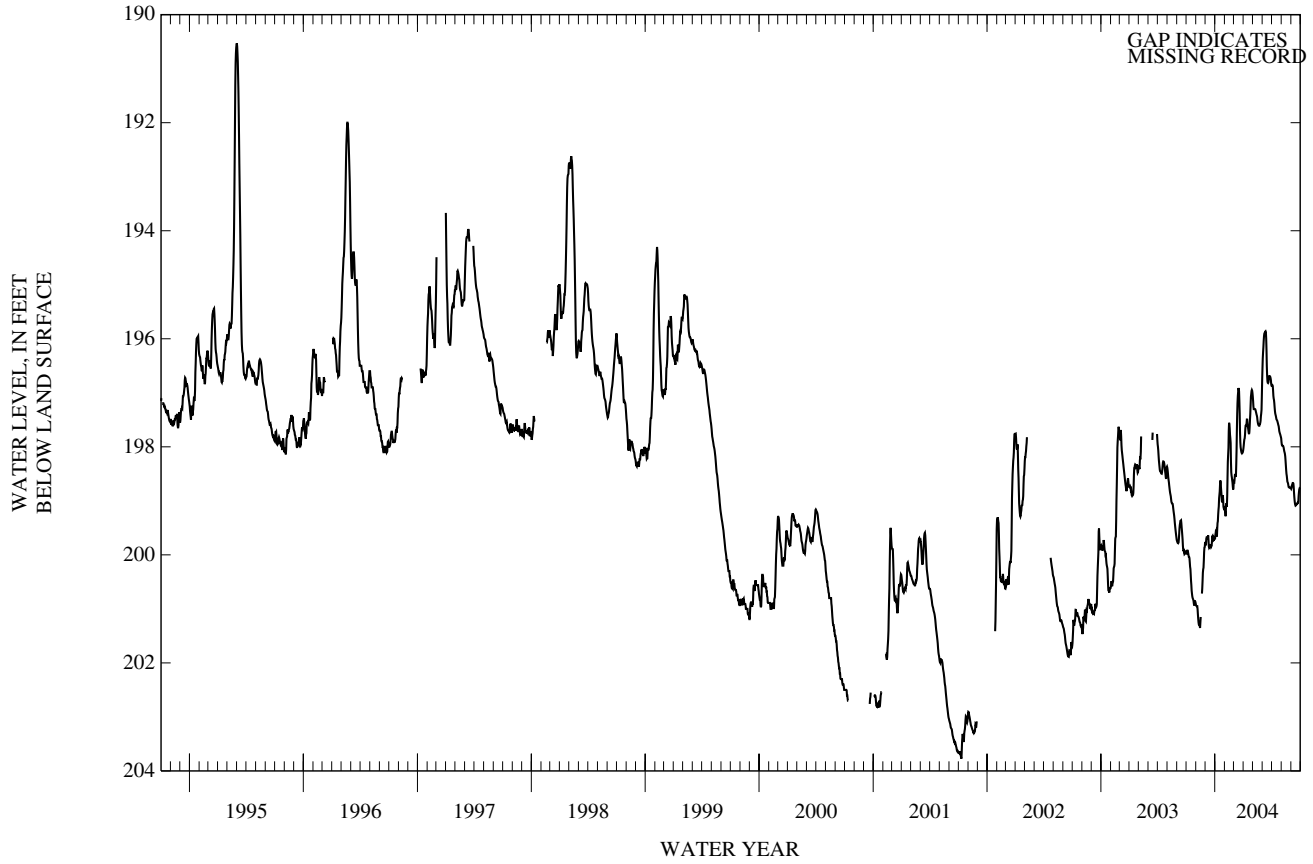
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 187.76 ft below land-surface datum, Apr. 7, 1975; lowest, 203.78 ft below land-surface datum, Oct. 10-11, 2001.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	199.93	200.96	199.69	199.58	199.29	198.51	197.85	197.31	196.09	197.01	197.98	198.69
10	200.04	201.29	199.67	199.40	198.71	198.24	197.60	197.34	195.88	197.31	198.09	198.88
15	200.42	201.33	199.88	198.89	197.59	197.05	197.64	197.48	196.62	197.48	198.39	199.09
20	200.78	200.75	199.85	198.80	198.11	197.52	197.77	197.61	196.82	197.56	198.65	199.05
25	200.92	200.28	199.70	199.03	198.64	198.10	197.11	197.58	196.70	197.72	198.75	198.96
EOM	200.92	199.81	199.71	199.17	198.80	198.09	197.03	196.92	196.87	197.87	198.77	198.78
MAX	200.94	201.36	199.88	199.71	199.30	198.69	198.07	197.61	196.87	197.87	198.77	199.09

WTR YR 2004 HIGHEST 196.98 JUN 10, 11, 12, 2004 LOWEST 201.36 NOV 14, 2003

LOWEST MONTHLY WATER LEVEL



LINCOLN COUNTY

350034086422800. Local number, Li:G-1.

LOCATION.--Lat 35°00'34", long 86°42'28", Hydrologic Unit 06030002, on west side of Pepper Road at Taft well field, 0.8 mi south of State Highway 110, at Taft. Owner: Lincoln Count Board of Public Utilities.

AQUIFER.--Fort Payne Formation of early Mississippian age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 106.5 ft, cased to 106.5 ft, slotted from 53 to 87 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Altitude of land-surface datum is 904.00. Measuring point: Top of casing 2.10 ft above land-surface datum.

REMARKS.--Records fair. Missing records Nov. 14, 24-25, Dec. 2, 19-21, 25-26, Jan. 6-7, 11, 19-20, 22-23, 28-31, Feb. 1, 3-4, 9, and July 29. Water levels affected by pumpage from Taft Well field for municipal water supply.

PERIOD OF RECORD.--April 1992 to Sept. 1992, Oct. 1995 to current year.

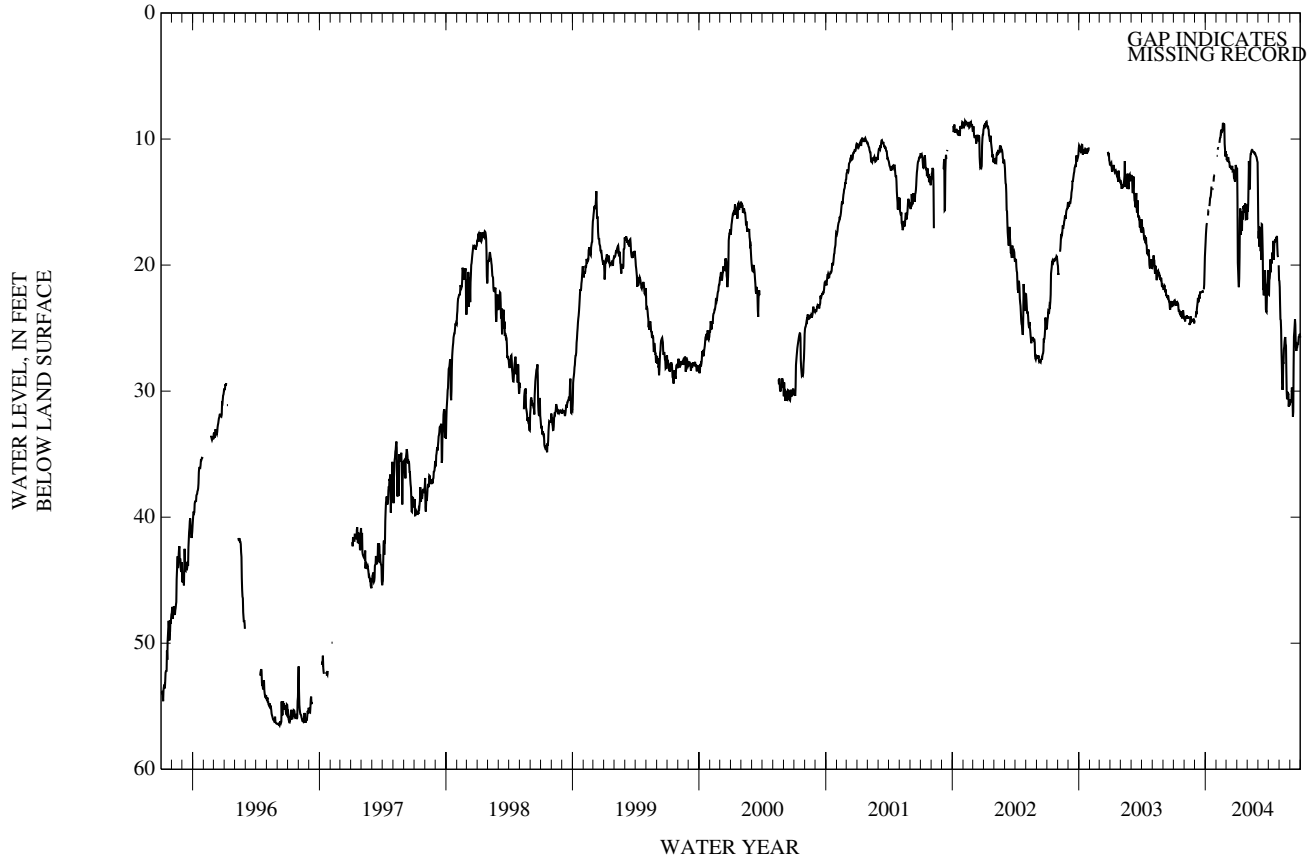
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.10 ft below land-surface datum, Feb. 6, 2002; lowest, 56.53 ft below land-surface datum, Sept. 7, 8, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.30	24.41	24.13	16.85	11.11	12.29	22.41	12.11	22.22	23.42	25.14	32.06
10	23.49	25.03	23.09	15.77	10.51	12.82	18.09	11.31	22.70	22.40	30.25	32.68
15	24.15	25.12	23.11	14.74	9.46	12.75	20.13	10.93	24.46	21.95	28.29	25.47
20	24.44	24.64	---	---	8.88	13.47	17.90	11.15	23.52	19.78	28.59	27.88
25	24.67	---	---	13.29	10.91	14.20	17.58	11.38	26.25	20.52	31.24	27.06
EOM	24.68	25.03	19.09	---	12.41	12.61	18.56	17.59	24.30	22.94	31.92	26.85
MAX	24.68	25.38	25.09	18.57	12.41	14.20	22.59	18.42	26.25	24.31	31.96	32.68

WTR YR 2004 HIGHEST 8.57 FEB 24, 2004 LOWEST 32.68 SEPT 10, 2004

LOWEST MONTHLY WATER LEVEL



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 interval.

