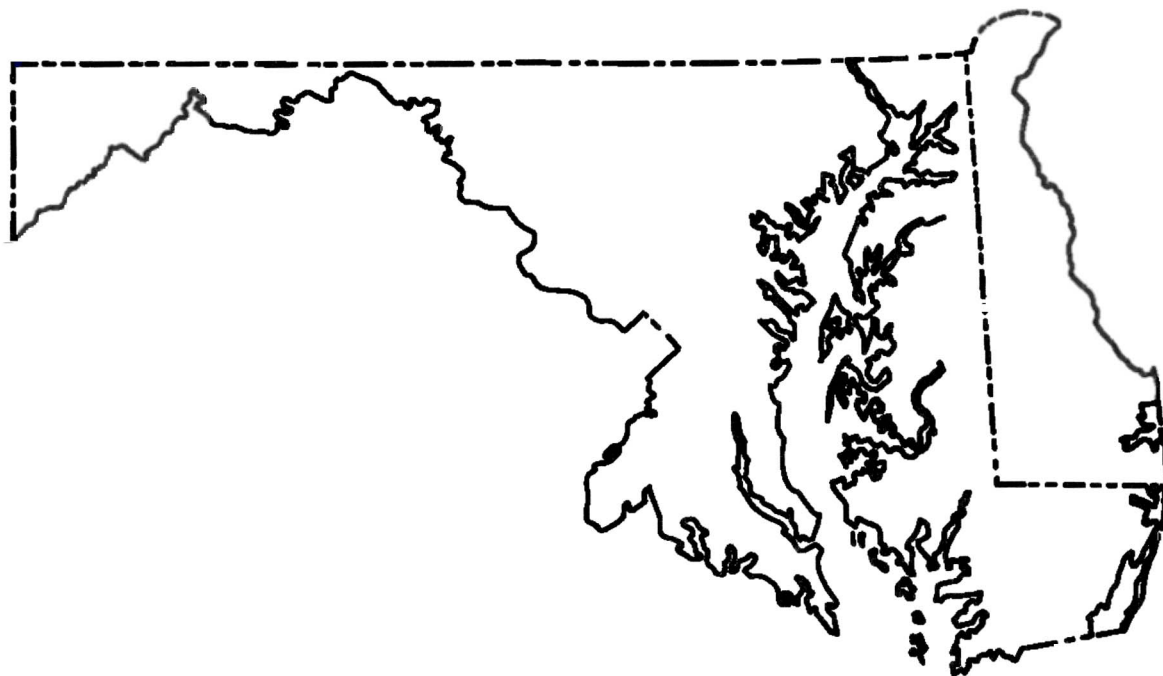


# Water Resources Data Maryland and Delaware Water Year 2000

## Volume 1. Surface -Water Data

Robert W. James, Richard W. Saffer, Anthony J. Tallman

Water-Data Report MD-DE-00-1



*UNITED STATES DEPARTMENT OF THE INTERIOR*

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13. ABSTRACT (Maximum 200 words)

Water resources data for the 2000 water year for Maryland and Delaware consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs. This volume (Volume 1. Surface-Water Data) contains records for water discharge at 121 gaging stations; stage and contents of 1 reservoir; and water quality at 21 gaging stations. Also included are stage and discharge for 3 crest-stage partial-record stations, discharge only for 27 low-flow partial-record stations, and stage only for 5 tidal crest-stage partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Maryland and Delaware.

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CONTENTS

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	Page
Preface.....	iii
List of surface-water stations, in downstream order, for which records are published in this volume.....	vi
List of discontinued surface-water discharge stations.....	ix
List of discontinued crest-stage partial-record stations.....	xiii
List of discontinued surface-water-quality stations.....	xvi
List of low-flow, partial-record stations.....	xvii
Introduction.....	1
Cooperation.....	1
Summary of hydrologic conditions.....	2
Special networks and programs.....	4
Explanation of records.....	4
Station identification numbers.....	4
Downstream order system.....	4
Latitude-longitude system.....	5
Records of stage and water discharge.....	5
Data collection and computation.....	6
Data presentation.....	7
Station manuscript.....	7
Data table of daily mean values.....	8
Statistics of monthly mean data.....	8
Summary statistics.....	8
Identifying estimated daily discharge.....	10
Accuracy of the records.....	10
Other records available.....	10
Records of surface-water quality.....	10
Classification of records.....	10
Arrangement of records.....	11
On-site measurements and sample collection.....	11
Water temperature.....	11
Sediment.....	11
Laboratory measurements.....	12
Data presentation.....	12
Remark codes.....	13
Water-quality control data.....	13
Access to USGS data.....	14
Definition of terms.....	15
Publications on Techniques of Water-Resources Investigations.....	26
Selected U.S. Geological Survey reports on surface-water resources in Delaware.....	30
Selected Delaware Geological Survey reports on surface-water resources in Delaware.....	33
Selected U.S. Geological Survey reports on surface-water resources in Maryland.....	34
Selected Maryland Geological Survey reports on surface-water resources in Maryland.....	40
Station records, surface water.....	48
Discharge at partial-record stations and miscellaneous sites.....	398
Low-flow partial-record stations.....	398
Crest-stage partial-record stations.....	402
Elevation at tidal crest-stage partial-record stations.....	403
Analyses of samples collected at water-quality partial-record stations and miscellaneous sites.....	404
Index.....	487

ILLUSTRATIONS

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Figure 1. Comparison of discharge at representative gaging stations during 2000 water year with median discharge for the period 1971-2000.....	3
2. System for numbering miscellaneous sites (latitude and longitude).....	5
3. Map of Maryland and Delaware showing location of surface-water stations, water- quality stations, and crest-stage partial-record stations.....	42
4. Map of Maryland and Delaware showing location of discontinued surface-water stations.....	44

[Letters after station name designate type of data collected: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation and contents]

<u>NORTH ATLANTIC SLOPE BASINS</u>	Station number	Page
<u>DELAWARE RIVER BASIN</u>		
Delaware River:		
Shellpot Creek at Wilmington, DE (d).....	01477800	48
Christina River at Coochs Bridge, DE (d).....	01478000	50
White Clay Creek at Newark, DE (d).....	01478650	52
White Clay Creek near Newark, DE (d).....	01479000	54
Red Clay Creek at Wooddale, DE (d).....	01480000	56
Red Clay Creek at Stanton, DE (d).....	01480015	58
Brandywine Creek at Wilmington, DE (d).....	01481500	60
Blackbird Creek at Blackbird, DE (d).....	01483200	64
<u>ST. JONES RIVER BASIN</u>		
St. Jones River at Dover, DE (d).....	01483700	66
<u>MISPILLION RIVER BASIN</u>		
Beaverdam Branch (head of Mispillion River) at Houston, DE (d).....	01484100	68
<u>INDIAN RIVER BASIN</u>		
Cow Bridge Branch (head of Indian River):		
Stockley Branch at Stockley, DE (d).....	01484500	70
Millsboro Pond Outlet at Millsboro, DE (d).....	01484525	72
Swan Creek near Millsboro, DE (d).....	01484534	74
Bundicks Branch at Robinsville, DE (d).....	01484548	80
Blackwater Creek near Clarkesville, DE (d).....	01484600	84
Munchy Branch near Rehobeth Beach, DE (d).....	01484668	90
Beaverdam Ditch near Millville, DE (d).....	01484695	96
<u>POCOMOKE RIVER BASIN</u>		
Pocomoke River near Willards, MD (d,c).....	01485000	102
Nassawango Creek near Snow Hill, MD (d,c,s).....	01485500	108
<u>MANOKIN RIVER BASIN</u>		
Manokin Branch (head of Manokin River) near Princess Anne, MD (d).....	01486000	114
<u>NANTICOKE RIVER BASIN</u>		
Nanticoke River near Bridgeville, DE (d,c,s).....	01487000	116
Marshyhope Creek near Adamsville, DE (d).....	01488500	120
<u>CHOPTANK RIVER BASIN</u>		
Choptank River near Greensboro, MD (d,c,s).....	01491000	122
<u>CHESTER RIVER BASIN</u>		
Chester River:		
Unicorn Branch near Millington, MD (d).....	01493000	126
Chesterville Branch near Crumpton, MD (d,c,s).....	01493112	128
Morgan Creek near Kennedyville, MD (d,c).....	01493500	140
<u>ELK RIVER BASIN</u>		
Big Elk Creek (head of Elk River) at Elk Mills, MD (d).....	01495000	144
<u>SUSQUEHANNA RIVER BASIN</u>		
Susquehanna River at Conowingo, MD (d,c,s).....	01578310	146
Deer Creek at Rocks, MD (d).....	01580000	158
<u>BUSH RIVER BASIN</u>		
Bynum Run (head of Bush River):		
Bynum Run at Bel Air, MD (d).....	01581500	160
Winters Run near Benson, MD (d).....	01581700	162
<u>GUNPOWDER RIVER BASIN</u>		
Gunpowder Falls (head of Gunpowder River):		
Mingo Branch near Hereford, MD (d).....	01581940	164
Little Falls:		
Beetree Run at Bently Springs (d).....	01581960	166
Little Falls at Blue Mount, MD (d).....	01582000	168
Gunpowder Falls at Glencoe, MD (d).....	01582500	170
Western Run:		
Piney Run at Dover, MD (d).....	01583100	172
Western Run at Western Run, MD (d).....	01583500	174
Beaverdam Run:		
Baisman Run:		
Pond Branch at Oregon Ridge, MD (d,c).....	01583570	176
Baisman Run at Broadmoor, MD (d,c).....	01583580	180
Beaverdam Run at Cockeyville, MD (d).....	01583600	182

[Letters after station name designate type of data collected: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation and contents]

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Page
<u>GUNPOWDER RIVER BASIN</u> --Continued		
Gunpowder Falls (head of Gunpowder River):		
Minebank Run at Loch Raven, MD (d).....	01583980	184
Long Green Creek at Glen Arm, MD (d).....	01584050	186
Little Gunpowder Falls at Laurel Brook, MD (d).....	01584500	188
Bird River:		
Whitemarsh Run (head of Bird River) near Fullerton, MD (d).....	01585090	190
North Fork Whitemarsh Run near White Marsh, MD (d).....	01585095	192
Whitemarsh Run at White Marsh, MD (d).....	01585100	194
Honeygo Run near White Marsh, MD (d).....	01585104	196
<u>BACK RIVER BASIN</u>		
Herring Run (head of Back River):		
West Branch Herring Run at Idlewylde, MD (d).....	01585200	198
Moores Run:		
Moores Run tributary near Todd Avenue at Baltimore, MD (d).....	01585225	200
Moores Run at Radecke Avenue at Baltimore, MD (d).....	01585230	202
<u>PATAPSCO RIVER BASIN</u>		
East Branch of North Branch Patapsco River:		
West Branch of North Branch Patapsco River:		
Cranberry Branch near Westminster, MD (d).....	01585500	204
North Branch Patapsco River at Cedarhurst, MD (d).....	01586000	206
Beaver Run near Finksburg, MD (d).....	01586210	208
Morgan Run near Louisville, MD (d).....	01586610	210
Patapsco River:		
West Branch Herbert Run:		
East Branch Herbert Run at Arbutus, MD (d).....	01589100	212
Gwynns Falls at Glyndon, MD (d,c).....	01589180	214
Gwynns Falls near Delight, MD (d).....	01589197	220
Gwynns Falls at Villa Nova, MD (d,c).....	01589300	222
Dead Run at Franklinton, MD (d).....	01589330	226
Rognel Heights Storm Sewer Outfall at Baltimore, MD (d,c).....	01589340	228
Gwynns Falls at Washington Boulevard at Baltimore, MD (d,c).....	01589352	234
Jones Falls at Sorrento, MD (d).....	01589440	238
Jones Falls at Maryland Avenue at Baltimore, MD (d).....	01589478	240
Furnace Creek:		
Sawmill Creek at Glen Burnie, MD (d).....	01589500	242
Sawmill Creek tributary at BWI near Ferndale, MD (d).....	01589501	244
<u>SEVERN RIVER BASIN</u>		
Severn Run (head of Severn River)		
South Fork Jabez Branch at Millersville, MD (d).....	01589795	246
<u>PATUXENT RIVER BASIN</u>		
Patuxent River near Unity, MD (d,c,s).....	01591000	248
Cattail Creek near Glenwood, MD (d).....	01591400	252
Patuxent River below Brighton Dam near Brighton, MD (d).....	01591610	254
Hawlings River near Sandy Spring, MD (d).....	01591700	256
Patuxent River near Laurel, MD (d).....	01592500	258
Little Patuxent River at Guilford, MD (d).....	01593500	260
Little Patuxent River at Savage, MD (d,c,s).....	01594000	262
Patuxent River near Bowie, MD (d,c,s).....	01594440	266
Western Branch at Upper Marlboro, MD (d,c,s).....	01594526	272
<u>POTOMAC RIVER BASIN</u>		
North Branch Potomac River:		
Laurel Run at Dobbin Road near Wilson, MD (d).....	01594930	282
Sand Run:		
North Fork Sand Run near Wilson, MD (d).....	01594936	284
McMillan Fork near Fort Pendelton, MD (d).....	01594950	286
North Branch Potomac River at Steyer, MD (d).....	01595000	288
Stony River near Mt. Storm, WV (d,t).....	01595200	290
Savage River near Barton, MD (d).....	01596500	294
Savage River below Savage River Dam, near Bloomington, MD (d).....	01597500	296
North Branch Potomac River at Luke, MD (d).....	01598500	298
Georges Creek at Franklin, MD (d).....	01599000	300
Wills Creek near Cumberland, MD (d).....	01601500	302
North Branch Potomac River near Cumberland, MD (d).....	01603000	304
Patterson Creek near Headsville, WV (d).....	01604500	306
South Branch Potomac River near Petersburg, WV (d).....	01606500	308
South Fork South Branch Potomac River near Moorefield, WV (d).....	01608000	310
South Branch Potomac River near Springfield, WV (d).....	01608500	312

[Letters after station name designate type of data collected: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation and contents]

<u>NORTH ATLANTIC SLOPE BASINS</u> --Continued	Station number	Page
<u>POTOMAC RIVER BASIN</u> --Continued		
Potomac River:		
Potomac River at Paw Paw, WV (d).....	01610000	314
Sideling Hill Creek at Bellegrove, MD (d).....	01610155	316
Cacapon River near Great Cacapon, WV (d).....	01611500	318
Potomac River at Hancock, MD (d).....	01613000	320
Conococheague Creek at Fairview, MD (d,c,s).....	01614500	322
Marsh Run at Grimes, MD (d).....	01617800	328
Antietam Creek near Sharpsburg, MD (d).....	01619500	330
Shenandoah River at Millville, WV (d).....	01636500	332
Catoctin Creek near Middletown, MD (d).....	01637500	334
Potomac River at Point of Rocks, MD (d).....	01638500	336
Monocacy River:		
Monocacy River at Bridgeport, MD (d).....	01639000	338
Piney Creek near Taneytown, MD (d).....	01639140	340
Big Pipe Creek (head of Double Pipe Creek) at Bruceville, MD (d).....	01639500	342
Monocacy River at Jug Bridge, near Frederick, MD (d).....	01643000	344
Bennett Creek at Park Mills, MD (d).....	01643500	346
Seneca Creek:		
Great Seneca Creek near Quince Orchard, MD (d).....	01644600	348
Seneca Creek at Dawsonville, MD (d).....	01645000	350
Potomac River near Washington, DC (d,c,t).....	01646500	352
Potomac River at Chain Bridge at Washington, DC (c,s).....	01646580	360
Rock Creek at Sherrill Drive, Washington, DC (d).....	01648000	368
Northeast Branch Anacostia River (head of Anacostia River)		
at Riverdale, MD (d).....	01649500	370
Northwest Branch Anacostia River near Colesville, MD (d).....	01650500	372
Northwest Branch Anacostia River near Hyattsville, MD (d).....	01651000	374
Watts Branch at Washington, DC (d).....	01651800	376
Piscataway Creek at Piscataway, MD (d).....	01653600	378
Zekiah Swamp Run (head of Wicomico River) near Newtown, MD (d,c,s).....	01660920	380
St. Clement Creek (head of St. Clement Bay) near Clements, MD (d).....	01661050	384
St. Marys River at Great Mills, MD (d).....	01661500	386
 <u>OHIO RIVER BASIN</u>		
<u>MONONGAHELA RIVER BASIN</u>		
Monongahela River:		
Youghiogheny River near Oakland, MD (d).....	03075500	388
Deep Creek Reservoir near Oakland, MD (e).....	03076000	390
Youghiogheny River at Friendsville, MD (d).....	03076500	392
Bear Creek at Friendsville, MD (d).....	03076600	394
Casselman River at Grantsville, MD (d).....	03078000	396
Discharge at partial-record stations and miscellaneous sites.....		
Low-flow partial-record stations.....		398
Crest-stage partial-record stations.....		402
Elevation at tidal crest-stage partial-record stations.....		403
Analyses of samples collected at water-quality partial-record stations and miscellaneous sites.....		
		404

The following continuous-record surface-water discharge (gaging stations) in Maryland, Delaware, and the District of Columbia have been discontinued. Daily streamflow records (discharge) were collected and published for the period of record, expressed in water years, shown for each station.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS</u>			
<u>DELAWARE RIVER BASIN</u>			
Delaware River:			
Christina River near Bear, DE	01478040	40.6	1977-82
White Clay Creek above Newark, DE	01478500	66.7	1952-59 1962-80
Mill Creek at Mill Creek Road at Hockessin, DE	01479197	3.66	1990-95
Mill Creek at Stanton, DE	01479500	12.4	1931-33
Little Mill Creek near Newport, DE	01480095	5.24	1991-95 1997-98
Little Mill Creek at Elsmere, DE	01480100	6.70	1964-80
Army Creek at State Road, DE	01482200	2.42	1978-81
Red Lion Creek near Red Lion, DE	01482298	3.08	1978-81
Wiggins Millpond Outlet (head of Appoquinimink River):			
Noxontown Lake Outlet near Middletown, DE	01483153	8.85	1993-94
Drawyer Creek tributary near Odessa, MD	01483170	4.68	1978-80
<u>LEIPSIC RIVER BASIN</u>			
Leipsic River near Cheswold, DE	01483500	9.35	1931-33 1943-57
<u>ST. JONES RIVER BASIN</u>			
Fork Branch (head of St. Jones River)			
Mudstone Branch at Chestnut Grove, DE	01483670	8.96	1993-94
<u>MURDERKILL RIVER BASIN</u>			
Murderkill River near Felton, DE	01484000	13.6	1931-34 1960-85 1997-99
<u>BROADKILL RIVER BASIN</u>			
Broadkill River:			
Beaverdam Creek near Milton, DE	01484270	6.10	1971-80
Sowbridge Branch (head of Primehook Creek) near Milton, DE	01484300	7.08	1957-78
<u>INDIAN RIVER BASIN</u>			
Cow Bridge Branch (head of Indian River):			
Vines Creek at Omar, DE	01484548	13.6	1985-88
<u>WICOMICO RIVER BASIN</u>			
Andrews Branch (head of Wicomico River):			
Beaverdam Creek near Salisbury, MD	01486500	19.5	1930-32 1938-75
<u>NANTICOKE RIVER BASIN</u>			
Nanticoke River:			
James Branch (head of Broad Creek):			
Trap Pond Outlet (head of Hitch Pond Branch) near Laurel, DE	01487500	16.7	1951-71
Broad Creek:			
Holly Ditch near Laurel, DE	01488000	2.19	1951-56
Marshyhope Creek at Adamsville, DE	01488600	60.4	1969-71
Faulkner Branch at Federalsburg, MD	01489000	7.10	1950-92
Rewastico Creek near Hebron, MD	01489500	12.2	1950-56
<u>TRANSQUAKING RIVER BASIN</u>			
Transquaking River:			
Chicamacomico River near Salem, MD	01490000	15.0	1951-80
<u>CHOPTANK RIVER BASIN</u>			
Tappahanna Ditch (head of Choptank River):			
Tidy Island Creek (continuation of Tappahanna Ditch): Culbreth Marsh Ditch near Chapelton, DE	01490500	11.6	1951-56
Choptank River:			
Tuckahoe Creek near Ruthsburg, MD	01491500	85.2	1951-56
Kings Creek:			
Beaverdam Branch at Matthews, MD	01492000	5.85	1950-81
<u>WYE RIVER BASIN</u>			
Wye River:			
Wye East River:			
Sallie Harris Creek near Carmichael, MD	01492500	8.09	1951-56
<u>CHESTER RIVER BASIN</u>			
Chester River:			
Southeast Creek at Church Hill, MD	01494000	12.5	1951-56
<u>SASSAFRAS RIVER BASIN</u>			
Sassafras River:			
Jacobs Creek near Sassafras, MD	01494500	5.39	1951-56



	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>			
<u>ELK RIVER BASIN</u>			
Big Elk Creek (head of Elk River):			
Little Elk Creek at Childs, MD .....	01495500	26.8	1949-58
Long Creek near Chesapeake City, MD .....	01495800	4.36	1978-81
<u>NORTHEAST RIVER BASIN</u>			
Northeast Creek (head of Northeast River) at Leslie, MD .....	01496000	24.3	1949-84
<u>PRINCIPIO CREEK BASIN</u>			
Principio Creek near Principio Furnace, MD .....	01496200	9.03	1967-92
<u>SUSQUEHANNA RIVER BASIN</u>			
Susquehanna River:			
Broad Creek at Mill Creek, MD .....	01578000	16.4	1905-09
Octoraro Creek near Rising Sun, MD .....	01578500	193	1932-58
			1969-77
Basin Run at Liberty Grove, MD .....	01579000	5.31	1949-58
Octoraro Creek at Rowlandsville, MD .....	01579500	210	1896-99
Deer Creek near Kalmia, MD .....	01580200	125	1967-77
Deer Creek near Churchville, MD .....	01580500	141	1905-09
<u>BUSH RIVER BASIN</u>			
Bynum Run (head of Bush River):			
Church Creek:			
Cranberry Run at Aberdeen, MD .....	01581657	4.16	1988-89
Cranberry Run at Perryman, MD .....	01581658	5.22	1987-89
<u>GUNPOWDER RIVER BASIN</u>			
Gunpowder Falls (head of Gunpowder River):			
Western Run:			
Delaware Run:			
Slade Run near Glyndon, MD .....	01583000	2.09	1947-81
Gunpowder Falls near Carney, MD .....	01584000	314	1949-64
Little Gunpowder Falls near Bel Air, MD .....	01585000	43	1904-09
Bird River:			
Whitemarsh Run (head of Bird River):			
Honeygo Run at White Marsh, MD .....	01585105	2.65	1990-93
Windlass Run near White Marsh, MD .....	01585107	2.03	1992-93
<u>BACK RIVER BASIN</u>			
Herring Run (head of Back River):			
Stemmers Run (head of Northeast Creek) at Rossville, MD .....	01585300	4.46	1959-72
			1974-89
Brien Run at Stemmers Run, MD .....	01585400	1.97	1958-87
<u>PATAPSCO RIVER BASIN</u>			
North Branch Patapsco River near Reistertown, MD .....	01586500	91.0	1927-54
North Branch Patapsco River near Marriottsville, MD .....	01587000	165	1930-60
South Branch Patapsco River at Henryton, MD .....	01587500	64.4	1948-80
Piney Run near Sykesville, MD .....	01588000	11.4	1931-58
Patapsco River at Woodstock, MD .....	01588500	251	1896-1909
Patapsco River at Hollofield, MD .....	01589000	285	1944-92
			1994-95
Gwynns Falls near Owings Mills, MD .....	01589200	4.90	1958-75
Jones Falls at Maryland Avenue at Baltimore, MD .....	01589478	58.3	1981-82
Jones Falls near mouth at Baltimore, MD .....	01589480	60.4	1981-82
Curtis Creek:			
Furnace Creek:			
Sawmill Creek at Crain Highway at Glen Burnie, MD .....	01589512	8.24	1984-85
			1990-94
Marley Creek at Harundale, MD .....	01589522	4.79	1984-85
<u>SOUTH RIVER BASIN</u>			
North River (head of South River) near Annapolis, MD .....			
Bacon Ridge Branch at Chesterfield, MD .....	01590000	8.50	1932-74
			1943-52
			1975-90
<u>RHODE RIVER BASIN</u>			
Rhode River:			
Muddy Creek:			
North Fork Muddy Creek at South River, MD .....	01590700	0.88	1972-76

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>PATUXENT RIVER BASIN</u>			
Patuxent River:			
Cattail Creek near Cookesville, MD.....	01591350	8.37	1977-81
Cattail Creek at Roxbury Mills, MD .....	01591500	27.7	1944-56
Patuxent River near Burtonsville, MD .....	01592000	127	1911-45
Little Patuxent River:			
Middle Patuxent River near Simpsonville, MD.....	01593710	48.4	1987-95
Dorsey Run near Jessup, MD .....	01594400	11.6	1948-58
Western Branch near Largo, MD .....	01594500	30.2	1950-75
Cocktown Creek near Huntingtown, MD .....	01594600	3.85	1957-76
Hunting Creek near Huntingtown, MD .....	01594670	9.38	1989-98
Killpeck Creek at Huntersville, MD .....	01594710	3.26	1986-98
St. Leonard Creek near St. Leonard, MD .....	01594800	6.73	1957-68
<u>POTOMAC RIVER BASIN</u>			
North Branch Potomac River:			
South Fork Sand Run near Wilson, MD .....	01594934	1.55	1980-86
North Branch Potomac River at Kitzmiller, MD.....	01595500*	225	1950-85
North Branch Potomac River at Barnum, WV .....	01595800*	266	1966-85
North Branch Potomac River at Bloomington, MD .....	01596000	287	1925-27 1929-50
Savage River:			
Crabtree Creek near Swanton, MD .....	01597000	16.7	1948-81
Savage River at Bloomington, MD .....	01598000	115	1906-07 1925-27 1929-50
North Branch Potomac River at Pinto, MD .....	01600000*	596	1939-85
Wills Creek below Hyndman, PA .....	01601000	146	1951-67
North Branch Potomac River at Cumberland, MD .....	01602500	873	1894-97
Evitts Creek near Centerville, PA .....	01603500	30.2	1932-82
Evitts Creek near Cumberland, MD .....	01604000	89.0	1929-32
Town Creek near Oldtown, MD .....	01609000	148	1928-35 1967-81
Sawpit Run near Oldtown, MD .....	01609500	5.08	1948-58
Little Tonoloway Creek near Hancock, MD .....	01612500	16.9	1947-63
Potomac River at Shepherdstown, WV .....	01618000	5,936	1928-53 (a)1954-63 1964-93 1948-51 1966-81
Antietam Creek near Waynesboro, PA .....	01619000	93.5	
Beaver Creek:			
Albert Powell Fish Hatchery Spring at Beaver Creek, MD .....	01619320		1987-98
Catoctin Creek:			
Little Catoctin Creek at Harmony, MD .....	01637000	8.83	1947-59 1968
Catoctin Creek near Jefferson, MD .....	01638000	111	1928-31
Monocacy River:			
Toms Creek at Emmitsburg, MD .....	01639375	41.3	1986-90
Big Pipe Creek (head of Double Pipe Creek):			
Little Pipe Creek at Avondale, MD .....	01640000	8.10	1947-56
Owens Creek near Foxville, MD .....	01640456	1.01	1986-87
Owens Creek at Lantz, MD .....	01640500	5.93	1932-84
Hunting Creek near Foxville, MD .....	01640965	2.14	1982-94
Hunting Creek tributary near Foxville, MD .....	01640970	4.01	1982-91
Hunting Creek near Thurmont, MD .....	01640975	7.08	1982-86
Bear Branch near Thurmont, MD .....	01640980	0.38	1990-95
Hunting Creek at Jimtown, MD .....	01641000	18.4	1950-92
Fishing Creek near Lewistown, MD .....	01641500	7.29	1948-84
Fishing Creek Tributary near Lewistown, MD .....	01641510	0.40	1988-95
Monocacy River near Frederick, MD .....	01642000	665	1896-1930
Linganore Creek near Frederick, MD .....	01642500	82.3	1932 1934-82
Bennett Creek:			
Bennett Creek tributary at Park Mills, MD .....	01643495	0.15	1992-93
Broad Run at Elmer, MD .....	01643615	14	(b)1978-80
Seneca Creek:			
Great Seneca Creek near Gaithersburg, MD .....	01644500	41.0	1925-31
Watts Branch at Rockville, MD .....	01645200	3.70	1957-87
Little Falls Branch near Bethesda, MD .....	01646550	4.10	1944-59 1962-79
Rock Creek:			
North Branch Rock Creek:			
Williamsburg Run near Olney, MD .....	01647685	2.25	1967-74
North Branch Rock Creek near Norbeck, MD .....	01647720	9.73	1967-77
Manor Run near Norbeck, MD .....	01647725	1.01	1967-74
North Branch Rock Creek near Rockville, MD .....	01647740	12.5	1967-77
Rock Creek at Q Street, Washington, DC .....	01649000	75.8	1892-94 1929-33

\* Currently operated as a crest-stage partial-record station.

a Estimated daily discharges October 1953 to June 1964.

b Daily values data unpublished, available at Baltimore, MD office.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>			
<u>POTOMAC RIVER BASIN--Continued</u>			
Potomac River--Continued			
Northeast Branch Anacostia River:			
Northwest Branch Anacostia River at Norwood, MD.....	01650050	2.45	1967-74
Browns Creek:			
Nursery Run at Cloverly, MD .....	01650085	0.35	1967-74
North Creek:			
Batchellors Run at Oakdale, MD .....	01650190	0.47	(a)1967-70
Bel Pre Creek at Lay Hill, MD .....	01650450	1.69	1967-74
Lutes Run at Lutes, MD .....	01650470	0.47	(a)1967-70
Anacostia River:			
Beaverdam Branch Anacostia River at Kenilworth Avenue, Washington, DC.....	01652000	14	1911-12
Henson Creek (head of Broad Creek) at Oxon Hill, MD .....	01653500	16.7	1948-78
Mattawoman Creek near Pomonkey, MD .....	01658000	54.8	1950-72
Wicomico River:			
Chaptico Creek at Chaptico, MD .....	01661000	10.4	1947-72
<u>OHIO RIVER BASIN</u>			
<u>MONONGAHELA RIVER BASIN</u>			
Monongahela River:			
Youghiogheny River:			
South Branch Casselman River near Bittenger, MD .....	03077940	3.22	1976-81
Casselman River:			
Big Piney Run near Salisbury, PA .....	03078500	24.5	1932-80

a Daily values data unpublished, available at Baltimore, MD office.

The following crest-stage partial-record stations in Maryland and Delaware have been discontinued. Annual maximum discharge and gage-height data were collected and published for the period of record, expressed in water years, shown for each station.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS</u>			
<u>DELAWARE RIVER BASIN</u>			
Delaware River:			
Christina River near Bear, DE.....	01478040	40.6	1983-91
White Clay Creek:			
Pike Creek near Newark, DE.....	01478950	6.04	1969-75
Mill Creek at Hockessin, DE.....	01479200	a4.19	1966-75
West Branch Red Clay Creek:			
Red Clay Creek tributary near Yorklyn, DE.....	01479950	0.38	1966-75
Brandywine Creek:			
Brandywine Creek tributary near Centerville, DE.....	01481200	0.97	1966-75
Husbands Run:			
Willow Run at Rockland, DE.....	01481450	0.37	1966-75
Red Lion Creek:			
Doll Run at Red Lion, DE.....	01482310	b1.2	1966-75
<u>SMYRNA RIVER BASIN</u>			
Providence Creek (head of Smyrna River):			
Paw Paw Branch:			
Paw Paw Branch tributary near Clayton, DE.....	01483290	b1.3	1966-75
Smyrna River:			
Sawmill Branch:			
Sawmill Branch tributary near Blackbird, DE.....	01483400	b0.6	1966-75
<u>LEIPSIC RIVER BASIN</u>			
Leipsic River near Cheswold, DE.....	01483500	9.35	1958-75
<u>ST. JONES RIVER BASIN</u>			
St. Jones River:			
Puncheon Branch at Dover, DE.....	01483720	b2.3	1966-75
<u>MURDERKILL RIVER BASIN</u>			
Murderkill River:			
Murderkill River tributary near Felton, DE.....	01484002	b1.0	1966-75
Hudson Branch (head of Spring Creek):			
Pratt Branch near Felton, DE.....	01484050	3.29	1966-75
<u>BROADKILL RIVER BASIN</u>			
Broadkill River:			
Beaverdam Creek near Milton, DE.....	01484270	6.10	1966-75
<u>INDIAN RIVER BASIN</u>			
Indian River:			
Whartons Branch near Millsboro, DE.....	01484531	5.8	1986-88
Pepper Creek at Dagsboro, DE.....	01484550	8.78	1960-75
Blackwater Creek near Clarksville, DE.....	01484600	3.5	1986-88
<u>WICOMICO RIVER BASIN</u>			
Andrews Branch (head of Wicomico River) near Delmar, MD.....	01486100	b4.1	1966-76
<u>NANTICOKE RIVER BASIN</u>			
Nanticoke River:			
Bridgeville Branch:			
Bridgeville Branch tributary at Bridgeville, DE.....	01486900	b0.8	1966-68
Gum Branch:			
Toms Dam Branch near Greenwood, DE.....	01486980	b6.4	1966-75
James Branch (head of Broad Creek):			
Trap Pond Outlet (head of Hitch Pond Branch) near Laurel, DE....	01487500	16.7	1972-73 1975
Broad Creek:			
Little Creek:			
Meadow Branch near Delmar, DE.....	01487900	b3.9	1967-75
Holly Ditch near Laurel, DE.....	01488000	2.19	1959-75
<u>CHOPTANK RIVER BASIN</u>			
Tappahanna Ditch (head of Choptank River) near Hartly, DE.....	01490470	5.93	1961-73
Tidy Island Creek (continuation of Tappahanna Creek):			
Culbreth Marsh Ditch:			
Beachy Neidig Ditch near Willow Grove, DE.....	01490490	b2.3	1966-75
Culbreth Marsh Ditch (Shades Branch) near Chapelton, DE.....	c01490500	11.6	1957-68
Cow Marsh:			
Meredith Branch near Sandtown, DE.....	01490600	b8.4	1966-75
Broadway Branch:			
Oldtown Branch at Goldsboro, MD.....	01490800	3.9	1967-76
Gravelly Branch:			
Sangston Prong near Whiteleysburg, DE.....	01491010	b1.9	1966-75
Spring Branch near Greensboro, MD.....	01491050	b3.8	1966-76
Hunting Creek:			
Gravel Run at Beulah, MD.....	01492050	8.4	1966-76

a 0.15 square miles is probably noncontributing.

b Approximately.

c Prior to 1956 published as "Shades Branch".

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>WYE RIVER BASIN</u>			
Wye River:			
Wye East River:			
Sallie Harris Creek near Carmichael, MD.....	01492500	8.09	1957-81
Skipton Creek:			
Mill Creek near Skipton, MD.....	01492550	b4.6	1966-76
<u>CHESTER RIVER BASIN</u>			
Andover Branch (head of Chester River):			
Southeast Creek at Church Hill, MD.....	01494000	12.5	1957-65
Browns Branch:			
Browns Branch tributary near Church Hill, MD.....	01494020	b1.7	1971-78
<u>NORTHEAST RIVER BASIN</u>			
Northeast Creek (head of Northeast River):			
Northeast River tributary near Charlestown, MD.....	01496080	b1.7	1967-76
<u>SUSQUEHANNA RIVER BASIN</u>			
Susquehanna River:			
Broad Creek:			
Broad Creek tributary at Whiteford, MD.....	01577940	0.77	1971-86
Octoraro Creek:			
Basin Run at West Nottinham, MD.....	01578800	b1.3	1967-76
Basin Run at Liberty Grove, MD.....	01579000	5.31	1965-76
<u>Bush River Basin</u>			
Bynum Run (head of Bush River) at Bel Air, MD.....	01581500	8.52	1971-72
<u>GUNPOWDER RIVER BASIN</u>			
Gunpowder Falls (head of Gunpowder River):			
Piney Creek near Hereford, MD.....	01582510	b1.5	1966-79
Western Run:			
Western Run tributary at Western Run, MD.....	01583495	0.26	1966-76
Beaverdam Run:			
Baisman Run at Broadmoor, MD.....	01583580	1.47	1970-76
Little Gunpowder Falls at Laurel Brook, MD.....	01584500	36.1	1971-86
<u>PATAPSCO RIVER BASIN</u>			
North Branch Patapsco River:			
South Branch Patapsco River:			
Hay Meadow Branch:			
Hay Meadow Branch tributary at Poplar Springs, MD.....	01587050	0.54	1966-76
Piney Run near Sykesville, MD.....	01588000	11.4	1959-74
Patapsco River:			
Gwynns Falls at Owings Mills, MD.....	01589220	9.12	1958-65 1967-68
Gwynns Falls at McDonough, MD.....	01589240	19.3	1958-68 1971-84
Jones Falls at Brooklandville, MD.....	01589400	19.7	1958-65 1968
<u>PATUXENT RIVER BASIN</u>			
Patuxent River:			
Little Patuxent River:			
Little Patuxent River tributary at Guilford Downs, MD.....	01593350	0.95	1966-76
Dorsey Run near Jessup, MD.....	01594400	11.6	1959-68
Mill Branch near Mitchellville, MD.....	01594445	b1.1	1967-76
<u>POTOMAC RIVER BASIN</u>			
North Branch Potomac River:			
Savage River near Frostburg, MD.....	01596005	b1.5	1971-86
Wills Creek below Hyndman, PA.....	01601000	146	1968-86
Potomac River:			
Town Creek:			
Sawpit Run near Oldtown, MD.....	01609500	5.08	1963-76
Fifteen Mile Creek:			
Pratt Hollow:			
Pratt Hollow tributary at Pratt, MD.....	01610105	0.70	1971-86
Sideling Hill Creek:			
Bear Creek at Forest Park, MD.....	01610150	10.4	1965-69 1971-83
Little Tonoloway Creek near Hancock, MD.....	01612500	16.9	1964
Ditch Run near Hancock, MD.....	01613150	b4.8	1965-86
Potomac River tributary near Hancock, MD.....	01613160	b1.2	1965-76
Antietam Creek:			
Little Antietam Creek:			
Dog Creek:			
Dog Creek tributary near Locust Grove, MD.....	01619475	0.10	1966-76

b Approximately.