DATUM.--Elevation of land-surface is 2,150 ft above NGVD of 1929, from topographic map. Measuring point: Floor of recorder shelter 1.5 ft above land-surface datum.

REMARKS.--Records good. Highest water level readings may be influenced for short periods by surface inflow.

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

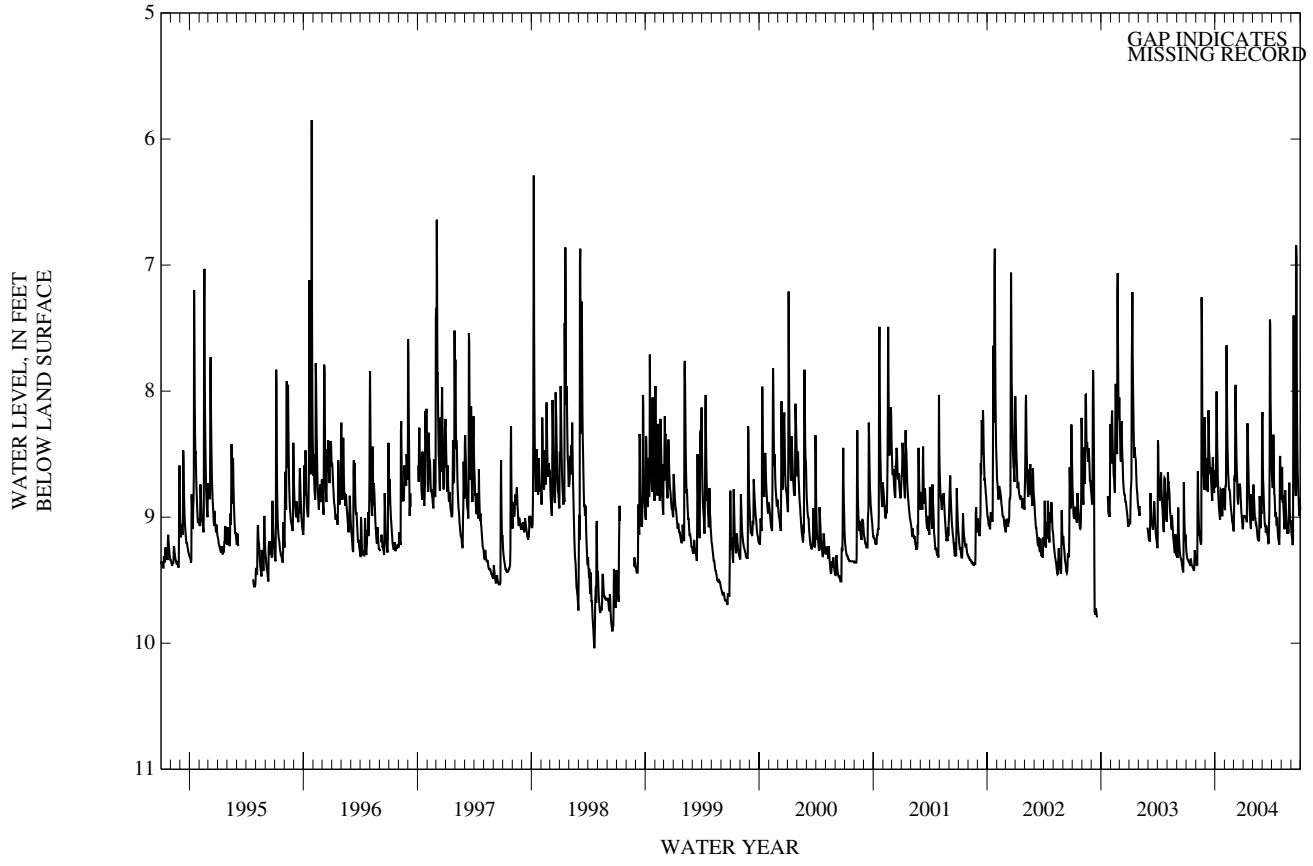
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft below land-surface datum, Mar. 27, 1994; lowest, 11.66 ft below land-surface datum, Oct. 18, 19, 20, 1998.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.34	9.39	8.54	8.70	8.76	8.74	8.99	8.88	8.88	8.76	8.92	9.20
10	9.36	9.08	8.83	8.76	8.50	8.60	9.00	9.05	9.07	8.87	9.08	8.17
15	9.37	9.20	8.59	8.98	8.78	8.90	8.42	9.14	9.12	9.02	8.96	8.82
20	9.39	7.88	8.77	8.82	8.93	8.74	8.91	9.19	9.22	9.14	9.14	8.37
25	9.42	8.67	8.55	9.01	9.04	8.97	9.10	9.06	7.82	9.22	9.02	8.92
EOM	9.35	8.47	8.67	8.89	9.11	9.09	9.02	8.86	8.60	8.85	9.05	9.01
MAX	9.42	9.39	8.88	9.03	9.11	9.12	9.10	9.21	9.24	9.22	9.15	9.24

WTR YR 2004 HIGHEST 6.16 SEPT 17, 2004 LOWEST 9.43 OCT 24, 25, 26, 2003

LOWEST MONTHLY WATER LEVEL



SHELBY COUNTY

350857089591401. Local number, Sh:P-99.

LOCATION.--Lat 35°08'57", long 89°59'14", Hydrologic Unit 08010210, access road off North Parkway, 0.2 mi south of North Parkway, in Overton Park. Owner: USGS and Memphis Park Commission.

AQUIFER.--Fluvial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 59 ft, cased to 53 ft, screened 53 to 59 ft.

INSTRUMENTATION.--Water level recorder -- 60 minute interval.

DATUM.--Elevation of land-surface datum is 271.06 ft above NGVD of 1929. Measuring point: Top of casing, 2.50 ft above land-surface datum.

REMARKS.--Records good. No missing record.

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

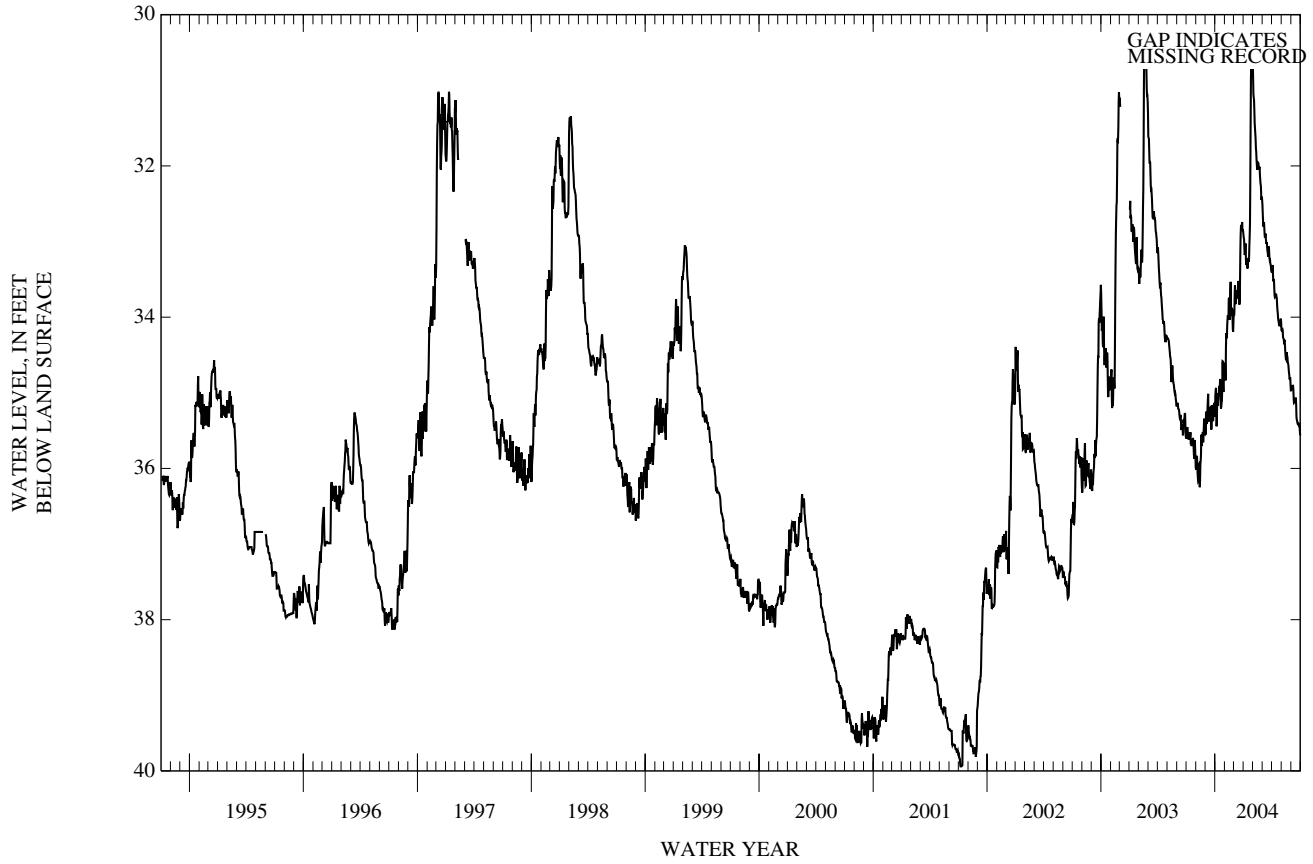
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.27 ft below land-surface datum, April 30, 1991; lowest 42.58 ft below land-surface datum, November 15, 1971.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.52	35.99	35.36	35.36	34.64	33.62	33.21	31.18	32.79	33.51	34.23	34.95
10	35.53	36.12	35.24	35.22	34.05	33.81	33.27	31.72	32.94	33.75	34.33	35.16
15	35.67	36.02	35.27	35.04	33.96	33.67	33.34	32.06	33.04	33.70	34.58	35.11
20	35.68	35.75	35.54	35.25	33.72	33.84	33.19	32.05	33.20	33.96	34.55	35.38
25	35.85	35.64	35.39	34.85	33.93	32.84	31.11	32.22	33.23	34.10	34.75	35.43
EOM	36.01	35.48	35.33	34.73	34.15	32.89	30.57	32.51	33.42	34.11	34.99	35.59
MAX	36.01	36.28	35.61	35.47	34.90	34.01	33.41	32.51	33.42	34.12	34.99	35.59