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>POTOMAC RIVER BASIN --Continued</u>			
Catoctin Creek:			
Little Catoctin Creek at Harmony, MD.....	01637000	8.8	1961-67 1969-77
Hollow Road Creek (head of Cone Branch) near Middletown, MD.....	01637600	2.3	1965-74 1977
Monocacy River:			
Piney Creek:			
Piney Creek tributary at Taneytown, MD.....	01639095	0.62	1967-76
Big Pipe Creek:			
Little Pipe Creek at Avondale, MD.....	01640000	8.10	1959-65 1967-80
Owens Creek:			
Owens Creek tributary near Rocky Ridge, MD.....	01640700	b1.2	1967-77
Linganore Creek:			
Dollyhyde Creek at Libertytown, MD.....	01642400	b2.7	1969-76
Little Seneca Creek (head of Seneca Creek):			
Bucklodge Branch:			
Bucklodge Branch tributary near Barnesville, MD.....	01644420	0.27	1967-76
Little Falls Branch near Bethesda, MD.....	01646550	b4.1	1979-84
Northeast Branch Anacostia River:			
Northwest Branch Anacostia River at Norwood, MD .....	01650050	2.45	1975-76
Browns Creek:			
Nursery Run at Cloverly, MD.....	01650085	0.35	1975-76
North Creek:			
Batchellors Run at Oakdale, MD.....	01650190	0.47	1967-76
Mattawoman Creek near Pomonkey, MD.....	01658000	57.7	1973-86
Zekiah Swamp Run (head of Wicomico River):			
Wolf Den Branch near Cedarville, MD.....	01660900	b2.3	1966-80
Clark Run near Bel Alton, MD.....	01660930	10.4	1966-76
Herring Creek:			
Glebe Branch at Valley Lee, MD.....	01661430	b0.3	1968-78
<u>OHIO RIVER BASIN</u>			
<u>MONONGAHELA RIVER BASIN</u>			
Monongahela River:			
Youghiogheny River:			
Little Youghiogheny River:			
Little Youghiogheny River tributary near Deer Park, MD.....	03075450	0.57	1965-76
Toliver Run:			
Toliver Run tributary near Hoyes Run, MD.....	03075600	0.53	1965-86
Youghiogheny River tributary near Friendsville, MD.....	03076505	0.22	1965-76
North Branch Casselman River:			
North Branch Casselman River tributary at Foxtown, MD.....	03077700	b1.0	1965-77
Casselman River:			
Big Piney Run near Salisbury, PA.....	03078500	24.5	1974-86

b Approximately.

The following continuous-record surface-water-quality stations have been discontinued in Maryland and Delaware. Daily records of specific conductance (SC), water temperature (T), pH, dissolved oxygen (DO), and sediment (SED) were collected for the period (in water years) shown for each station.

<u>NORTH ATLANTIC SLOPE BASINS</u>	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record
<u>DELAWARE RIVER BASIN</u>				
Delaware River:				
Christina River:				
White Clay Creek:				
Red Clay Creek at Wooddale, DE .....	01480000	47.0	T	1953-81
Brandywine Creek at Wilmington, DE .....	01481500	314	T	1957-61
				1971-73
				1975-80
			SED	1947-61
				1964-80
Delaware Bay near Lewes, DE .....	01484450		SC, T	1993-98
<u>CHOPTANK RIVER BASIN</u>				
Choptank River near Greensboro, MD .....	01491000	113	SC, T	1975-91
			SED	1981-91
<u>ELK RIVER BASIN</u>				
Elk River near Town Point, MD .....	01495900		SC, T	1982-98
<u>SUSQUEHANNA RIVER BASIN</u>				
Susquehanna River at Conowingo, MD.....	01578310	27,100	SC, T	1979-81
				1984-92
			SED	1980-81
				1984-92
<u>RHODE RIVER BASIN</u>				
Rhode River:				
Muddy Creek:				
North Fork Muddy Creek at South River, MD .....	01590710	0.89	T	1971-78
Rhode River near South River, MD .....	01590720	18.0	SC, pH, T, DO	1971-83
<u>PATUXENT RIVER BASIN</u>				
Patuxent River near Bowie, MD .....	01594440	348	SC, T	1978-80
				1986-91
			SED	1986-91
Patuxent River at Benedict, MD .....	01594700	742	T	1964-69
<u>POTOMAC RIVER BASIN</u>				
North Branch Potomac River:				
Laurel Run at Dobbin Road near Wilson, MD .....	01594930	8.23	SC, T	1981-88
			pH	1984-88
Sand Run:				
South Fork Sand Run near Wilson, MD .....	01594934	1.55	SC, pH, T	1981-86
North Fork Sand Run near Wilson, MD .....	01594936	1.91	SC, T	1981-88
				1985-88
McMillan Fork near Fort Pendelton, MD .....	01594950	2.30	SC, pH, T	1987-97
North Branch Potomac River at Kitzmiller, MD .....	01595500	225	SC, pH, DO	1981-85
			T	1961-85
North Branch Potomac River at Barnum, WV .....	01595800	266	SC, pH, T, DO	1981-85
North Branch Potomac River at Luke, MD .....	01598500	404	T	1961-81
North Branch Potomac River at Pinto, MD .....	01600000	596	SC, pH, T, DO	1981-85
North Branch Potomac River near Cumberland, MD .....	01603000	875	T, SED	1965-79
Potomac River at Hancock, MD .....	01613000	4,073	T	1952-64
				1966-75
Conococheague Creek at Fairview, MD .....	01614500	495	T, SED	1967-80
Potomac River at Shepherdstown, WV .....	01618000	5,936	SC, T	1981
Antietam Creek near Sharpsburg, MD .....	01619500	281	T	1963-75
Shenandoah River at Millville, WV .....	01636500	3,040	SC, T	1980-83
Potomac River at Point of Rocks, MD.....	01638500	9,651	T, SED	1961-93
Monocacy River at Bridgeport, MD.....	01639000	173	T, SED	1990-93
Hunting Creek near Foxville, MD .....	01640965	2.14	SC, T	1988-91
Hunting Creek tributary near Foxville, MD .....	01640970	4.01	SC, T	1988-91
Fishing Creek:				
Fishing Creek tributary near Lewistown, MD.....	01641510	0.40	SC, T	1988-90
Monocacy River at Reich's Ford Bridge near Frederick, MD...	01643020		T, SED	1961-93
Watts Branch at Rockville, MD .....	01645200	3.70	T	1957-67
Potomac River at Great Falls, MD .....	01645500	11,430	SC, T	1973-78

	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record
<u>NORTH ATLANTIC SLOPE BASINS</u>				
<u>POTOMAC RIVER BASIN--Continued</u>				
Potomac River at Chain Bridge at Washington, DC.....	01646580	11,570	SC, pH, T, DO SED	1978-81 1979-81
Rock Creek:				
North Branch Rock Creek:				
Williamsburg Run near Olney, MD .....	01647685	2.25	SED	1967-68
North Branch Rock Creek near Rockville, MD .....	01647740	12.5	SED	1967-77
Northeast Branch Anacostia River:				
Northwest Branch Anacostia River:				
Browns Creek:				
Nursery Run at Cloverly, MD .....	01650085	0.35	SED	1967-68
Northwest Branch Anacostia River near Colesville, MD ...	01650500	21.1	SED	1967-75
Potomac River at Indian Head, MD .....	01655480	12,160	SC, pH, T, DO	1978-81
Potomac River at Piney Point, MD .....	01661475	---	SC, pH, T, DO	1980-81
<u>OHIO RIVER BASIN</u>				
<u>MONONGAHELA RIVER BASIN</u>				
Monongahela River:				
Youghiogheny River at Friendsville, MD.....	03076500	295	T	1963-75



The following low-flow, partial-record stations have been operated in Maryland, Delaware, and the District of Columbia. Measurements at these sites were made during periods of base flow when streamflow was primarily from ground-water storage. The column headed "Period of record" shows the water years in which measurements were made.

<u>NORTH ATLANTIC SLOPE BASINS</u>	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>DELAWARE RIVER BASIN</u>			
Delaware River:			
Naaman Creek:			
South Branch Naaman Creek near Claymont, DE .....	01477400	3.83	1955-66 1968-71
Christina River near Newark, DE .....	01477850	3.76	1981-83
West Branch Christina River near Newark, DE .....	01477860	4.20	1981-83
Belltown Run near Glasgow, DE .....	01478009	3.35	1978-81
Muddy Run at Glasgow, DE .....	01478024	5.43	1978-81
Muddy Run near Cooches Bridge, DE .....	01478028	8.21	1978-80
White Clay Creek:			
White Clay Creek tributary near Ogletown, DE .....	01478878	3.68	1978-80
Brandywine Creek:			
Rocky Run at Talleyville, DE .....	01481350	1.76	1957-59 1966
Wilson Run at Guyencort, DE .....	01481400	1.62	1957-59
North Fork Wilson Run at Guyencort, DE .....	01481430	1.12	1957-59
Wilson Run at Rockland, DE .....	01481440	3.05	1957-63
Husbands Run at Rockland, DE .....	01481460	1.28	1957-59
Squirrel Run at Montchanin, DE .....	01481480	1.67	1957-59
Alapocas Run at Concord, DE .....	01481530	0.81	1957-59
Red Lion Creek at Red Lion, DE .....	01482300	3.20	1955-60 1962-71
Dragon Creek at Kirkwood, DE .....	01482400	1.93	1978-81
Dragon Creek tributary at Kirkwood, DE .....	01482405	0.16	1978-81
Joy Run near Summit Bridge, DE .....	01482670	1.26	1978-80
Scott Run near Boyds Corner, DE .....	01482690	2.18	1978-81
Appoquinimink River:			
Wiggins Millpond Outlet (head of Appoquinimink River) at Townsend, DE .....	01483150	3.82	1957-60 1962-66 1968-71 1978-80
Drawyer Creek near Mt. Pleasant, DE .....	01483160	1.54	1978-80
Spring Mill Branch near Armstrong, DE .....	a01483165@	4.68	1979-80
Dove Nest Branch near Odessa, DE .....	a01483170@	4.68	1978-80
<u>SMYRNA RIVER BASIN</u>			
Providence Creek (head of Smyrna River) at Clayton, DE .....	01483300	11.8	1955-60 1962-63 1966, 1968-69
Smyrna River:			
Mill Creek at Smyrna, DE .....	01483350	4.77	1955-57 1959-60 1962-63 1966, 1968-69
<u>ST. JONES RIVER BASIN</u>			
Fork Branch (head of St. Jones River) at Dupont, DE .....	01483650	7.50	1955-57 1959-60 1962-66 1968-71
Maidstone Branch at Dupont, DE .....	01483680	17.3	1955-57 1959-60 1962-66 1968-71
<u>MURDERKILL RIVER BASIN</u>			
Murderkill River:			
Browns Branch near Houston, DE .....	01484020	12.4	1955-71
Spring Creek:			
Hudson Branch (head of Spring Creek) near Canterbury, DE .....	01484040	8.40	1955-60
Pratt Branch near Felton, DE .....	01484050*	3.29	1955-57 1959-60 1962-71
Double Run near Magnolia, DE .....	01484060	5.68	1955-57 1959-60 1962-64 1966-71

a Prior to 2001 published as "Drawyer Creek tributary".

@ Currently a surface-water discharge station.

\* Also a crest-stage partial-record station.

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>MISSPILLION RIVER BASIN</u>			
Beaverdam Branch (head of Misspillion River):			
Cedar Creek near Lincoln, DE .....	01484200	7.21	1955-60 1962-63 1966, 1968-69
<u>BROADKILL RIVER BASIN</u>			
Pemberton Branch (head of Broadkill River) near Milton, DE .....			
	01484240	6.68	1955-66 1968-71
Broadkill River:			
Beaverdam Creek near Milton, DE .....	01484270	6.10	1955-71
<u>INDIAN RIVER BASIN</u>			
Indian River:			
Sheep Pen Ditch near Shortly, DE .....	01484510	b5.4	1986-88 1997-98
Iron Branch at Millsboro, DE .....	01484530	b8.0	1985-88 1997-99
Whartons Branch near Millsboro, DE .....	01484531*	b5.8	1968-69 1971, 1985-88 1999
Swan Creek near Warwick, DE .....	01484535	b7.2	1985-88 1997-98
Pepper Creek at Dagsboro, DE .....	01484550*	8.78	1955-71 1985-88 1997-99
Blackwater Creek near Clarkesville, DE .....	01484600*	b3.5	1968-69 1971, 1985-88 1997-98
Love Creek at Robinsonville, DE .....	01484655	b12	1985-88 1997-99
Chapel Branch at Angola, DE .....	01484677	b8.0	1985-88 1997-99
Unity Branch at Angola, DE .....	01484678	4.2	1999
<u>MILLER CREEK BASIN</u>			
Beaverdam Ditch near Millville, DE .....			
	01484695	2.2	1997-98
<u>DIRICKSON CREEK BASIN</u>			
Bearhole Ditch (head of Dirickson Creek) at Bunting, DE .....			
	01484700	b6.4	1968-71 1985-88 1997-98
<u>WICOMICO RIVER BASIN</u>			
Andrews Branch (head of Wicomico River):			
Leonard Pond Run near Delmar, MD .....	01486200	13.4	1950-51 1964, 1969-71
<u>NANTICOKE RIVER BASIN</u>			
Nanticoke River (Gravelly Fork):			
Deep Creek at Old Furnace, DE .....	01487100	33.0	1955-60 1962-63 1968
Tyndall Branch near Hardscrabble, De .....	01487120	12.7	1955-63 1966
Lewes Creek:			
Butler Mill Branch near Woodland, De .....	01487300	6.96	1955-63 1966, 1968-69
James Branch (head of Broad Creek):			
Elliott Pond Branch (Chipman Pond Branch) near Laurel, DE.....	01487700	8.55	1955-66 1968-71
Chicone Creek at Reids Grove, MD .....	01489395	4.69	1951-53 1969-71
Baron Creek at MD-DE State Corner .....	01489400	8.93	1950-52 1969-70
<u>CHOPTANK RIVER BASIN</u>			
Choptank River near Choptank Mills, DE .....			
Forge Branch at Greensboro, MD .....	01490550	b58	1985-87
Watts Creek near Denton, MD .....	01491060	9.84	1952-53
Tuckahoe Creek:	01491180	b11	1964-75
Knott Millpond near Hillsboro, MD .....	01491800	8.45	1952-53 1968-71
Cabin Creek at Cabin Creek, MD .....	01492080	6.05	1952-53

b Approximately.

\* Also a crest-stage partial-record station.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>			
<u>WYE RIVER BASIN</u>			
Wye River:			
Wye East River:			
Skipton Creek:			
Mill Creek near Wye Mills, MD .....	01492560	5.72	1952-53
<u>CHESTER RIVER BASIN</u>			
Andover Branch (head of Chester River):			
Cypress Branch at Millington, MD .....	01492980	<b>b38</b>	1964-66 1968-75
Mills Branch near Millington, MD .....	01492990	9.98	1953-54 1968-71
Chester River:			
Foreman Branch at Ewingville, MD .....	01493480	5.27	1953-54
Langford Creek:			
East Fork Langford Creek:			
Mill Pond Outlet near Langford, MD .....	01494035	5.10	1953-54 1968-71
Old Mill Stream Branch (head of Corsica River) at Centerville, MD .....	01494100	11.2	1964-71
<u>SASSAFRAS RIVER BASIN</u>			
Sassafras River:			
Sassafras River tributary at Ginns Corner, MD .....	01494450	3.81	1982-83
Duffy Creek near Cecilton, MD .....	01494480	1.45	1968-71 1982
<u>WORTON CREEK BASIN</u>			
Mill Creek (head of Worton Creek) at Hanesville, MD .....	01494600	4.63	1953-54 1968-71
<u>ELK RIVER BASIN</u>			
Big Elk Creek (head of Elk River):			
Gramies Run at Elk Mills, MD .....	01494995	3.05	1981-83
Little Elk Creek at Rock Church, MD .....	01495480	17.8	1982-83
Laurel Run near Elkton, MD .....	01495520	3.87	1982-83
Dogwood Run at Elkton, MD .....	01495525	1.62	1982-83
Mill Creek near Elkton, MD .....	01495540	4.32	1968-70 1982
Elk River:			
Perch Creek near Elkton, MD .....	01495550	<b>b6.0</b>	1964-75 1978-80 1982-83
Back Creek near Mt. Pleasant, DE .....	01495700	4.40	1968-69
Bohemia River:			
Sandy Branch at Bohemia Creek, MD .....	01495925	2.58	1968-70 1982
Little Bohemia Creek near Warwick, MD .....	01495935	2.45	1953-54
Scotchman Creek:			
Scotchman Creek tributary near Cecilton, MD .....	01495950	1.40	1982-83
<u>NORTHEAST RIVER BASIN</u>			
Northeast Creek (head of Northeast River):			
Little Northeast Creek:			
West Branch Little Northeast Creek at Zion, MD .....	01496030	3.32	1981-83
Little Northeast Creek at Mechanic Valley, MD .....	01496050	<b>b14</b>	1964-75
Northeast River:			
Northeast River tributary at North East, MD .....	01496055	1.55	1982-83
Stony Run near North East, MD .....	01496060	8.23	1982-83
Northeast River tributary at Charlestown, MD .....	01496085*	1.03	1982-83
Hance Point Creek at Hance Point, MD .....	01496100	1.36	1983
<u>PRINCIPIO CREEK BASIN</u>			
Principio Creek:			
Principio Creek tributary at Belvedere, MD .....	01496225	2.08	1982-83
<u>MILL CREEK BASIN</u>			
Mill Creek at Jackson, MD .....	01496250	3.73	1982-83

**b** Approximately.

\* Also a crest-stage partial-record station.

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>SUSQUEHANNA RIVER BASIN</u>			
Susquehanna River:			
Broad Creek at Pylesville, MD .....	01577950	11.3	1956-59 1962-63 1966
Conowingo Creek at Oakwood, MD .....	01578300	34.4	1982-83
Octoraro Creek:			
Stone Run near Rising Sun, MD .....	01578475	2.24	1982-83
Stone Run at Rising Sun, MD .....	01578480	6.71	1982-83
Love Run at Richardsmere, MD .....	01578490	3.55	1982-83
Octoraro Creek tributary at Richardsmere, MD .....	01578515	3.27	1982-83
Deer Creek at Gorsuch Mills, MD .....	01579875	<b>b</b> 25	1975-79
Big Branch at Harkins, MD .....	01579900	6.39	1975-79
Little Deer Creek near Federal Hill, MD .....	01579925	14.0	1975-79
Stout Bottle Branch near Ady, MD .....	01580170	7.13	1980-82
<u>SWAN CREEK BASIN</u>			
Swan Creek at Swan Creek, MD .....	01580700	13.2	1956-59 1962-63 1966
<u>BUSH RIVER BASIN</u>			
Bynum Run (head of Bush River) at Bush, MD .....			
	01581600	22.5	1956-59 1962-63 1966
James Run at Bush, MD .....	01581650	11.1	1956-59 1962-63 1966
Bush River:			
Grays Run at Stepney, MD .....	01581660	5.35	1956-59 1962-63 1966
Winters Run (head of Otter Point Creek) near Bel Air, MD .....	01581750	37.0	1954-59 1962-63 1966
<u>GUNPOWDER RIVER BASIN</u>			
Gunpowder Falls (head of Gunpowder River):			
Grave Run near Beckleysville, MD .....	01581830@	7.68	1977-82
Georges Run at Armacost, MD .....	01581850	13.0	1956-59 1962, 1966
Georges Run near Beckleysville, MD .....	01581870@	15.8	1977-82
Little Falls:			
Beetree Run at Bentley Springs, MD .....	01581960@	9.72	1975-79
Third Mine Branch near Stablersville, MD .....	01581980	5.27	1975-79
Green Branch at Phoenix, MD .....	01582900	4.45	1973, 1975-79
Western Run:			
Piney Run at Dover, MD .....	01583100@	12.3	1975-79
Blackrock Run at Coopersville, MD .....	01583200	9.38	1956-59 1962-63 1966
Beaverdam Run at Cockeysville, MD .....	01583600@	20.9	1956-59 1962-63 1966
Little Gunpowder Falls at Hess, MD .....	01584200	16.5	1956-59 1962-63 1966
<u>PATAPSCO RIVER BASIN</u>			
North Branch Patapsco River:			
Deep Run at Lawndale, MD .....	01585700	6.70	1975-82
Beaver Run at Finksburg, MD .....	01586200	12.7	1957-59 1961-63 1966
Middle Run near Finksburg, MD .....	01586550	6.18	1973, 1975-79
Morgan Run near Gamber, MD .....	01586600	26.0	1957-59 1961-63 1966
Little Morgan Run near Eldersburg, MD .....	01586650	7.13	1973, 1975-79
South Branch Patapsco River at Woodbine, MD .....	01587070	11.4	1975-79
Gillis Falls at Woodbine, MD .....	01587170	19.4	1988-90 1957-59

@ Currently a surface-water discharge station.

b Approximately.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>			
<u>PATAPSCO RIVER BASIN--Continued</u>			
Patapsco River--Continued			
Rockburn Branch at Elkridge, MD .....	01589040	3.69	1988-90
Deep Run at Hanover, MD .....	01589080	18.0	1975-79
			1988-90
Stony Run at Elkridge, MD .....	01589090	<b>b9.4</b>	1955, 1964-67
Gwynns Falls:			
Red Run near Owings Mills, MD .....	01589230	7.39	1975-79
Gwynns Falls at Baltimore, MD.....	01589345	50.7	1980-82
Jones Falls at Eccleston, MD .....	01589370	2.86	1976-79
<u>SEVERN RIVER BASIN</u>			
Severn Run (head of Severn River) at Benfield, MD .....	01589800	<b>b24</b>	1964-67
<u>PATUXENT RIVER BASIN</u>			
Patuxent River at Mullinix, MD .....			
	01590800	10.7	1988-90
Cabin Branch near Florence, MD .....	01590900	8.36	1975-79
			1988-90
Cattail Creek:			
Cattail Creek tributary at Carrs Mill, MD .....	01591200	3.93	1956-59
			1961-63
			1966,
			1988-90
Cattail Creek tributary at Daisy, MD .....	01591375	3.12	1977-82
			1988-90
Dorsey Branch near Knollwood, MD .....	01591475	3.78	1964,
			1988-90
Hawlings River near Unity, MD .....	01591650	5.08	1977-82
Little Patuxent River at Pine Orchard, MD .....	01593200	7.03	1956-59
			1961-64
			1966,
			1988-90
Red Hill Branch at Columbia, MD .....	01593300	5.98	1988-90
Middle Patuxent River near West Friendship, MD .....	01593600	11.4	1956-59
			1961-64
			1966,
			1988-90
Middle Patuxent River tributary near Dayton, MD .....	01593650	4.25	1977-82
Middle Patuxent River tributary near Columbia, MD .....	01593675	9.12	1988-90
Middle Patuxent River tributary near Clarksville, MD .....	01593700	6.24	1977-82
			1988-90
Hammond Branch at Scaggsville, MD .....	01594100	3.01	1956-59
			1962-64
			1966,
			1988-90
Hammond Branch near Laurel, MD .....	01594200	6.83	1988-90
Towers Branch at Conoways, MD .....	01594300	5.69	1975-80
Dorsey Run at Jessup, MD .....	01594395	6.59	1964,
			1989-91
Stocketts Run near Hardesty, MD .....	01594455	6.68	1977-80
Rock Branch at Bayard, MD .....	01594465	6.73	1977-80
Western Branch:			
Northeast Branch at Kolbes, MD .....	01594490	7.74	1977-80
Collington Branch at Upper Marlboro, MD .....	01594525	22.9	1964-66
			1975-79
Mataponi Creek near Naylor, MD .....	01594535	<b>b14</b>	1964-66
			1982
Lyons Creek at Lyons Creek, MD .....	01594545	<b>b15</b>	1964-67
<u>POTOMAC RIVER BASIN</u>			
North Branch Potomac River:			
Glade Run at Steyer, MD .....	01594975	8.86	1977-82
Savage River:			
Little Savage River near Avilton, MD .....	01596200	1.95	1979-82
Big Run near Swanton, MD .....	01596600	13.4	1977-82
Crabtree Creek:			
Middle Fork near Swanton, MD .....	01597100	10.8	1977-82
Georges Creek near Midland, MD .....	01598770	13.1	1979-82
Woodland Creek at Ocean, MD .....	01598775	5.49	1979-82
Mill Run at Morrison, MD .....	01598980	7.35	1979-82
Mill Run at Rawlings, MD .....	01599800	2.84	1979-82
Wills Creek at Eilerslie, MD .....	01601100	185	1979-82
Jennings Run:			
North Branch Jennings Run at Barrelsville, MD .....	01601300	<b>b12</b>	1964-74
Jennings Run at Corriganville, MD .....	01601325	37.7	1975-79
Collier Run at Spring Gap, MD .....	01604150	<b>b11</b>	1964-74
Mill Run at Oldtown, MD .....	01605425	10.6	1975-79
Seven Springs Run at Oldtown, MD .....	01605475	9.16	1975-82

**b** Approximately.

NORTH ATLANTIC SLOPE BASINS--Continued	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>POTOMAC RIVER BASIN--Continued</u>			
Potomac River--Continued			
Town Creek:			
Murley Branch near Flintstone, MD .....	01608950	11.9	1977-78 1980-82
Maple Run near Town Creek, MD .....	01608975	7.10	1977-78 1980-82
Fifteen Mile Creek near Piney Grove, MD .....	01610060	20.2	1975-79
Deep Run near Little Orleans, MD .....	01610065	6.26	1975-79
Fifteen Mile Creek at Little Orleans, MD .....	01610075	61.6	1975-79
Sideling Hill Creek:			
Bear Creek at Forest Park, MD .....	01610150*	10.4	1975-79 1985-87
Potomac River tributary at Woodmont, MD .....	01610170	3.29	1985-87
Tonoloway Creek at Hancock, MD .....	01613100	113	1985-87
Ditch Run near Hancock, MD .....	01613150*	4.80	1975-79
Licking Creek:			
Lanes Run near Forsythe, MD .....	01613540	9.98	1980-82 1985-87
Licking Creek near Pectonville, MD .....	01613545	212	1985-87
Conococheague Creek:			
Little Conococheague Creek near Charlton, MD .....	01614050	18.1	1985-87
Rockdale Run at Fairview, MD .....	01614525	9.67	1976-79 1981-82 1985-87
Rush Run near Huyett, MD .....	01614575	5.20	1976-79 1981-82 1985-87
Meadow Brook at Conococheague, MD .....	01614625	6.77	1976-79 1981-82 1985-87
Conococheague Creek tributary near Huyett, MD .....	01614675	7.94	1977-79 1981-82 1985-87
Conococheague Creek at Williamsport, MD .....	01614705	564	1985-87
Downey Branch near Downesville, MD .....	01617600	3.00	1976-79 1981-82
Marsh Run:			
St. James Run at Spielman, MD .....	01617780	7.14	1977-79 1981-82 1985-87
Antietam Creek:			
Little Antietam Creek at Leitersburg, MD .....	01619050	24.5	1976-79 1981-82 1985-87
West Branch at Paramount, MD .....	01619145	5.07	1977-79 1981-82
Marsh Run at Fiddlesburg, MD .....	01619150	<b>b31</b>	1965-74 1976-79 1985-87
Landis Spring Branch near Benevola, MD .....	01619275	6.60	1976-79 1981-82 1985-87
Beaver Creek at Benevola, MD .....	01619325	22.9	1975-79 1985-87
Little Beaver Creek at Benevola, MD .....	01619350	8.70	1975-79 1985-87
Little Antietam Creek at Keedysville, MD .....	01619480	<b>b24</b>	1964-67 1976-79 1985-87
Sharmans Branch near Antietam, MD .....	01619525	4.62	1977-79 1981-82
Isreal Creek at Weverton, MD .....	01636730	13.2	1975-79 1985-87
Catoctin Creek:			
Little Catoctin Creek near Brunswick, MD .....	01636850	8.64	1977-83
Middle Creek at Ellerton, MD .....	01636975	22.7	1977-82
Catoctin Creek at Olive, MD .....	01638050	112	1977-83
Potomac River tributary at Point of Rocks, MD .....	01638520	3.04	1982-83
Tuscarora Creek at Tuscarora, MD .....	01638600	20.3	1975-79 1982-83

\* Also a crest-stage partial-record station.

**b** Approximately.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>			
<u>POTOMAC RIVER BASIN--Continued</u>			
Monocacy River:			
Piney Creek at Taneytown, MD .....	01639100	22.9	1956-59 1961-63 1966
Piney Creek near Keysville, MD .....	01639150	34.4	1982-83
Toms Creek:			
Friends Creek near Emmitsburg, MD .....	01639325	12.2	1977-83
Toms Creek near Keysville, MD .....	01639390	88.1	1982-83
Double Pipe Creek:			
Big Pipe Creek (head of Double Pipe Creek) at Bachman Mills, MD .....	01639400	9.39	1956-59 1961-63 1966
Deep Run at Union Mills, MD .....	01639420	5.46	1975-79
Silver Run near Silver Run, MD .....	01639440	8.77	1975-82
Big Pipe Creek near Mayberry, MD .....	01639450	51.6	1956-59 1962-63 1966
Bear Branch near Mayberry, MD .....	01639465	13.9	1975-82
Meadow Branch near Uniontown, MD .....	01639470	12.6	1956-59 1961-63 1966
Little Pipe Creek:			
Wolfpit Branch at Linwood, MD .....	01640100	2.01	1956-59 1961-63 1966
Little Pipe Creek at Union Bridge, MD .....	01640150	40.4	1956-59 1962-63 1966
Beaver Dam Creek near Union Bridge, MD .....	01640160	7.04	1977-82
Little Pipe Creek at Keymar, MD .....	01640200	80.0	1982-83
Owens Creek near Thurmont, MD .....	01640600	14.4	1975-79
Little Owens Creek near Thurmont, MD .....	01640650	6.16	1975-79
Beaver Branch at Rocky Ridge, MD .....	01640720	6.53	1977-82
Owens Creek near Rocky Ridge, MD .....	01640750	38.8	1982-83
Fishing Creek near Utica, MD .....	01641600	17.9	1982-83
Tuscarora Creek near Frederick, MD .....	01641900	16.5	1975-79 1982-83
Israel Creek near Walkersville, MD .....	01642050	<b>b</b> 29	1964-66 1975-79 1982-83
Linganore Creek near New London, MD .....	01642430	45.2	1980-82
Bens Branch near New Market, MD .....	01642450	11.8	1975-82
Bush Creek at Ijamsville, MD .....	01643100	<b>b</b> 17.5	1964-66
Bush Creek at Reels, MD .....	01643110	29.7	1982-83
Ballenger Creek near Lime Kiln, MD .....	01643125	20.2	1975-83
Bennett Creek:			
Little Bennett Creek at Hyattstown, MD .....	01643400	12.8	1968-69 1975-79
Broad Run at Elmer, MD .....	01643615	14.0	1975-82
Seneca Creek:			
Little Seneca Creek at Boyds, MD .....	01644400	<b>b</b> 21	1964-67
Bucklodge Branch near Dawsonville, MD .....	01644425	8.47	1975-82
Great Seneca Creek:			
Goshen Branch at Goshen, MD .....	01644480	7.63	1975-77 1979
Dry Seneca Creek near Seneca, MD .....	01645050	19.2	1975-82
Rock Run near Cabin John, MD .....	01646220	<b>b</b> 4.8	1964-67
Rock Creek at Redland, MD .....	01647620	7.45	1977-82
Northeast Branch Anacostia River:			
Paint Branch at College Park, MD .....	01649200	17.5	1980-82
Oxon Run (head of Oxon Creek) at Washington, DC .....	01652580	6.84	1980-82
Piscataway Creek:			
Tinkers Creek at Piscataway, MD .....	01653625	15.9	1975-82
Mattawoman Creek near Waldorf, MD .....	01657900	16.9	1980-82
Chicamuxen Creek:			
Reeder Run at Chicamuxen, MD .....	01658300	<b>b</b> 5.6	1964-67
Nanjemoy Creek:			
Burgess Creek:			
Mill Run (head of Nanjemoy Creek) Welcome, MD .....	01660650	9.89	1980-82
Port Tobacco Creek (head of Port Tobacco River) near Marshalls Corner, MD .....	01660740	15.8	1977-82

**b** Approximately.

	Station number	Drainage area (mi <sup>2</sup> )	Period of record
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>			
<u>POTOMAC RIVER BASIN--Continued</u>			
Wicomico River:			
Zekiah Swamp Run (head of Wicomico River) near Malcolm, MD	01660905	12.1	1975-82
Clark Run near Bel Alton, MD	01660930	10.4	1975-79
Gilbert Swamp Run near Olivers Shop, MD	01660950	<b>b</b> 32	1964-65
McIntosh Run:			
Brooks Run near Hollywood, MD	01661200	5.76	1980-82
McIntosh Run at Tintop Hill, MD	01661300	12.1	1964-66 1982
Glebe Run at Leonardtown, MD	01661410	5.81	1980-82
<u>OHIO RIVER BASIN</u>			
<u>MONONGAHELA RIVER BASIN</u>			
Monongahela River:			
Youghiogheny River:			
Cherry Creek near Crellin, MD	03075350	16.7	1977-82
Snowy Creek:			
Laurel Run at Crellin, MD	03075400	10.9	1964-74
Little Youghiogheny River at Loch Lynn Heights, MD	03075475	13.2	1975-79
Muddy Creek at Swallow Falls State Park, MD	03075700	17.8	1977-82
Cherry Creek near McHenry, MD	03075900	12.3	1973, 1975-79
Bear Creek:			
South Branch Bear Creek near Accident, MD	03076580	6.01	1964-74
South Branch Bear Creek near Friendsville, MD	03076590	16.8	1975-79
Casselman River:			
North Branch Casselman River near Grantsville, MD	03077925	24.4	1975-80
South Branch Casselman River near Grantsville, MD	03077950	20.8	1975-79

**b** Approximately.



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WATER RESOURCES DATA - MARYLAND AND DELAWARE, 2000

VOLUME 1. SURFACE-WATER DATA

INTRODUCTION

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

This report series includes records of stage, discharge, and water quality of streams and stage, contents, and water quality of lakes and reservoirs. This volume contains records for water discharge at 111 gaging stations; stage and contents at 1 reservoir; and water quality at 17 gaging stations. Also included are stage and discharge for 3 crest-stage partial-record stations, discharge only for 27 low-flow partial-record stations, and stage only for 5 tidal crest-gage partial-record stations. Locations of these sites are shown on figure 3. Locations of discontinued gaging stations are shown on figure 4. Additional water data were collected at various sites not part of the systematic data-collection program. These data represent that part of the National Water-Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Maryland and Delaware.

This series of annual reports for Maryland and Delaware began with a report for the 1961 water year that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. In the 1989 water year, the report format was changed to two volumes. Both volumes contained data on quantities of surface water, quality of surface and ground water, and ground-water levels. Volume 1 contained data on the Atlantic Slope Basins (Delaware River through Patuxent River) and Volume 2 contained data on the Monongahela and Potomac River Basins. Beginning with the 1991 water year, Volume 1 contains all information on quantities of surface water and surface-water-quality data and Volume 2 contains ground-water levels and ground-water-quality data.

Prior to the introduction of this series and for several water years concurrent with it, water resources data for Maryland and Delaware 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, Parts 6A and 6B."** For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title **"Quality of Surface Waters of the United States,"** and water levels for the 1935 through 1974 water years were published under the title **"Ground-Water Levels in the United States."** The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States, and may be purchased from the U.S. Geological Survey, Branch of Information Services, Federal Center, Box 25286, Denver, CO 80225.

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

Additional information including current prices for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone at (410) 238-4200.

COOPERATION

The U.S. Geological Survey and agencies of the State of Maryland had cooperative agreements for the collection of water-resource records from 1896 to 1909 and since 1924. Similar cooperative agreements have existed between the Survey and agencies of the State of Delaware since 1943. Organizations that assisted in collecting the data in this report through cooperative agreements with the Survey are:

Maryland Geological Survey, Emery T. Cleaves, Director.

Delaware Geological Survey, Robert R. Jordan, State Geologist.

Maryland Department of the Environment, Chesapeake Bay and Special Projects Program, Robert M. Summers, Division Chief.

District of Columbia Department of Public Works, Larry King, Director.

Maryland State Highway Administration, Parker F. Williams, Administrator.

Assistance with funds or services was given by the U.S. Army Corps of Engineers for collecting records at 12 gaging stations and 3 water-quality stations within Maryland.

The following organizations also aided in collecting records:

Delaware: Department of Natural Resources and Environmental Control,  
Water Resources Agency for New Castle County.

Maryland: Maryland Water Resources Administration, Washington Suburban Sanitary  
Commission, Upper Potomac River Commission, Baltimore County, Baltimore City,  
Anne Arundel County, Harford County, Montgomery County, Prince Georges County.

Organizations that provided data are acknowledged in station descriptions.

#### SUMMARY OF HYDROLOGIC CONDITIONS

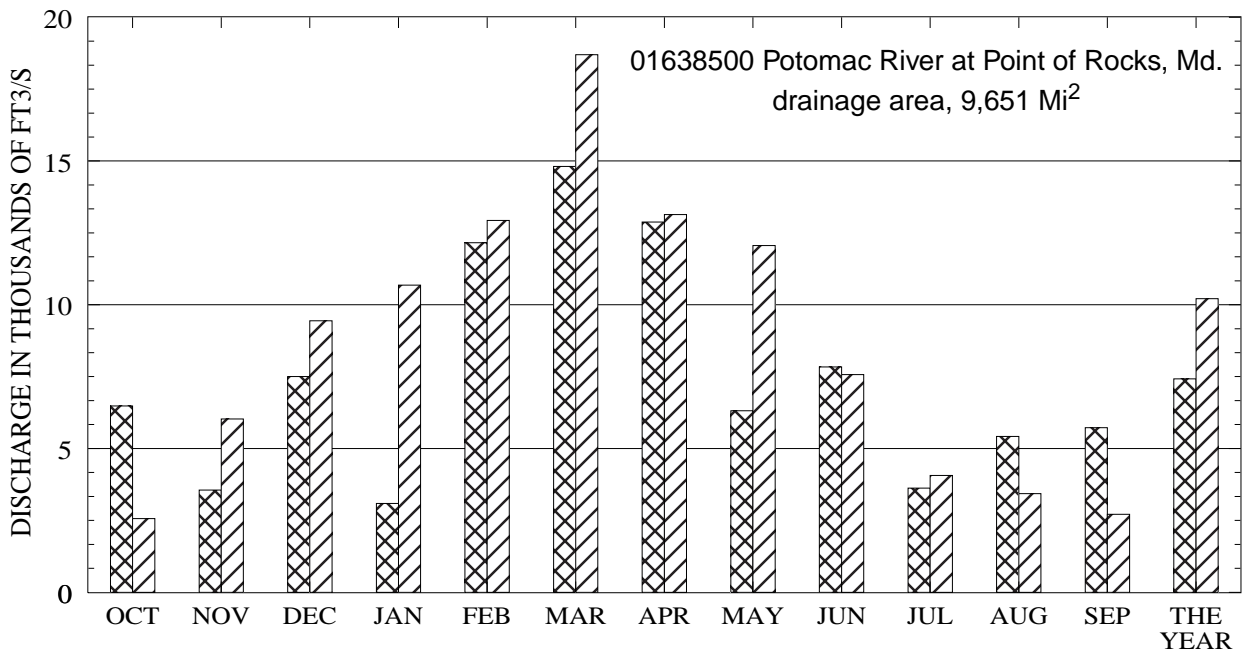
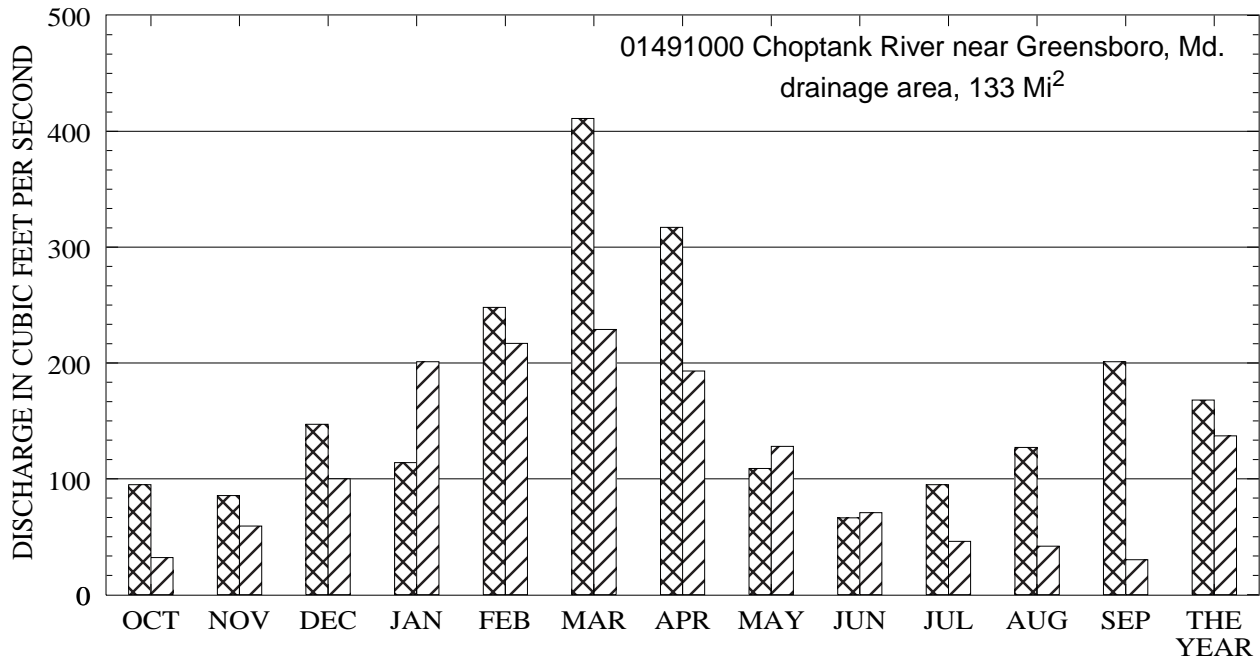
Streamflow at the beginning of the 2000 water year was in the excessive range (upper 25 percent of the record) throughout Maryland and Delaware following above-normal rainfall (1.0 to 12.5 inches) which occurred when Hurricane Floyd passed over the area. During October 1999, streamflow remained unchanged except for the Eastern Shore and western Maryland, where flows fell into the normal range. Flows during November and December 1999 were in the normal range throughout Maryland and Delaware. During January 2000, flows were in the normal range except in western Maryland and along the main stem of the Potomac River following below-normal precipitation (0.5 to 1.5 inches). In February 2000, flows returned to the normal range throughout the area. During March 2000, flows remained in the normal range except for the Eastern Shore, where flows rose into the excessive range following above-normal precipitation (1.5 to 6.0 inches). Flows for April 2000 remained excessive on the Eastern Shore and rose into the excessive range in central Maryland following above-normal precipitation (1.0 to 2.0 inches). During May 2000, flows dropped into the normal range on the Eastern Shore and in Central Maryland. Flows in Western Maryland and along the main stem Potomac River dropped in to the deficient range (lower 25 percent of the record) deficient range following below-normal precipitation (0.5 to 2.0 inches). During June and July 2000, flows throughout Maryland and Delaware were in the normal range except for the Eastern Shore during July when flows increased following above-normal rainfall. Above-normal rainfall continued during August and September 2000 with flows throughout Maryland and Delaware rising into the excessive range during these months.

During the 2000 water year, flows were in the deficient range at two of the four index stations: Potomac River at Paw Paw, WV, in western Maryland; and Potomac River near Washington, D.C., in central Maryland. At the Choptank River at Greensboro, on the Eastern Shore of Maryland, and Seneca Creek at Dawsonville, in central Maryland, flows were in the normal range. No record flows were set at any of the four index stations during the 2000 water year.

Monthly and annual-mean discharges for water year 2000 were compared to long-term averages (reference period 1971-2000) for two representative streamflow-gaging stations in figure 1. Data for the station, Potomac River at Point of Rocks, in central Maryland, reflect runoff conditions in the Potomac River Basin, excluding the Coastal Plain. Data for the station, Choptank River near Greensboro, on the Eastern Shore of Maryland, reflect runoff from a 113 mi<sup>2</sup>(square mile) area, of which 21.6 mi<sup>2</sup> is located in Delaware in the central part of the Delmarva Peninsula.

Average freshwater inflow to the Chesapeake Bay was estimated to be 69,100 ft<sup>3</sup>/s (cubic feet per second), on the basis of flows for the James, Potomac, and Susquehanna Rivers. This is 90 percent of the long-term average during the reference period 1951-2000. Flows for October averaged 112 percent above normal. During November, flows averaged 35 percent below normal. For December, flows averaged 36 percent below normal. For January, flows averaged 50 percent below normal. Flows in February averaged 20 percent below normal. Flows in March were 7 and percent below normal while flows in April were 3 percent above normal. Flows for May were 14 percent below normal. June flows were 112 percent above normal. During July, flows were 5percent below normal. August flows were 111 percent above normal. September flows were 121 percent above normal. No new flow records were set during the 2000 water year.

The combined storage in the three major water-supply reservoirs in the Baltimore City Municipal System (combined usable capacity of 75,850 million gallons [previously 85,430 million gallons, decrease in storage capacity due to increase in sediment storage]) increased from 76 percent (revised) of capacity from September 1999, to 89 percent of capacity at the end of September 2000.



☒ Monthly and yearly mean discharge for 2000 water year

☒ Median of monthly and yearly mean discharge for 30-year period, 1971 to 2000

FIGURE 1. COMPARISON OF DISCHARGE AT TWO LONG-TERM REPRESENTATIVE GAGING STATIONS DURING THE 2000 WATER YEAR WITH MEDIAN DISCHARGE FOR INDICATED PERIOD.

### SPECIAL NETWORKS AND PROGRAMS

**National Stream-Quality Accounting Network (NASQAN)** monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (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.

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

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

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

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

[http://www.rvares.er.usgs.gov/nawqa/NAWQA\\_home.html](http://www.rvares.er.usgs.gov/nawqa/NAWQA_home.html)

### EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 2000 water year that began October 1, 1999, and ended September 30, 2000. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface water. The locations of the stations where the data were collected are shown in figure 3. The following sections of introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

#### Station Identification Numbers

Each data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for surface-water stations where only miscellaneous measurements are made.

#### Downstream Order System

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

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 01477800, which appears just to the left of the station name, includes the two-digit part number "01" plus the six-digit downstream-order number "477800." The part number designates the major river basin; for example, part "01" is the North Atlantic Slope Basin.

### Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the **LOCATION** paragraph of the station description (See figure 2 below).

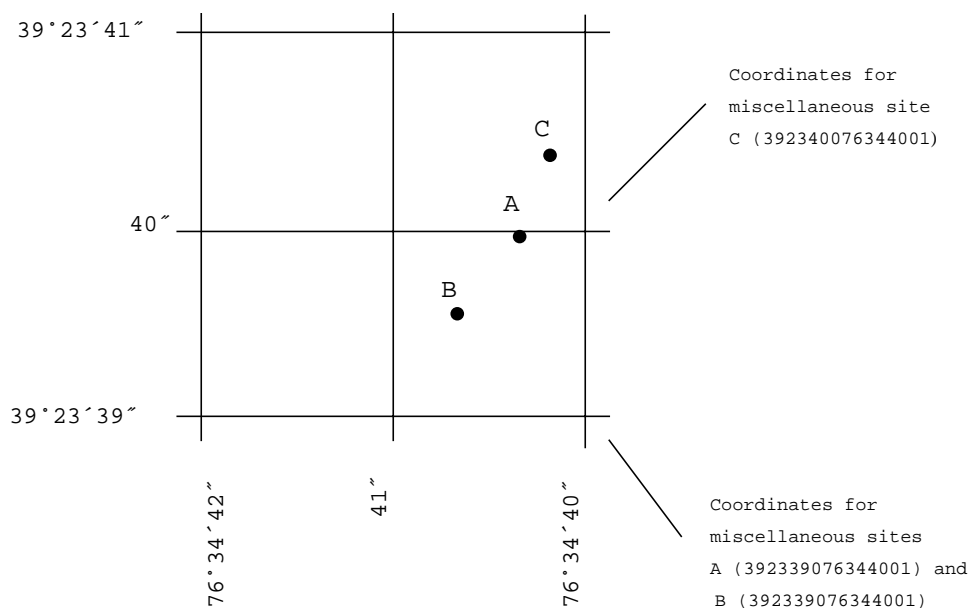


Figure 2. --System for numbering miscellaneous sites (latitude and longitude)

### Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean-daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because mean-daily discharges and end-of-day contents commonly are published for such stations, they are referred to as **"daily stations."**

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as **"Crest-stage partial records,"** or **"Low-flow partial records."** Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered partial records, but they are presented separately in this report. Locations of all complete-record and crest-stage partial-record stations for which data are given in this report are shown in figure 3.

### Data Collection and Computation

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

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the U.S. Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI's), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

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

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

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

In computing records of lake or reservoir contents, it is necessary to have available curves or tables defining the relation of stage and content based on bathymetric surveys. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes are then determined. If the stage-content relation changes because of deposition of sediment in a lake or reservoir, periodic re-surveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly inaccurate as the time lapsed since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relations, similar to the methods by which other stream discharges are computed.

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

### Data Presentation

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

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily-mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly-mean flow data for a designated period, by water years; and 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.

#### Station manuscript

The manuscript provides descriptive information under various headings 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 which follow clarify information presented under the various headings of the station description.

**LOCATION.**--Information on locations is obtained from the most accurate maps available. The location of the gaging station in relation to the cultural and physical features in the vicinity and 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 maps available vary from one drainage basin to another, the accuracy of drainage areas also varies. Drainage areas are updated as better maps become available.

**PERIOD OF RECORD.**--This indicates the 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 flow could reasonably be considered equivalent to flow at the present station.

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

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

**REMARKS.**--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge"). If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, 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 extreme 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, outlet works and spillway, and purpose and use of the reservoir.

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

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

**PEAK DISCHARGE(S) FOR CURRENT YEAR.**--The maximum instantaneous discharge and any secondary peaks occurring during the current year are given. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330.



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

Although rare, the records of a discontinued gaging station may occasionally need revision. Because there would be no current or, possibly, future station manuscript 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 ever revised after the station was discontinued. If the data for a discontinued station were obtained by computer retrieval, however, the data would be current and there would be no need to check because any published revision of data is always accompanied by a revision of the corresponding data in computer storage.

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

Headings for **AVERAGE DISCHARGE** and **EXTREMES FOR THE PERIOD OF RECORD** have been deleted and the information contained in these paragraphs is now presented in the tabular summaries following the discharge table or in the **REMARKS** paragraph, as appropriate. No changes have been made to the data presentation of lake contents.

#### 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 average flow in cubic feet per second for the month, and the lines headed "**MAX**" and "**MIN**" give the maximum and minimum daily discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "**CFSM**"), or in inches (line headed "**IN.**"), or in acre-feet (line headed "**AC-FT**"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion, or if the drainage area includes large non-contributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

#### Statistics of monthly-mean data

A tabular summary of the mean (line headed "**MEAN**"), maximum (line headed "**MAX**"), and minimum (line headed "**MIN**") of monthly-mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period is expressed as "**FOR WATER YEARS \_\_\_\_-\_\_\_\_, BY WATER YEAR (WY),**" and lists the first and last water years of the range of years selected from the **PERIOD OF RECORD** paragraph in the station manuscript. It consists of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed 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 record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed 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 in 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 this occurs, it will be noted in the **REMARKS** paragraph or in footnotes. Selected streamflow-duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage area.

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

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

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

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

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

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

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

**ANNUAL 7-DAY MINIMUM**--The lowest mean discharge for 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 to March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

**INSTANTANEOUS PEAK FLOW**--The maximum instantaneous discharge occurring for the water year or for the designated period.

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

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

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

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

**Cubic feet per second per square mile (CFSM, ft<sup>3</sup>/s/mi<sup>2</sup>)** 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.

**Inch (IN., in.)** indicates 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 is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made during times of drought or flood to give better areal coverage of those events. These measurements and others collected for some special reasons are called measurements at miscellaneous sites.

### Identifying Estimated Daily Discharge

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

### Accuracy of the Records

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

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

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

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes affected by 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 when compared to the observed discharge.

### Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Maryland and Delaware offices of the MD-DE-DC District. In addition, most of the daily-mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

### Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

### Classification of records

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

A careful distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 3.

### 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 of 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 to insure that the data obtained represent the in situ quality of the water. For this reason, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on-site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "**Techniques of Water-Resources Investigations**," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. These references are listed under "**PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS**" (TWRI) section of this report. These methods are consistent with ASTM standards and generally follow ISO standards. Also, detailed information on collecting, treating, and shipping samples may be obtained from the U.S. Geological Survey Maryland and Delaware offices.

One sample can adequately define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream-Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured, and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey Maryland office whose address is given on the back of the title page of this report.

### Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may closely follow 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 Maryland and Delaware Offices of the U.S. Geological Survey.

### Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily, or in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after these periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may only be representative of conditions 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

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the U.S. Geological Survey laboratory in Arvada, Colorado. Methods used to analyze sediment samples and to compute sediment records are described in TWRI Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

#### Data Presentation

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

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

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

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

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

**INSTRUMENTATION**.--Information on instrumentation is given only if a water-quality monitor temperature 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 U.S. Geological Survey by a cooperating organization are identified here.

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

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

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

#### Remark Codes

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

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

#### WATER-QUALITY CONTROL DATA

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 are described in the following section. Procedures have been established for the storage of water-quality-control data within the U.S. Geological Survey. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

#### Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by 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. There are many types of blank samples possible, each 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 processed through 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**

A Reference sample is a solution or material prepared by a laboratory whose 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 insure 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 so that the samples are considered 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. There are many types of replicate samples 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 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 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

#### **ACCESS TO USGS 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 the most current or discontinued gaging stations on the world wide web (WWW). These data may be accessed at

**<http://water.usgs.gov/>**

Some water-quality and ground-water data also are available on the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address for MD-DE-DC District office on back of the title page).

## DEFINITION OF TERMS

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

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

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

**Algae** are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

**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.

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

**Annual runoff** is the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

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

**Cubic foot per second per square mile [CFSM, ft<sup>3</sup>/s/mi<sup>2</sup>]** 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.

**Inch (IN., in.)** 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 uniformly distributed on it.

**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 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 weight percent of the hydrogen substituted chlorine.

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

**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 warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which 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 (mL) of sample.

**Fecal coliform bacteria** are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms 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.

**Fecal streptococcal bacteria** are bacteria found in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°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.



**Enterococcus bacteria** are commonly found in the feces of humans and other warm-blooded 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 which produce pink to red colonies with black or reddish-brown precipitate after incubation at 41°C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants.

**Baseflow** is flow in a channel sustained by ground-water discharge in the absence of direct runoff.

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

**Benthic organisms (invertebrates)** are the group of animals inhabiting the bottoms 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 micro-organisms, 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.

**Ash mass** is the mass or amount of residue present after the residue from the 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 ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ).

**Dry mass** refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash, and sediment, in the sample. Dry-mass is expressed in the same units as ash mass.

**Organic mass** or volatile mass of the 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 ash mass and dry mass.

**Wet mass** is the mass of living matter plus contained water.

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

**Bottom material:** See Bed material.

**Cells/volume** refers to the number of plankton cells or natural units counted using a microscope and grid or counting cell. Results are generally reported as cells or units per millimeter.

**Cells volume (biovolume)** determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used 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 ( $\mu\text{m}^3$ ) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

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

From cell volume, total algal biomass expressed as ( $\mu\text{m}^3/\text{mL}$ ) is thus determined by multiplying the number of cells of a given species by its average cell volume and the summing these volumes over all species.

**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.

**Chlorophyll** refers to the green pigments of plants. Chlorophyll **a** and **b** are the two most common green pigments in plants.

**Colloid** is any substance with particles in such a fine state of subdivision dispersed in a medium (for example, water) that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

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

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

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

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

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

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

**Control structure** as used in this report is a structure on a stream 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<sup>3</sup>/s)** is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

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

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

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

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

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

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

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

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

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

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

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

**Dissolved-solids concentration** of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change. Alternatively, alkalinity concentration (as mg/L CaCO<sub>3</sub>) can be converted to carbonate concentration by multiplying by 0.60.

**Diversity index** is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$D' = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where  $n_i$  is the number of individuals per taxon,  $n$  is the total number of individuals, and  $s$  is the total number of taxa in the sample of the community. Diversity 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 basin** is a part of the Earth's surface that is occupied by a drainage system with a common outlet for its surface runoff (see "Drainage area").

**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.

**Extractable organic halides (EOX)** are organic compounds which contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried stream-bottom sediments. 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 stream-bottom sediments.

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

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

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

**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.

**Hardness** of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

**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.co-ops.nos.noaa.gov/tideglos.html>

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

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

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

$$I = I_0 e^{-\lambda L}$$

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

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

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

**Low tide** is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day.

See NOAA web site:

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

**Macrophytes** are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually 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.

**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.

**Methylene blue active substances (MBAS)** are apparent detergents. 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,  $\mu\text{g/g}$ )** is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

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

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

**Microsiemens per centimeter (US/CM,  $\mu\text{S/cm}$ )** is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

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

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

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

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

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

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

**Organism** is any living entity.

**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<sup>2</sup>), 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.

**Total organism count** is the total number of organisms collected and enumerated in any particular sample.

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

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

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

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

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

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

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

**Percent composition** 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, mass, or volume.

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

**Periphyton** is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While 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 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

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

**Phytoplankton** is the plant part of the plankton. They are usually 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 are commonly known as algae.

**Blue-green algae (Cyanophyta)** are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

**Diatoms** are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

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

**Fire algae (Pyrrhophyta)** are a group of algae that are free-swimming unicells characterized by a red pigment spot.

**Green algae** have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

**Zooplankton** is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often 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.

**Polychlorinated biphenyls (PCBs)** are industrial chemicals that are mixtures of chlorinated biphenyl compounds. They have properties and applications similar to poly-chlorinated biphenyls (PCB's) and have been identified in commercial PCB preparations.

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

**Primary productivity (carbon method)** is expressed as milligrams of carbon per area per unit time [ $\text{mg C}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg C}/(\text{m}^3/\text{time})$ ] for phytoplankton. 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 in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

**Primary productivity (oxygen method)** is expressed as milligrams of oxygen per area per unit time [ $\text{mg O}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg O}/(\text{m}^3/\text{time})$ ] for phytoplankton. 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.

**Radioisotopes** are isotopic forms of an element 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.

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

**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 non-exceedance 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 non-exceedances of the  $7Q_{10}$  occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. 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.

**River mile** as used herein, is the distance above the mouth of Chesapeake Bay, Potomac River, or confluence of the North and South Branches of the Potomac River, measured along the center line of the navigation channel or the main stem of the Potomac River, Shenandoah River, or North or South Branch of the Potomac River. River mile data were furnished by the U.S. Army Corps of Engineers.

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

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

**Sea level** refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

**See:** [http://www.co-ops.nos.noaa.gov/glossary/gloss\\_n.html#NGVD](http://www.co-ops.nos.noaa.gov/glossary/gloss_n.html#NGVD)

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

**Bed load** is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit from the bed to an elevation equal to the top of the bed-load sampler nozzle (usually within 0.25 feet of the streambed).

**Bed load discharge (tons per day)** is the quantity of sediment moving as bed load, reported as dry weight, that passes a section in a given time.

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

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

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

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

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

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

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

Seven-day 10-year low flow (7Q10, 7Q<sub>10</sub>) is the minimum flow averaged over 7 consecutive days that is expected to occur on average, once in any 10-year period. The 7Q10 has a 10-percent chance of occurring in any given year.

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. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

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

Stable isotope ratio (per MILL/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 waters, to evaluate mixing of different waters, 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.

Artificial substrate is a device which is purposely 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 taken. 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.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

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

Surficial bed material is the top 0.1 to 0.2 ft of the bed material that is sampled using U.S. Series Bed-Material Samplers.

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

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

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

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

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



**Synoptic Studies** are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution of 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.

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

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

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

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

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

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

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

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

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

**Volatile Organic Compounds (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 manmade chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

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

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

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

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

Wet weight refers to the weight of animal tissue or other substance including its contained water.

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

**TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY**

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

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

**Book 1. Collection of Water Data by Direct Measurement**

*Section D. Water Quality*

- 1-D1. **Water temperature--influential factors, field measurements, and data presentation**, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. **Guidelines for collection and field analysis of ground-water samples for selected unstable constituents**, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

**Book 2. Collection of Environmental Data**

*Section D. Surface Geophysical Methods*

- 2-D1. **Application of surface geophysics to ground-water investigations**, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. **Application of seismic-refraction techniques to hydrologic studies**, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.

*Section E. Subsurface Geophysical Methods*

- 2-E1. **Application of borehole geophysics to water-resources investigations**, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. **Borehole geophysics applied to ground-water investigations**, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.

*Section F. Drilling and Sample Methods*

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

**Book 3. Application of Hydraulics**

*Section A. Surface-Water Techniques*

- 3-A1. **General field and office procedures for indirect discharge measurements**, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. **Measurement of peak discharge by the slope-area method**, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. **Measurement of peak discharge at culverts by indirect methods**, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. **Measurement of peak discharge at width contractions by indirect methods**, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. **Measurement of peak discharge at dams by indirect methods**, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. **General procedure for gaging streams**, by R. W. Carter and Jacob Dividian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
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- 3-A9. **Measurement of time of travel and dispersion in streams by dye tracing**, by F. A. Kilpatrick, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. **Discharge ratings at gaging stations**, E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. **Measurement of discharge by moving-boat method**, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

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**Book 3. Application of Hydraulics--Continued****Section A. Surface-Water Techniques--Continued**

- 3-A12. **Fluorometric procedures for dye tracing**, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. **Computation of continuous records of streamflow**, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. **Use of flumes in measuring discharge**, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. **Computation of water-surface profiles in open channels**, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. **Measurement of discharge using tracers**, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. **Acoustic velocity meter systems**, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. **Determination of stream reaeration coefficients by use of tracers**, by F. A. Kilpatrick, R. E. Rathbun, Nobuhiro Yotsukura, G. W. Parker, and L. L. Delong: USGS--TWRI Book 3, Chapter 18. 1989. 52 pages.
- 3-A19. **Levels of streamflow gaging stations**, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. **Simulation of soluble waste transport and buildup in surface waters using tracers**, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. **Stream-gaging cableways**, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.

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- 3-B1. **Aquifer-test design, observation, and data analysis**, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. **Introduction to ground-water hydraulics, a programmed text for self-instruction**, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. **Type curves for selected problems of flow to wells in confined aquifers**, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. **Regression modeling of ground-water flow**, by R. L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. **Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems**, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. **Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction**, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. **The principle of superposition and its application in ground-water hydraulics**, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. **Analytical solutions for one-, two-, and three dimensional solute transport in ground-water systems with uniform flow**, by EY J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 pages.

**Section C. Sedimentation and Erosion Techniques**

- 3-C1. **Fluvial sediment concepts**, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. **Field methods of measurement of fluvial sediment**, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. **Computation of fluvial-sediment discharge**, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

**Book 4. Hydrologic Analysis and Interpretation****Section A. Statistical Analysis**

- 4-A1. **Some statistical tools in hydrology**, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. **Frequency curves**, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

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

**Section D. Interrelated Phases of the Hydrologic Cycle**

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

**Book 5. Laboratory Analysis****Section A. Water Analysis**

- 5-A1. **Methods for determination of inorganic substances in water and fluvial sediments**, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. **Determination of minor elements in water by emission spectroscopy**, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
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- 5-A4. **Methods for collection and analysis of aquatic biological and microbiological samples**, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
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- 5-A6. **Quality assurance practices for the chemical and biological analyses of water and fluvial sediments**, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

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- 6-A3. **A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual**, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
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**Book 7. Automated Data Processing and Computations****Section C. Computer Programs**

- 7-C1. **Finite difference model for aquifer simulation in two dimensions with results of numerical experiments**, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. **Computer model of two-dimensional solute transport and dispersion in ground water**, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. **A model for simulation of flow in singular and interconnected channels**, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

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**Book 8. Instrumentation****Section A. Instruments for Measurement of Water Level**

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

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

**Book 9. Handbooks for Water-Resources Investigations****Section A. National Field Manual for the Collection of Water-Quality Data**

- 9-A1. **National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling**, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS--TWRI Book 9, Chapter A1. 1998. 47 pages.
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- 9-A6. **National Field Manual for the Collection of Water-Quality Data: Field Measurements**, edited by F.D. Wilde and D.B. Radtke: USGS--TWRI Book 9, Chapter A6. 1998. 48 pages.
- 9-A7. **National Field Manual for the Collection of Water-Quality Data: Biological Indicators**, edited by D.N. Myers and F.D. Wilde: USGS--TWRI Book 9, Chapter A7. 1997. 49 pages.
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## SELECTED U.S. GEOLOGICAL SURVEY REPORTS ON SURFACE-WATER RESOURCES IN DELAWARE

Listed below is a selection of reports on surface-water resources in Delaware which are available through the U.S. Geological Survey, Book and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225. An asterick (\*) indicates that the publication is out of print and is not purchasable from any official source.

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- P-822 Cushing, E.M., Kantrowitz, I.H., and Taylor K.R., 1973, **Water resources of the Delmarva Peninsula**, 58 p.
- P-750-D Johnston, R. H., 1971, **Base flow as an indicator of aquifer characteristics in the Coastal Plain of Delaware**: Geological Survey Research, p. D212-D215.
- P-600-B Williams, O.O., 1968, **Reservoir effects on downstream water temperatures in the upper Delaware River basin**: Geological Survey Research, p. B195-B199.
- P-485-A\* Sigafos, R.S., 1964, **Botanical evidence of floods and flood-plain deposition**, p. A1-A35.
- P-450-E Giustic, E.V., and Schneider, W.J., 1962, **Comparison of drainage on topographic maps of the Piedmont province in Short papers in geology, hydrology, and topography**: Geological Survey Research, article 212, p. E1-E189.
- P-424-B Carter, R.W., 1961, **Magnitude and frequency of floods in suburban areas in Short papers in the geologic and hydrologic sciences**: Geological Survey Research, article 5, p. B9-B11.
- P-417-B\* Hely, A.G., and Olmsted, F.H., 1963, **Some relations between streamflow characteristics and the environment in the Delaware River region**, p. B1-B25.
- P-381\* Parker, G.G., Hely, A.G., Keighton, W.B., Olmsted, F.H., and others, 1965, **Water resources of the Delaware River basin**, 200 p.

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- W-2355-A Robert J. Shedlock, Judith M. Denver, Marta A. Hayes, Pixie A. Hamilton, Michael T. Koterba, Leon Joseph Bachman, Patrick J. Phillips, and William S.L. Banks, 1999, **Water-quality assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia: Results of Investigations, 1987-91** 41 p.
- W-2425 Hayes, M.A., 1997, **Delaware wetland resources, National Water Summary--Wetland Resources**, p. 147-152.
- W-2300 Simmons, R.H., **Delaware surface-water resources in U.S. Geological Survey, 1986, National Water Summary 1985--Hydrologic events**, p. 181-186.
- W-1871 Schneider, W.J., 1968, **Water data for metropolitan areas-A summary of data from 222 areas in the United States**, 397 p.
- W-1849 Barnes, H.H., Jr., 1967, **Roughness characteristics of natural channels**, 213 p.
- W-1838 Martin, R.O.R., and Hanson, R.L., 1966, **Reservoirs in the United States**, 115 p.
- W-1813 Dalrymple, Tate, 1965, **Flood peak runoff and associated precipitation in selected drainage basins in the United States**, 406 p.
- W-1812 Durfor, C.N., and Becker, Edith, 1964, **Public water supplies of the 100 largest cities in the United States, 1962**, 364 p.
- W-1809-O Keighton, W.B., 1965, **Delaware River water quality, Bristol to Marcus Hook, Pennsylvania, August 1949 to December 1963**, 57 p.
- W-1767\* Rasmussen, W.C., Odell, J.W., and Beamer, N.H., 1966, **Delaware water**, 106 p.
- W-1699-N Hardison, C.H., and Martin, R.O.R., 1963, **Water-supply characteristics of streams in the Delaware River basin and in southern New Jersey**, p. N1-N45.
- W-1619-T Slaughter, T.H., 1962, **Beach-area water supplies between Ocean City, Maryland, and Rehoboth Beach, Delaware**, p. T1-T10.
- W-1594-B Boggess, D.H., and Rima, D.H., 1962, **Experiments in water spreading at Newark, Delaware**, p. B1-B15.
- W-1586-B\* Cohen, Bernard, and McCarthy, L.T., Jr., 1962, **Salinity of the Delaware estuary**, p. B1-B57.
- W-1586-C Miller, E.G., 1962, **Observations of tidal flow in the Delaware River**, p. C1-C26.
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- W-1586-G Keighton, W.B., 1966, **Fresh-water discharge-salinity relations in the tidal Delaware River**, p. G1-G16.
- W-1473 Hem, J.D., 1959, **Study and interpretation of the chemical characteristics of natural water**, p. 269.
- W-1420\* Bogart, D.B., 1960, **Floods of August-October 1955, New England to North Carolina**, 854 p.
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W-995\* Jones, B.E., and Helland, R.O., 1948, *Index to river surveys made by the United States Geological Survey and other agencies revised to July 1, 1947*, 145 p.

W-340\* Wood, B.D., 1916, *Stream-gaging stations and publications relating to water resources, 1885-1913*, 195 p.

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HA-11 Hely, A.G., Nordenson, T.J., and others, 1961, *Precipitation, water loss, and runoff in the Delaware River basin and New Jersey*, 11 p.

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## FACT SHEETS

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FS 97-126 Preston, S.D., *Evaluation of the stream-gaging network in Maryland, Delaware, and Washington, D.C.*, 4 p.

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WRIR 95-4153 Dillow, J.J.A., **Technique for estimating magnitude and frequency of peak flows in Delaware**, 26 p, 3 plates.

WRIR 94-4188 Paulachok, G.N., Simmons, R.H., and Tallmon, A.J., **Storm and flood of July 5, 1989 in Northern New Castle County, Delaware**, 29 p.

WRIR 94-4020 Carpenter, D.H., and Hayes, D.C., **Low flow characteristic of streams in Maryland and Delaware**, 113 p, 10 plates.

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## SELECTED U.S. GEOLOGICAL SURVEY REPORTS ON SURFACE-WATER RESOURCES IN MARYLAND--Continued

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OFR 85-197 Hodges, A.L., Jr., Estimated average annual alkalinity of six streams entering Deep Creek Lake, Garrett County, Maryland, 63 p.

OFR 85-82 Carter, Virginia; Rybicki, N.B.; Anderson, R.T.; Trombley, T.J.; and Zynjuk, G.L., Data on distribution and abundance of submersed aquatic vegetation in the tidal Potomac River and transition zone of the Potomac estuary, Maryland, Virginia, and the District of Columbia, 1983 and 1984.

OFR 84-859 Cohen, R.R.H., Pollock, S.O., Stoelzel, V.E., and Boulukos, K.E., Phytoplankton-abundance and generic-composition data for the Potomac River and Estuary, Maryland, 29 p.

OFR 84-426 Hilleary, J.T., Hydrologic data: South Branch Casselman River, Garrett County, and Marsh Run, Washington County, Maryland, 63 p.

OFR-83-873 Hickman, R.E., Water quality data for selected streams tributary to the tidal Potomac River and estuary, Maryland and Virginia, 1979-1983 water years, 69 p.

OFR 83-861 Taylor, K.R., James, R.W., Jr., Helinsky, B.M., Traveltime and dispersion in the Potomac River, Cumberland, Maryland, to Washington, D.C., 71 p.

OFR 83-33 Staubitz, W.W., and Sobashinski, J.R., Hydrology of Area 6, eastern Coal Province, Maryland, West Virginia, and Pennsylvania, 131 p.

OFR 81-1200# Katz, B.G., and Fisher, G.T., Analysis and characterization of urban storm-water runoff for selected basins in the Baltimore, Maryland metropolitan area--a project plan, 58 p. (see page 27)

OFR 81-812 Staubitz, W.W., Quality of surface water in the coal mining areas of western Maryland and adjacent areas of Pennsylvania and West Virginia from April 1979 to June 1980, 106 p.

OFR-81-538 Herb, W.J., Shaw, L.C., and Brown, D.E., Hydrology of area 5, Eastern Coal Province, Pennsylvania, Maryland, and West Virginia, 92 p.

OFR 81-10 Cory, R.L., Diel oxygen variations in the Rhode River Estuary, Maryland, 1970-1978, 14 p.

OFR 80-1016# Carpenter, D.H., Technique for estimating magnitude and frequency of floods in Maryland, 119 p. (see page 28)

OFR 78-171 Herb, W.J., Excedence probability - Depth relationships of floods for Maryland streams west of Chesapeake Bay, 14 p.

OFR 76-884 Herb, W.J., Availability of hydrologic data for Montgomery County, Maryland, 15 p., 1 sheet, 1:62,500 (1 inch = 1 mile).

OFR 76-178 Herb, W.J., Availability of hydrologic data for Prince Georges County, Maryland, 7 p.

1974 Carpenter, D.H., Flood characteristics of small drainage basins in Maryland, 90 p.

OFR 74-1015 Carpenter, D.H., Floods of August and September 1971 in Maryland and Delaware, 41 p.

1973 Water resources of the Delmarva Peninsula, a summary report (White House document 93-68) to the Congress, 59 p.

1972 Sediment yields of urban construction sources, Montgomery County, Maryland, a progress report, Rock Creek Anacostia River basins, 39 p.

1972 Taylor, K.R., A summary of peak stages and discharges in Maryland, Delaware, and District of Columbia for flood of June 1972, 13 p.

1969 Simmons, R.H., Floods of August 1967 in Maryland and Delaware, 98 p.

1959 Darling, J.M., Floods in Maryland, Magnitude and Frequency, 9 p.



**SELECTED MARYLAND GEOLOGICAL SURVEY REPORTS ON SURFACE-WATER RESOURCES IN MARYLAND**

Listed below is a selection of reports on surface-water resources in Maryland which are available through the Maryland Geological Survey, 2300 St. Paul Street, Baltimore, Maryland 21218.

**BULLETINS**

- MGS B 36 Duigon, M.T., and Dine, J.R., 1991, **Water resources of Washington County, Maryland**, 109 p.
- MGS B 35 Werkheiser, W.H., 1990, **Hydrogeology and ground-water resources of Somerset County, Maryland**, 156 p.
- MGS B 34 Otton, E.G., Wiley, R.E., McGregor, R.A., Achmad, G.J., Hiortdahl, S.N., and Gerhart, J.M., 1989, **Water resources and estimated effects of ground-water development, Duigon M.T.Cecil County, Maryland**, 133 p.
- MGS B 33 Duigon, M.T., and Dine, J.R., 1987, **Water resources of Frederick County, Maryland**, 106 p.
- MGS B 25 Darling, J.M., 1961, **Maryland streamflow characteristics**, 136 p.
- MGS B 24 Slaughter, T.H., and Darling, J.M., 1961, **Water resources of Allegany and Washington Counties**, 408 p.
- MGS B 22 Meyer, Gerald, and Beall, R.M., 1958, **Water resources of Carroll and Frederick Counties**, 355 p.
- MGS B 21 Overbeck, R.M., Slaughter, T.H., and Hulme, A.E., 1958, **Water resources of Cecil, Kent, and Queen Annes Counties**, 478 p.
- MGS B 18 Rasmussen, W.C., Slaughter, T.H., Hulme, A.E., and Murphy, J.J., 1956, **Water resources of Caroline, Dorchester, and Talbot Counties**, 465 p.
- MGS B 17 Dingman, R.J., Ferguson, H.F., and Martin, R.O.R., 1956, **Water resources of Baltimore and Harford Counties**, 233 p.
- MGS B 16 Rasmussen, W.C., Slaughter, T.H., Bennett, R.R., Meyer, R.R., and Hulme, G.E., 1955, **Water resources of Somerset, Wicomico, and Worcester Counties**, 535 p.
- MGS B 14 Dingman, R.J., Meyer, Gerald, and Martin, R.O.R., 1954, **Water resources of Howard and Montgomery Counties**, 260 p.
- MGS B 13 Amsden, T.W., Overbeck, R.M., and Martin, R.O.R., 1954, **Geology and water resources of Garrett County**, 349 p.
- MGS B 11 Martin, R.O.R., and Ferguson, H.F., 1953, **Water resources of St. Marys County**, 195 p.
- MGS B 10 Cooke, C., Wythe, Martin, R.O.R., and Meyer, Gerald, 1952, **Geology and water resources of Prince Georges's County**, 270 p.
- MGS B 8 Bennion, V.R., Dougherty, D.F., and Overbeck, R.M., 1951, **Water resources of Calvert County**, 100 p.
- MGS B 5 Bennion, V.R., and Brookhart, J.W., 1949, **Water resources of Anne Arundel County**, 14 p.