WTR YR 2004 HIGHEST 30.40 APR 27, 28, 2004 LOWEST 36.28 NOV 13, 2003

LOWEST MONTHLY WATER LEVEL



351113089583101. Local number, Sh:P-151.

LOCATION.--Lat 35°11'13", long 89°58'31", Hydrologic Unit 08010210, 350 ft southeast of south abutment of Wolf River bridge at Hollywood Street crossing and 150 ft east of Hollywood Street; at north Hollywood Dump site. Owner: City of Memphis and U.S. Geological Survey.

AQUIFER.--Alluvial sand and gravel of Holocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 34.2 ft, cased to 29.2 ft, screened 29.2 to 34.2 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 238.14 ft above NGVD of 1929. Measuring point: Top of inside recorder shelter shelf, 2.00 ft above land-surface datum.

REMARKS.--Records good. No missing records.

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

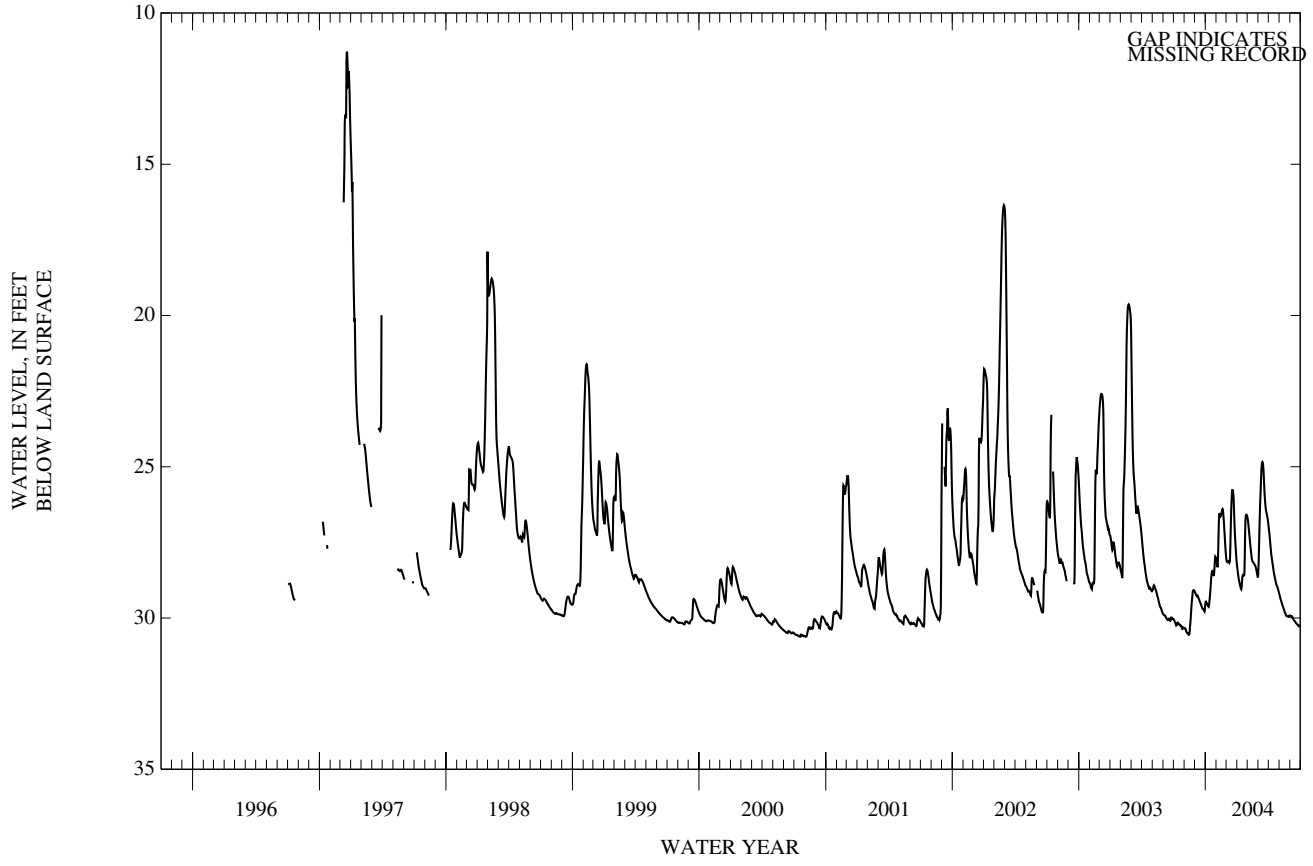
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.20 ft below land-surface datum, Mar. 19, 1997; lowest, 30.64 ft below land-surface datum, Nov. 3-4, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.17	30.42	29.25	29.57	28.34	28.15	28.70	27.15	27.02	27.51	29.42	29.94
10	30.24	30.51	29.32	29.66	26.54	28.17	28.97	27.75	25.27	28.06	29.60	30.04
15	30.20	30.55	29.49	29.15	26.59	26.63	28.90	28.13	25.01	28.46	29.77	30.12
20	30.26	29.93	29.64	28.49	26.49	25.84	28.60	28.22	26.12	28.76	29.92	30.20
25	30.37	29.18	29.74	28.65	27.35	27.21	26.92	28.36	26.56	28.96	29.95	30.27
EOM	30.35	29.12	29.63	28.03	28.01	28.24	26.65	28.67	26.95	29.20	29.92	30.28
MAX	30.38	30.56	29.82	29.66	28.34	28.24	29.06	28.67	28.65	29.20	29.97	30.28

WTR YR 2004 HIGHEST 24.83 JUN 12, 13, 2004 LOWEST 30.10 NOV 13, 14, 2003

LOWEST MONTHLY WATER LEVEL



SHELBY COUNTY—Continued

351102089582701. Local number, Sh:P-152.

LOCATION.--Lat 35°11'02", long 89°58'27", Hydrologic Unit 08010210, 1,500 ft south-southeast of abutment of Wolf River bridge at Hollywood Street crossing and 250 ft east of Hollywood Street, at north Hollywood Dump site. Owner: City of Memphis and U.S. Geological Survey.

AQUIFER.--Alluvial sand and gravel of Holocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 28.7 ft, cased to 23.7 ft, screened 23.7 to 28.7 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 237.73 ft above NGVD of 1929. Measuring point: Top of inside recorder shelter shelf, 1.70 ft above land-surface datum.

REMARKS.--Records good. No missing record.