**REPORTS OF INVESTIGATIONS**

- MGS RI 71 Cleaves, E.T., and Doheny, E.J., 2000, **A Strategy for improving the Stream-Gaging Network in Maryland**, 72 p.
- MGS RI 48 Kerhin, R.T., and others, 1988, **The surficial sediments of Chesapeake Bay, Maryland: Physical characteristics and sediment budget**, 82 p.
- MGS RI 45 Wiley, R.E., and Achmad, G.J., 1986, **Simulation of ground-water flow and base flow in weathered crystalline rock, Upper Cattail Creek, Howard County, Maryland**, 68 p.
- MGS RI 42 Otton, E.G., and Hilleary, J.T., 1985, **Maryland springs--their physical, thermal, and chemical characteristics**, 151 p.
- MGS RI 41-A Hiortdahl, S.N., 1988, **Hydrologic and mining data from an area of underground coal mining in Garrett County, Maryland**, 81 p.
- MGS RI 41 Duigon, M.T., and Smigaj, M.J., 1985, **First report on the hydrologic effects of underground coal mining in southern Garrett County, Maryland**, 99 p.
- MGS RI 40 **The Columbia aquifer of the Eastern Shore of Maryland**, 1984, Part 1, Bachman, L.J., and Wilson, J.M., Hydrogeology, Part 2, Wilson, J.M., and Bachman, L.J., **Selected water-well records, chemical analyses, water-level measurements, lithologic logs and geophysical logs**, 144 p.
- MGS RI 35 Carpenter, D.H., 1983, **Characteristics of streamflow in Maryland**, 237 p.
- MGS RI 17 Mack, F.K., Webb, W.E., and Gardner, R.A., 1971, **Water resources of Dorchester and Talbot Counties, Maryland, with special emphasis on the ground-water potential of the Cambridge and Easton areas**, 107 p.
- MGS RI 16 Walker, P.N., 1971, **Flow characteristics of Maryland streams**, 160 p.

## SELECTED MARYLAND GEOLOGICAL SURVEY REPORTS ON SURFACE-WATER RESOURCES IN MARYLAND--Continued

## REPORTS OF INVESTIGATIONS--Continued

MGS RI 13 Webb, W.E., and Heddle, S.G., 1970, **Extent of brackish water in the tidal rivers of Maryland**, 46 p.

MGS RI 9 Thomas, J.D., and Heidel, S.G., 1969, **Chemical and physical character of municipal water supplies in Maryland**, 52 p.

MGS RI 5 Thomas, J.D., 1966, **Chemical quality reconnaissance of water of Maryland streams**, 61 p.

MGS RI 3 Boggess, D.H., and Heidel, S.G., 1968, **Water resources of the Salisbury area, Maryland**, 69 p.

MGS RI 1 Heidel, S.G., and Fernier, W.W., 1965, **Chemical quality of water and trace elements in the Patuxent River basin**, 40 p.

## BASIC DATA REPORTS

MGS BDR 19 Dine, J.R., Adamski, J.C., Tompkins, M.D., 1992, **Hydrologic data for Howard County, Maryland**, 240 p.

MGS BDR 18 Duigon, M.T., Dine, J.R., and Tompkins, M.D., 1989, **Ground-water and surface-water data for Washington County, Maryland**, 273 p.

MGS BDR 16 Wiley, R.E., McGregor, R.A., deGrouchy, Joanne, and Tompkins, M.D., 1987, **Hydrologic data for Cecil County, Maryland**, 150 p.

MGS BDR 15 Dine, J.R., Tompkins, M.D., and Duigon, M.T., 1985, **Ground-water and surface-water data for Frederick County, Maryland**, 240 p.

MGS BDR 12 Hilleary, J.T., and Weigle, J.W., 1981, **Carroll County ground-water information: well records, spring records, and chemical-quality data**, 252 p.

MGS BDR 11 Nutter, L.J., Smigaj, M.J., and Knobel, L.L., 1980, **Garrett County water-well records, chemical-quality data, ground-water use, coal test-hole data, and surface-water data: with a section on gas-well records**, 102 p.

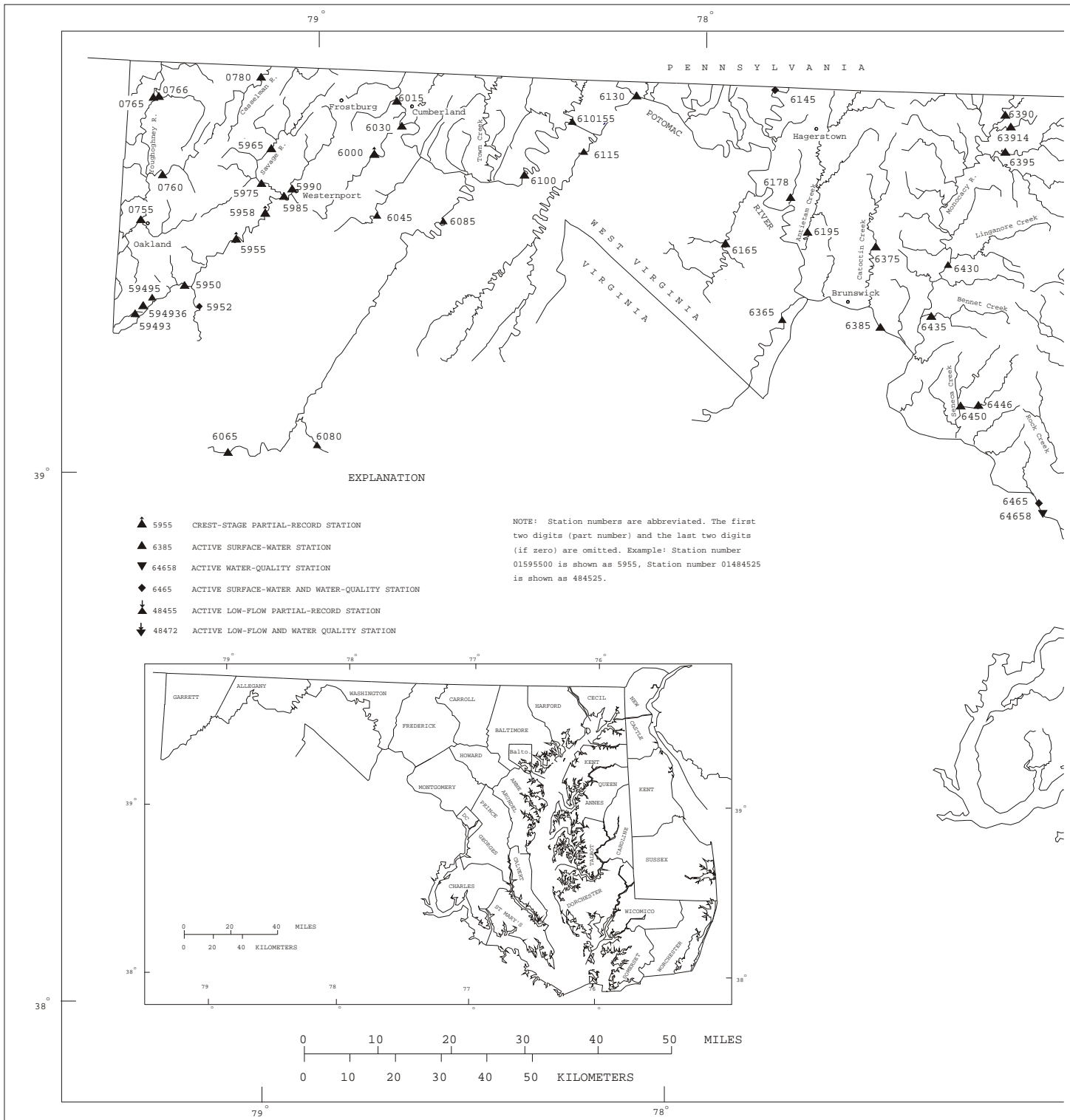
MGS BDR 2 Slaughter, T.H., and Laughlin, C.P., 1966, **Records of wells and springs in Charles County, Maryland**, 93 p.

MGS BDR 1 Laughlin, C.P., 1966, **Records of wells and springs in Baltimore County, Maryland**, 406 p.

## INFORMATION CIRCULARS

MGS IC 12 Taylor, K.R., and Solley, W.B., 1972, **Traveltime and concentration attenuation of a soluble dye in Antietam and Conococheague Creeks, Maryland**, 25 p.

MGS IC 9 Taylor, K.R., 1970, **Traveltime and concentration attenuation of a soluble dye in the Monocacy River, Maryland**, 23 p.



Base map modified from U.S. Geological Survey 1:100,000 DLG

Figure 3. Map of Maryland and Delaware showing location of surface-water, water-quality, low-flow and crest-stage partial-record stations.



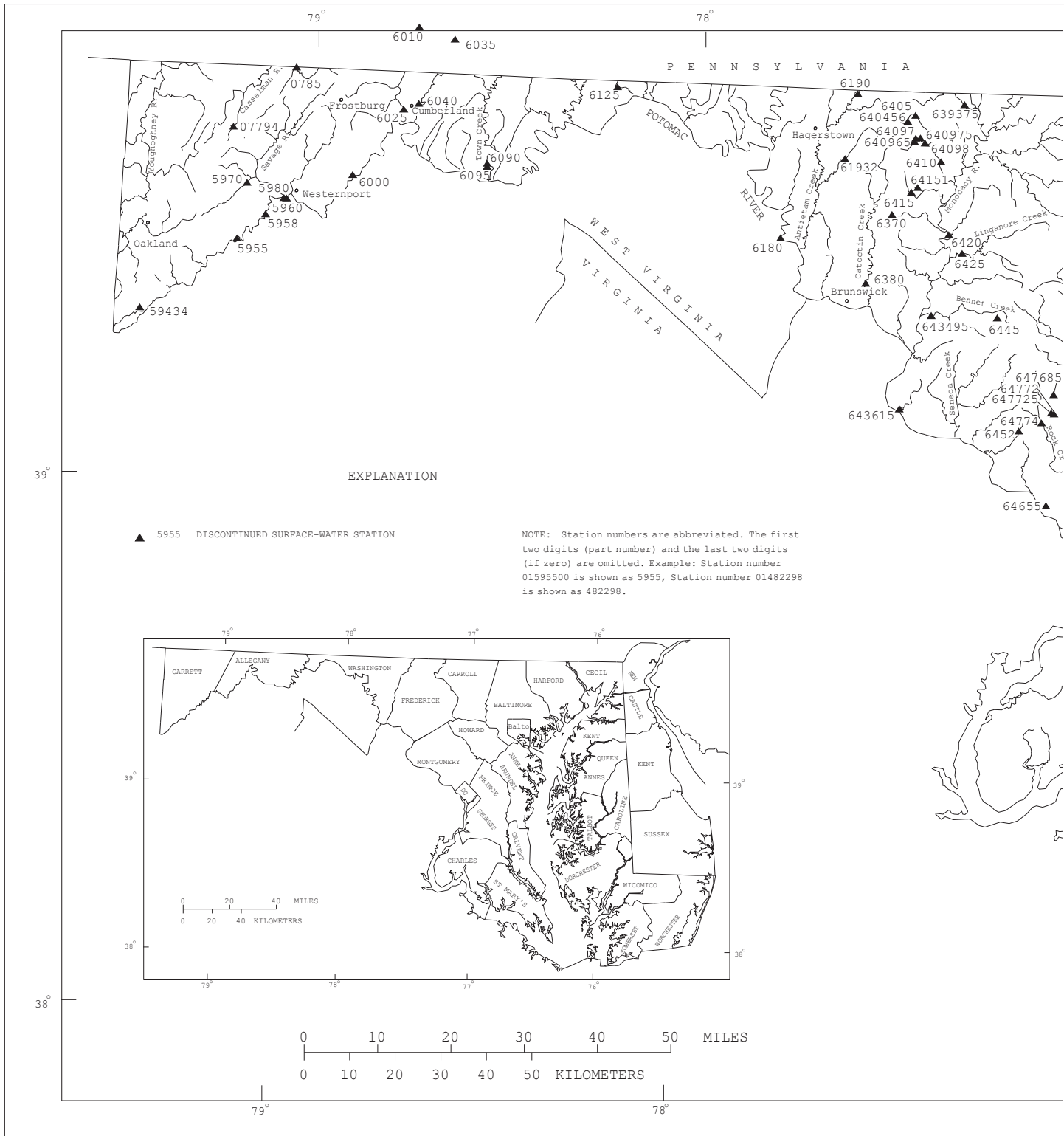


Figure 4. Map of Maryland and Delaware showing location of discontinued surface-water stations.



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

**REMARK CODES**

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

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological 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 blank.
&	Biological organism estimated as dominant.

**Dissolved Trace-Element Concentrations**

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

**Change in National Trends Network Procedures**

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



HYDROLOGIC-DATA STATION RECORDS

NORTH ATLANTIC SLOPE BASINS

DELAWARE RIVER BASIN

01477800 SHELLPOT CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°45'39", long 75°31'10", New Castle County, Hydrologic Unit 02040205, on right bank 100 ft east of intersection of 44th and Pine Streets in Clifton Park, 700 ft downstream from bridge on North Market Street in Wilmington, 0.2 mi downstream from Matson Run, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--7.46 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1945 to current year.

REVISED RECORDS.--WSP 1382: 1948(m).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 15.16 ft above sea level.

REMARKS.--Records good below 100 ft<sup>3</sup>/s and above 4,000 ft<sup>3</sup>/s except those between 100 and 4,000ft<sup>3</sup>/s, which are fair, and those for estimated daily discharges (backwater), which are poor. Occasional regulation at low flow from unknown source upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1940, that of July 5, 1989. Flood of Aug. 1, 1945, reached a stage of about 8.5 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0320	1,840	5.78	Jul 27	0015	1,190	4.68
Jun 28	1850	*2,230	*6.32				

Minimum discharge 0.73 ft<sup>3</sup>/s, Sep 10-14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.2	2.7	1.9	6.7	4.8	5.8	4.4	1.5	3.0	4.8	17
2	1.8	31	2.7	2.1	11	4.6	5.2	5.9	1.3	2.5	4.6	2.0
3	1.9	5.3	2.8	2.0	14	4.4	5.5	4.2	1.2	22	8.2	2.6
4	21	e2.0	2.8	45	3.5	4.2	12	3.6	1.1	9.7	21	1.6
5	31	e1.9	2.8	16	3.9	4.1	5.3	2.4	1.2	2.7	4.0	1.1
6	3.3	e1.9	24	4.1	3.5	3.9	5.0	2.4	7.7	2.1	2.2	.91
7	2.3	e1.8	6.7	3.5	4.5	3.9	4.5	2.0	3.0	2.2	3.6	.85
8	1.9	e1.8	3.8	3.2	5.0	4.2	5.9	1.7	1.4	2.2	2.1	.80
9	1.8	e1.7	3.3	3.6	6.1	4.2	35	1.9	1.3	2.1	2.1	.80
10	75	e1.7	16	32	11	4.0	7.5	7.5	1.2	2.3	1.7	.78
11	7.3	e1.6	6.2	7.8	25	18	5.1	4.6	1.2	2.3	2.5	.76
12	3.5	e1.6	3.8	4.3	14	39	4.6	1.8	6.6	1.9	2.0	.73
13	2.8	e1.5	24	4.2	5.5	6.5	4.3	11	16	2.0	1.7	1.2
14	2.5	e1.5	149	3.5	79	5.0	4.3	8.5	4.9	5.8	20	3.1
15	2.3	e1.5	27	2.8	17	4.5	8.9	1.8	1.8	13	3.8	.78
16	2.3	e1.5	9.1	3.2	11	62	23	1.5	2.4	2.6	2.1	1.5
17	3.9	e1.5	5.1	3.2	7.5	111	37	3.5	2.2	1.8	1.8	.97
18	5.9	e1.6	3.9	2.9	19	7.8	14	1.7	3.1	1.5	2.2	.90
19	2.3	e1.5	3.5	2.5	103	5.3	7.9	20	2.6	9.6	2.4	28
20	40	e1.5	8.1	3.1	17	4.4	6.1	4.1	1.5	4.8	1.7	7.8
21	5.3	e1.6	6.6	4.4	10	420	30	3.8	39	1.7	1.6	1.5
22	4.2	e1.6	4.1	2.7	7.7	535	20	5.9	30	1.6	1.6	1.1
23	9.0	e1.7	4.0	2.3	7.3	16	8.1	4.0	2.2	1.3	1.8	1.3
24	3.2	e1.7	3.7	2.7	7.4	9.9	6.5	11	1.6	1.5	1.7	1.5
25	2.7	9.0	3.2	6.3	6.7	8.1	5.5	2.4	1.4	1.6	1.7	47
26	2.8	8.7	3.2	4.5	5.6	7.4	5.1	1.7	16	122	1.5	78
27	2.5	60	3.3	2.8	5.1	17	4.7	2.0	1.7	102	3.6	4.8
28	2.7	4.9	2.7	2.8	10	95	4.8	3.6	219	5.0	8.9	2.2
29	2.6	3.3	2.4	3.1	5.2	10	4.8	4.2	19	4.9	3.8	1.9
30	2.8	2.9	2.3	4.2	---	7.7	4.5	1.7	6.6	5.1	2.1	1.5
31	2.4	---	2.1	12	---	6.4	---	1.5	---	8.3	2.5	---
TOTAL	255.3	162.0	344.9	198.7	432.2	1438.3	300.9	136.3	399.7	351.1	125.3	292.20
MEAN	8.24	5.40	11.1	6.41	14.9	46.4	10.0	4.40	13.3	11.3	4.04	9.74
MAX	75	60	149	45	103	535	37	20	219	122	21	78
MIN	1.8	1.5	2.1	1.9	3.5	3.9	4.3	1.5	1.1	1.3	1.5	.73
CFSM	1.10	.72	1.49	.86	2.00	6.22	1.34	.59	1.79	1.52	.54	1.31
IN.	1.27	.81	1.72	.99	2.16	7.17	1.50	.68	1.99	1.75	.62	1.46

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
MEAN	5.15	8.48	11.7	12.8
MAX	22.5	27.7	48.7	37.9
MIN	1.96	1.35	1.03	1.18
(WY)	1996	1973	1997	1979
MEAN	13.1	16.4	13.0	10.7
MAX	46.4	32.7	31.6	34.8
MIN	2.95	2.93	2.55	1.76
(WY)	2000	1983	1947	1975
MEAN	1.34	1.76	1.09	.65
MAX	6.22	1.34	1.52	.54
MIN	1.34	1.76	1.09	.65
(WY)	1985	1985	1955	1966

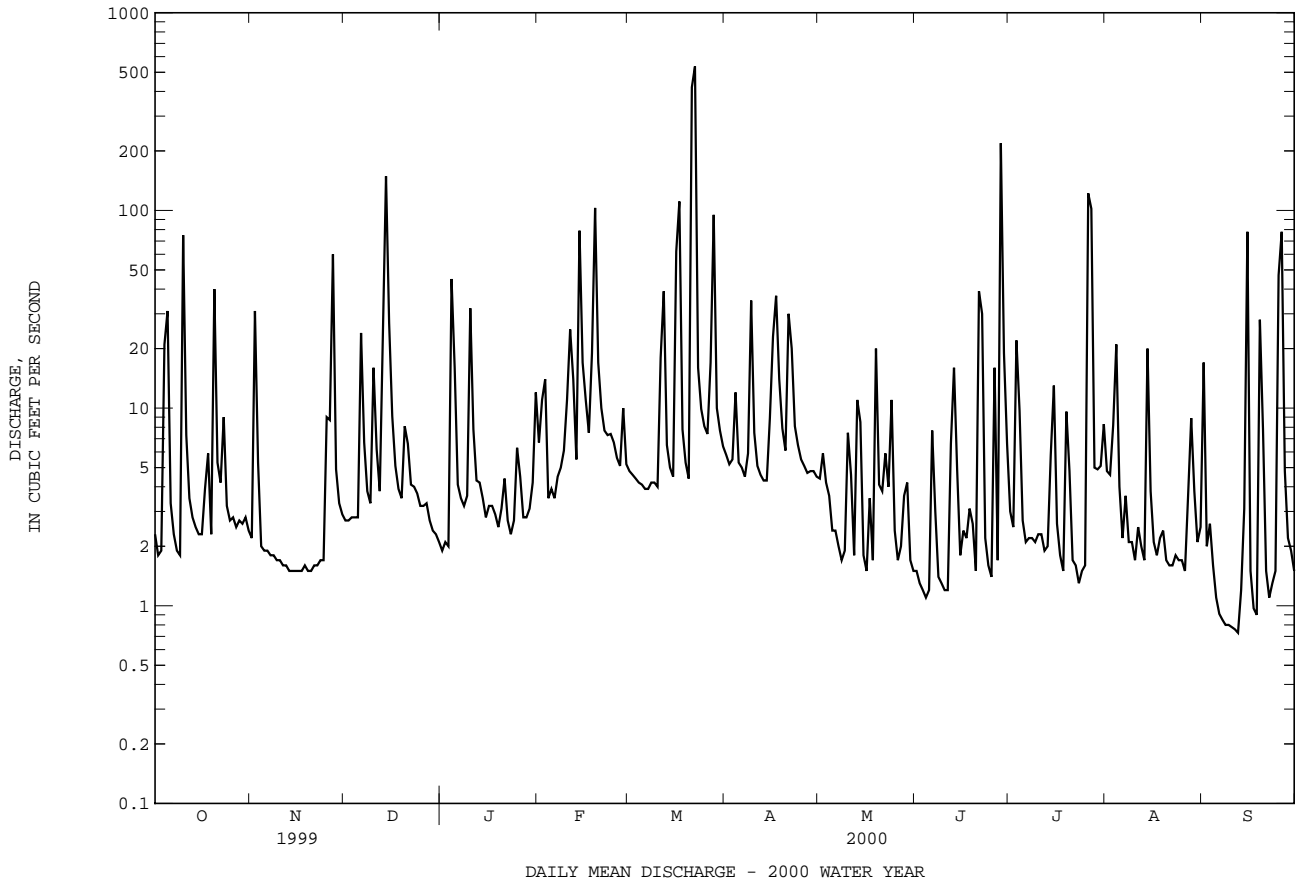
01477800 SHELLPOT CREEK AT WILMINGTON, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1946 - 2000	
ANNUAL TOTAL	5099.91	4436.90		
ANNUAL MEAN	14.0	12.1	10.1	
HIGHEST ANNUAL MEAN			16.2	1989
LOWEST ANNUAL MEAN			5.52	1963
HIGHEST DAILY MEAN	1480 Sep 16	535 Mar 22	1480	Sep 16 1999
LOWEST DAILY MEAN	.61 Sep 3	.73 Sep 12	.09	(a)
ANNUAL SEVEN-DAY MINIMUM	.87 Aug 29	.80 Sep 6	.10	Aug 27 1966
INSTANTANEOUS PEAK FLOW		2230 Jun 28	(b)8040	Jul 5 1989
INSTANTANEOUS PEAK STAGE		6.32 Jun 28	13.76	Jul 5 1989
INSTANTANEOUS LOW FLOW		.43 (c)	.09	Oct 2 1968
ANNUAL RUNOFF (CFSM)	1.87	1.63	1.35	
ANNUAL RUNOFF (INCHES)	25.43	22.13	18.38	
10 PERCENT EXCEEDS	19	20	18	
50 PERCENT EXCEEDS	3.2	3.8	2.9	
90 PERCENT EXCEEDS	1.6	1.5	.80	

a Oct. 2, 4, 1968.

b From rating curve extended above 200 ft<sup>3</sup>/s on basis of culvert and flow-over-road measurements at gage heights 9.10 and 11.91 ft.

c Sept. 10-14.



## DELAWARE RIVER BASIN

01478000 CHRISTINA RIVER AT COOCHS BRIDGE, DE

LOCATION.--Lat 39°38'14", long 75°43'42", New Castle County, Hydrologic Unit 02040205, on right bank 60 ft downstream from highway bridge, 0.5 mi southeast of Coochs Bridge, 3.3 mi south of Newark, 3.6 mi upstream from Belltown Run, and 22.6 mi upstream from mouth.

DRAINAGE AREA.--20.5 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR MD-DE-79-1: 1943-70(P). WDR MD-DE-87-1: 1980-82(P).

GAGE.--Water-stage recorder. Datum of gage is 25.54 ft above sea level. Prior to Sept. 14, 1944, nonrecording gage on upstream side of bridge at same datum. Sept. 14, 1944, to May 13, 1969, recording gage at site on left bank at downstream side of highway bridge at same datum. May 26, 1969, to Dec. 5, 1973, recording gage on left bank 82 ft downstream from highway bridge at same datum.

REMARKS.--No estimated daily discharges. Records good. Low and medium flow regulated by mill upstream from station. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0615	*2,130	*12.00	Mar 28	0300	1,130	10.49

Minimum discharge 4.4 ft<sup>3</sup>/s, Sep 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	10	7.8	12	21	18	22	16	12	11	9.3	8.0
2	6.8	18	7.6	12	17	17	21	17	12	9.0	8.4	6.3
3	6.4	18	7.4	12	14	16	21	16	12	8.5	8.9	5.8
4	17	9.7	7.2	81	15	15	34	15	11	8.6	16	7.2
5	58	8.8	7.2	86	16	15	22	15	11	8.5	12	6.7
6	7.2	8.6	20	25	15	14	20	15	20	8.1	7.3	4.7
7	5.9	8.6	11	21	17	14	19	14	17	7.7	7.4	4.6
8	6.0	8.4	8.1	19	18	15	21	14	12	7.2	6.4	4.6
9	4.8	8.5	7.6	18	17	15	76	13	11	7.1	8.2	4.7
10	115	8.6	24	40	24	15	27	22	11	7.4	6.0	4.7
11	25	8.5	15	32	48	37	20	21	11	7.2	5.4	4.6
12	14	8.3	8.8	21	45	102	20	14	11	7.0	5.4	4.7
13	12	8.2	33	19	22	21	18	34	13	6.6	6.7	5.1
14	12	8.2	363	17	179	15	18	34	15	32	15	5.1
15	11	8.2	54	16	58	14	21	14	12	34	11	35
16	11	8.1	25	16	36	23	41	13	13	11	19	7.1
17	12	7.9	19	15	30	181	135	22	11	8.4	8.3	5.2
18	15	8.0	16	13	46	26	58	16	20	7.8	8.3	4.6
19	11	7.9	15	13	223	17	29	28	21	12	8.1	135
20	46	7.9	20	14	51	15	23	19	12	14	6.2	24
21	17	8.3	21	14	29	557	83	17	25	8.0	5.6	8.6
22	17	8.0	16	13	23	1040	75	19	106	8.2	5.3	6.4
23	27	8.7	14	13	21	76	28	17	12	6.1	5.9	6.1
24	13	9.0	14	14	20	50	22	43	9.9	5.4	5.7	6.4
25	12	13	13	13	23	41	20	19	9.3	6.3	5.1	30
26	11	20	13	16	25	37	19	14	33	40	4.7	153
27	11	123	13	14	19	58	19	13	10	22	12	16
28	11	12	13	12	44	343	18	15	13	8.1	25	9.1
29	11	9.6	12	12	21	37	17	16	19	6.5	11	7.6
30	10	8.4	12	13	---	27	17	13	31	13	7.0	6.8
31	11	---	12	30	---	24	---	13	---	11	9.7	---
TOTAL	555.2	408.4	829.7	666	1137	2895	984	571	536.2	357.7	280.3	537.7
MEAN	17.9	13.6	26.8	21.5	39.2	93.4	32.8	18.4	17.9	11.5	9.04	17.9
MAX	115	123	363	86	223	1040	135	43	106	40	25	153
MIN	4.8	7.9	7.2	12	14	14	17	13	9.3	5.4	4.7	4.6
CFSM	.87	.66	1.31	1.05	1.91	4.56	1.60	.90	.87	.56	.44	.87
IN.	1.01	.74	1.51	1.21	2.06	5.25	1.79	1.04	.97	.65	.51	.98

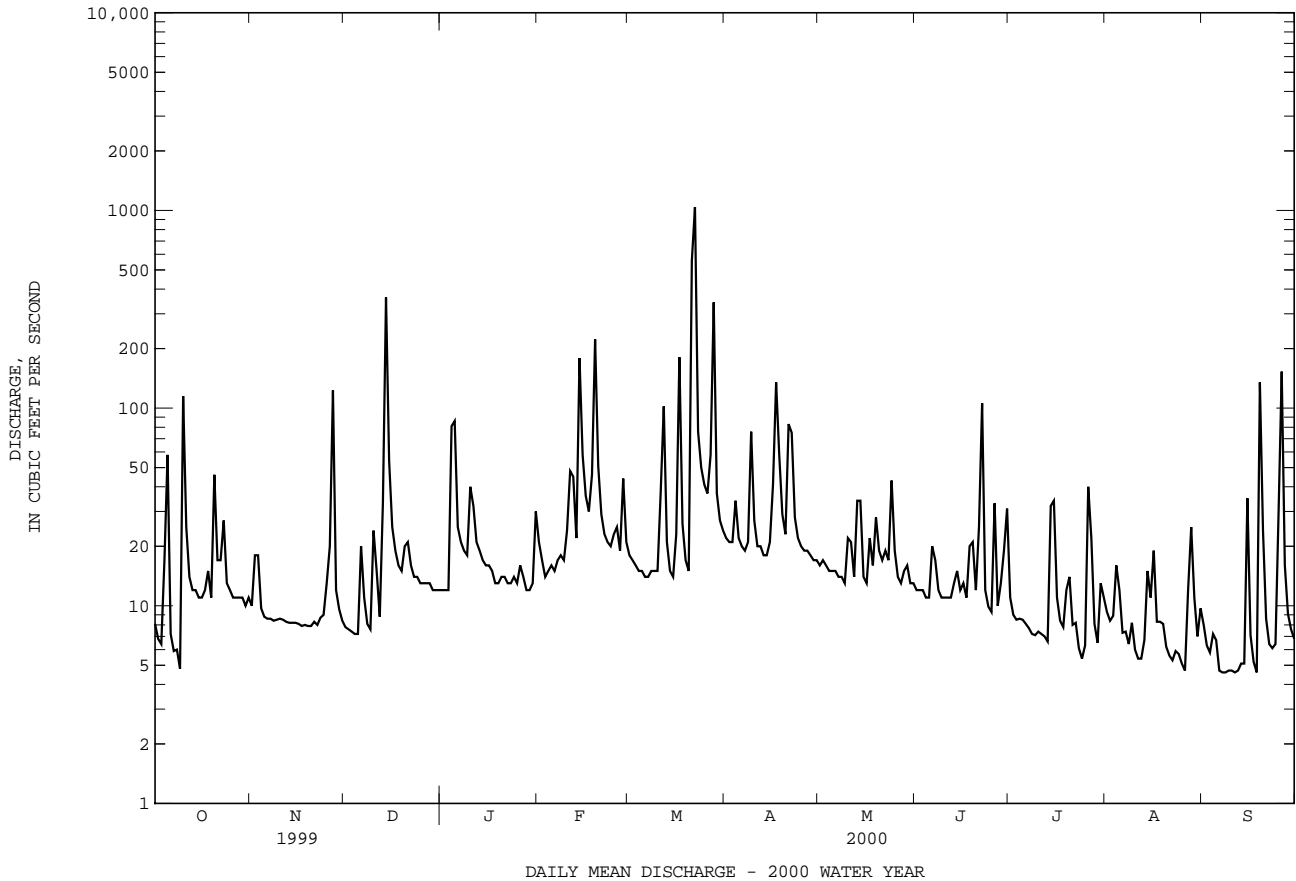
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
MEAN	14.9	24.1	34.2	40.2	42.1	48.5	36.8	31.1	20.9	21.6	17.3	16.5
MAX	62.9	82.8	122	165	154	121	107	77.6	76.5	165	117	107
(WY)	1972	1973	1997	1979	1979	1978	1983	1990	1972	1989	1967	1999
MIN	2.25	2.76	3.98	5.35	10.1	8.35	10.5	8.10	4.57	2.48	1.29	2.85
(WY)	1964	1966	1966	1981	1947	1981	1963	1965	1966	1963	1966	1965

01478000 CHRISTINA RIVER AT COOCHS BRIDGE, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	10682.3		9758.2		28.9	
ANNUAL MEAN	29.3		26.7		53.4	
HIGHEST ANNUAL MEAN					14.2	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	2650	Sep 16	1040	Mar 22	2650	Sep 16 1999
LOWEST DAILY MEAN	1.1	Aug 11	4.6	(a)	.20	(b)
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 5	4.7	Sep 6	.50	Aug 25 1966
INSTANTANEOUS PEAK FLOW			2130	Mar 22	(c) 7050	Sep 16 1999
INSTANTANEOUS PEAK STAGE			12.00	Mar 22	13.73	Sep 16 1999
INSTANTANEOUS LOW FLOW			4.4	Sep 18	.00	Sep 4 1993
ANNUAL RUNOFF (CFSM)	1.43		1.30		1.41	
ANNUAL RUNOFF (INCHES)	19.38		17.71		19.18	
10 PERCENT EXCEEDS	39		40		48	
50 PERCENT EXCEEDS	11		14		13	
90 PERCENT EXCEEDS	2.6		6.7		4.4	

a Sep. 7, 8, 11, 18.  
 b Aug. 7, 17, 18, 21, 27, 28, 1966.  
 c From rating curve extended above 1,500 ft<sup>3</sup>/s.



DELAWARE RIVER BASIN

01478650 WHITE CLAY CREEK AT NEWARK, DE

LOCATION.--Lat 39°41'20", long 75°44'58", New Castle County, Hydrologic Unit 02040205, on right bank 200 ft upstream from highway bridge on Paper Mill Road, at Newark, and 10.3 mi upstream from mouth.

DRAINAGE AREA.--69.0 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 56.45 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow affected by City of Newark municipal water plant upstream from station. Records do not include a negligible diversion upstream from station by MBNA America. U.S. Geological Survey gage-height telemeter at location. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0815	*2,740	*11.59	No peak greater than base discharge.			