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

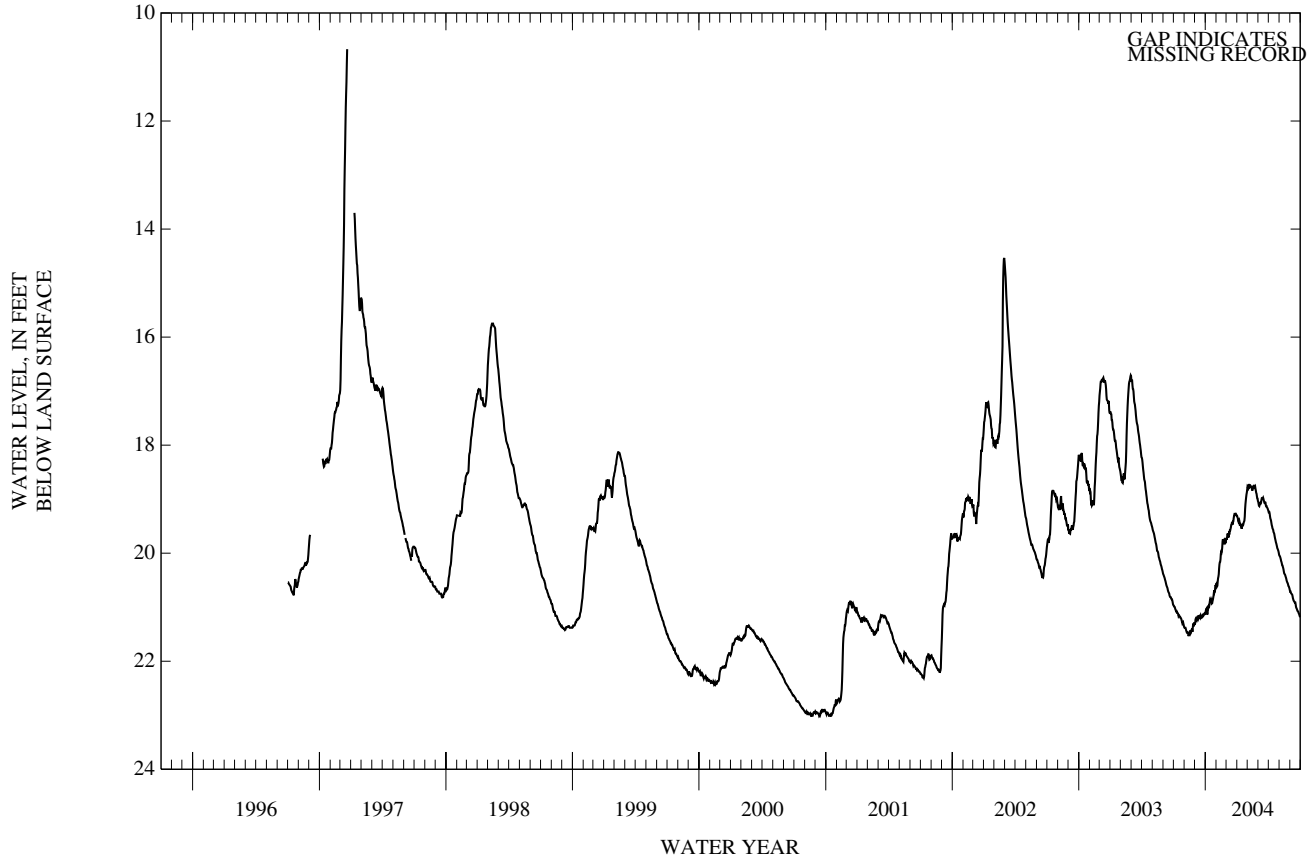
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.57 ft below land-surface datum, Mar. 21, 1997; lowest, 23.02 ft below land-surface datum, Nov. 21, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.03	21.41	21.24	21.12	20.59	19.65	19.44	18.74	19.11	19.34	20.13	20.76
10	21.09	21.49	21.21	21.02	20.23	19.66	19.50	18.77	19.04	19.49	20.25	20.87
15	21.18	21.51	21.18	20.89	20.01	19.51	19.54	18.86	18.98	19.62	20.39	20.94
20	21.20	21.50	21.21	20.95	19.79	19.45	19.46	18.78	19.09	19.76	20.48	21.05
25	21.30	21.44	21.18	20.77	19.77	19.31	19.12	18.86	19.13	19.90	20.57	21.11
EOM	21.38	21.30	21.13	20.59	19.77	19.31	18.85	19.06	19.23	20.04	20.70	21.20
MAX	21.38	21.56	21.34	21.14	20.63	19.77	19.57	19.06	19.23	20.04	20.70	21.20

WTR YR 2004 HIGHEST 18.71 MAY 04, 05, 2004 LOWEST 20.98 NOV 13, 2003

LOWEST MONTHLY WATER LEVEL



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 artesian observation well, diameter 6 in., depth 384 ft, cased to 375 ft, screened 375 to 384 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 330.40 ft above NGVD of 1929. Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Records good. No missing record. Water levels affected by pumpage for municipal and industrial water supply in the Memphis area.

PERIOD OF RECORD.--October 1940 to current year.

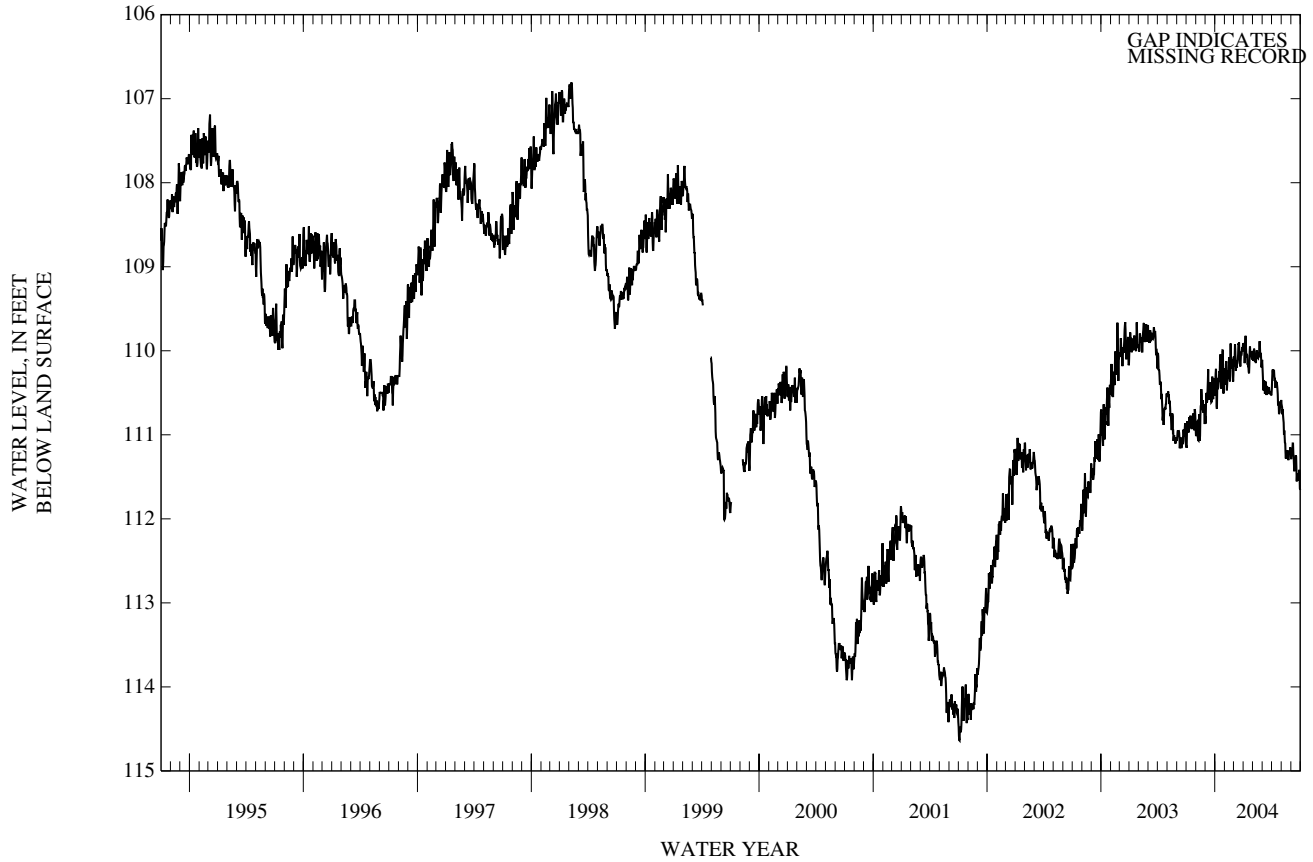
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.08 ft below land-surface datum, Dec. 27, 1940; lowest, 114.66 ft below land-surface datum, Oct. 3, 4, 2001.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	110.88	110.90	110.57	110.54	110.33	109.94	110.18	110.00	110.49	110.30	110.72	111.19
10	110.83	111.03	110.35	110.47	110.33	110.23	110.05	110.17	110.47	110.37	110.96	111.42
15	110.92	110.89	110.47	110.28	110.20	110.11	110.18	110.06	110.47	110.39	111.31	111.39
20	110.90	110.72	110.64	110.45	109.98	110.08	110.28	110.09	110.52	110.60	111.33	111.49
25	110.92	110.79	110.56	110.16	110.10	110.05	110.02	110.11	110.51	110.75	111.23	111.53
EOM	111.01	110.82	110.54	110.32	110.35	109.93	110.09	110.15	110.53	110.60	111.28	111.72
MAX	111.20	111.13	110.91	110.74	110.51	110.28	110.31	110.21	110.56	110.79	111.35	111.72

WTR YR 2004 HIGHEST 109.80 APR 08, 2004 LOWEST 111.72 SEPT 30, 2004

LOWEST MONTHLY WATER LEVEL



SHELBY COUNTY—Continued

352042089523401. Local number, Sh:U-100.

LOCATION.--Lat 35°20'42", long 89°52'34", Hydrologic Unit 08010209, at Millington, 0.3 mi north of intersection of Navy Road and First Street and 300 ft west-southwest of intersection of Darkar Street and First Street, on former Naval Support Activity Mid-South Northside. Owner: Naval Support Activity Mid-South.

AQUIFER.--Loess silt and clay of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 18 ft, cased to 8 ft, screened 8 to 18 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 274.97 ft above NGVD of 1929. Measuring point: Top of inside recorder shelter shelf, 2.44 ft above land-surface datum.

REMARKS.--Records good. Missing records from Mar. 20 to Apr. 5.

PERIOD OF RECORD.--May 1995 to current year.

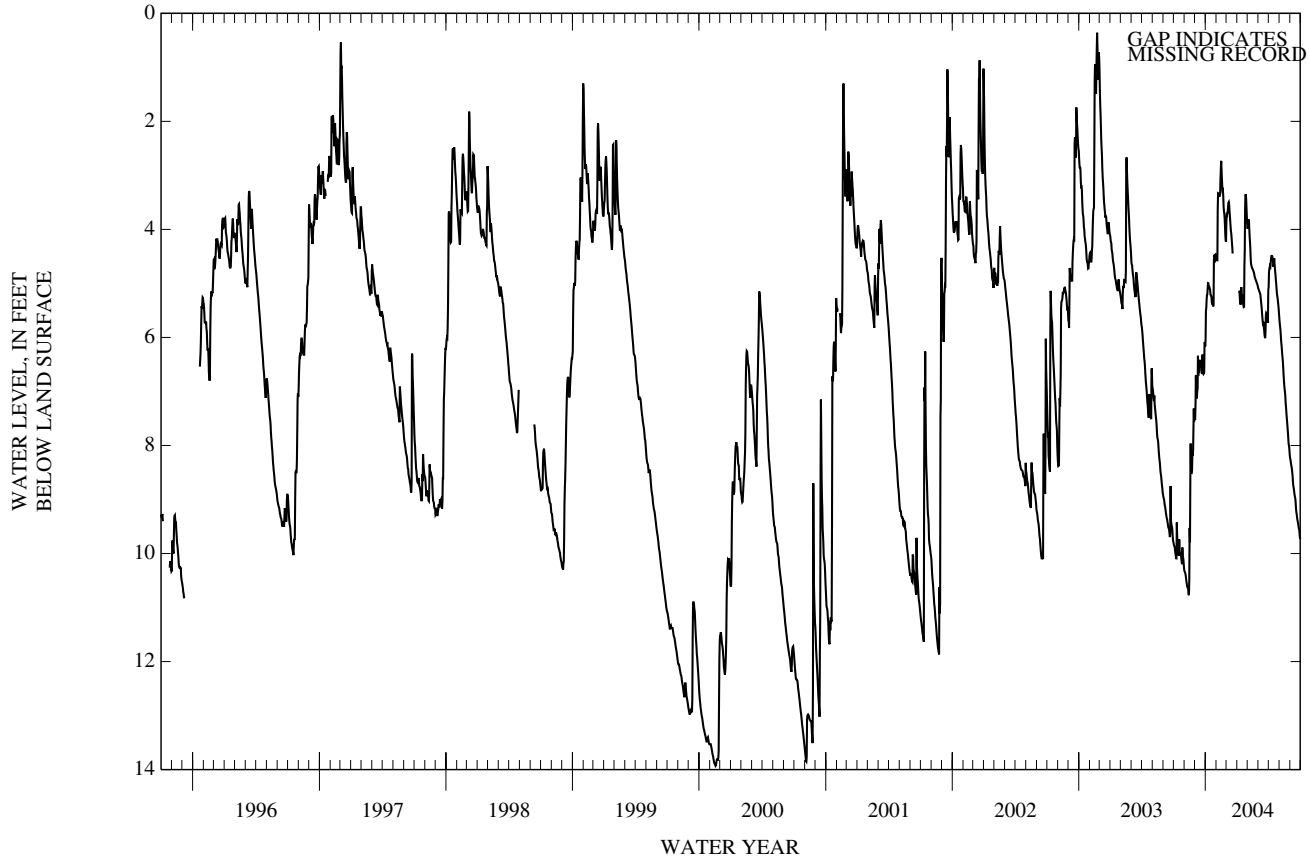
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.26 ft below land-surface datum, Feb. 22, 2003; lowest, 13.94 ft below land-surface datum, Feb. 17, 18, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.97	10.44	7.12	5.22	4.53	3.69	---	3.89	5.17	4.68	6.03	8.41
10	9.73	10.63	6.57	5.07	3.37	3.69	5.36	4.61	5.43	4.49	6.40	8.76
15	10.01	10.77	6.50	5.21	2.79	4.07	5.22	4.74	5.80	4.73	6.92	8.97
20	10.01	8.50	6.66	5.39	3.28	---	5.45	4.83	6.00	4.83	7.31	9.29
25	10.25	8.22	6.67	5.16	3.84	---	3.51	4.95	5.56	5.23	7.73	9.52
EOM	10.31	7.53	6.18	4.47	4.25	---	3.95	5.08	5.14	5.63	8.21	9.74
MAX	10.31	10.78	7.53	6.13	4.58	4.46	5.50	5.08	6.04	5.63	8.21	9.74

WTR YR 2004 HIGHEST 2.71 FEB 15, 2004 LOWEST 10.78 NOV 14, 2003

LOWEST MONTHLY WATER LEVEL



352042089523402. Local number, Sh:U-101.

LOCATION.--Lat 35°20'42", long 89°52'34", Hydrologic Unit 08010209, at Millington, 0.3 mi north of intersection of Navy Road and First Street and 300 ft west-southwest of intersection of Dakar Street and First Street, on former Naval Support Activity Mid-South Northside. Owner: Naval Support Activity Mid-South.

AQUIFER.--Fluvial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 69 ft, cased to 59 ft, screened 59 to 69 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 275.19 ft above NGVD of 1929. Measuring point: Top of inside recorder shelter shelf, 2.62 ft above land-surface datum.

REMARKS.--No missing record.

PERIOD OF RECORD.--May 1995 to current year.

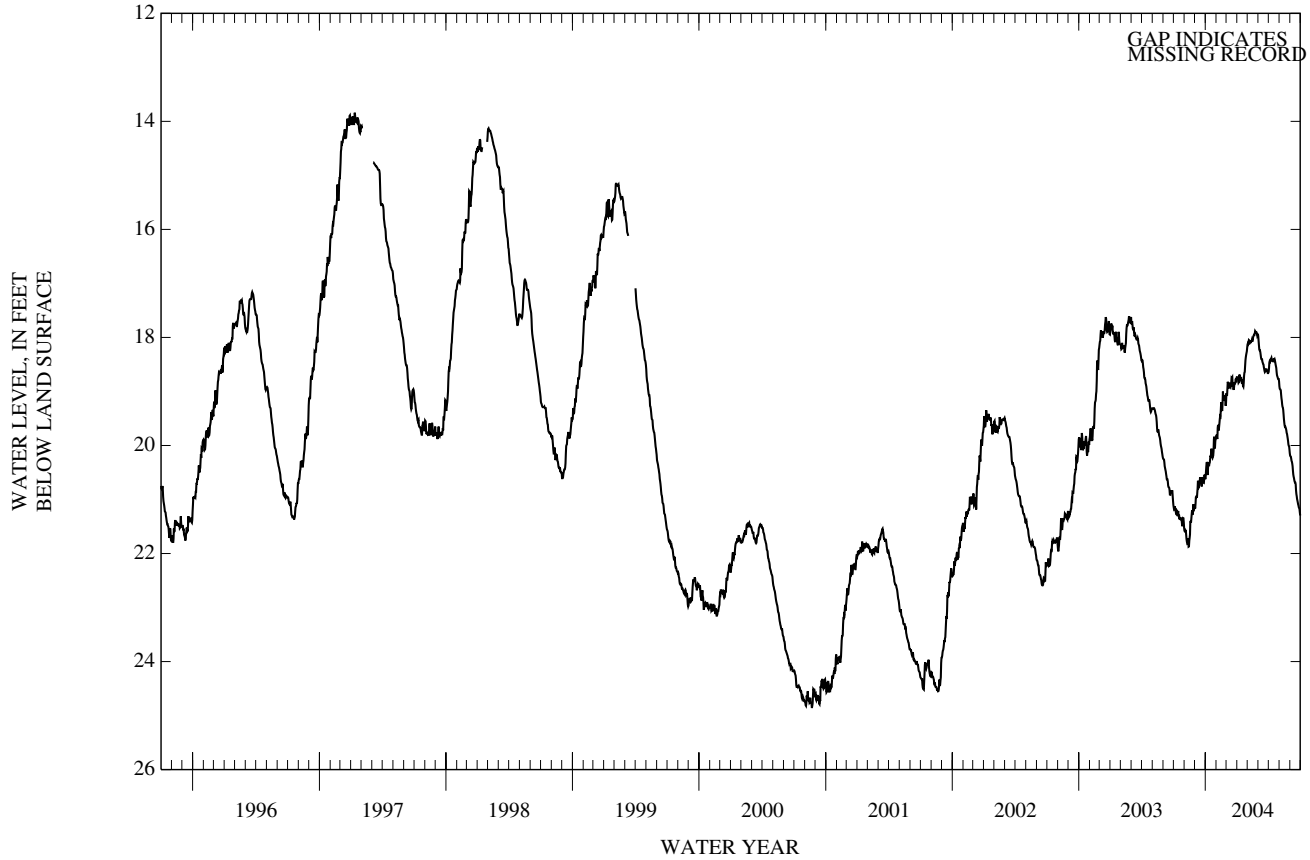
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.02 ft below land-surface datum, May 2-3, 1997; lowest, 24.87 ft below land-surface datum, Nov. 21, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.19	21.60	20.95	20.40	19.82	18.84	18.86	18.05	18.24	18.43	19.01	20.30
10	21.21	21.82	20.77	20.39	19.60	18.94	18.79	18.08	18.40	18.43	19.29	20.55
15	21.31	21.80	20.69	20.22	19.25	18.89	18.86	18.07	18.50	18.42	19.60	20.69
20	21.37	21.44	20.76	20.23	19.08	18.88	18.91	17.95	18.64	18.48	19.69	20.96
25	21.49	21.31	20.68	20.06	19.09	18.86	18.45	17.91	18.59	18.72	19.88	21.12
EOM	21.55	21.13	20.63	19.87	19.27	18.74	18.24	17.96	18.65	18.85	20.17	21.31
MAX	21.55	21.90	21.17	20.62	19.90	19.10	18.92	18.16	18.70	18.85	20.17	21.31

WTR YR 2004 HIGHEST 17.88 MAY 23, 24, 2004 LOWEST 21.90 NOV 13, 14, 2003

LOWEST MONTHLY WATER LEVEL



SHELBY COUNTY—Continued

352042089523403. Local number, Sh:U-102.

LOCATION.--Lat 35°20'42", long 89°52'34", Hydrologic Unit 08010209, at Millington, 0.3 mi north of intersection of Navy Road and First Street and 300 ft west-southwest of intersection of Dakar Street and First Street, on former Naval Support Activity Mid-South Northside. Owner: Naval Support Activity Mid-South.