Minimum discharge 26 ft<sup>3</sup>/s, Jan 18 (ice effect), Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	51	59	57	79	85	122	90	63	57	62	48
2	53	57	56	57	65	81	121	93	60	51	48	43
3	49	134	56	58	63	76	121	88	57	47	45	55
4	67	60	55	84	63	75	162	85	55	70	48	53
5	170	53	54	185	63	75	128	84	57	51	44	37
6	71	51	96	80	60	70	114	87	104	44	41	33
7	56	50	83	69	61	66	104	80	97	44	43	33
8	52	49	61	64	61	66	106	76	65	43	39	33
9	51	49	58	63	59	66	215	75	60	40	36	32
10	216	51	78	91	63	65	146	93	56	40	35	30
11	117	50	98	118	81	81	118	156	54	38	34	30
12	70	48	64	73	110	154	112	80	56	35	33	30
13	61	48	71	69	72	90	102	80	63	35	35	47
14	57	47	398	62	186	76	99	112	70	40	57	36
15	53	47	205	57	208	71	103	74	63	49	51	130
16	53	46	109	61	137	75	145	68	66	131	40	45
17	54	46	88	52	156	310	227	77	57	98	35	37
18	62	46	76	51	113	119	222	70	70	50	37	34
19	54	46	70	59	406	93	143	113	64	52	39	168
20	100	48	75	63	230	85	124	104	51	61	35	168
21	85	49	102	61	143	615	175	92	57	45	32	54
22	63	48	73	60	111	2740	247	91	107	41	31	43
23	74	50	64	65	112	295	142	101	57	38	31	42
24	58	56	63	63	112	207	120	134	50	38	33	43
25	54	64	58	63	112	174	109	87	46	42	32	54
26	53	79	60	74	105	155	104	73	52	169	30	385
27	52	363	60	60	93	146	103	69	47	180	34	106
28	51	98	59	58	132	444	102	76	94	67	142	63
29	51	71	57	67	95	175	99	75	160	53	49	52
30	51	62	57	76	---	146	93	66	121	53	44	48
31	51	---	58	106	---	133	---	63	---	59	54	---
TOTAL	2177	2017	2621	2226	3351	7109	4028	2712	2079	1861	1349	2012
MEAN	70.2	67.2	84.5	71.8	116	229	134	87.5	69.3	60.0	43.5	67.1
MAX	216	363	398	185	406	2740	247	156	160	180	142	385
MIN	49	46	54	51	59	65	93	63	46	35	30	30
CFSM	1.02	.97	1.23	1.04	1.67	3.32	1.95	1.27	1.00	.87	.63	.97
IN.	1.17	1.09	1.41	1.20	1.81	3.83	2.17	1.46	1.12	1.00	.73	1.08

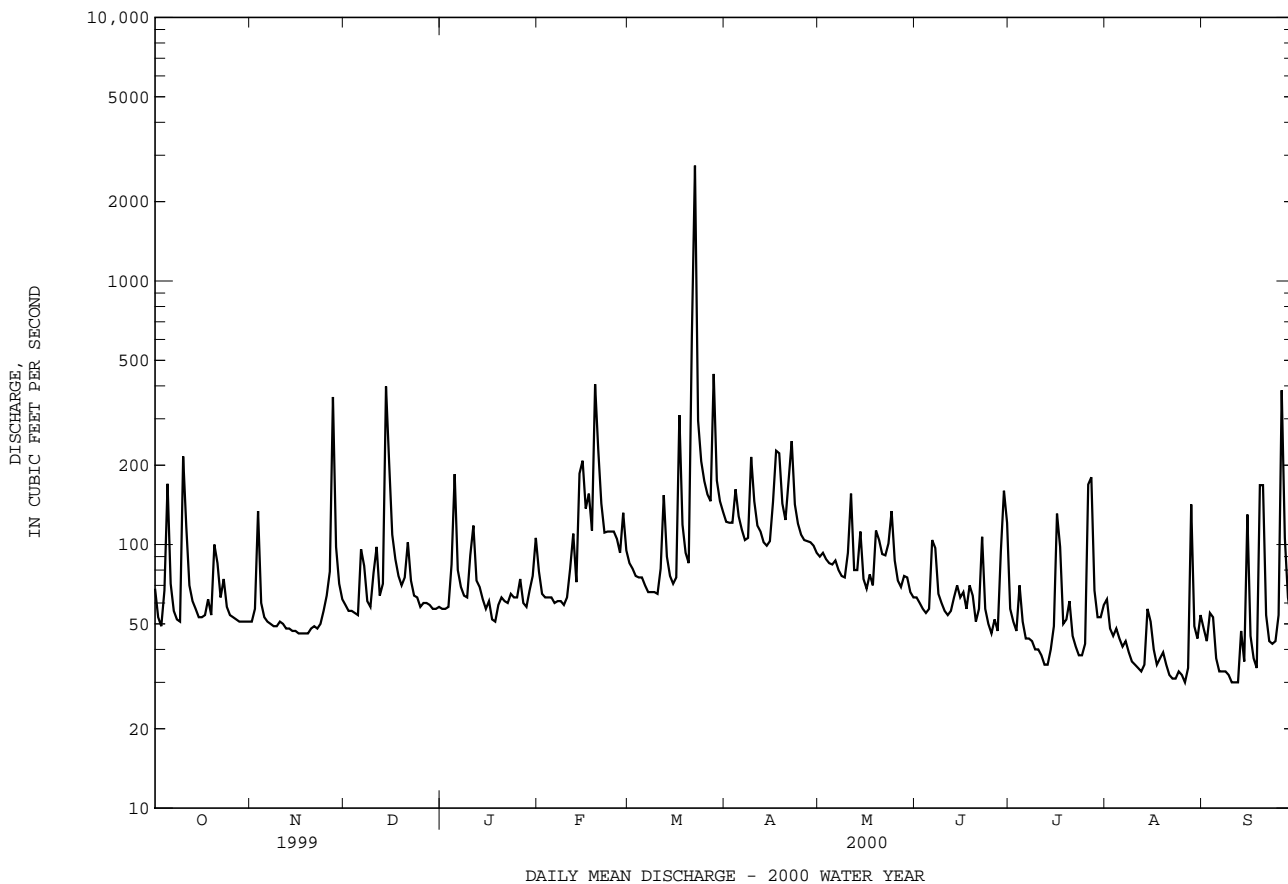
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000
MEAN	67.4	66.7	96.5	132	99.9	176	115
MAX	185	144	326	256	159	345	171
(WY)	1997	1997	1997	1996	1997	1994	1996
MIN	23.2	27.1	29.0	71.8	48.7	95.2	45.3
(WY)	1995	1999	1999	2000	1995	1995	1995

01478650 WHITE CLAY CREEK AT NEWARK, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL	30376.0		33542		87.2	
ANNUAL MEAN	83.2		91.6		129	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					1995	
HIGHEST DAILY MEAN	5750	Sep 16	2740	Mar 22	5750	Sep 16 1999
LOWEST DAILY MEAN	6.5	(a)	30	(b)	4.5	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	7.8	Aug 2	32	Sep 6	6.1	Sep 1 1995
INSTANTANEOUS PEAK FLOW			2740	Mar 22	(c)16800	Sep 16 1999
INSTANTANEOUS PEAK STAGE			11.59	Mar 22	17.13	Sep 16 1999
INSTANTANEOUS LOW FLOW			26	(d)	2.6	Sep 13 1995
ANNUAL RUNOFF (CFSM)	1.21		1.33		1.26	
ANNUAL RUNOFF (INCHES)	16.38		18.08		17.18	
10 PERCENT EXCEEDS	111		146		157	
50 PERCENT EXCEEDS	52		63		55	
90 PERCENT EXCEEDS	18		40		21	

- a Aug. 4, 19.
- b Aug. 26, Sept. 10-12.
- c From rating curve extended above 2,500 ft<sup>3</sup>/s on basis of runoff comparison with White Clay Creek above Newark, DE (01478500).
- d Jan. 18 (ice effect), Aug. 27.



DELAWARE RIVER BASIN

01479000 WHITE CLAY CREEK NEAR NEWARK, DE

LOCATION.--Lat 39°41'47", long 75°40'31", New Castle County, Hydrologic Unit 02040205, on left bank 35 ft downstream from bridge on private road at Delaware Park Race Track, 0.4 mi downstream from the Baltimore and Ohio Railroad bridge, 1.1 mi downstream from Pike Creek, 3.8 mi east of Newark, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--89.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1931 to September 1936, June 1943 to September 1957, October 1959 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1051: 1933(M). WSP 1382: 1932, 1934. WDR MD-DE-83-1: 1978-82(P).

GAGE.--Water-stage recorder. Datum of gage is 9.00 ft above sea level. Nov. 17, 1931, to Sept. 30, 1936, June 4, 1943, to Sept. 30, 1957, and Oct. 1, 1959, to Apr. 7, 1976, at site 0.5 mi upstream at datum 2.6 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow affected by City of Newark municipal water plant upstream from station. Slight diurnal fluctuation at low flow caused by mills upstream from station. Records do not include a negligible diversion upstream from station by MBNA America. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23 ft, previous site and datum, in July 1937 (probably affected by backwater from railroad bridge which has since been raised and widened), from information by Baltimore & Ohio Railroad.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0615	*7,130	*15.40	No other peak greater than base discharge.			

Minimum discharge 35 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	54	71	69	115	102	180	117	83	80	79	59
2	58	80	67	68	91	98	172	123	79	68	60	50
3	49	168	65	72	81	91	169	114	76	65	61	101
4	80	73	64	164	87	87	221	111	74	83	73	76
5	224	61	62	284	86	88	176	109	73	66	60	46
6	77	60	129	103	79	84	158	109	121	59	51	40
7	58	57	114	88	83	81	149	103	112	55	54	39
8	51	53	75	81	81	79	152	100	82	54	50	39
9	51	54	69	79	75	79	298	98	76	52	48	39
10	297	55	111	125	87	79	197	114	71	52	45	38
11	138	54	132	160	119	127	157	188	69	50	44	37
12	79	51	81	93	143	259	151	101	84	47	42	37
13	67	52	120	86	107	113	140	120	83	46	45	51
14	61	52	709	78	323	93	137	148	89	77	75	43
15	57	50	337	69	293	86	145	96	77	84	66	211
16	57	48	149	74	159	107	212	91	81	119	50	57
17	63	46	116	68	200	496	335	110	73	136	45	45
18	73	45	98	74	166	155	291	93	126	63	48	40
19	60	46	90	75	614	113	181	157	90	78	48	263
20	140	47	101	73	334	103	156	131	70	81	44	255
21	112	49	132	70	178	902	246	113	121	59	40	67
22	86	48	95	64	136	4030	335	116	248	53	39	51
23	112	51	85	76	133	473	184	122	82	49	39	48
24	75	63	81	76	132	319	156	181	68	50	40	49
25	65	80	74	75	134	266	145	112	63	53	40	113
26	61	121	77	99	126	239	139	94	128	238	38	612
27	59	564	75	76	111	259	137	91	64	256	57	130
28	55	135	72	68	165	731	137	97	102	83	176	74
29	55	92	70	77	116	259	130	98	283	66	62	57
30	54	79	68	77	---	215	124	88	188	68	51	51
31	53	---	70	169	---	193	---	85	---	68	68	---
TOTAL	2606	2488	3659	2910	4554	10406	5510	3530	3036	2458	1738	2818
MEAN	84.1	82.9	118	93.9	157	336	184	114	101	79.3	56.1	93.9
MAX	297	564	709	284	614	4030	335	188	283	256	176	612
MIN	49	45	62	64	75	79	124	85	63	46	38	37
CFSM	.94	.93	1.32	1.05	1.76	3.77	2.06	1.28	1.14	.89	.63	1.05
IN.	1.09	1.04	1.53	1.21	1.90	4.34	2.30	1.47	1.27	1.03	.73	1.18

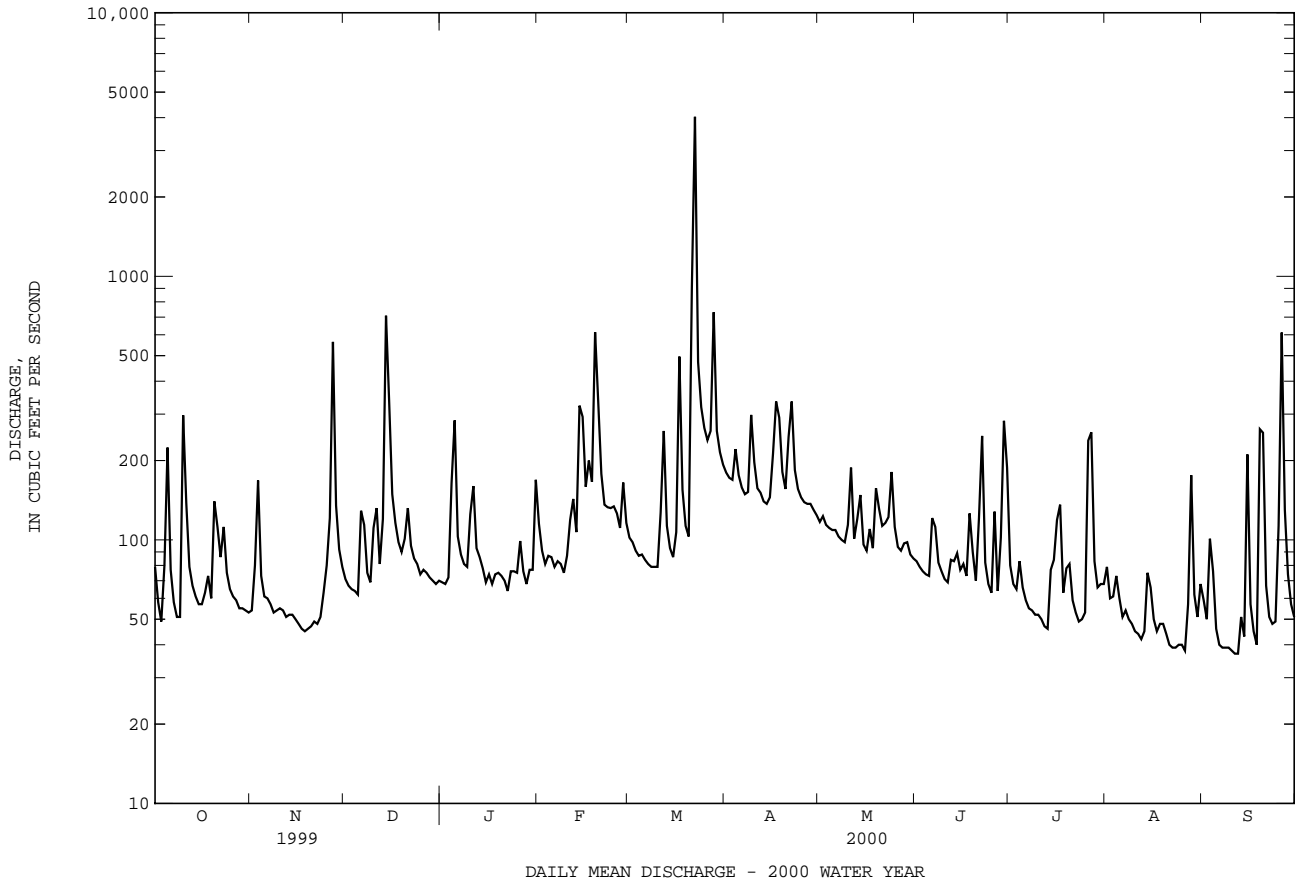
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1936, 1943 - 1957, 1960 - 2000, BY WATER YEAR (WY)

	1932	1936	1943	1957	1960	2000						
MEAN	66.0	91.8	115	148	161	177	152	128	97.4	94.9	78.2	77.4
MAX	234	221	405	493	542	402	342	265	311	540	301	416
(WY)	1997	1973	1997	1979	1979	1994	1983	1989	1972	1975	1967	1999
MIN	17.6	28.4	28.1	32.8	52.4	57.5	59.7	42.3	33.7	16.6	13.6	15.0
(WY)	1964	1966	1966	1966	1934	1981	1963	1955	1995	1963	1966	1932

01479000 WHITE CLAY CREEK NEAR NEWARK, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS	
					1932 - 1936	
					1943 - 1957	
					1960 - 2000	
ANNUAL TOTAL	41417.2		45713		115	
ANNUAL MEAN	113		125		193	1975
HIGHEST ANNUAL MEAN					55.9	1966
LOWEST ANNUAL MEAN					5.0	Sep 16 1999
HIGHEST DAILY MEAN	8220	Sep 16	4030	Mar 22	8220	Sep 16 1999
LOWEST DAILY MEAN	9.3	Aug 19	37	(a)	5.0	Sep 10 1966
ANNUAL SEVEN-DAY MINIMUM	10	Aug 2	38	Sep 6	5.7	Sep 7 1966
INSTANTANEOUS PEAK FLOW			7130	Mar 22	(b)19500	Sep 16 1999
INSTANTANEOUS PEAK STAGE			15.40	Mar 22	(c)17.74	Jun 22 1972
INSTANTANEOUS LOW FLOW			33	Aug 27	4.7	Sep 11 1966
ANNUAL RUNOFF (CFSM)	1.27		1.40		1.30	
ANNUAL RUNOFF (INCHES)	17.29		19.09		17.60	
10 PERCENT EXCEEDS	141		211		192	
50 PERCENT EXCEEDS	63		81		76	
90 PERCENT EXCEEDS	20		49		32	

- a Sept. 11, 12.
- b From rating curve extended above 6,700 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement at a gage height of 15.9 ft and on basis of runoff comparisons with nearby stations.
- c At previous site and datum.



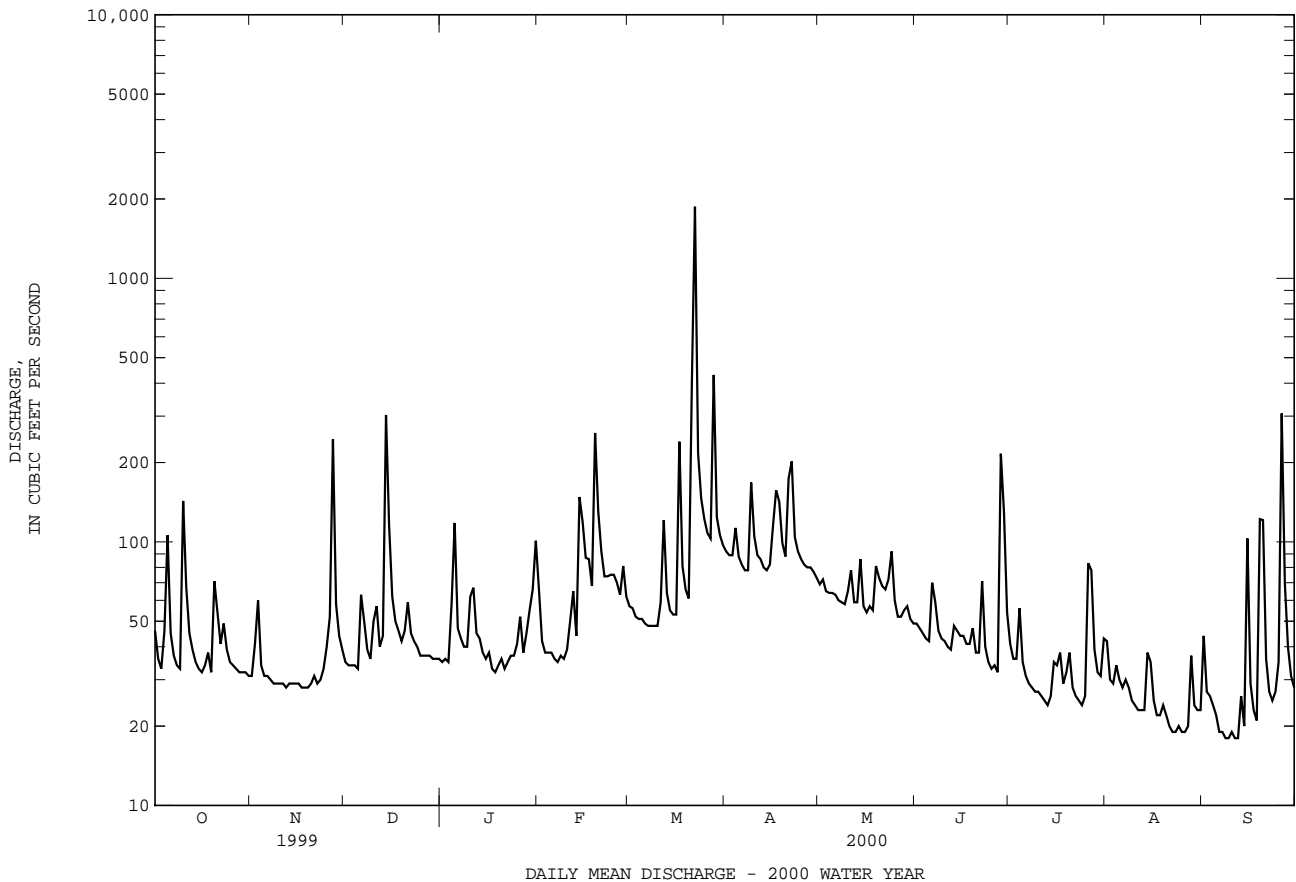




01480000 RED CLAY CREEK AT WOODDALE, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	20879.6		22818			
ANNUAL MEAN	57.2		62.3		63.1	
ANNUAL MEAN#	56.8		62.3		63.0	
HIGHEST ANNUAL MEAN					104	
LOWEST ANNUAL MEAN					32.3	
HIGHEST DAILY MEAN	(e)3440		1870		(e)3440	
LOWEST DAILY MEAN	7.0		18		4.5	
ANNUAL SEVEN-DAY MINIMUM	8.6		18		4.9	
INSTANTANEOUS PEAK FLOW			3750		(b)7650	
INSTANTANEOUS PEAK STAGE			8.59		(c)13.93	
INSTANTANEOUS LOW FLOW			18		2.9	
ANNUAL RUNOFF (CFSM)	1.22		1.33		1.34	
ANNUAL RUNOFF (CFSM)#	1.21		1.33		1.34	
ANNUAL RUNOFF (INCHES)	16.53		18.06		18.23	
ANNUAL RUNOFF (INCHES)#	16.41		18.06		18.20	
10 PERCENT EXCEEDS	68		103		107	
50 PERCENT EXCEEDS	35		42		43	
90 PERCENT EXCEEDS	14		25		19	

- # Adjusted for inflow since June 1994.
- e Estimated.
- a Sept. 8, 9, 11, 12.
- b From rating curve extended above 3,900 ft<sup>3</sup>/s on basis of contracted opening measurement at a gage height of 9.93 ft.
- c From high-water mark in well.
- d Aug. 27, Sept. 8-13.



## DELAWARE RIVER BASIN

01480015 RED CLAY CREEK NEAR STANTON, DE

LOCATION.--Lat 39°42'55", long 75°38'28", New Castle County, Hydrologic Unit 02040205, on right bank at downstream side of westbound lane of bridge on State Highway 4, near Stanton, and 0.9 mi upstream from mouth.

DRAINAGE AREA.--52.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (missing record, backwater), which are poor. Low flows augmented at times by inflow from Hoopes Reservoir located 5.7 miles upstream from gage on unnamed tributary to Red Clay Creek, capacity 2,000,000,000 gal. Water from Brandywine Creek is pumped into Hoopes Reservoir and is released into Red Clay Creek during periods of low flow. No releases were observed during the 2000 water year. Water from Red Clay Creek is used for municipal supply. U.S. Geological Survey gage-height telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0815	(e)*4,200	(a)*19.01	No other peak greater than base discharge.			

e Estimated

a Gage height affected by backwater.

Minimum discharge unknown.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	e34	e45	e41	e90	e76	e110	71	52	e46	48	e56
2	52	e55	e39	e40	e70	e70	e105	73	50	e44	38	e43
3	49	e80	e38	e40	e50	e66	e100	70	49	e43	38	e32
4	70	e54	e37	e70	e43	e62	e145	69	49	e60	59	e28
5	78	e45	e37	e140	e41	e60	e115	69	48	e54	40	e26
6	75	e35	e80	e85	e41	e58	e93	68	70	e47	37	e23
7	40	e34	e60	e53	e40	e56	90	63	61	e42	39	e21
8	43	e33	e45	e47	e40	e54	91	60	51	e39	37	e20
9	44	e32	e43	e46	e42	e54	186	59	49	38	35	e20
10	126	e32	e54	e70	e50	e54	121	66	47	36	33	e20
11	79	e32	e65	e80	e65	e80	98	82	46	36	32	e19
12	44	e32	e48	e64	e85	e140	94	60	45	35	32	e25
13	45	e32	e55	e54	e70	e95	86	66	48	35	32	e32
14	e40	e32	e350	e48	e190	e70	85	90	48	39	45	e28
15	36	e32	e200	e42	e140	e65	90	59	45	44	44	e125
16	41	e32	e100	e47	e120	e100	136	57	42	41	34	e60
17	42	e32	e70	e41	e110	e270	183	62	42	47	31	e30
18	42	e32	e56	e37	e100	e150	167	56	43	39	31	e27
19	34	e33	e50	e40	e330	e90	112	84	43	42	34	142
20	80	e34	e58	e44	e210	e80	98	74	36	e47	31	e130
21	e65	e36	e70	e39	e140	e350	172	67	60	e40	29	e36
22	e47	e34	e60	e41	e90	e2400	230	66	88	e34	28	e32
23	e58	e37	e52	e44	e88	e900	119	71	53	e32	28	e28
24	e50	e45	e48	e44	e88	e220	100	99	49	e30	29	e32
25	e43	e60	e46	e50	e87	e170	93	62	47	e35	28	e37
26	e38	e150	e45	e60	e82	e140	90	55	51	e100	27	e380
27	e37	e300	e45	e50	e76	e130	83	54	45	e88	e35	e150
28	e36	e150	e44	e57	e100	e500	85	57	218	e70	e45	e80
29	e35	e70	e43	e70	e85	e280	82	59	181	e50	e35	e52
30	e35	e55	e42	e90	---	e130	76	54	54	e42	e30	e35
31	e34	---	e41	e120	---	e120	---	53	---	e50	e28	---
TOTAL	1604	1694	2066	1794	2763	7090	3435	2055	1810	1425	1092	1769
MEAN	51.7	56.5	66.6	57.9	95.3	229	114	66.3	60.3	46.0	35.2	59.0
MAX	126	300	350	140	330	2400	230	99	218	100	59	380
MIN	34	32	37	37	40	54	76	53	36	30	27	19
(†)	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	.99	1.08	1.27	1.10	1.82	4.36	2.19	1.27	1.15	.88	.67	1.13
IN.	1.14	1.20	1.47	1.27	1.96	5.03	2.44	1.46	1.28	1.01	.78	1.26

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

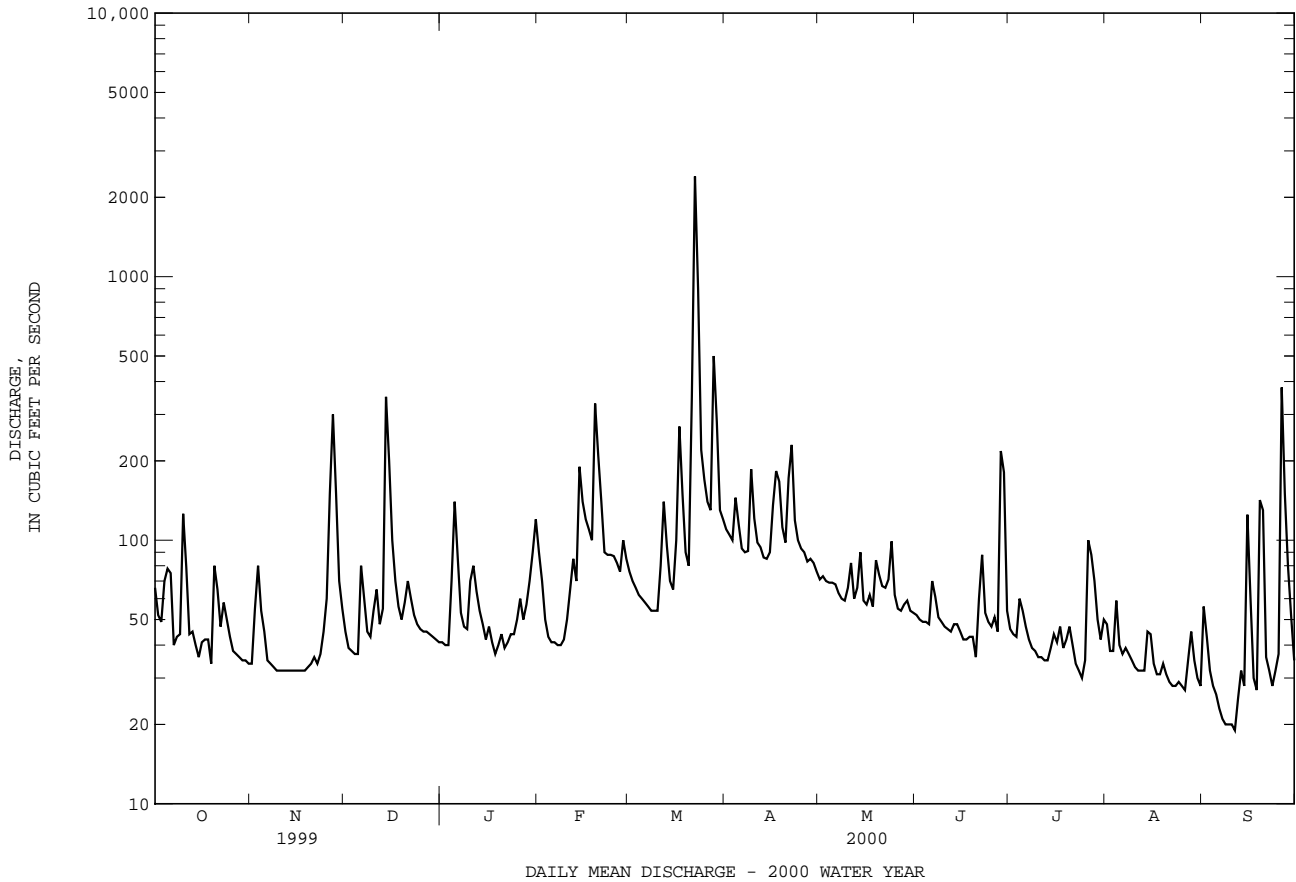
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	47.5	54.6	70.5	98.1	77.7	121	93.2	77.6	58.9	58.1	43.6	61.4
MAX	120	91.5	240	220	151	229	191	138	104	246	97.7	219
(WY)	1997	1997	1997	1996	1994	2000	1993	1989	1996	1989	1996	1999
MIN	23.0	19.8	19.1	37.9	40.8	65.0	38.6	39.7	23.7	19.3	25.2	18.2
(WY)	1995	1999	1999	1992	1992	1990	1995	1995	1999	1999	1998	1998

† Inflow in cubic feet per second, from Hoopes Reservoir for municipal supply.

01480015 RED CLAY CREEK NEAR STANTON, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	24143.8		28597			
ANNUAL MEAN	66.1		78.1		71.9	
ANNUAL MEAN#	65.7		78.1		71.5	
HIGHEST ANNUAL MEAN					98.2	
LOWEST ANNUAL MEAN					37.2	
HIGHEST DAILY MEAN	(e)4300	Sep 16	(e)2400	Mar 22	(e)4300	Sep 16 1999
LOWEST DAILY MEAN	(e)8.0	Aug 25	(e)19	Sep 11	(e)7.0	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	9.7	Jul 27	21	Sep 6	9.7	Jul 27 1999
INSTANTANEOUS PEAK FLOW			(e)4200	Mar 22	(a)8260	Sep 16 1999
INSTANTANEOUS PEAK STAGE			19.01	Mar 22	(b)23.54	Sep 16 1999
INSTANTANEOUS LOW FLOW			UNKNOWN		(c)	(d)
ANNUAL RUNOFF (CFSM)	1.26		1.49		1.37	
ANNUAL RUNOFF (CFSM)#	1.25		1.49		1.36	
ANNUAL RUNOFF (INCHES)	17.14		20.30		18.64	
ANNUAL RUNOFF (INCHES)#	17.03		20.30		18.53	
10 PERCENT EXCEEDS	84		130		120	
50 PERCENT EXCEEDS	41		52		49	
90 PERCENT EXCEEDS	16		32		23	

# Adjusted for inflow since June 1994.  
 e Estimated  
 a From rating curve extended above 5,000 ft<sup>3</sup>/s.  
 b From floodmarks: gage height affected by backwater.  
 c Minimal recordable stage was 10 ft<sup>3</sup>/s, may have been less during periods of doubtful or no gage-height record.  
 d Aug. and Sept. of 1995 and 1996.



## DELAWARE RIVER BASIN

01481500 BRANDYWINE CREEK AT WILMINGTON, DE

LOCATION.--Lat 39°46'09", long 75°34'25", New Castle County, Hydrologic Unit 02040205, on right bank in Rockford Park, 0.2 mi downstream from Rising Sun Bridge, in Wilmington, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--314 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1946 to current year. Prior to December 1946 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1948, 1950.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 68.23 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Some diurnal fluctuation at low flow caused by mills upstream from station. Flow regulated since November 1973 by Marsh Creek Reservoir, capacity 7,230,000,000 gal, about 27 mi upstream. No diversion just upstream from station by plant of E. I. du Pont de Nemours & Co. since June 13, 1960. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	1515	*15,500	*11.99	No other peak greater than base discharge.			

Minimum discharge 147 ft<sup>3</sup>/s, Sep 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542	271	365	358	502	658	880	559	358	331	310	228
2	377	328	350	353	466	627	847	580	332	294	255	229
3	320	754	351	352	432	602	831	547	315	302	253	230
4	382	425	355	419	454	578	1010	505	299	421	838	227
5	711	359	354	855	449	542	864	503	304	304	355	192
6	512	352	489	597	437	520	817	479	501	270	266	174
7	379	346	701	523	431	485	776	436	539	260	259	170
8	339	329	448	503	443	479	757	382	344	250	249	166
9	295	317	401	502	416	483	1100	361	309	241	227	166
10	648	311	442	599	463	490	938	342	295	257	220	170
11	785	305	594	736	528	519	742	595	281	252	209	167
12	439	293	470	590	612	765	707	358	279	226	209	169
13	360	288	463	549	520	636	688	339	546	220	391	325
14	338	281	1080	520	707	559	673	578	389	276	276	314
15	311	281	1320	462	796	537	679	407	367	346	363	903
16	348	273	670	509	673	548	749	367	357	284	261	401
17	389	266	607	439	718	1120	823	386	337	302	230	221
18	500	259	571	351	649	732	1020	371	401	256	220	190
19	392	238	544	464	1120	564	717	548	1900	255	227	291
20	511	205	541	e440	1040	523	637	764	778	289	222	617
21	536	233	623	e390	726	1350	736	836	460	253	205	295
22	404	251	569	e360	644	11500	1750	707	1140	239	203	223
23	406	241	512	e360	659	3410	909	1020	708	225	202	195
24	370	278	457	465	728	1900	837	990	395	224	203	200
25	342	339	408	418	809	1460	796	833	332	236	203	238
26	320	453	397	e400	810	1270	765	686	315	587	193	1780
27	303	1470	400	e380	681	1230	716	637	300	827	188	959
28	282	634	385	e370	984	2200	703	655	745	352	220	464
29	279	443	375	e360	811	1260	686	595	820	285	208	375
30	275	396	364	443	---	1000	634	435	521	270	194	335
31	269	---	365	558	---	915	---	391	---	278	210	---
TOTAL	12664	11219	15971	14625	18708	39462	24787	17192	14967	9412	8069	10614
MEAN	409	374	515	472	645	1273	826	555	499	304	260	354
MAX	785	1470	1320	855	1120	11500	1750	1020	1900	827	838	1780
MIN	269	205	350	351	416	479	634	339	279	220	188	166
(†)	-2.1	-0.3	-19.4	-2.6	23.1	6.7	-5.0	-3.3	4.9	-3.7	-0.2	2.2
MEAN#	407	374	496	469	668	1280	821	552	504	300	260	356
CFM#	1.30	1.19	1.58	1.49	2.13	4.08	2.61	1.76	1.61	.96	.83	1.13
IN#	1.50	1.33	1.82	1.72	2.30	4.70	2.91	2.03	1.80	1.11	.96	1.26

e Estimated

† Change in contents in Marsh Creek Reservoir, equivalent in cubic feet per second, provided by Pennsylvania Department of Environmental Resources.

# Adjusted for change in reservoir contents.

01481500 BRANDYWINE CREEK AT WILMINGTON, DE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1973, BY WATER YEAR (WY) [UNREGULATED]

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	223	356	434	498	681	734	696	559	435	330	315	284
MAX	860	794	979	1052	1454	1206	1406	1087	1343	749	1436	1403
(WY)	1972	1972	1973	1953	1971	1958	1958	1958	1972	1958	1955	1971
MIN	80.6	117	129	173	225	333	259	190	149	92.5	81.9	99.6
(WY)	1964	1966	1966	1955	1954	1969	1963	1963	1963	1963	1957	1964

SUMMARY STATISTICS

WATER YEARS 1947 - 1973

ANNUAL MEAN	461	
HIGHEST ANNUAL MEAN	732	1972
LOWEST ANNUAL MEAN	252	1954
HIGHEST DAILY MEAN	14300	Jun 23 1972
LOWEST DAILY MEAN	56	Aug 23 1972
ANNUAL SEVEN-DAY MINIMUM	59	Aug 18 1957
INSTANTANEOUS PEAK FLOW	(a)29000	Jun 23 1972
INSTANTANEOUS PEAK STAGE	15.49	Jun 23 1972
INSTANTANEOUS LOW FLOW	(b)30	Dec 26 1948
ANNUAL RUNOFF (CFSM)	1.47	
ANNUAL RUNOFF (INCHES)	19.93	
10 PERCENT EXCEEDS	864	
50 PERCENT EXCEEDS	316	
90 PERCENT EXCEEDS	125	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY) [REGULATED]

	306	367	531	636	633	770	728	598	442	388	263	322
MEAN	306	367	531	636	633	770	728	598	442	388	263	322
MAX	1022	856	1927	1868	1610	1839	1773	1168	1079	1243	572	1099
(WY)	1997	1997	1997	1979	1979	1994	1983	1989	1975	1975	1996	1999
MIN	125	157	145	119	246	230	223	304	172	101	103	108
(WY)	1987	1982	1981	1981	1992	1981	1985	1977	1985	1999	1995	1980

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1974 - 2000

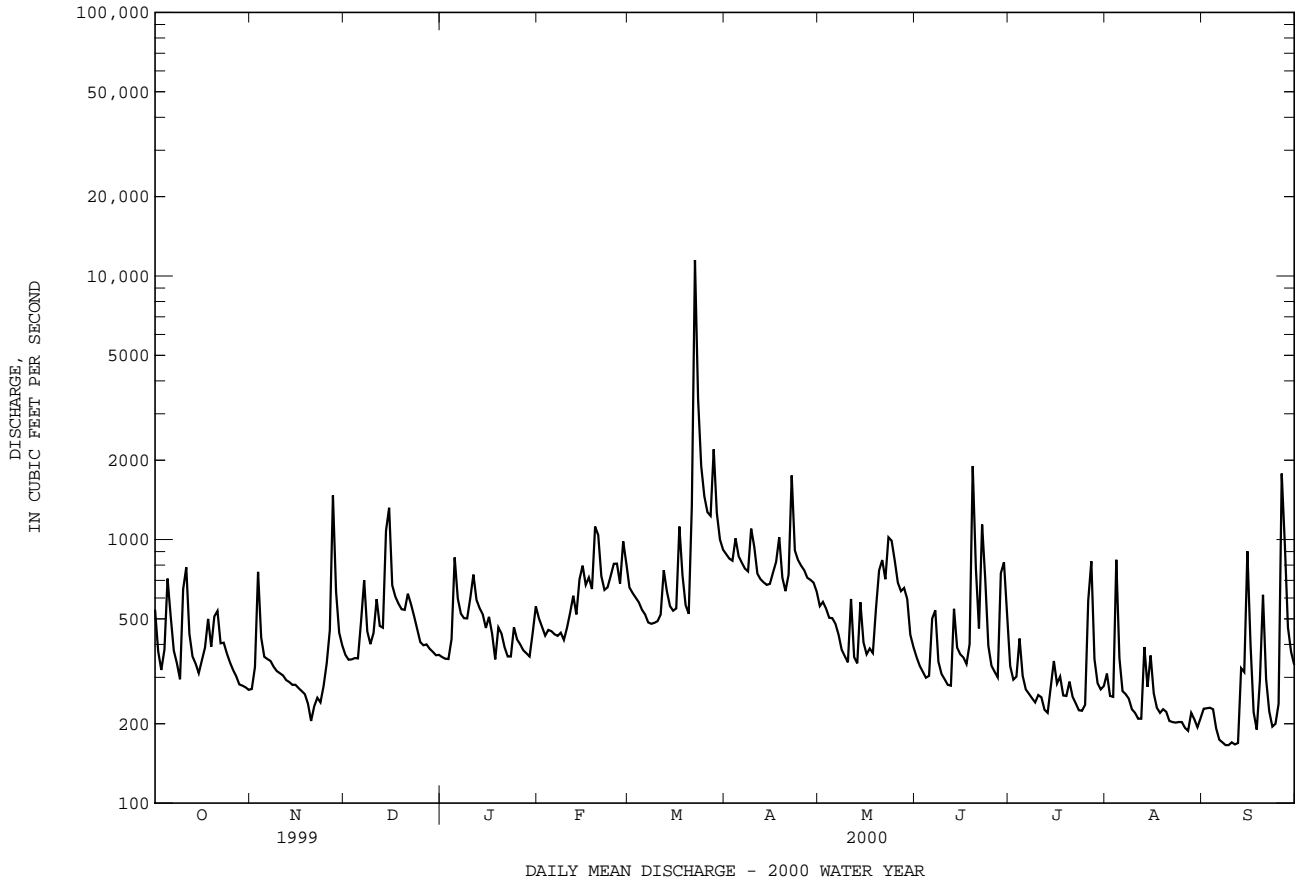
ANNUAL TOTAL	158992	197690	
ANNUAL MEAN	436	540	498
ANNUAL MEAN≠	436	540	499
HIGHEST ANNUAL MEAN			835
LOWEST ANNUAL MEAN			228
HIGHEST DAILY MEAN	14200	Sep 17	11500
LOWEST DAILY MEAN	52	Aug 7	166
ANNUAL SEVEN-DAY MINIMUM	54	Aug 3	169
INSTANTANEOUS PEAK FLOW			15500
INSTANTANEOUS PEAK STAGE			11.99
INSTANTANEOUS LOW FLOW			147
ANNUAL RUNOFF (CFSM)	1.39		1.72
ANNUAL RUNOFF (CFSM)≠	1.39		1.72
ANNUAL RUNOFF (INCHES)	18.84		23.42
ANNUAL RUNOFF (INCHES)≠	18.84		23.42
10 PERCENT EXCEEDS	655	837	915
50 PERCENT EXCEEDS	328	417	352
90 PERCENT EXCEEDS	86	227	142

a From rating curve extended above 18,000 ft<sup>3</sup>/s.

b During period of ice effect.