AQUIFER.--Cockfield Formation of Claiborne Group of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 115 ft, cased to 105 ft, screened 105 to 115 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 275.05 ft above NGVD of 1929. Measuring point: Top of inside recorder shelter shelf, 2.67 ft above land-surface datum.

REMARKS.--Records good. No missing record.

PERIOD OF RECORD.--May 1995 to current year.

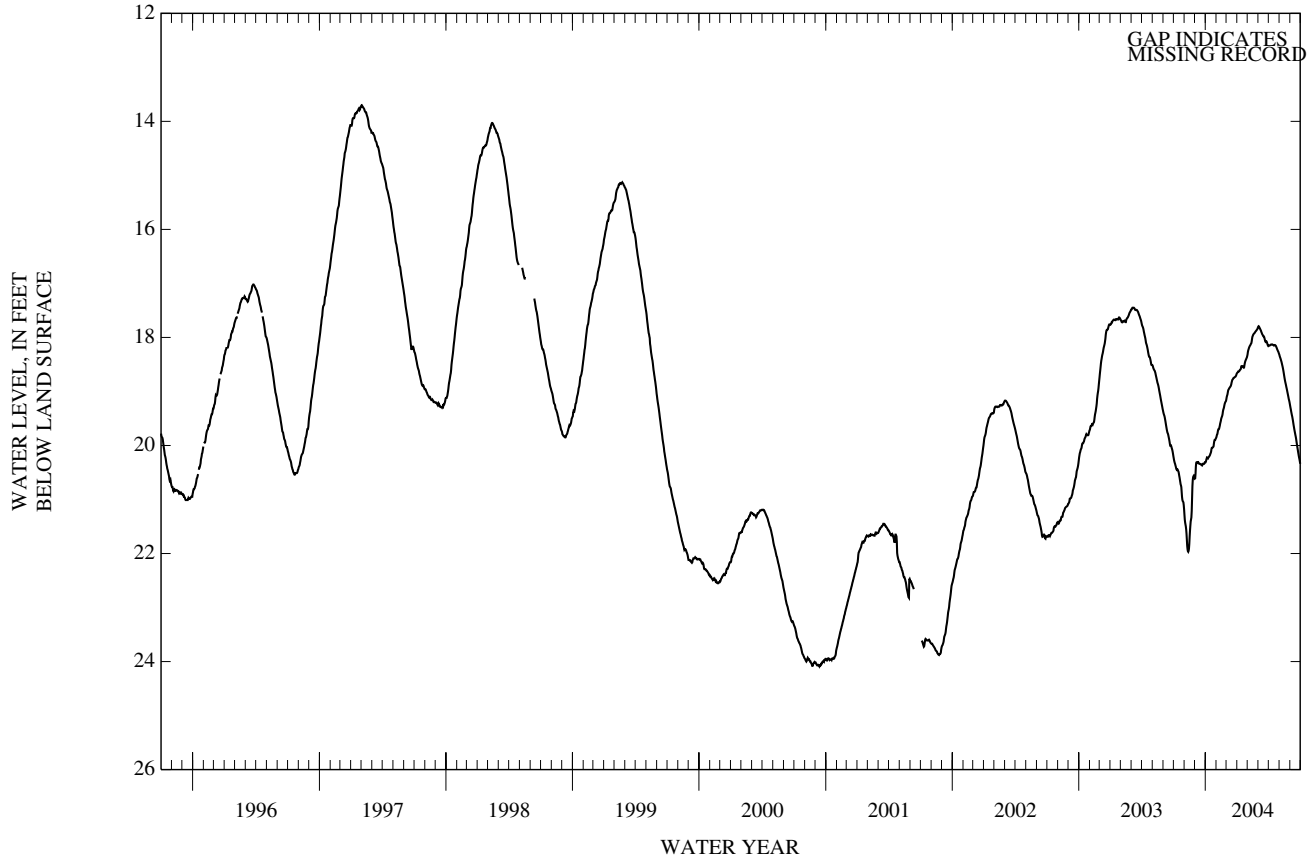
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.71 ft below land-surface datum, Apr. 30 - May 4, 1997; lowest, 24.09 ft below land-surface datum, Dec. 13, 15-16, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.36	21.52	20.34	20.23	19.78	19.04	18.63	18.21	17.83	18.15	18.42	19.42
10	20.45	21.94	20.32	20.22	19.68	18.94	18.60	18.14	17.91	18.13	18.55	19.60
15	20.50	21.87	20.34	20.16	19.52	18.88	18.53	18.00	17.98	18.15	18.74	19.79
20	20.70	21.39	20.36	20.04	19.40	18.77	18.56	17.93	18.05	18.15	18.90	19.98
25	20.98	20.69	20.34	20.00	19.25	18.74	18.44	17.89	18.08	18.22	19.06	20.18
EOM	21.23	20.60	20.31	19.87	19.18	18.68	18.36	17.83	18.16	18.31	19.25	20.35
MAX	21.23	21.97	20.62	20.31	19.86	19.16	18.66	18.33	18.16	18.31	19.25	20.35

WTR YR 2004 HIGHEST 17.79 JUN 02, 03, 2004 LOWEST 21.97 NOV 11, 12, 2003

LOWEST MONTHLY WATER LEVEL



351917089515101. Local number, Sh:V-211.

LOCATION.--Lat 35°19'17", long 89°51'51", Hydrologic Unit 08010209, at Millington, 1,200 ft east of intersection of State Route 385 and Singleton Parkway, and 50 ft south of Big Creek Drainage Canal. Owner: Tennessee Department of Transportation and Naval Support Activity Mid-South.

AQUIFER.--Alluvial sand and gravel of Holocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 50 ft, cased to 40 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 268.27 ft above NGVD of 1929. Measuring point: Top of casing, 2.58 ft above land-surface datum.

REMARKS.--Missing records Oct. 1-2. Water level affected by stage of Big Creek Drainage Canal.

PERIOD OF RECORD.--September 1999 to October 2004 (discontinued).

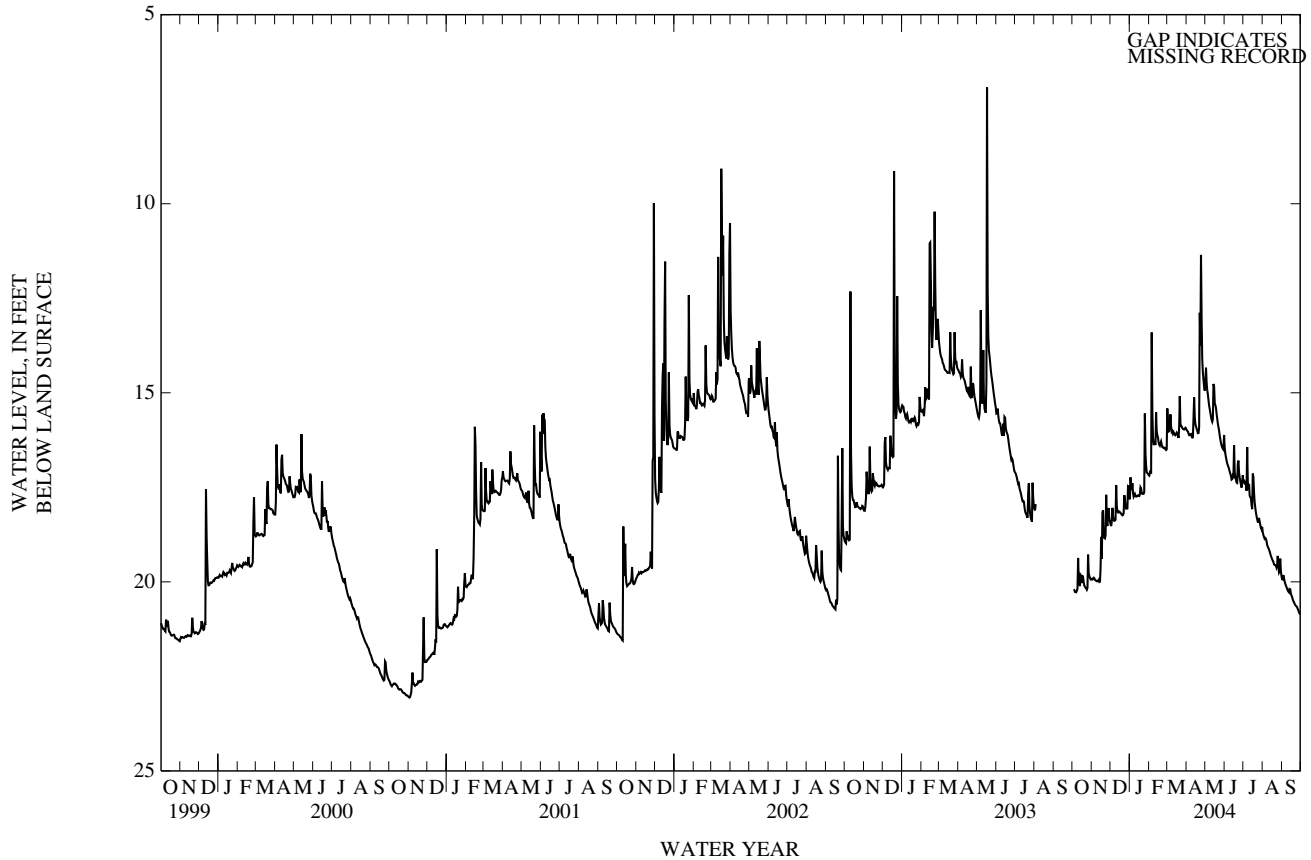
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.10 ft below land-surface datum, May 17, 2003; lowest, 23.07 ft below land-surface datum, Nov. 2, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.27	19.92	18.32	17.58	17.12	15.98	16.13	15.12	16.91	17.53	18.89	20.02
10	19.80	19.99	18.18	17.74	16.35	16.09	16.19	15.69	17.16	17.63	19.12	20.26
15	19.96	19.97	18.15	17.73	16.26	16.12	15.86	15.10	17.34	18.13	19.39	20.36
20	20.12	18.81	18.25	17.68	16.33	16.22	16.08	15.76	17.41	18.11	19.57	20.56
25	20.25	18.48	18.04	17.52	16.48	15.95	13.82	16.29	17.29	18.47	19.48	20.70
EOM	19.92	18.44	17.81	17.19	16.51	15.97	14.97	16.42	17.40	18.64	19.90	20.88
MAX	20.31	20.01	18.53	17.83	17.20	16.47	16.19	16.52	17.57	18.64	19.90	20.88

WTR YR 2004 HIGHEST 8.12 APR 24, 2004 LOWEST 21.12 OCT 07, 08, 09, 2004

LOWEST MONTHLY WATER LEVEL



SHELBY COUNTY—Continued

351916089515101. Local number, Sh:V-212.

LOCATION.--Lat 35°19'16", long 89°51'51", Hydrologic Unit 08010209, at Millington, 1,200 ft east of intersection of State Route 385 and Singleton Parkway, and 60 ft south of Big Creek Drainage Canal. Owner: Tennessee Department of Transportation and Naval Support Activity Mid-South.

AQUIFER.--Cockfield Formation of Claiborne Group of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 2 in., depth 67 ft, cased to 57 ft, screened 57 to 67 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 268.26 ft above NGVD of 1929. Measuring point: Top of casing, 2.70 ft above land-surface datum.

REMARKS.--Records good. No missing record. Water level affected by stage of Big Creek Drainage Canal.

PERIOD OF RECORD.--September 1999 to October 2004 (discontinued).

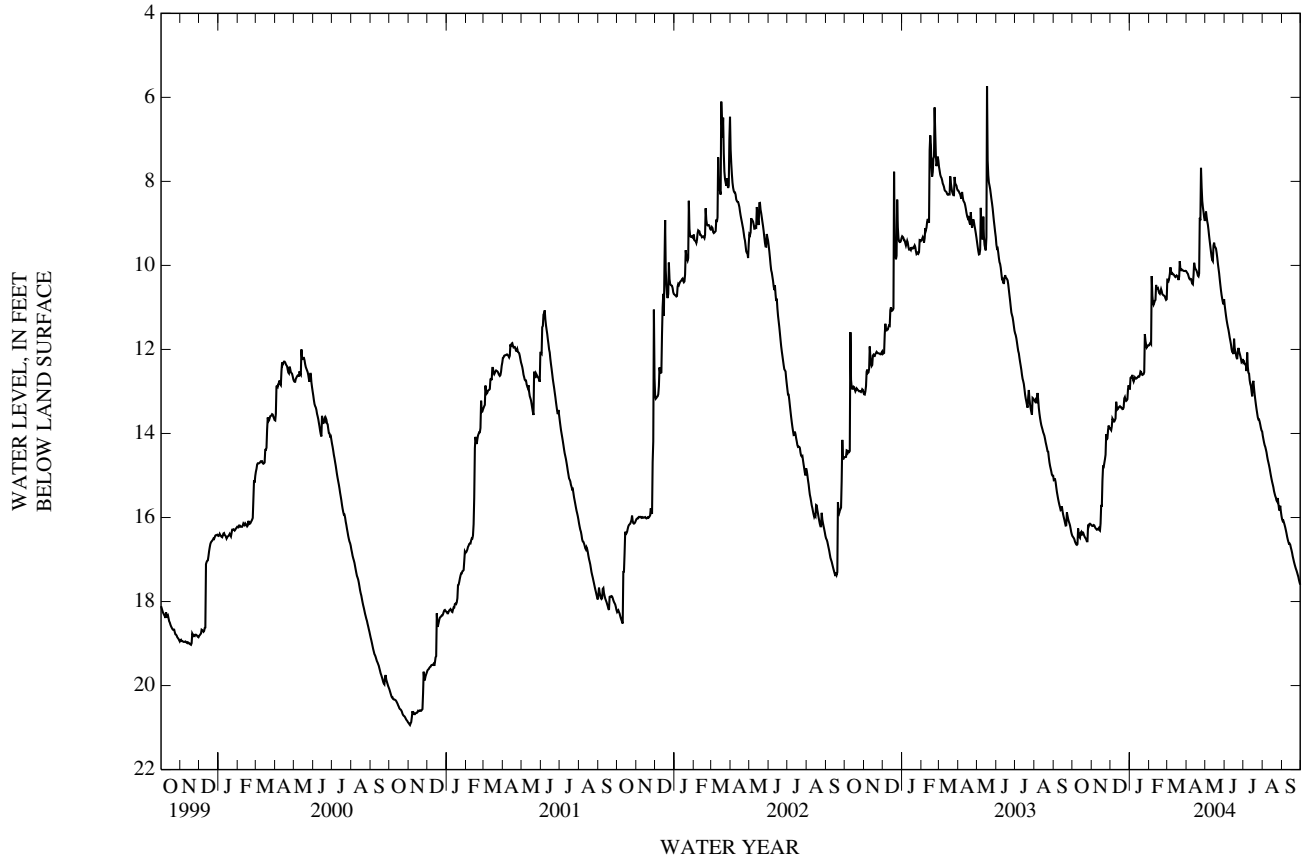
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.53 ft below land-surface datum, May 17, 2003; lowest, 20.94 ft below land-surface datum, Nov. 3, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.59	16.21	13.70	12.66	11.86	10.27	10.33	9.09	11.43	12.46	14.35	16.20
10	16.37	16.29	13.53	12.70	10.86	10.23	10.45	9.75	11.83	12.66	14.72	16.55
15	16.39	16.30	13.38	12.65	10.57	10.28	10.10	9.53	12.17	13.17	15.12	16.75
20	16.46	14.82	13.43	12.62	10.58	10.40	10.27	9.88	12.23	13.26	15.47	17.08
25	16.61	14.15	13.22	12.42	10.73	10.11	8.36	10.53	12.12	13.71	15.60	17.34
EOM	16.18	13.89	12.95	11.91	10.83	10.15	8.98	10.91	12.31	14.00	16.01	17.62
MAX	16.70	16.32	13.94	12.96	11.91	10.79	10.47	10.96	12.38	14.00	16.01	17.62

WTR YR 2004 HIGHEST 6.16 APR 24, 2004 LOWEST 17.652 SEPT 30, 2004

LOWEST MONTHLY WATER LEVEL



351917089515102. Local number, Sh:V-222.

LOCATION.--Lat 35°19'17", long 89°51'51", Hydrologic Unit 08010209, at Millington, 1,200 ft east of intersection of State Route 385 and Singleton Parkway, and 40 ft south of Big Creek Drainage Canal. Owner: Tennessee Department of Transportation and Naval Support Activity Mid-South.

AQUIFER.--Alluvial sand, silt and clay of Holocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 30 ft, cased to 20 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Water-level recorder -- 60-minute interval.

DATUM.--Elevation of land-surface datum is 268.50 ft above NGVD of 1929. Measuring point: Top of casing, 2.25 ft above land-surface datum.

REMARKS.--No missing records. Water levels affected by stage of Big Creek Drainage Canal.

PERIOD OF RECORD.--September 1999 to October 2004 (discontinued).