≠ Adjusted for change in reservoir contents since November 1973.

c Sept. 8, 9.



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## DELAWARE RIVER BASIN

01483200 BLACKBIRD CREEK AT BLACKBIRD, DE

LOCATION.--Lat 39°21'58", long 75°40'10", New Castle County, Hydrologic Unit 02040205, on left bank 15 ft downstream from highway culverts, 0.5 mi upstream from Barlow Branch, 0.6 mi southwest of Blackbird, 5.6 mi northwest of Smyrna, and 13.8 mi upstream from mouth.

DRAINAGE AREA.--3.85 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum, water years 1952-56, and occasional low-flow measurements, water years 1952-53, 1955-56. October 1956 to current year.

REVISED RECORDS.--WRD MD-DE-89-1: 1987-88(P).

GAGE.--Water-stage recorder. Concrete control since May 23, 1968. Datum of gage is 17.89 ft above sea level. Mar. 5, 1951, to Oct. 16, 1956, nonrecording gage and crest-stage gage at site 15 ft upstream at datum 1.0 ft higher. Oct. 17, 1956, to June 16, 1986, recording gage at same site on right bank at datum 1.0 ft higher.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation at low and medium flow by Blackbird Lake Dam upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0600	*193	*3.89	Aug 14	1715	89	2.73
Mar 28	0930	61	2.32	Sep 26	1045	64	2.36

Minimum discharge 1.2 ft<sup>3</sup>/s, July 8, 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	3.4	3.6	3.9	7.4	6.5	9.9	6.6	3.1	2.4	3.9	4.2
2	3.1	4.1	3.5	3.9	5.3	6.3	9.4	6.6	2.8	1.9	2.9	3.9
3	2.8	7.2	3.5	3.9	4.2	5.6	9.2	6.0	2.6	1.7	2.8	5.4
4	4.8	5.5	3.5	5.2	4.3	5.3	10	5.5	2.4	1.9	2.6	7.3
5	8.1	3.1	3.5	13	4.6	5.1	9.7	5.4	2.2	1.9	2.4	4.4
6	4.6	10	4.4	6.5	4.4	5.0	8.6	5.4	3.4	1.6	2.4	3.0
7	3.3	3.1	5.5	4.8	4.3	4.6	8.0	4.5	4.8	1.5	2.3	2.8
8	2.9	2.4	3.9	4.3	4.9	4.8	7.7	4.1	2.7	1.3	2.2	2.7
9	2.9	2.6	3.3	4.0	4.2	4.7	13	3.8	2.2	1.3	2.1	2.7
10	6.7	5.6	4.5	5.5	5.7	4.7	11	3.9	2.0	1.4	2.0	2.6
11	7.2	3.3	5.8	6.2	9.2	6.5	8.4	5.8	1.8	1.4	1.9	2.4
12	3.7	3.2	4.1	4.5	9.7	13	7.5	3.8	1.8	1.4	1.8	2.2
13	3.0	3.0	3.8	4.4	5.9	9.0	6.6	4.4	1.8	1.4	1.7	2.3
14	2.9	3.0	19	3.8	15	6.0	6.6	11	2.1	1.6	50	2.2
15	2.3	3.0	19	3.2	16	5.3	7.0	4.8	2.5	13	22	7.0
16	2.3	2.9	8.8	3.8	9.1	5.7	9.3	3.5	2.6	9.4	11	3.8
17	2.7	2.8	5.8	3.4	6.9	17	24	3.8	2.2	8.6	9.5	2.6
18	5.6	2.8	5.1	2.6	10	10	21	3.6	3.0	3.0	6.3	2.3
19	4.2	2.7	4.7	2.7	24	6.8	16	3.5	7.4	2.5	6.9	14
20	9.4	2.9	5.3	3.5	16	5.7	12	4.2	3.3	8.8	4.2	18
21	11	2.9	6.7	3.5	9.8	39	15	5.0	2.2	3.5	3.4	5.8
22	5.7	3.0	5.2	3.4	6.8	129	31	7.6	2.3	3.6	3.2	3.3
23	8.8	3.1	4.6	3.5	6.6	27	14	7.8	2.2	2.7	3.2	3.2
24	6.2	3.3	4.3	3.5	6.6	16	11	5.5	1.9	2.3	3.0	3.8
25	3.7	3.6	3.7	4.0	7.9	13	10	4.3	1.7	2.4	2.9	9.4
26	2.8	4.3	3.6	4.3	13	12	11	3.5	3.4	10	2.7	47
27	3.1	23	4.2	4.4	9.4	12	9.7	3.5	7.9	12	7.1	18
28	3.0	11	4.0	3.5	8.8	44	9.1	4.9	10	4.8	28	8.6
29	2.5	5.5	3.9	3.2	6.9	17	8.6	6.2	6.7	3.0	9.9	5.4
30	2.4	4.1	3.9	3.9	---	12	7.5	3.9	3.8	2.6	9.9	4.7
31	3.5	---	3.9	7.7	---	11	---	3.2	---	3.1	6.0	---
TOTAL	140.4	140.4	168.6	138.0	246.9	469.6	341.8	155.6	98.8	118.0	220.2	205.0
MEAN	4.53	4.68	5.44	4.45	8.51	15.1	11.4	5.02	3.29	3.81	7.10	6.83
MAX	11	23	19	13	24	129	31	11	10	13	50	47
MIN	2.3	2.4	3.3	2.6	4.2	4.6	6.6	3.2	1.7	1.3	1.7	2.2
CFSM	1.18	1.22	1.41	1.16	2.21	3.93	2.96	1.30	.86	.99	1.84	1.77
IN.	1.36	1.36	1.63	1.33	2.39	4.54	3.30	1.50	.95	1.14	2.13	1.98

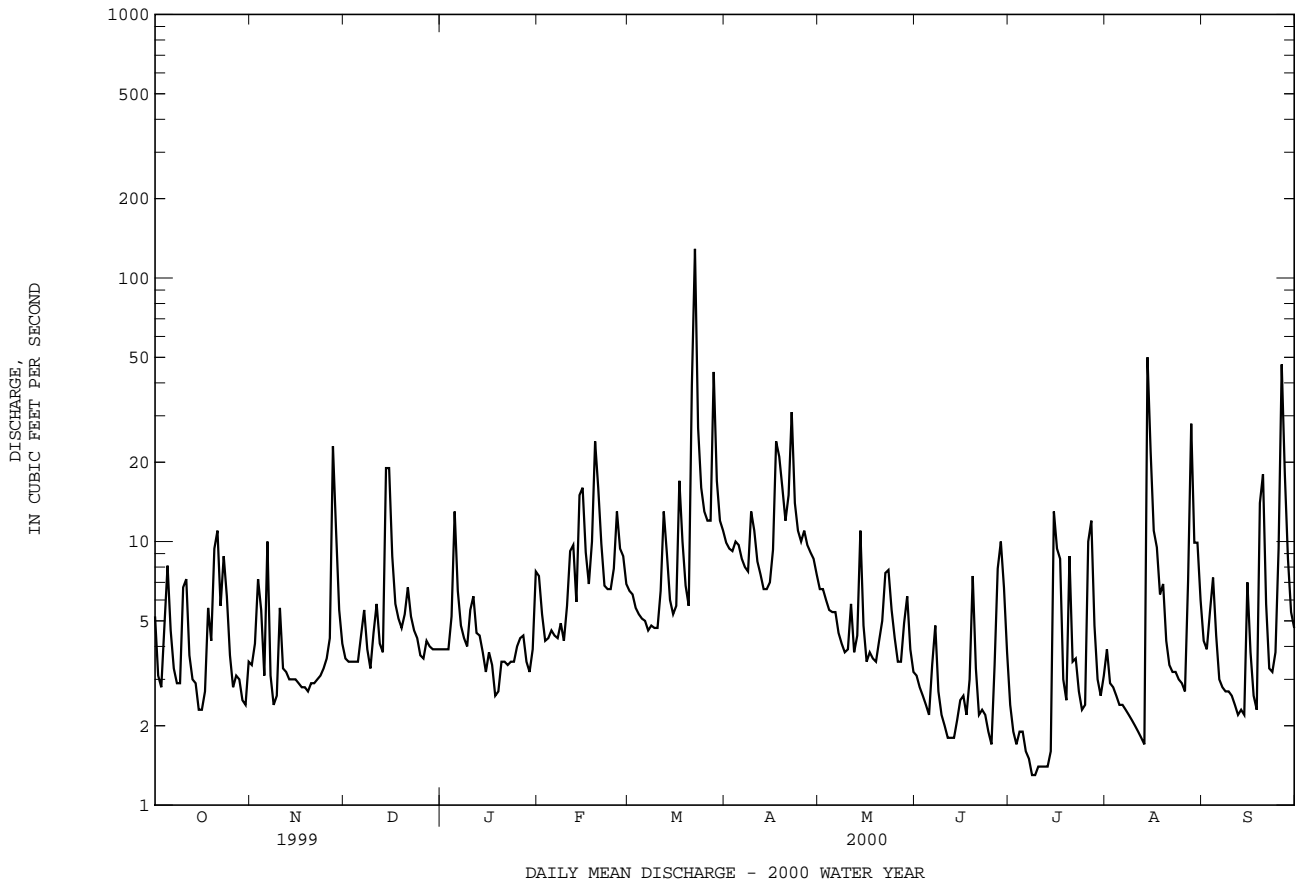
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
MEAN	2.45	3.44	5.08	6.24
MAX	8.83	10.4	23.5	18.1
MIN	.30	.73	.71	1.51
(WY)	1972	1957	1997	1978
				1979
				1958
				1983
				1989
				1972
				1989
				2000
				1999
				.21
				1969
				1966
				1966
				1981
				1992
				1966
				1966
				1977
				1966
				1966
				1966
				1966
				1966

01483200 BLACKBIRD CREEK AT BLACKBIRD, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	1768.31		2443.3			
ANNUAL MEAN	4.84		6.68		4.78	
HIGHEST ANNUAL MEAN					9.05 1972	
LOWEST ANNUAL MEAN					1.40 1966	
HIGHEST DAILY MEAN	397	Sep 16	129	Mar 22	397	Sep 16 1999
LOWEST DAILY MEAN	.06	Aug 19	1.3	(a)	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	.08	Aug 13	1.4	Jul 7	.00	Jul 17 1966
INSTANTANEOUS PEAK FLOW			193	Mar 22	(c)789	Sep 16 1999
INSTANTANEOUS PEAK STAGE			3.89	Mar 22	6.47	Sep 16 1999
INSTANTANEOUS LOW FLOW			1.2	(d)	.00	(f)
ANNUAL RUNOFF (CFSM)	1.26		1.73		1.24	
ANNUAL RUNOFF (INCHES)	17.09		23.61		16.86	
10 PERCENT EXCEEDS	8.1		12		9.8	
50 PERCENT EXCEEDS	2.8		4.3		2.7	
90 PERCENT EXCEEDS	.40		2.3		.53	

- a July 8, 9.
- b Sept. 11, 1965; July 12-15, 17-31, 14, 15, 18-21, 1966.
- c From rating curve extended above 600 ft<sup>3</sup>/s.
- d July 8-14.
- f No flow at times during 1964-66.

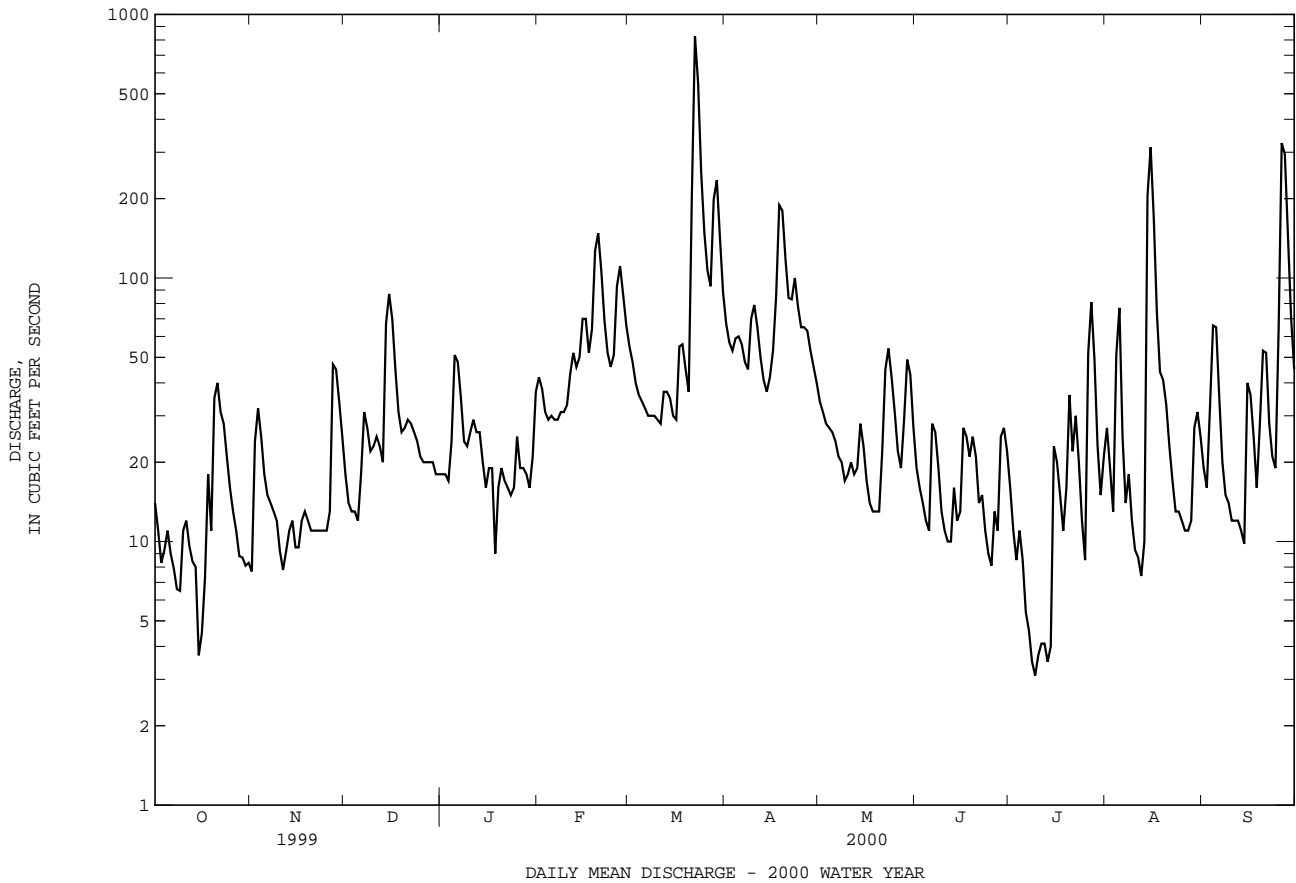




01483700 ST. JONES RIVER AT DOVER, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	9152.94		14736.7		37.0	
ANNUAL MEAN	25.1		40.3		69.3	
HIGHEST ANNUAL MEAN					6.14	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	554	Sep 17	826	Mar 22	1460	Sep 13 1960
LOWEST DAILY MEAN	.53	(a)	3.1	Jul 9	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	.58	Aug 8	3.7	Jul 8	.40	Sep 30 1963
INSTANTANEOUS PEAK FLOW			916	Mar 22	1900	Sep 13 1960
INSTANTANEOUS PEAK STAGE			7.36	Mar 22	(c)9.45	Sep 13 1960
INSTANTANEOUS LOW FLOW			(d)2.3	Jan 18	.00	(f)
ANNUAL RUNOFF (CFSM)	.79		1.26		1.16	
ANNUAL RUNOFF (INCHES)	10.67		17.19		15.77	
10 PERCENT EXCEEDS	49		72		85	
50 PERCENT EXCEEDS	15		24		20	
90 PERCENT EXCEEDS	1.6		9.3		3.7	

- a Aug. 13, 14.
- b July 9, 1959, May 9, 10, 1961.
- c From floodmark.
- d Ice effect.
- f No flow at times in 1959, 1961, 1962.



MISPILLION RIVER BASIN

01484100 BEAVERDAM BRANCH AT HOUSTON, DE

LOCATION.--Lat 38°54'20", long 75°30'49", Kent County, Hydrologic Unit 02040207, on left bank 15 ft upstream from culverts on State Highway 384, 0.8 mi south of Houston, and 1.2 mi upstream from Blairs Pond and mouth.

DRAINAGE AREA.--2.83 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1958 to current year.

REVISED RECORDS.--WDR MD-DE-84-1: 1981, 1983 (M).

GAGE.--Water-stage recorder and concrete control; timber control prior to Nov. 8, 1979. Datum of gage is 35.67 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (missing record), which are fair. Diversion for irrigation of about 150 acres upstream from station during some years. Several measurements of water temperature were made during this year. Water-quality data for some prior years have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0300	*63	*3.95	Sep 26	0915	31	3.30

Minimum discharge 1.6 ft<sup>3</sup>/s, Jul 12-14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.2	2.2	e2.0	e2.6	3.7	6.1	5.1	3.1	2.1	3.4	2.3
2	1.9	4.5	2.1	e1.9	e2.5	3.6	5.9	5.0	3.0	2.0	3.0	2.4
3	1.8	4.9	2.1	e1.9	e2.4	3.5	5.9	4.5	2.9	1.9	2.9	3.6
4	2.1	3.1	2.1	e2.1	e2.4	3.5	6.0	4.5	2.7	3.2	2.8	3.5
5	2.1	2.7	2.0	e2.5	e2.3	3.4	5.7	4.5	2.7	2.3	2.7	2.4
6	1.9	2.7	2.4	e2.4	e2.4	3.3	5.5	4.2	3.2	2.1	2.6	2.2
7	1.8	2.7	2.4	e2.2	e2.4	3.3	5.2	4.1	2.8	2.0	2.5	2.2
8	1.8	2.7	2.1	e2.0	e2.6	3.3	5.2	3.9	2.5	2.0	2.4	2.1
9	1.8	2.7	2.1	e1.9	2.7	3.3	6.6	3.8	2.4	1.9	2.3	2.1
10	2.0	2.7	2.5	e1.9	3.4	3.1	5.6	3.9	2.3	1.9	2.2	2.1
11	2.4	2.6	2.5	e2.4	4.1	3.3	5.4	3.9	2.3	1.9	2.1	2.0
12	1.9	2.6	2.2	e2.3	3.7	3.9	5.2	3.6	2.3	1.8	2.1	2.0
13	1.9	2.6	2.1	e2.1	3.3	3.4	4.9	3.7	2.5	1.7	2.3	2.0
14	1.8	2.6	4.6	e2.0	4.4	3.3	4.9	3.7	2.3	3.1	1.1	1.9
15	1.8	2.4	e3.7	e2.0	3.7	3.1	5.9	3.4	2.3	8.8	4.4	3.4
16	1.8	2.4	e3.3	e1.9	3.5	3.2	7.3	3.3	2.5	3.4	3.8	2.2
17	2.1	2.3	e3.1	e1.8	3.3	4.6	6.0	3.2	2.1	2.7	3.3	2.0
18	2.8	2.3	e2.9	e1.9	5.0	3.6	7.5	3.2	3.2	2.4	3.4	2.0
19	2.0	2.2	e2.9	e1.9	6.8	3.5	7.4	3.1	2.5	2.5	3.1	2.3
20	4.5	2.2	e2.9	e2.0	4.7	3.5	6.4	3.2	2.2	3.6	2.8	2.2
21	3.8	2.2	e3.0	e1.9	4.2	1.7	7.0	3.5	2.1	2.6	2.7	2.0
22	2.9	2.2	e2.9	e1.9	3.9	4.3	9.0	5.4	2.3	2.3	2.6	1.9
23	3.4	2.2	e2.8	e1.8	3.9	1.1	6.8	4.1	2.1	2.2	2.6	2.0
24	2.8	2.2	e2.7	e1.9	3.9	8.7	6.1	3.8	2.0	2.2	2.5	2.1
25	2.6	2.3	e2.6	e2.0	3.8	7.9	6.4	3.6	2.0	2.2	2.5	4.4
26	2.6	2.4	e2.5	e1.8	3.7	7.4	6.4	3.3	2.1	4.6	2.4	1.9
27	2.4	3.4	e2.4	e1.8	3.7	7.3	5.9	3.5	2.2	4.8	2.4	5.8
28	2.2	2.5	e2.3	e1.9	4.0	1.5	5.8	3.8	2.5	3.6	2.3	4.3
29	2.2	2.3	e2.2	e2.0	3.8	8.5	5.6	3.9	2.5	3.3	2.3	3.9
30	2.2	2.2	e2.2	e2.1	---	7.2	5.3	3.3	2.4	3.4	2.6	3.8
31	2.2	---	e2.1	e2.3	---	6.6	---	3.2	---	3.6	2.4	---
TOTAL	71.5	79.0	79.9	62.5	103.1	209.0	182.9	119.2	74.0	88.1	92.4	96.1
MEAN	2.31	2.63	2.58	2.02	3.56	6.74	6.10	3.85	2.47	2.84	2.98	3.20
MAX	4.5	4.9	4.6	2.5	6.8	4.3	9.0	5.4	3.2	8.8	1.1	1.9
MIN	1.8	2.2	2.0	1.8	2.3	3.1	4.9	3.1	2.0	1.7	2.1	1.9
CFSM	.82	.93	.91	.71	1.26	2.38	2.15	1.36	.87	1.00	1.05	1.13
IN.	.94	1.04	1.05	.82	1.36	2.75	2.40	1.57	.97	1.16	1.21	1.26

e Estimated

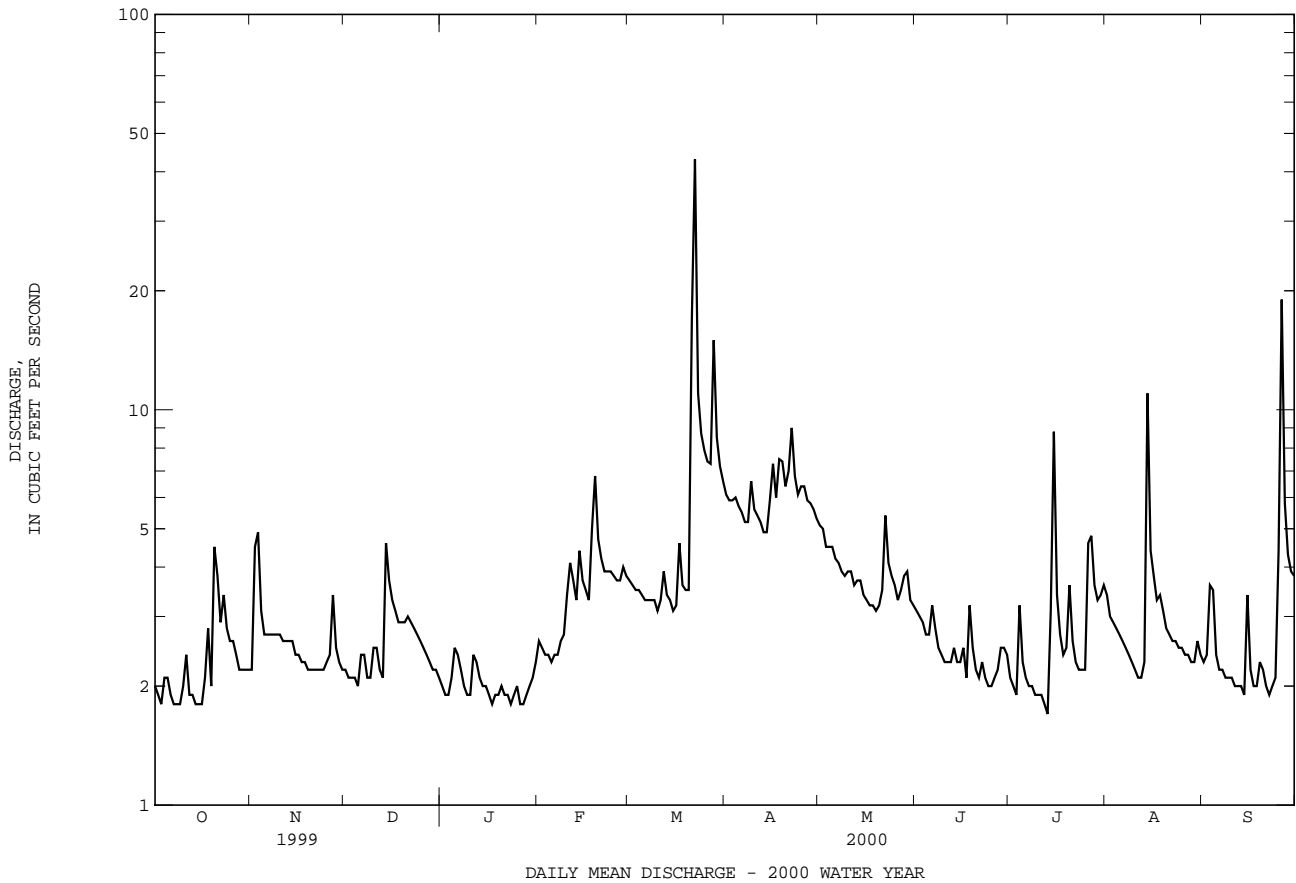
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

MEAN	1.82	2.18	3.18	4.52	5.50	6.50	5.63	4.41	3.01	2.68	2.37	2.07
MAX	4.69	7.56	11.5	10.7	16.2	18.0	11.0	10.5	6.17	16.8	9.38	10.1
(WY)	1959	1998	1973	1978	1998	1994	1983	1984	1979	1975	1967	1960
MIN	.37	.44	.48	.57	1.06	1.70	1.90	1.88	1.22	.42	.51	.44
(WY)	1987	1988	1966	1966	1966	1966	1985	1977	1986	1977	1987	1986

01484100 BEAVERDAM BRANCH AT HOUSTON, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1958 - 2000	
ANNUAL TOTAL	1037.38	1257.7		
ANNUAL MEAN	2.84	3.44	3.62	
HIGHEST ANNUAL MEAN			5.92	1998
LOWEST ANNUAL MEAN			1.20	1966
HIGHEST DAILY MEAN	36 Sep 16	43 Mar 22	98	May 30 1984
LOWEST DAILY MEAN	.43 (a)	1.7 Jul 13	(b).00	Jul 28 1977
ANNUAL SEVEN-DAY MINIMUM	.45 Aug 6	1.9 Jan 21	.06	Jul 19 1977
INSTANTANEOUS PEAK FLOW		63 Mar 22	(c)176	Sep 12 1960
INSTANTANEOUS PEAK STAGE		3.95 Mar 22	5.55	Sep 12 1960
INSTANTANEOUS LOW FLOW		1.6 (d)	(b).00	(f)
ANNUAL RUNOFF (CFSM)	1.00	1.21	1.28	
ANNUAL RUNOFF (INCHES)	13.64	16.53	17.36	
10 PERCENT EXCEEDS	5.0	5.6	6.6	
50 PERCENT EXCEEDS	2.4	2.6	2.8	
90 PERCENT EXCEEDS	.60	2.0	.81	

- a Aug. 10, 11.
- b Result of pumpage for irrigation.
- c From rating curve extended above 75 ft<sup>3</sup>/s.
- d July 12-14.
- f July 18-30, 1977.

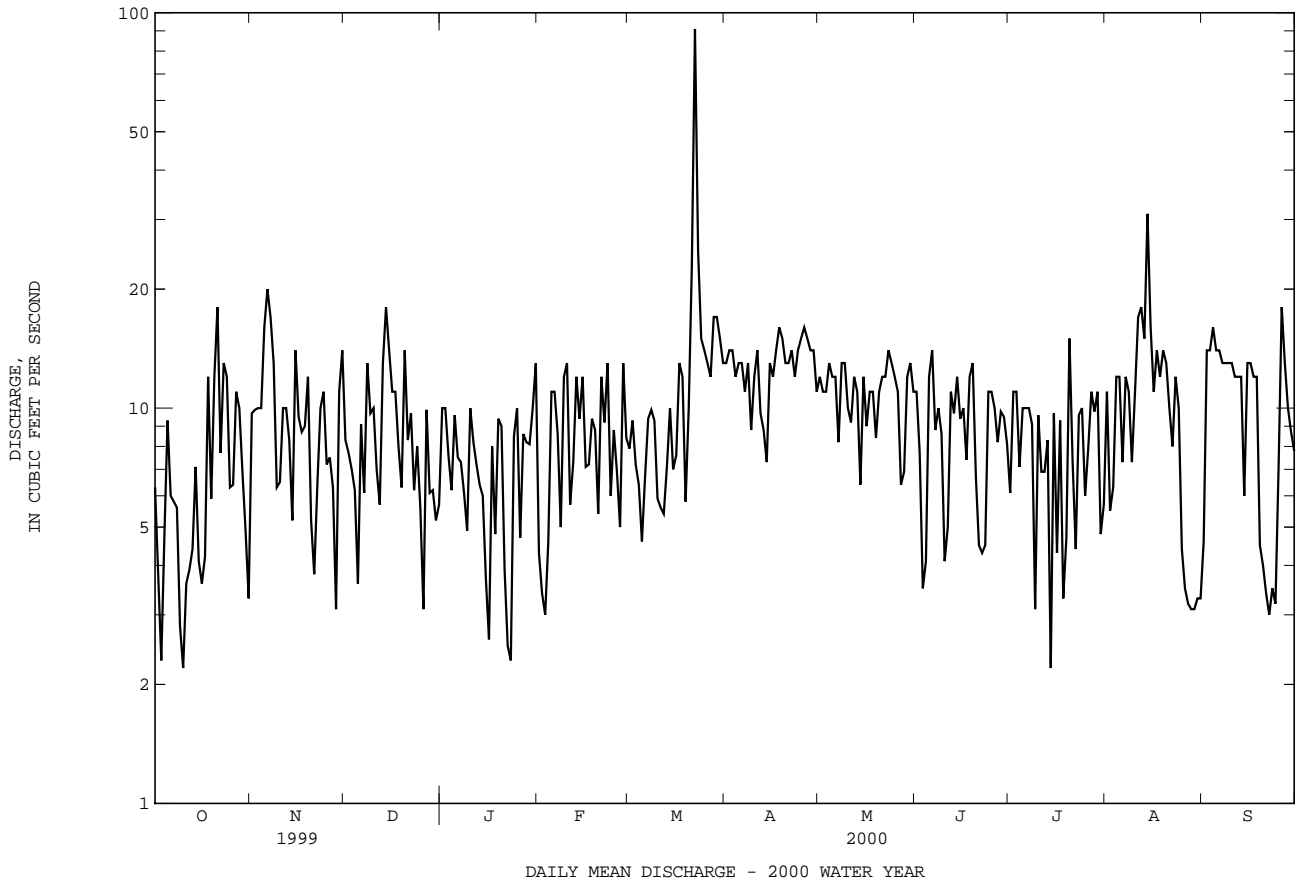




01484500 STOCKLEY BRANCH AT STOCKLEY, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1943 - 2000	
ANNUAL TOTAL	3126.70	3501.6	7.04	
ANNUAL MEAN	8.57	9.57	12.0	1958
HIGHEST ANNUAL MEAN			3.24	1966
LOWEST ANNUAL MEAN			195	Mar 3 1994
HIGHEST DAILY MEAN	53 Sep 16	91 Mar 22	.13	(b)
LOWEST DAILY MEAN	.71 Sep 6	2.2 (a)	.13	Sep 2 1944
ANNUAL SEVEN-DAY MINIMUM	4.0 Aug 31	3.4 Aug 25	(c) 303	Mar 3 1994
INSTANTANEOUS PEAK FLOW		110 Mar 22	5.52	Mar 3 1994
INSTANTANEOUS PEAK STAGE		4.21 Mar 22	.13	(d)
INSTANTANEOUS LOW FLOW		1.7 Jul 14	1.34	
ANNUAL RUNOFF (CFSM)	1.63	1.83	18.26	
ANNUAL RUNOFF (INCHES)	22.20	24.86	14	
10 PERCENT EXCEEDS	14	14	5.1	
50 PERCENT EXCEEDS	8.1	9.5	1.6	
90 PERCENT EXCEEDS	3.1	4.1		

- a Oct. 10, Jan. 23, and July 14.
- b Sept. 2-11, 1944.
- c From rating curve extended above 150 ft<sup>3</sup>/s.
- d Sept. 1-11, 1944.





## INDIAN RIVER BASIN

01484525 MILLSBORO POND OUTLET AT MILLSBORO, DE

LOCATION.--Lat 38°35'40", long 75°17'29", Sussex County, Hydrologic Unit 02060010, on right bank just upstream from Millsboro Pond Dam, 10 ft upstream from bridge on State Highway 24, at Millsboro.