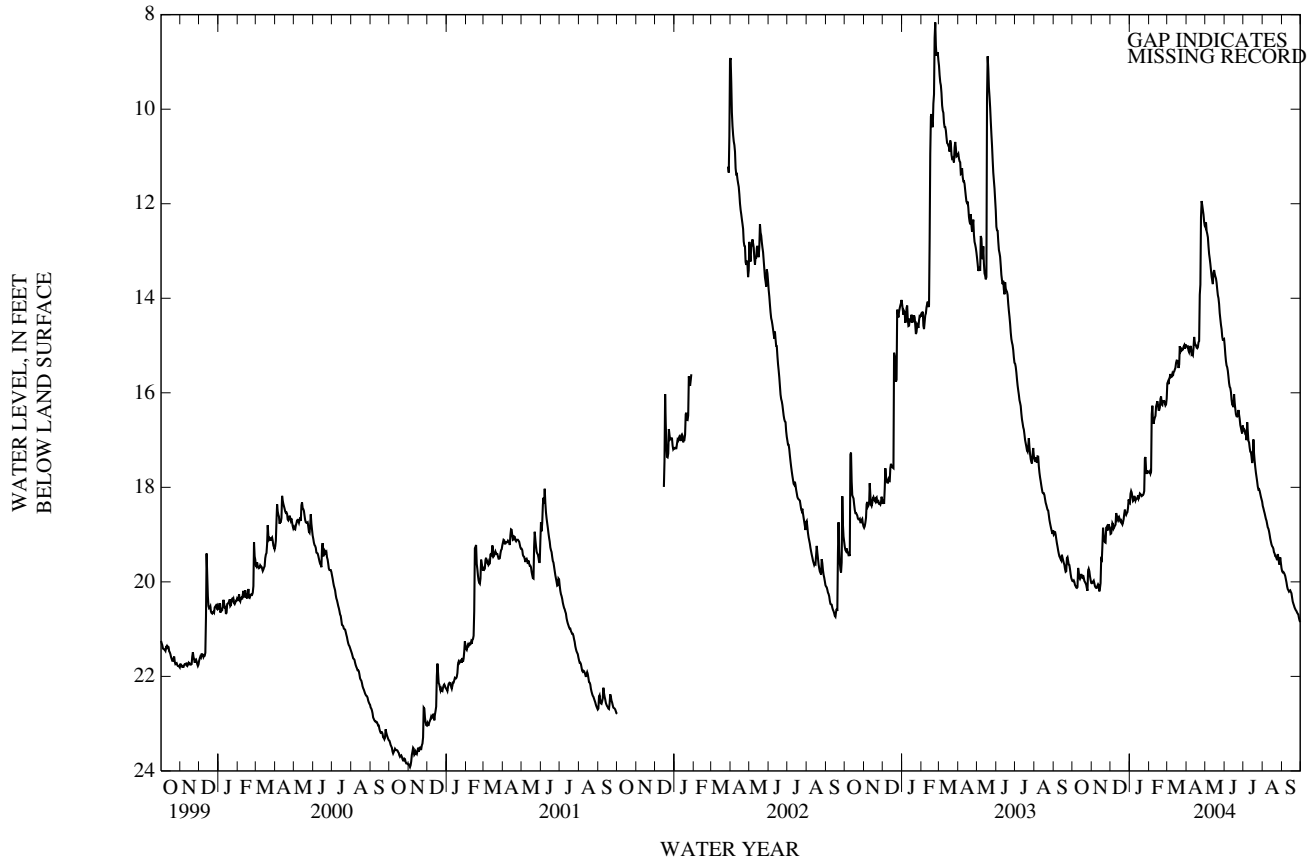
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.05 ft below land-surface datum, Feb. 23, 2003; lowest, 23.94 ft below land-surface datum, Nov. 3, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.08	20.06	18.85	18.24	17.61	15.70	15.17	12.79	15.48	16.96	18.65	19.86
10	20.00	20.11	18.73	18.31	16.55	15.69	15.20	13.49	15.92	17.10	18.90	20.17
15	19.87	20.08	18.68	18.27	16.36	15.46	15.03	13.44	16.34	17.53	19.23	20.24
20	20.00	19.08	18.82	18.21	16.20	15.44	15.01	13.89	16.52	17.63	19.43	20.52
25	20.21	18.89	18.57	18.02	16.19	15.13	12.15	14.52	16.61	18.06	19.48	20.67
EOM	20.04	18.92	18.36	17.71	16.19	15.02	12.50	14.92	16.77	18.35	19.75	20.87
MAX	20.21	20.24	19.02	18.37	17.72	16.05	15.24	14.92	16.90	18.35	19.75	20.87

WTR YR 2004 HIGHEST 11.86 APR 25, 2004 LOWEST 21.11 OCT 09, 2004

LOWEST MONTHLY WATER LEVEL



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 1,0225 ft, cased to 1,008 ft, screened 1,008 to 1,025 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 317.50 ft above NGVD 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, 97.52 ft below land-surface datum, Aug. 1, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	89.80	DEC 16	89.37	APR 01	88.85	JUN 28	88.71	SEP 27	89.14		
28	89.47	JAN 22	89.24	29	88.75	JUL 28	88.80				
DEC 01	89.68	FEB 26	89.00	JUN 01	88.46	AUG 30	88.98				

WATER YEAR 2004 HIGHEST 88.46 JUN 01, 2004 LOWEST 89.80 OCT 01, 2003

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 by USGS personnel.

DATUM.--Elevation of land-surface is 317.20 ft above NGVD 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, 39.00 ft below land-surface datum, Mar. 3, 1998; lowest measured, 42.57 ft below land-surface datum, Oct. 1, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	41.00	DEC 16	40.90	APR 01	40.30	JUN 28	40.23	SEP 27	40.67		
28	40.85	JAN 22	40.82	29	40.13	JUL 28	40.32				
DEC 01	41.08	FEB 26	40.50	JUN 01	40.02	AUG 30	40.45				

WATER YEAR 2004 HIGHEST 40.02 JUN 01, 2004 LOWEST 41.08 DEC 01, 2003

SHELBY COUNTY

350514089553700. Local number, Sh:K-75.

LOCATION.--Lat 35°05'14", long 89°55'37", Hydrologic Unit 08010211, at Willowview Avenue 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-tabel well, diameter 6 in., depth 91 ft cased to 81 ft, screened 81 to 91 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 260 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing 1.20 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--August 1948 to September 1994, water-level recorder, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 21.28 ft below land-surface datum, Apr. 2, 1950; lowest recorded, 52.03 ft below land-surface datum, Jan. 13, 1988; highest water level measured, 45.73 ft below land-surface datum, July 6, 1998; lowest measured, 50.91 ft below land-surface datum, Jan. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	47.22	DEC 17	47.08	MAR 01	46.97	APR 29	46.65	JUN 28	46.38	SEP 01	45.90
29	47.28	JAN 30	47.05	MAR 30	46.83	MAY 27	46.49	JUL 29	46.20	SEP 27	45.99
DEC 03	46.94										

WATER YEAR 2004 HIGHEST 45.90 SEP 01, 2004 LOWEST 47.28 OCT 29, 2003

3501435090005200. Local number, Sh:O-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 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 artesian observation well, diameter 6 in., depth 434 ft, cased to 424 ft, screened 424 to 434 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 228.70 ft above NGVD of 1929. Measuring point: Top of casing, 4.30 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply in the Memphis area.

PERIOD OF RECORD.--September 1940 to current year. Analog record September 1940 to January 1992, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 12.65 ft below land-surface datum, Sept. 3, 1940; lowest recorded, 68.82 ft below land-surface datum, Aug. 24, 1988; highest water level measured, 50.16 ft below land-surface datum, Mar. 29, 1994; lowest measured, 65.75 ft below land-surface datum, Sept. 7, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	55.81	DEC 02	54.67	JAN 23	53.88	APR 05	52.00	JUN 03	52.57	JUL 30	56.14
30	57.01	18	54.25	MAR 04	52.92	30	52.49	JUL 01	53.56	SEP 01	57.89

WATER YEAR 2004 HIGHEST 52.00 APR 05, 2004 LOWEST 57.89 SEP 01, 2004

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.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 286.70 ft above NGVD of 1929. Measuring point: Top of casing 1.30 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply in the Memphis area.

PERIOD OF RECORD.--October 1928 to current year. Analog record October 1928 to September 1997, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 58.65 ft below land-surface datum, Apr. 3, 1933; lowest, 147.31 ft below land-surface datum, June 30, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	119.41	DEC 17	116.13	MAR 01	115.89	APR 29	111.67	JUN 29	116.66	SEP 02	117.75
DEC 04	115.08	FEB 03	116.12	APR 01	114.05	MAY 26	111.05	JUL 29	118.24	27	115.23

WATER YEAR 2004 HIGHEST 111.05 MAY 26, 2004 LOWEST 119.41 OCT 29, 2003

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 by USGS personnel.

DATUM.--Elevation of land-surface datum is 264.20 ft above NGVD of 1929. Measuring point: Top of casing 0.60 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply 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, 90.00 ft below land-surface datum, Aug. 29, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	83.29	DEC 02	82.15	JAN 23	81.06	APR 05	81.79	JUN 03	82.72	JUL 30	83.57
30	82.66	18	81.77	MAR 04	81.37	30	81.58	JUL 01	82.86	SEP 01	83.96

WATER YEAR 2004 HIGHEST 81.06 JAN 23, 2004 LOWEST 83.96 SEP 01, 2004

SHELBY COUNTY—Continued

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 by USGS personnel.

DATUM.--Elevation of land-surface datum is 268.70 ft above NGVD of 1929. Measuring point: Top of casing 1.60 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply at Millington and Memphis.

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 recorded, 39.59 ft below land-surface datum, June 29, 1953; lowest, 64.88 ft below land-surface datum, Sept. 7, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	59.54	DEC 02	59.20	JAN 23	58.24	APR 05	57.10	JUN 03	56.92	JUL 30	57.92
30	59.62	18	58.74	MAR 04	57.70	30	56.93	JUL 01	57.03	SEP 01	59.39

WATER YEAR 2004 HIGHEST 56.92 JUN 03, 2004 LOWEST 59.62 OCT 30, 2003

CRITTENDED COUNTY, AR

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.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 211 ft above NGVD of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

REMARKS.--Well affected by pumpage in the Memphis, Tennessee area. Records good.

PERIOD OF RECORD.--May 1983 to current year. Analog record from May 1983 to October 1995, periodic measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.28 ft below land-surface datum, May 30, 31, 1983; lowest, 33.39 ft below land-surface datum, Oct. 31, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	29.48	DEC 22	27.59	FEB 27	26.98	APR 30	24.88	JUN 29	24.83	AUG 31	28.33
DEC 04	27.55	JAN 30	27.13	MAR 31	25.92	MAY 27	25.30	AUG 03	26.93	SEP 28	27.92

WATER YEAR 2004 HIGHEST 24.83 JUN 29, 2004 LOWEST 29.48 OCT 30, 2003

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, 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 Program Office, Illionis State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495. Finalized, quality assured data from all 2004 NADP/NTN sites are available on-line via the internet at http://bqs.usgs.gov/acidrain/

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