DRAINAGE AREA.--66.0 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1986 to September 1988, March 1991 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1.98 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (missing or questionable record), which are poor. Outflow from lake controlled by sluice gates at outlet. No gate openings during water year. Natural flow of stream affected by inflow from sand mine dewatering process. U.S. Geological Survey gage-height telemeter at location. Several measurements of water temperature were made during the period.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 715 ft<sup>3</sup>/s (estimated), Mar 22, gage height, 3.93 ft; minimum discharge, 40 ft<sup>3</sup>/s, Oct 14-16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	61	60	67	92	77	171	140	70	91	66	73
2	67	71	54	67	73	75	162	121	67	67	59	81
3	61	76	59	67	68	70	e150	121	62	66	57	174
4	60	80	53	65	64	68	e160	113	58	66	61	253
5	64	74	52	74	68	67	e150	107	59	64	112	215
6	63	64	66	70	70	64	140	102	72	63	109	156
7	60	65	66	82	70	64	138	102	80	60	76	131
8	60	64	70	72	70	66	130	93	67	56	73	113
9	55	61	65	67	71	64	144	94	64	53	63	109
10	51	62	63	74	74	59	137	87	60	52	60	106
11	53	58	69	76	78	e61	135	82	55	57	103	95
12	53	57	64	70	77	e68	119	77	58	54	197	87
13	51	60	68	70	77	e64	110	74	72	51	172	84
14	46	63	80	61	79	e64	107	72	64	49	218	83
15	40	58	90	60	82	e64	131	70	65	62	250	104
16	41	62	87	62	74	63	179	79	69	67	163	111
17	60	62	111	66	69	100	173	69	64	58	133	103
18	136	55	78	64	76	96	178	67	137	53	111	94
19	136	56	74	63	100	78	187	65	153	50	107	83
20	94	53	71	67	97	70	188	64	107	90	107	74
21	109	56	76	68	81	e200	185	79	69	113	103	74
22	133	53	85	63	80	e540	181	113	70	71	94	71
23	98	53	78	60	81	e550	177	136	70	61	84	67
24	84	54	74	61	78	e250	170	118	67	60	84	69
25	e76	59	71	76	75	227	172	102	65	61	84	98
26	e69	69	71	e72	78	217	176	82	63	77	80	207
27	69	73	69	66	78	209	176	74	60	102	72	264
28	67	67	70	62	82	208	174	74	67	89	70	203
29	68	63	69	60	81	220	165	77	99	70	70	146
30	67	61	67	63	---	209	157	75	112	69	71	122
31	63	---	67	104	---	186	---	71	---	64	73	---
TOTAL	2224	1870	2197	2119	2243	4418	4722	2800	2245	2066	3182	3650
MEAN	71.7	62.3	70.9	68.4	77.3	143	157	90.3	74.8	66.6	103	122
MAX	136	80	111	104	100	550	188	140	153	113	250	264
MIN	40	53	52	60	64	59	107	64	55	49	57	67
CFSM	1.09	.94	1.07	1.04	1.17	2.16	2.38	1.37	1.13	1.01	1.56	1.84
IN.	1.25	1.05	1.24	1.19	1.26	2.49	2.66	1.58	1.27	1.16	1.79	2.06

e Estimated

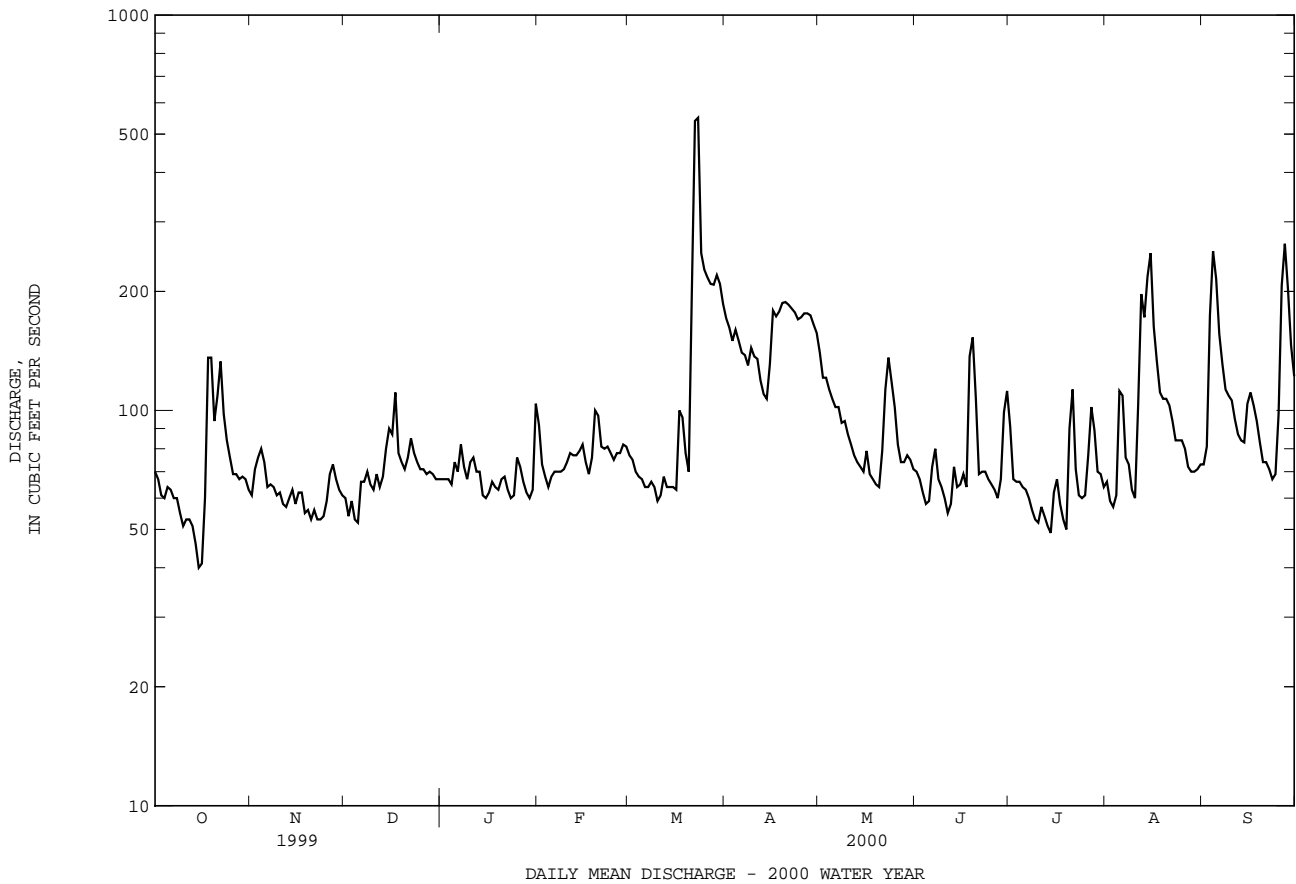
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	50.5	53.9	79.5	105	148	169	136	99.0	65.6	50.1	51.6	53.4			
MAX	109	81.6	198	174	428	373	184	151	85.6	75.8	103	122			
(WY)	1997	1998	1997	1998	1998	1994	1994	1996	1993	1996	2000	2000			
MIN	20.8	24.3	33.2	49.6	68.1	94.1	69.1	47.3	34.0	23.2	22.1	20.1			
(WY)	1987	1988	1988	1999	1999	1992	1995	1986	1986	1986	1999	1986			

01484525 MILLSBORO POND OUTLET AT MILLSBORO, DE--Continued

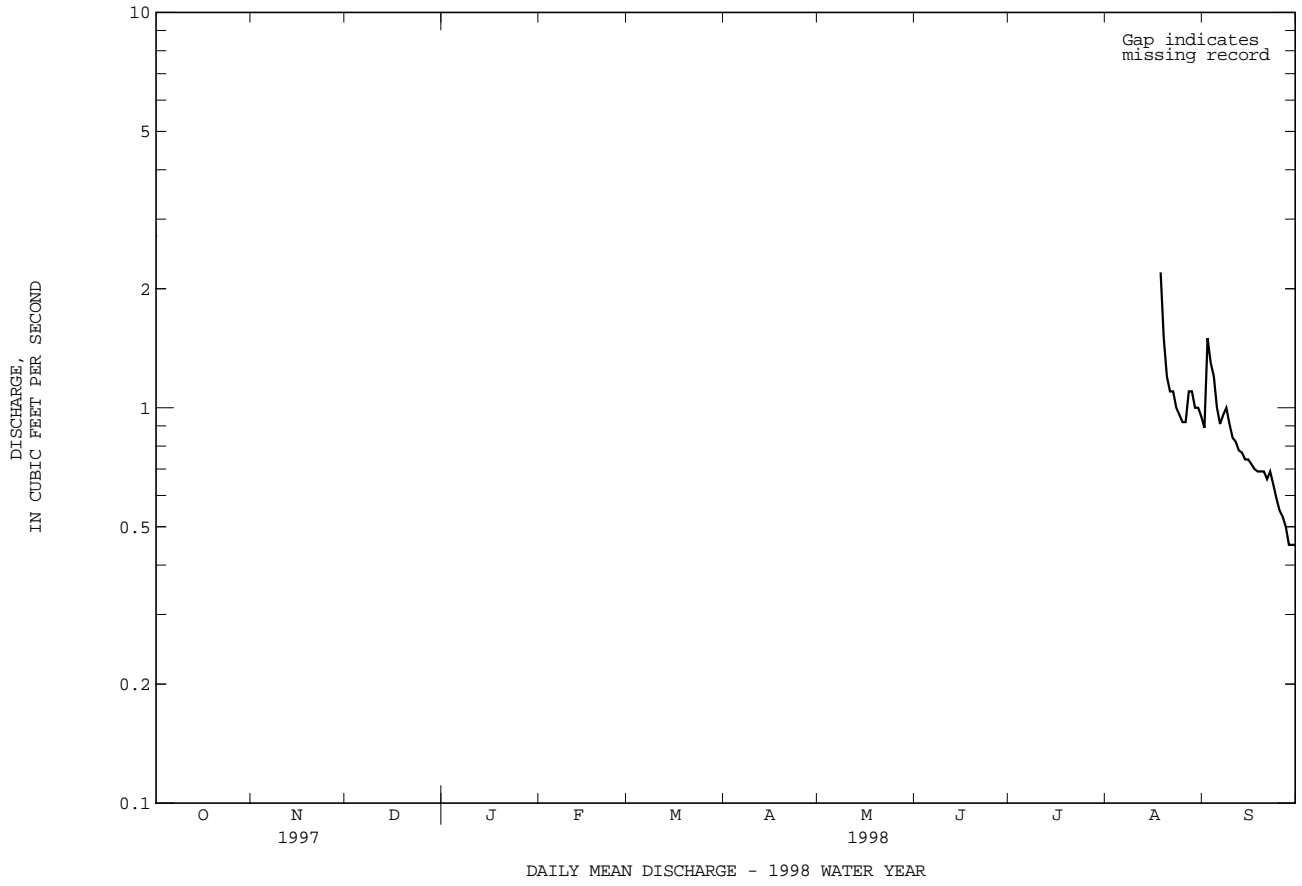
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 2000	
ANNUAL TOTAL	24055		33736		89.7	
ANNUAL MEAN	65.9		92.2		132	
HIGHEST ANNUAL MEAN					1988	
LOWEST ANNUAL MEAN					55.0	
HIGHEST DAILY MEAN	400	Sep 18	(e)550	Mar 23	1260	Mar 4 1994
LOWEST DAILY MEAN	13	(a)	40	Oct 15	(b, e).00	Aug 30 1998
ANNUAL SEVEN-DAY MINIMUM	15	Aug 7	48	Oct 10	15	Aug 7 1999
INSTANTANEOUS PEAK FLOW			(e)715	Mar 22	(c)1770	Mar 3 1994
INSTANTANEOUS PEAK STAGE			3.93	Mar 22	4.94	Mar 3 1994
INSTANTANEOUS LOW FLOW			40	(d)	(b, e).00	(f)
ANNUAL RUNOFF (CFSM)	1.00		1.40		1.36	
ANNUAL RUNOFF (INCHES)	13.56		19.01		18.46	
10 PERCENT EXCEEDS	108		164		160	
50 PERCENT EXCEEDS	64		72		70	
90 PERCENT EXCEEDS	26		59		27	

e Estimated.  
a Aug. 8, 9.  
b As a result of lake being filled after gages were closed.  
c From rating curve extended above 1,500 ft<sup>3</sup>/s  
d Oct. 14-16.  
f Aug. 29-31, 1998.





01484534 SWAN CREEK NEAR MILLSBORO, DE--Continued

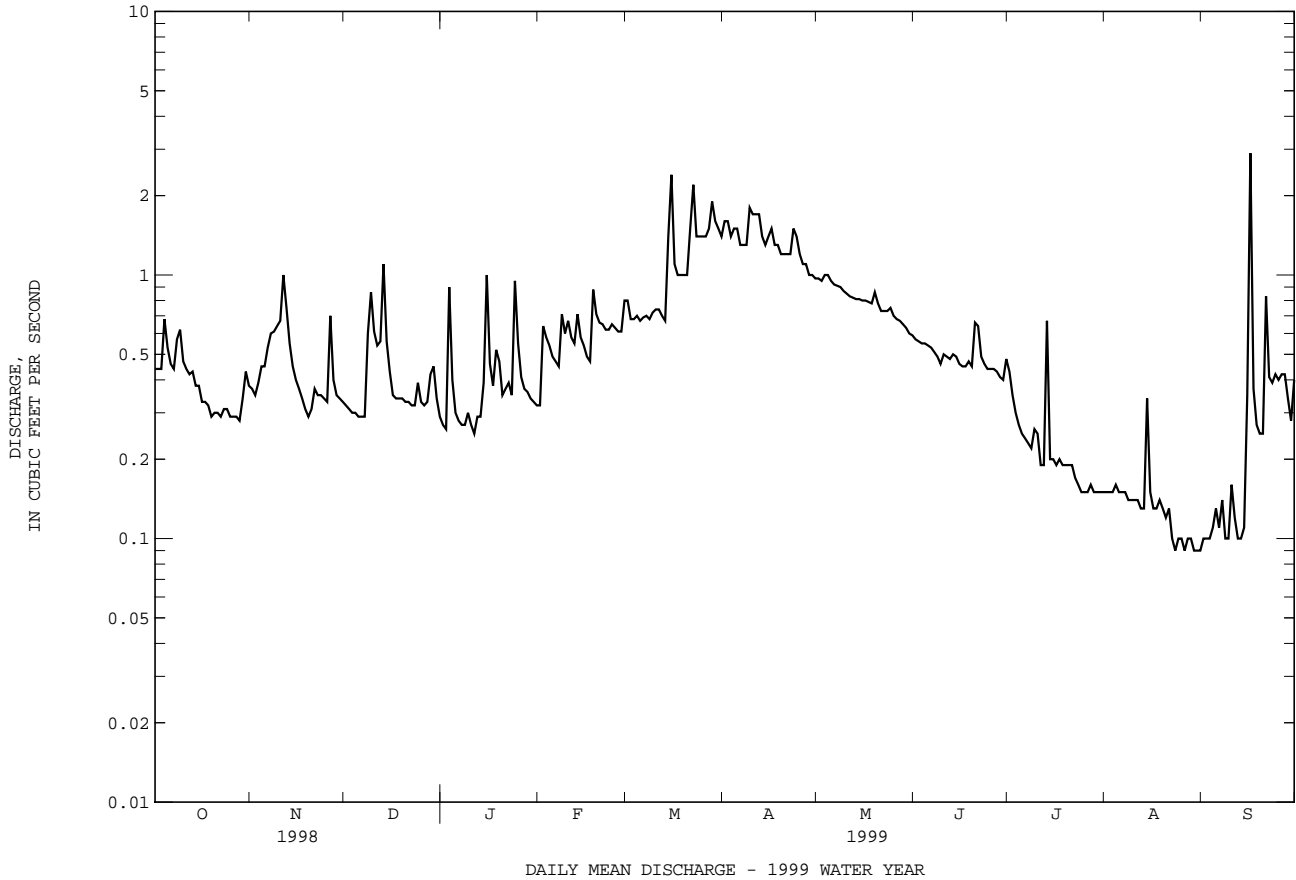




01484534 SWAN CREEK NEAR MILLSBORO, DE--Continued

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1998 - 1999	
ANNUAL TOTAL	205.21			
ANNUAL MEAN	.56		.56	1999
HIGHEST ANNUAL MEAN			.56	1999
LOWEST ANNUAL MEAN			.56	1999
HIGHEST DAILY MEAN	2.9	Sep 16	2.9	Sep 16 1999
LOWEST DAILY MEAN	.09	(a)	.09	(a)
ANNUAL SEVEN-DAY MINIMUM	.09	Aug 25	.09	Aug 25 1999
INSTANTANEOUS PEAK FLOW	8.9	Sep 16	(b)11	Aug 18 1998
INSTANTANEOUS PEAK STAGE	1.06	Sep 16	1.15	Aug 18 1998
INSTANTANEOUS LOW FLOW	.09	(c)	.09	(c)
ANNUAL RUNOFF (CFSM)	.11		.11	
ANNUAL RUNOFF (INCHES)	1.47		1.47	
10 PERCENT EXCEEDS	1.2		1.2	
50 PERCENT EXCEEDS	.44		.47	
90 PERCENT EXCEEDS	.15		.15	

- a Aug. 23,26,29-31, 1999.
- b From rating curve extended above 2.6 ft<sup>3</sup>/s.
- c Aug. 20-26, 29-31, 1999.





01484534 SWAN CREEK NEAR MILLSBORO, DE--Continued

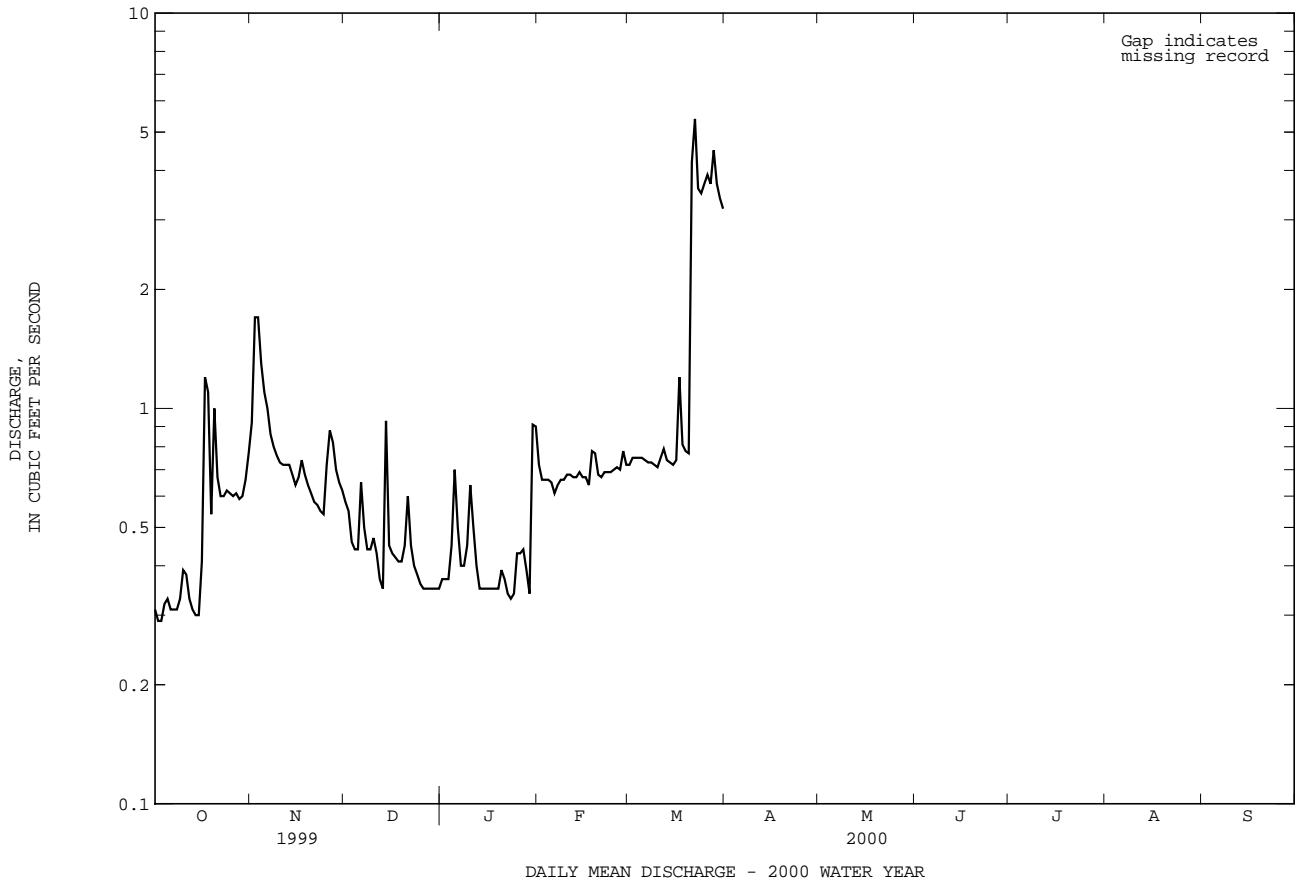
SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	220.62		
ANNUAL MEAN	.60		.56
HIGHEST ANNUAL MEAN			.56 1999
LOWEST ANNUAL MEAN			.56 1999
HIGHEST DAILY MEAN	2.9	Sep 16	5.4 Mar 22 2000
LOWEST DAILY MEAN	.09	(a)	.09 (a)
ANNUAL SEVEN-DAY MINIMUM	.09	Aug 25	.09 Aug 25 1999
INSTANTANEOUS PEAK FLOW			(b)13 Mar 21 2000
INSTANTANEOUS PEAK STAGE			1.22 Mar 21 2000
INSTANTANEOUS LOW FLOW			.09 (c)
ANNUAL RUNOFF (CFSM)	.12		.11
ANNUAL RUNOFF (INCHES)	1.58		1.47
10 PERCENT EXCEEDS	1.3		1.2
50 PERCENT EXCEEDS	.50		.54
90 PERCENT EXCEEDS	.15		.19

- a Aug. 23,26,29-31, 1999.
- b From rating curve extended above 2.6 ft<sup>3</sup>/s.
- c Aug. 20-26, 29-31, 1999.







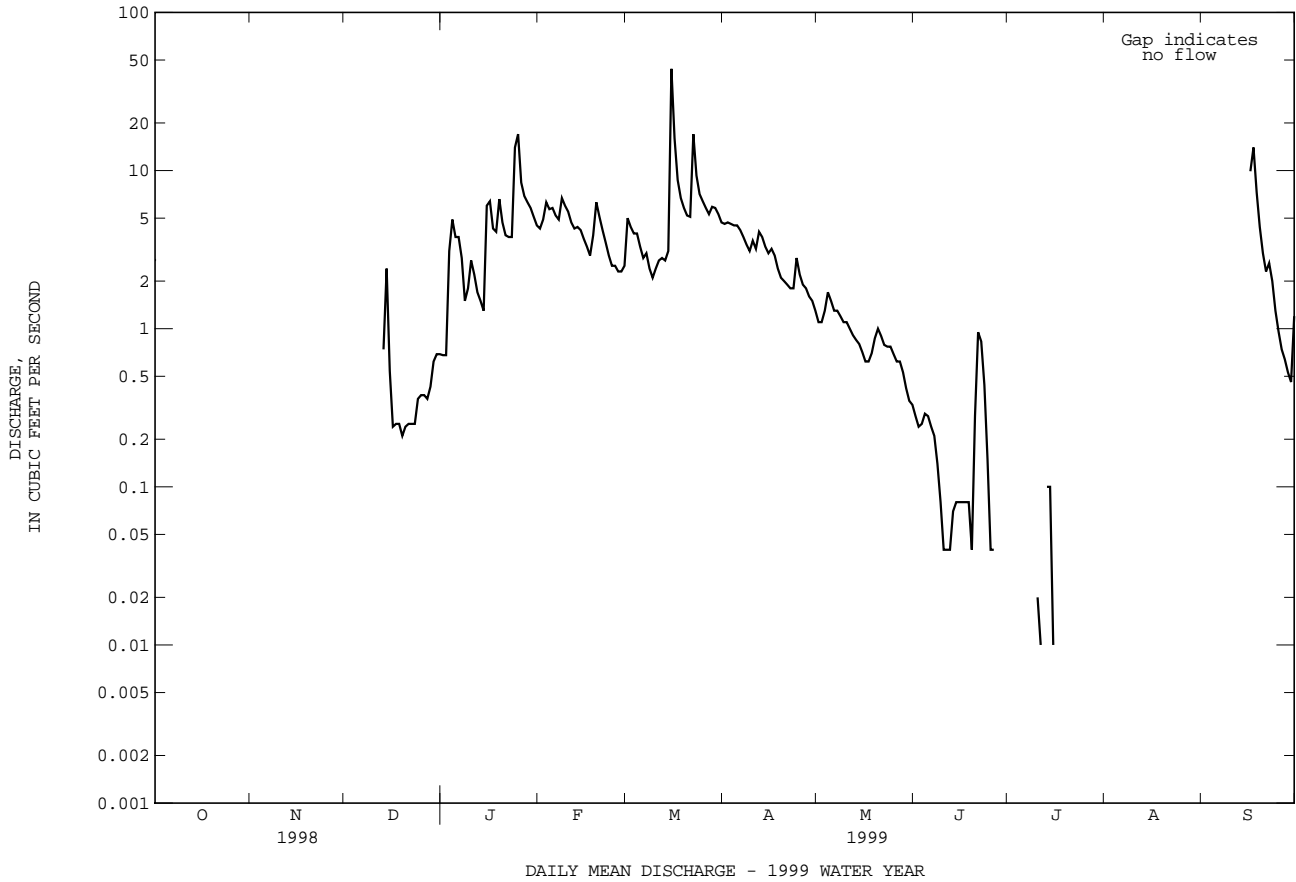
01484600 BLACKWATER CREEK NEAR CLARKESVILLE, DE--Continued

SUMMARY STATISTICS

FOR 1999 WATER YEAR

ANNUAL TOTAL	657.30	
ANNUAL MEAN	1.80	
HIGHEST DAILY MEAN	44	Mar 15
LOWEST DAILY MEAN	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.00	Oct 1
INSTANTANEOUS PEAK FLOW	66	Mar 15
INSTANTANEOUS PEAK STAGE	3.42	Mar 15
INSTANTANEOUS LOW FLOW	.00	(a)
ANNUAL RUNOFF (CFSM)	.52	
ANNUAL RUNOFF (INCHES)	7.05	
10 PERCENT EXCEEDS	5.1	
50 PERCENT EXCEEDS	.28	
90 PERCENT EXCEEDS	.00	

a Many days.





01484600 BLACKWATER CREEK NEAR CLARKESVILLE, DE--Continued

SUMMARY STATISTICS

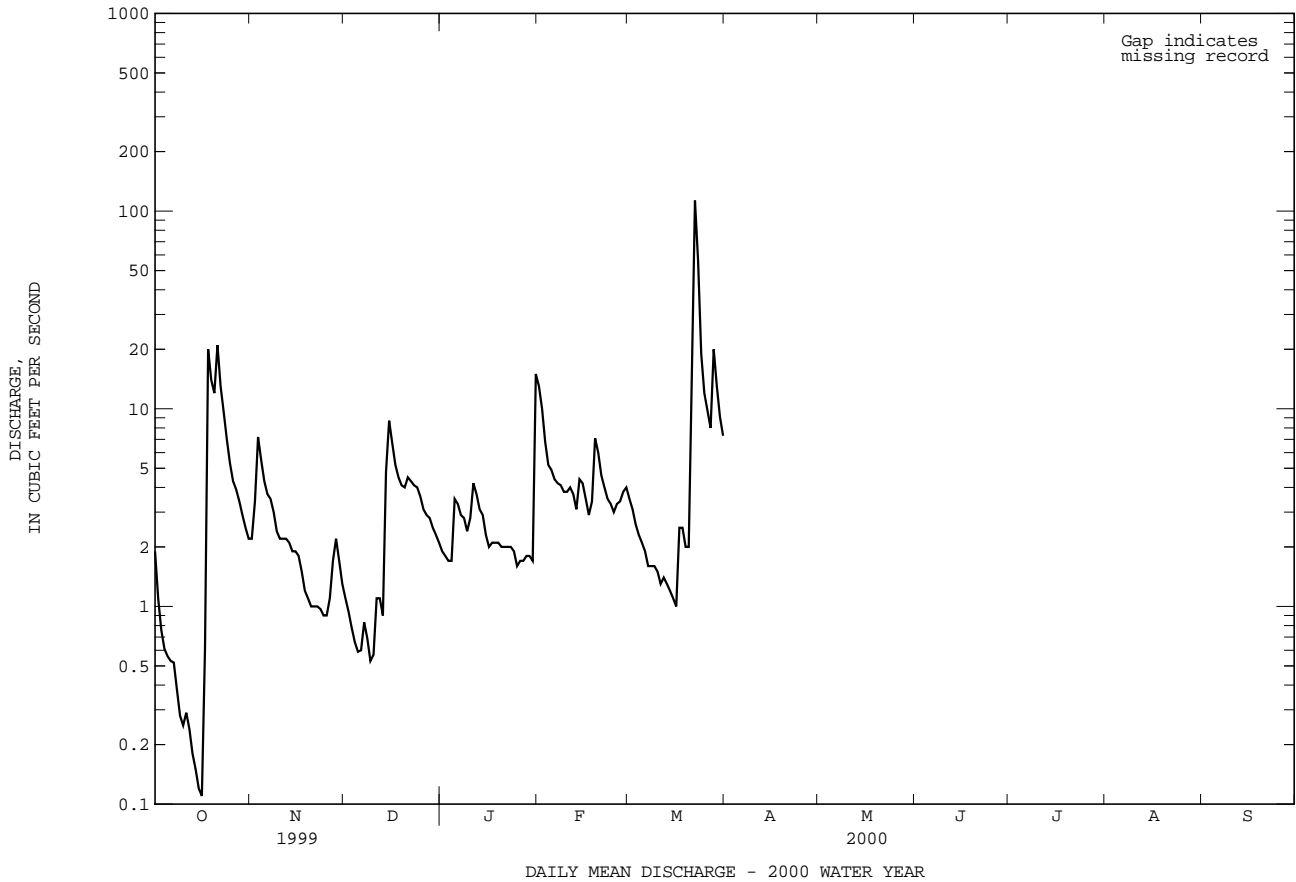
FOR 1999 CALENDAR YEAR

WATER YEARS 1999 - 2000

ANNUAL TOTAL	929.12		
ANNUAL MEAN	2.55		1.80
HIGHEST ANNUAL MEAN			1.80 1999
LOWEST ANNUAL MEAN			1.80 1999
HIGHEST DAILY MEAN	44	Mar 15	113 Mar 22 2000
LOWEST DAILY MEAN	.00	(a)	.00 (a)
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 27	.00 Oct 1 1998
INSTANTANEOUS PEAK FLOW			125 Mar 22 2000
INSTANTANEOUS PEAK STAGE			4.52 Mar 22 2000
INSTANTANEOUS LOW FLOW			.00 (b)
ANNUAL RUNOFF (CFSM)	.73		.52
ANNUAL RUNOFF (INCHES)	9.96		7.05
10 PERCENT EXCEEDS	5.8		5.8
50 PERCENT EXCEEDS	1.3		1.3
90 PERCENT EXCEEDS	.00		.00

a Many days.

b No flow at times in 1998 and 1999.





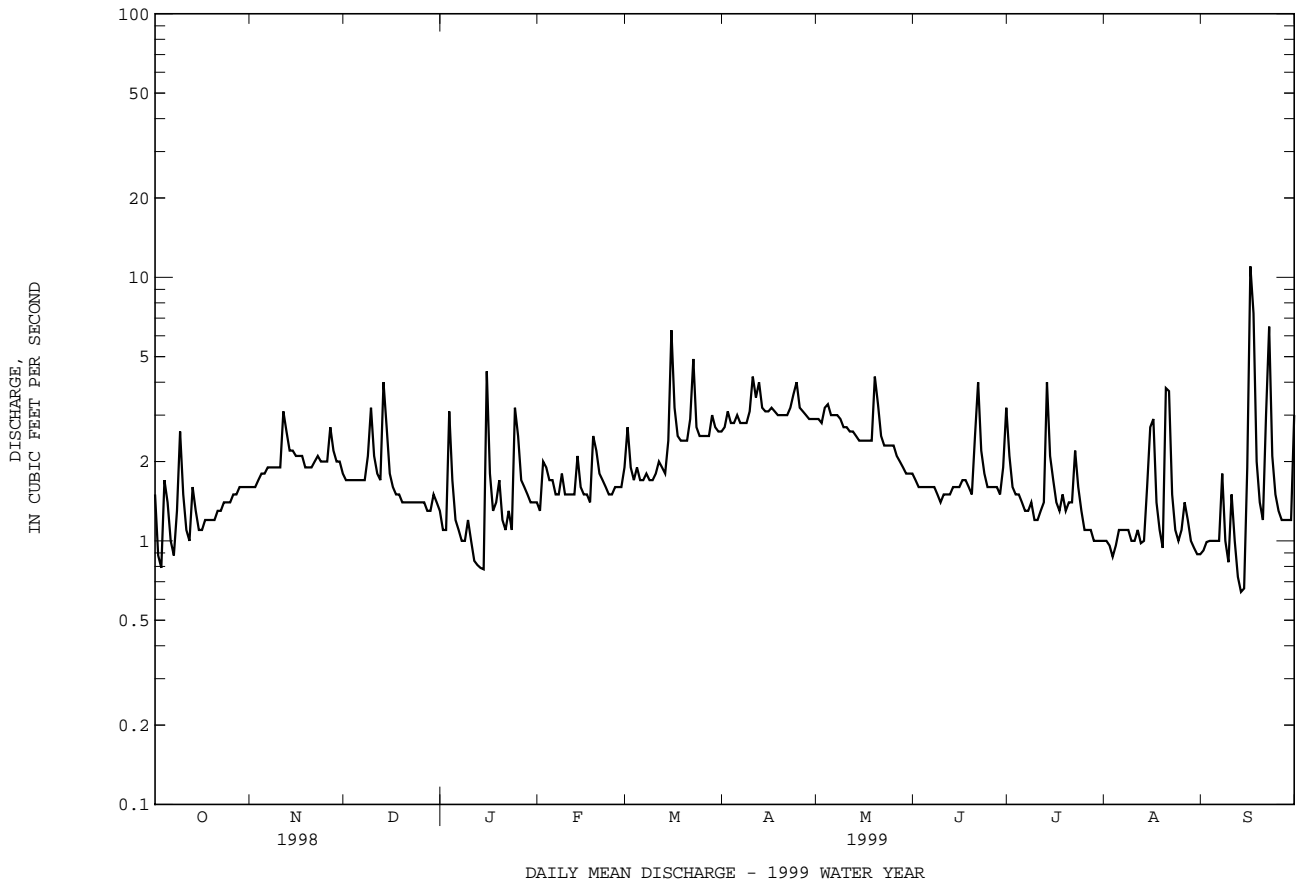




01484548 BUNDICKS BRANCH AT ROBINSONVILLE, DE--Continued

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1998 - 1999	
ANNUAL TOTAL	704.17			
ANNUAL MEAN	1.93		1.93	
HIGHEST ANNUAL MEAN			1.93	1999
LOWEST ANNUAL MEAN			1.93	1999
HIGHEST DAILY MEAN	11	Sep 16	11	Sep 16 1999
LOWEST DAILY MEAN	.64	Sep 13	.64	Sep 13 1999
ANNUAL SEVEN-DAY MINIMUM	.91	Sep 8	.84	Sep 24 1998
INSTANTANEOUS PEAK FLOW	14	Sep 16	14	Sep 16 1999
INSTANTANEOUS PEAK STAGE	1.74	Sep 16	1.74	Sep 16 1999
INSTANTANEOUS LOW FLOW	.64	(a)	.64	(a)
ANNUAL RUNOFF (CFSM)	.28		.28	
ANNUAL RUNOFF (INCHES)	3.80		3.80	
10 PERCENT EXCEEDS	3.0		3.0	
50 PERCENT EXCEEDS	1.7		1.6	
90 PERCENT EXCEEDS	1.0		1.0	

a Sept. 12-14, 1999.







01484548 BUNDICKS BRANCH AT ROBINSONVILLE, DE--Continued

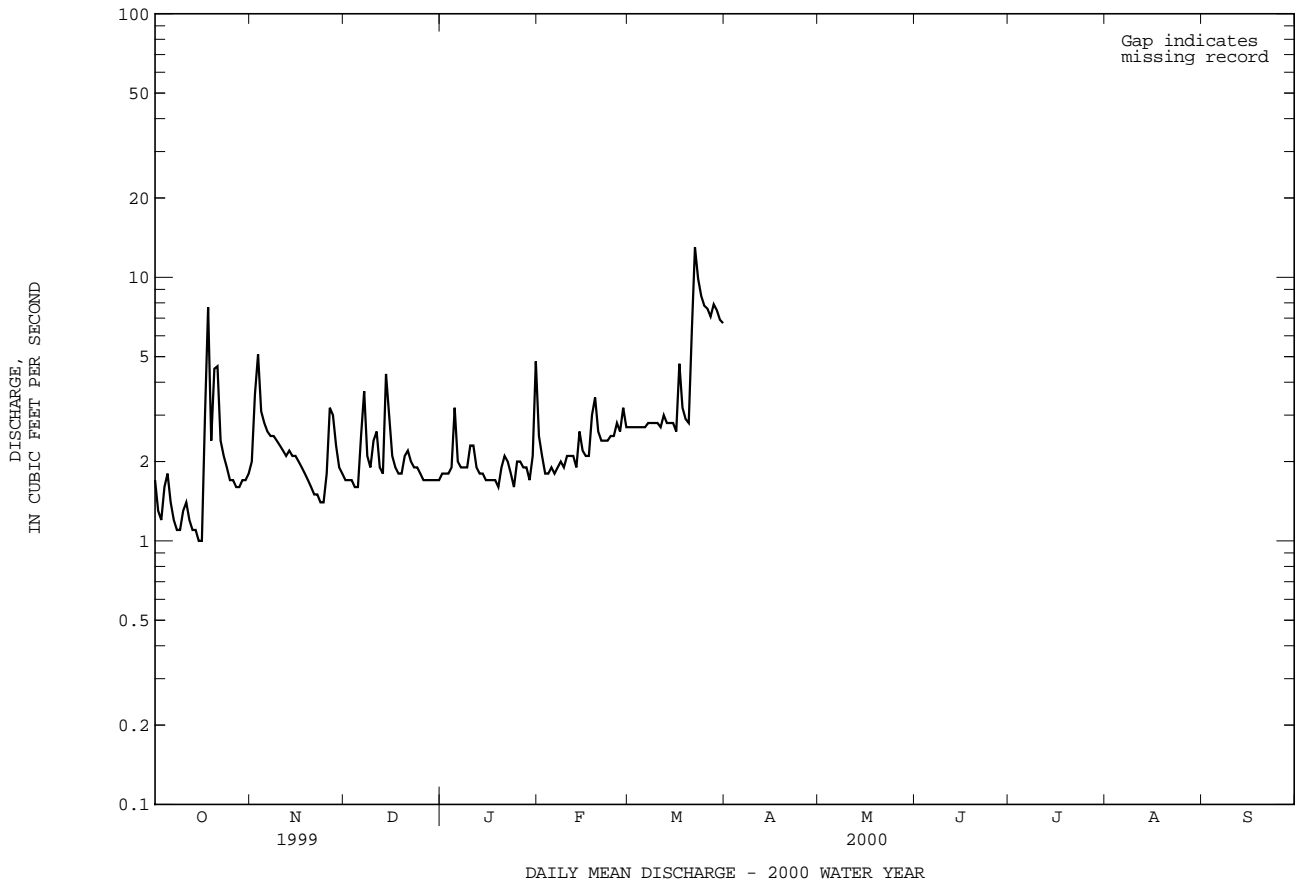
SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

WATER YEARS 1998 - 2000

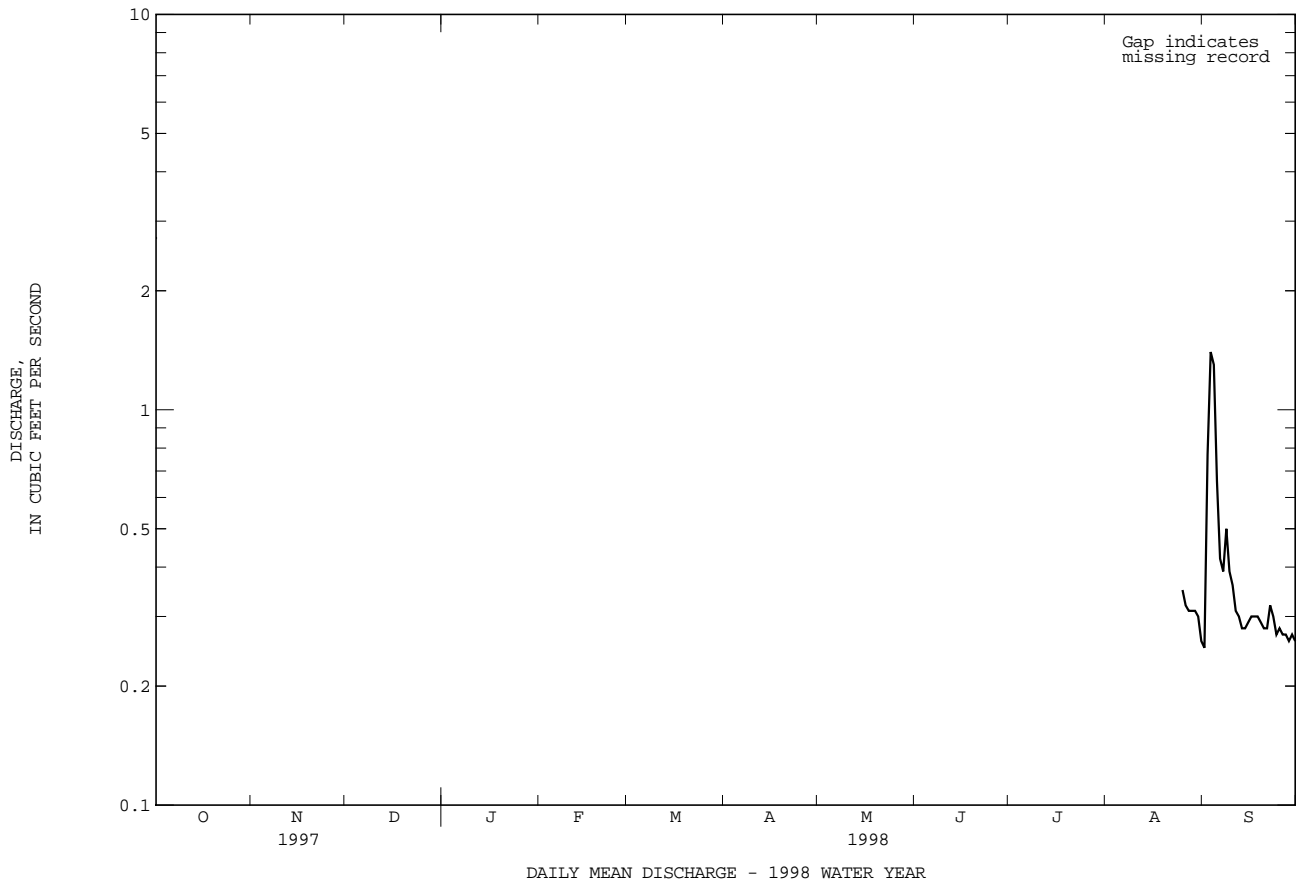
ANNUAL TOTAL	741.12		
ANNUAL MEAN	2.03		1.92
HIGHEST ANNUAL MEAN			1.92 1999
LOWEST ANNUAL MEAN			1.92 1999
HIGHEST DAILY MEAN	11	Sep 16	13 Mar 22 2000
LOWEST DAILY MEAN	.64	Sep 13	.64 Sep 13 1999
ANNUAL SEVEN-DAY MINIMUM	.91	Sep 8	.84 Sep 24 1998
INSTANTANEOUS PEAK FLOW			14 Sep 16 1999
INSTANTANEOUS PEAK STAGE			1.74 Sep 16 1999
INSTANTANEOUS LOW FLOW			.64 (a)
ANNUAL RUNOFF (CFSM)	.29		.28
ANNUAL RUNOFF (INCHES)	4.00		3.78
10 PERCENT EXCEEDS	3.1		3.1
50 PERCENT EXCEEDS	1.7		1.8
90 PERCENT EXCEEDS	1.0		1.1

a Sept. 12-14, 1999.





01484668 MUNCHY BRANCH NEAR REHOBETH BEACH, DE--Continued

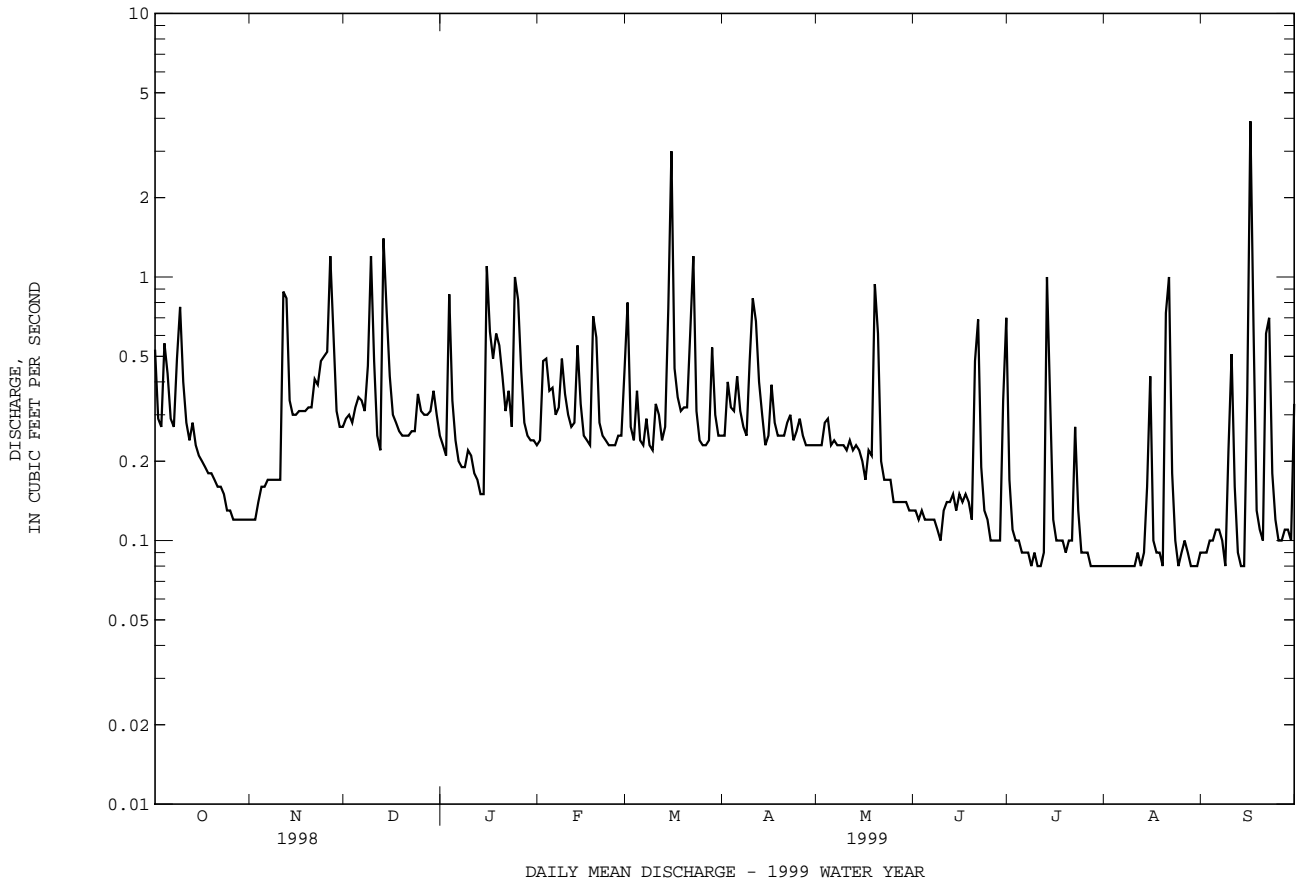




01484668 MUNCHY BRANCH NEAR REHOBETH BEACH, DE--Continued

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1998 - 1999	
ANNUAL TOTAL	107.05			
ANNUAL MEAN	.29		.29	
HIGHEST ANNUAL MEAN			.29	1999
LOWEST ANNUAL MEAN			.29	1999
HIGHEST DAILY MEAN	3.9	Sep 16	3.9	Sep 16 1999
LOWEST DAILY MEAN	.08	(a)	.08	(a)
ANNUAL SEVEN-DAY MINIMUM	.08	Jul 27	.08	Jul 27 1999
INSTANTANEOUS PEAK FLOW	8.5	Sep 16	(b)8.5	Sep 16 1999
INSTANTANEOUS PEAK STAGE	1.52	Sep 16	1.52	Sep 16 1999
INSTANTANEOUS LOW FLOW	.08	(a)	.08	(a)
ANNUAL RUNOFF (CFSM)	.56		.56	
ANNUAL RUNOFF (INCHES)	7.66		7.66	
10 PERCENT EXCEEDS	.55		.55	
50 PERCENT EXCEEDS	.23		.25	
90 PERCENT EXCEEDS	.09		.09	

a Many days during the 1999 water year.  
 b From rating curve extended above 4.5 ft<sup>3</sup>/s.





01484668 MUNCHY BRANCH NEAR REHOBETH BEACH, DE--Continued

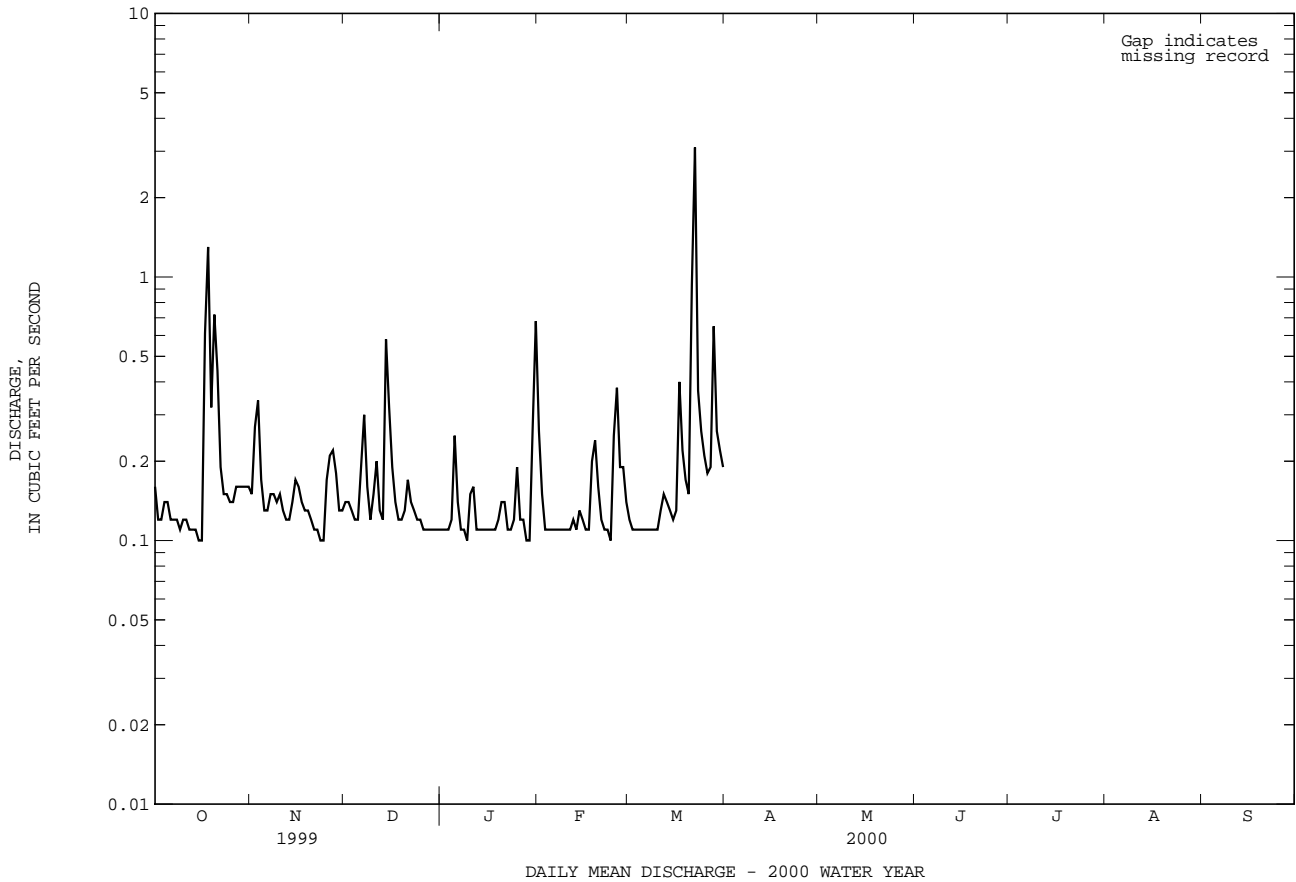
SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	92.88		
ANNUAL MEAN	.25		.29
HIGHEST ANNUAL MEAN			.29 1999
LOWEST ANNUAL MEAN			.29 1999
HIGHEST DAILY MEAN	3.9	Sep 16	3.9 Sep 16 1999
LOWEST DAILY MEAN	.08	(a)	.08 (a)
ANNUAL SEVEN-DAY MINIMUM	.08	Jul 27	.08 Jul 27 1999
INSTANTANEOUS PEAK FLOW			(b)8.5 Sep 16 1999
INSTANTANEOUS PEAK STAGE			1.52 Sep 16 1999
INSTANTANEOUS LOW FLOW			.08 (a)
ANNUAL RUNOFF (CFSM)	.49		.56
ANNUAL RUNOFF (INCHES)	6.64		7.66
10 PERCENT EXCEEDS	.49		.49
50 PERCENT EXCEEDS	.17		.19
90 PERCENT EXCEEDS	.09		.10

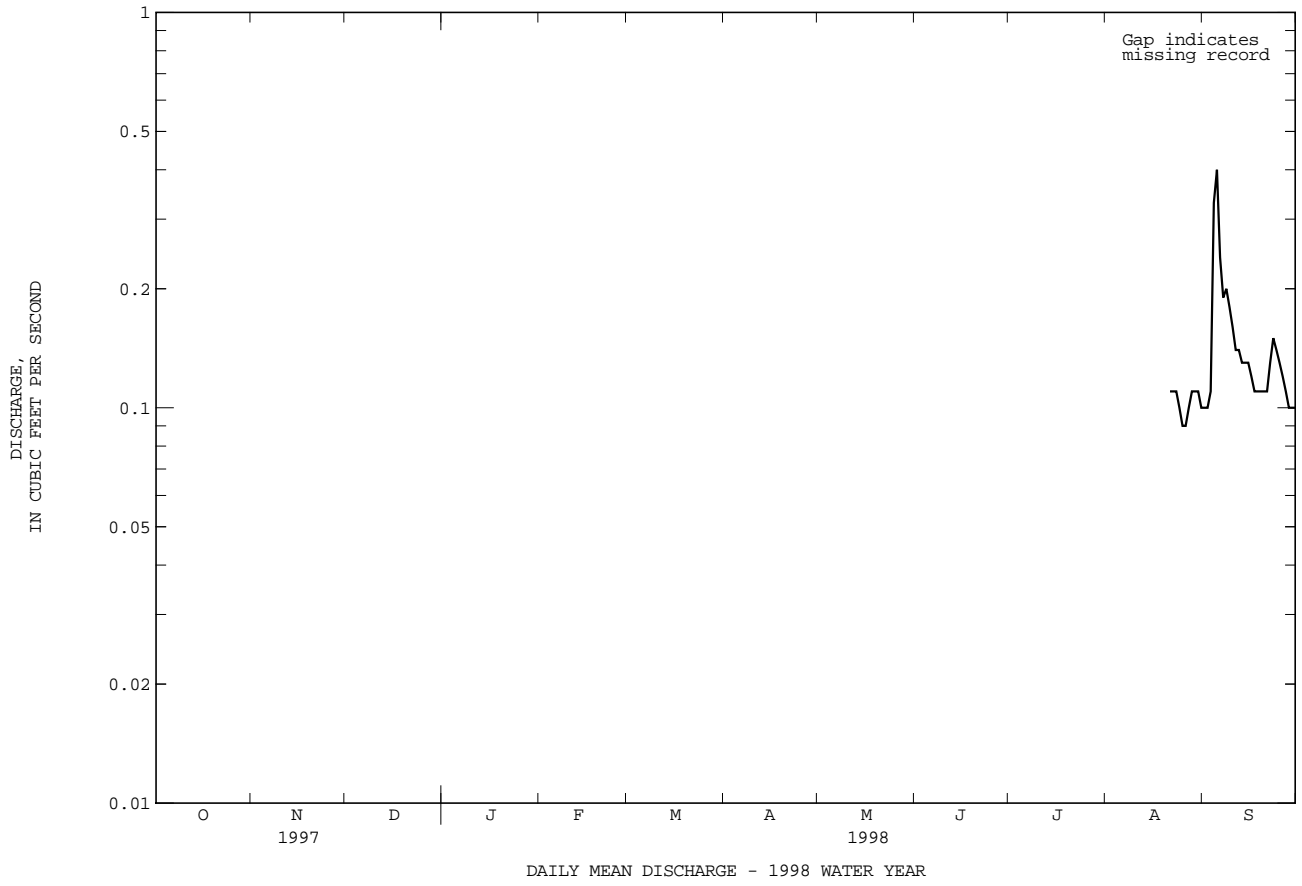
- a Many days during the 1999 water year.
- b From rating curve extended above 4.5 ft<sup>3</sup>/s.







01484695 BEAVERDAM DITCH NEAR MILLVILLE, DE--Continued

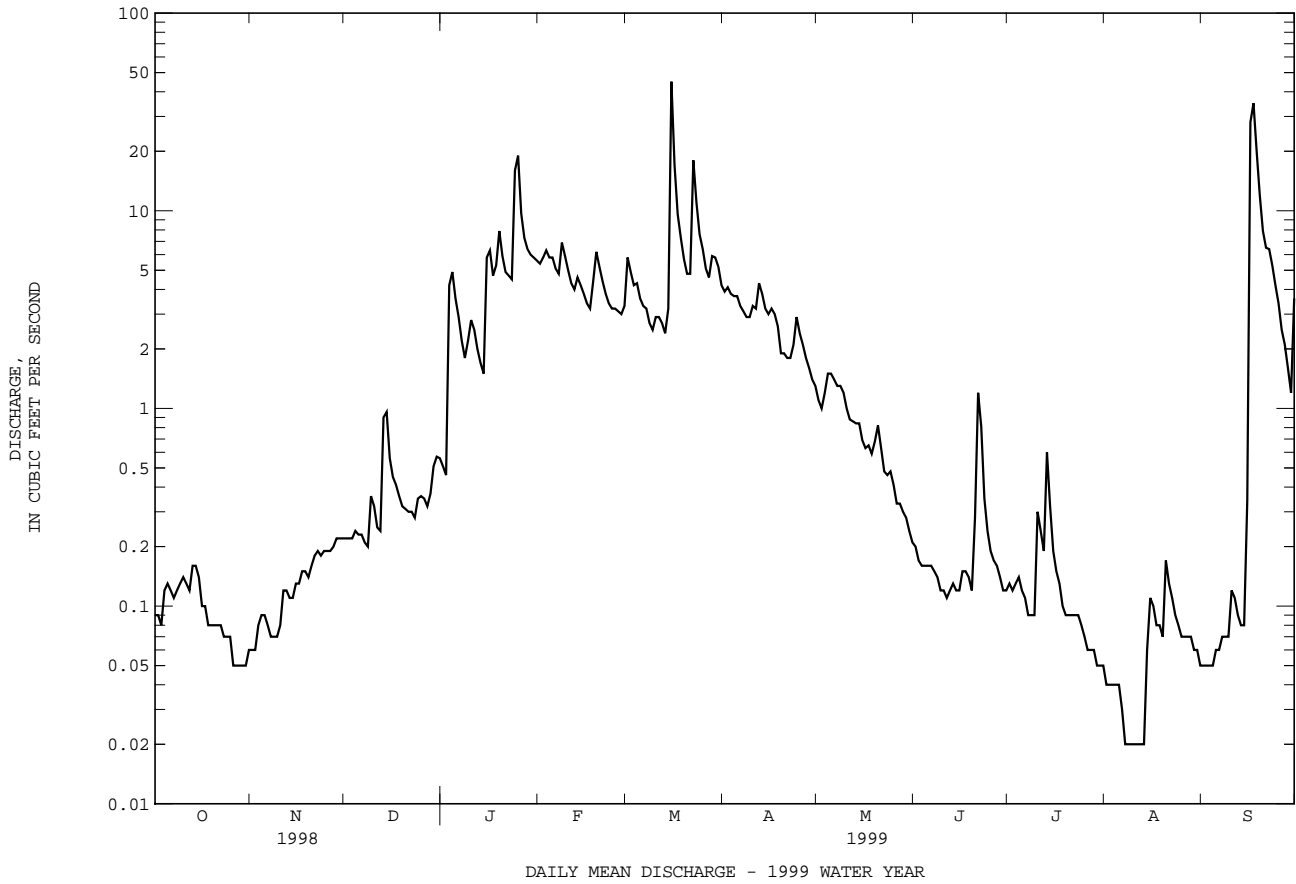




01484695 BEAVERDAM DITCH NEAR MILLVILLE, DE--Continued

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1998 - 1999	
ANNUAL TOTAL	783.39			
ANNUAL MEAN	2.15		2.15	
HIGHEST ANNUAL MEAN			2.15	1999
LOWEST ANNUAL MEAN			2.15	1999
HIGHEST DAILY MEAN	45	Mar 15	45	Mar 15 1999
LOWEST DAILY MEAN	.02	(a)	.02	(a)
ANNUAL SEVEN-DAY MINIMUM	.02	Aug 7	.02	Aug 7 1999
INSTANTANEOUS PEAK FLOW	58	Mar 15	(b)58	Mar 15 1999
INSTANTANEOUS PEAK STAGE	3.22	Mar 15	3.22	Mar 15 1999
INSTANTANEOUS LOW FLOW	.02	(c)	.02	(c)
ANNUAL RUNOFF (CFSM)	.95		.95	
ANNUAL RUNOFF (INCHES)	12.95		12.96	
10 PERCENT EXCEEDS	5.7		5.3	
50 PERCENT EXCEEDS	.32		.23	
90 PERCENT EXCEEDS	.06		.07	

- a Aug. 7-13, 1999.
- b From rating curve extended above 55 ft<sup>3</sup>/s.
- c Aug. 1, 8-14, 1999.

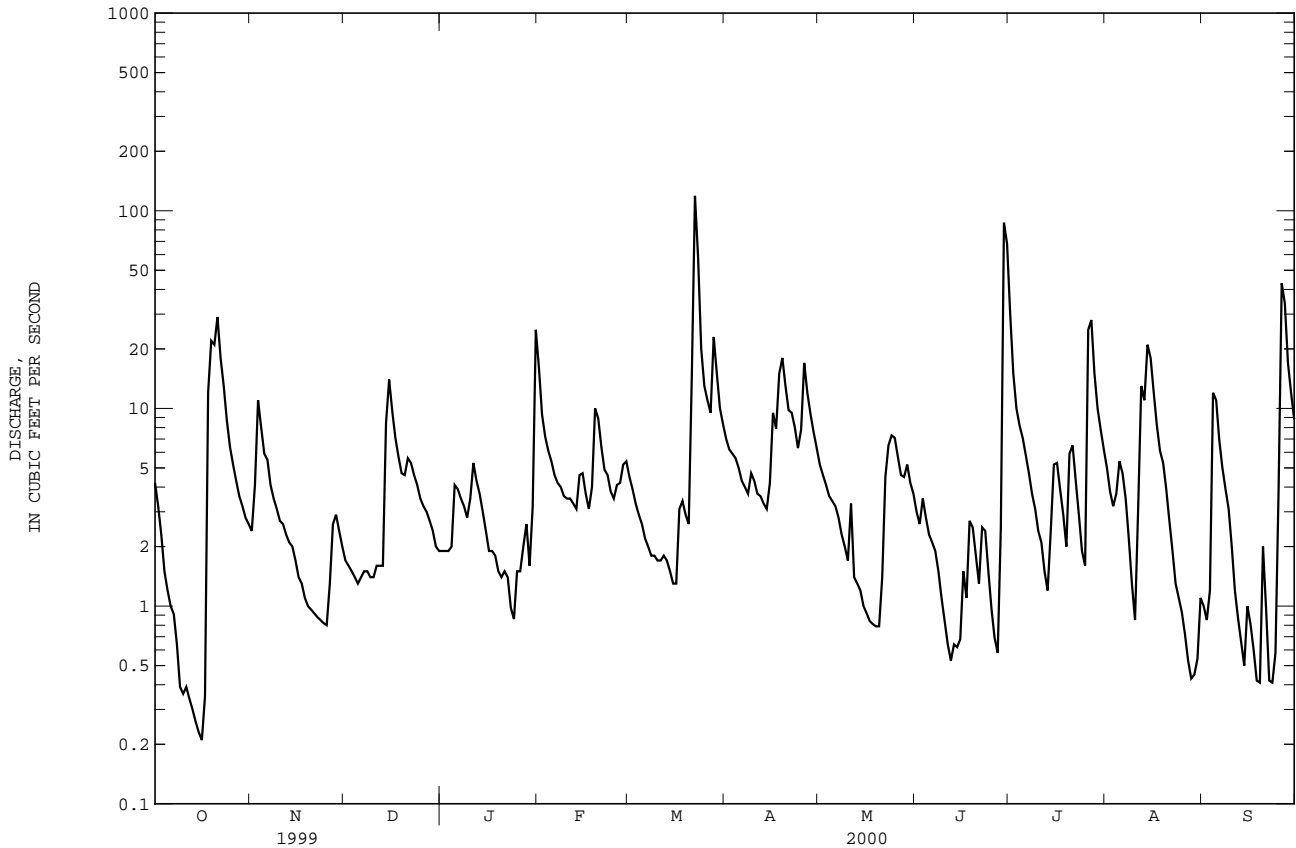




01484695 BEAVERDAM DITCH NEAR MILLVILLE, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	1128.71		2049.03			
ANNUAL MEAN	3.09		5.60		3.87	
HIGHEST ANNUAL MEAN					5.60 2000	
LOWEST ANNUAL MEAN					2.15 1999	
HIGHEST DAILY MEAN	45	Mar 15	119	Mar 22	119	Mar 22 2000
LOWEST DAILY MEAN	.02	(a)	.21	Oct 16	.02	(a)
ANNUAL SEVEN-DAY MINIMUM	.02	Aug 7	.30	Oct 11	.02	Aug 7 1999
INSTANTANEOUS PEAK FLOW			147	Mar 22	(b)147	Mar 22 2000
INSTANTANEOUS PEAK STAGE			4.97	Mar 22	4.97	Mar 22 2000
INSTANTANEOUS LOW FLOW			.20	Oct 17	.02	(c)
ANNUAL RUNOFF (CFSM)	1.39		2.51		1.74	
ANNUAL RUNOFF (INCHES)	18.83		34.18		23.61	
10 PERCENT EXCEEDS	6.3		12		7.8	
50 PERCENT EXCEEDS	1.6		3.1		1.7	
90 PERCENT EXCEEDS	.07		.83		.09	

- a Aug. 7-13, 1999.
- b From rating curve extended above 55 ft<sup>3</sup>/s.
- c Aug. 1, 8-14, 1999.

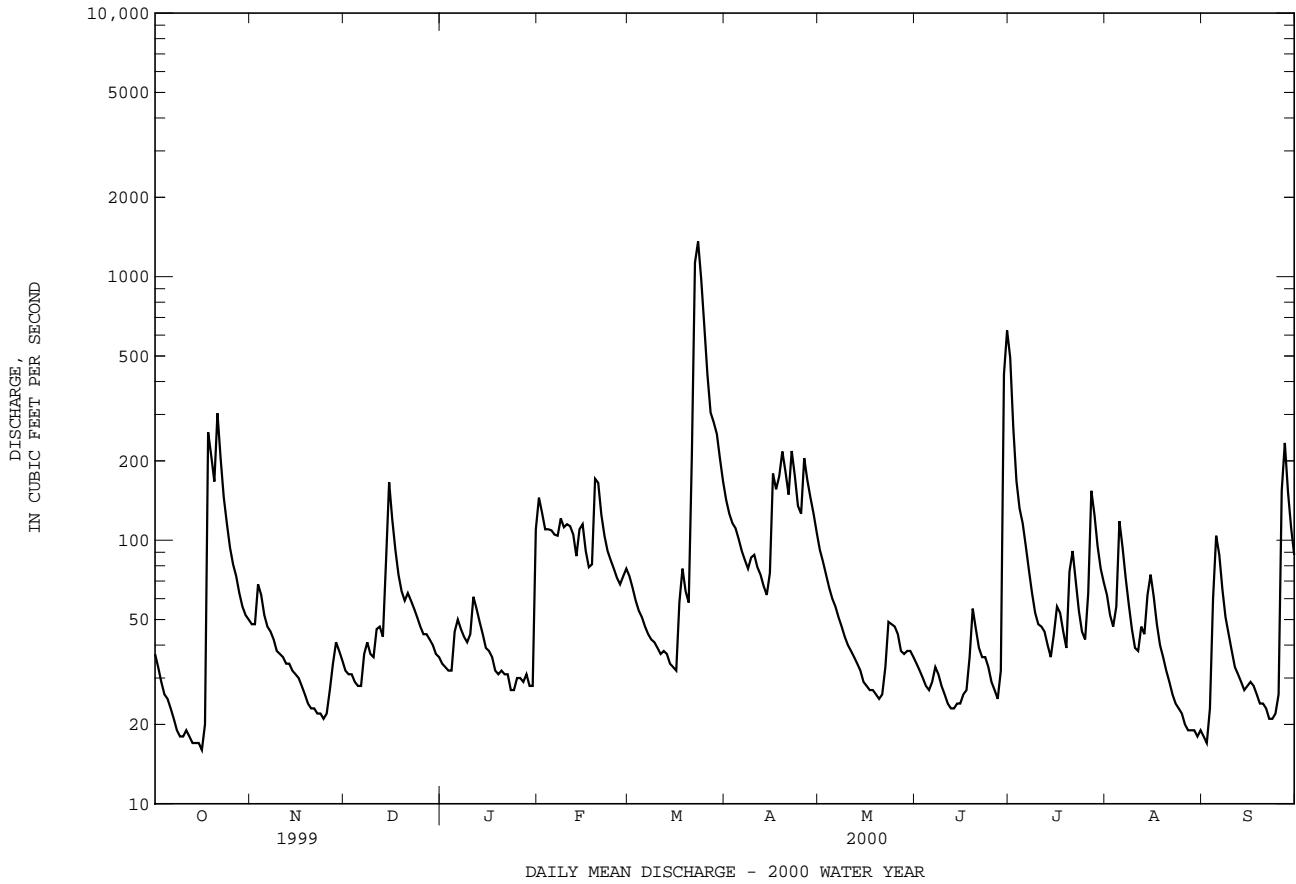




01485000 POCOMOKE RIVER NEAR WILLARDS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	17549.6		29154		72.8	
ANNUAL MEAN	48.1		79.7		130	
HIGHEST ANNUAL MEAN					24.8	
LOWEST ANNUAL MEAN					1979	
HIGHEST DAILY MEAN	519	Mar 15	1360	Mar 23	2580	Aug 20 1989
LOWEST DAILY MEAN	1.6	Aug 30	16	Oct 16	1.3	Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	2.1	Aug 24	17	Oct 10	1.8	Sep 10 1995
INSTANTANEOUS PEAK FLOW			1480	Mar 23	(a)2820	Aug 20 1989
INSTANTANEOUS PEAK STAGE			12.83	Mar 23	15.41	Aug 20 1989
INSTANTANEOUS LOW FLOW			16	(b)	1.2	(c)
ANNUAL RUNOFF (CFSM)	.79		1.32		1.20	
ANNUAL RUNOFF (INCHES)	10.79		17.93		16.35	
10 PERCENT EXCEEDS	102		153		158	
50 PERCENT EXCEEDS	32		45		40	
90 PERCENT EXCEEDS	3.5		24		8.4	

a From rating curve extended above 1,600 ft<sup>3</sup>/s.  
 b Oct. 16, 17.  
 c Sept. 12, 15, 16, 1995.





POCOMOKE RIVER BASIN

01485000 POCOMOKE RIVER NEAR WILLARDS, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-78, 1991, 1999 to current year.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 27...	1030	70	171	6.0	16.0	12.0	765	7.9	73	42	10.7	3.80
NOV 22...	1130	21	122	5.9	20.0	12.5	768	8.7	81	31	8.00	2.66
JAN 11...	1130	63	137	5.9	6.0	9.0	752	8.9	78	39	9.94	3.49
FEB 16...	1130	91	139	6.8	13.5	6.8	763	10.2	83	38	9.55	3.42
MAR 22...	1130	1150	52	6.4	--	7.0	748	8.7	73	13	3.16	1.35
MAY 19...	1030	26	104	6.2	30.0	20.0	769	6.7	73	25	6.52	2.19
JUN 28...	0930	3.0	106	6.9	24.5	24.0	--	6.1	--	24	6.32	2.08
JUL 24...	1030	46	120	6.6	24.0	20.5	--	--	--	33	8.55	2.77
SEP 27...	0900	248	159	5.4	17.0	15.0	774	5.4	53	33	8.15	3.11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS N) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)
OCT 27...	9.5	6.9	13	15	20.0	15.2	<.1	20.1	132	5.1	4.32	.013
NOV 22...	9.5	4.0	20	24	12.2	12.1	<.1	23.4	93	2.0	--	<.010
JAN 11...	10.3	4.8	10	12	16.8	14.5	<.1	18.2	119	4.0	3.27	.015
FEB 16...	9.3	5.4	10	12	17.5	14.4	<.1	16.8	125	5.1	4.48	.010
MAR 22...	3.5	6.6	11	14	5.8	5.5	<.1	4.1	79	4.8	1.97	.014
MAY 19...	9.0	2.6	20	24	7.8	10.7	<.1	23.1	111	1.7	.926	.015
JUN 28...	8.6	2.4	19	23	6.8	14.8	<.1	20.0	91	1.2	--	<.010
JUL 24...	9.0	4.4	18	21	11.6	12.4	<.1	17.1	112	2.2	--	<.010
SEP 27...	7.2	9.3	15	18	.7	.6	<.1	11.1	123	4.5	3.13	.027

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
OCT 27...	4.33	.051	.79	.62	4.9	.74	.56	.037	.014	<.010	167
NOV 22...	1.52	.053	.49	.41	1.9	.44	.35	.028	.011	<.010	50
JAN 11...	3.28	.109	.74	.65	3.9	.63	.54	.065	.018	.015	132
FEB 16...	4.49	.064	.64	.59	5.1	.58	.52	.042	.012	<.010	--
MAR 22...	1.98	.671	2.8	1.8	3.8	2.1	1.2	1.22	.723	.648	--
MAY 19...	.941	.155	.76	.62	1.6	.60	.46	.120	.053	.031	--
JUN 28...	.709	.065	.53	.50	1.2	.47	.44	.100	.031	.023	--
JUL 24...	1.44	.059	.80	.80	2.2	.74	.74	.083	.035	.025	--
SEP 27...	3.16	.110	1.3	1.2	4.4	1.2	1.1	.265	.150	.118	282

< Actual value is known to be less than the value shown.

POCOMOKE RIVER BASIN

01485000 POCOMOKE RIVER NEAR WILLARDS, MD--Continued

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

DATE	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE- NIUM, DIS-SOLVED (UG/L AS SE) (01145)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (82660)	ACETO- CHLOR, WATER FLTRD REC (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)
OCT 27...	<1	<2.0	300	55	<.2	<2.4	<.003	.005	.009	<.002	.018
NOV 22...	<1	<2.0	480	46	<.2	<2.4	<.003	<.002	.011	<.002	.006
JAN 11...	<1	<2.0	240	64	<.2	<2.4	<.003	<.002	.010	<.002	.012
FEB 16...	--	E.6	270	70	--	--	<.003	<.002	.009	<.002	.008
MAR 22...	--	3.4	340	60	--	--	<.003	<.002	<.002	<.002	.020
MAY 19...	--	--	1270	34	--	--	<.003	.073	.008	<.002	.326
JUN 28...	--	--	500	23	--	--	<.003	.007	.011	<.002	.115
JUL 24...	--	--	600	24	--	--	<.003	<.002	.012	<.002	.067
SEP 27...	<1	E1.5	540	48	<.2	<2.4	<.003	.019	<.010	<.002	.062

DATE	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (82674)	CHLOR- PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCCA WATER FLTRD 0.7 U GF, REC (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)
OCT 27...	<.002	<.002	<.003	<.015	<.004	<.004	E.002	E.009	115	<.002	<.001
NOV 22...	<.002	<.002	<.003	<.003	<.004	<.004	<.002	<.002	88	<.002	<.001
JAN 11...	<.002	<.002	<.003	<.003	<.004	<.004	E.002	E.005	111	<.002	<.001
FEB 16...	<.002	<.002	<.003	<.010	<.004	<.004	E.002	E.005	86	<.002	<.001
MAR 22...	<.002	<.002	<.003	<.030	<.004	<.010	<.002	E.007	94	E.004	<.001
MAY 19...	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.014	125	<.002	<.001
JUN 28...	<.002	<.002	<.003	<.003	<.004	.008	<.002	E.012	95	<.002	<.001
JUL 24...	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.010	112	<.002	<.001
SEP 27...	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.036	122	<.002	<.001

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (82677)	EPTC WATER FLTRD 0.7 U GF, REC (82668)	ETHAL- PROP ALIN WAT FLT 0.7 U GF, REC (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (82672)	FONOFO WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (82667)	
OCT 27...	<.017	<.002	<.004	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006
NOV 22...	<.017	.010	<.004	<.003	<.003	96	<.004	<.002	<.005	<.001	<.006
JAN 11...	<.017	<.002	<.004	<.003	<.003	102	<.004	<.002	<.005	<.001	<.006
FEB 16...	<.017	<.002	<.004	<.003	<.003	80	<.004	<.002	<.005	<.001	<.006
MAR 22...	<.017	<.002	<.004	<.003	<.003	79	<.004	<.002	<.005	<.001	<.006
MAY 19...	<.017	<.002	<.004	<.003	<.003	94	<.004	<.002	<.005	<.001	<.006
JUN 28...	<.017	<.002	<.004	<.003	<.003	92	<.004	<.002	<.005	<.001	<.006
JUL 24...	<.017	<.002	<.004	<.003	<.003	92	<.004	<.002	<.005	<.001	<.006
SEP 27...	<.017	<.002	<.004	<.003	<.003	110	<.007	<.002	<.005	<.001	<.006

E Estimated value.  
 < Actual value is known to be less than the value shown.

## POCOMOKE RIVER BASIN

01485000 POCOMOKE RIVER NEAR WILLARDS, MD--Continued

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

DATE	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
OCT											
27...	.137	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.013
NOV											
22...	.074	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
JAN											
11...	.072	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008
FEB											
16...	.079	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.005
MAR											
22...	.095	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006
MAY											
19...	.098	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
JUN											
28...	.060	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.007
JUL											
24...	.129	<.010	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.026
SEP											
27...	.232	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.023
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT											
27...	<.003	<.007	<.004	<.013	.007	<.010	<.007	<.013	<.002	<.001	<.002
NOV											
22...	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002
JAN											
11...	<.003	<.007	<.004	<.013	E.003	<.010	<.007	<.013	<.002	<.001	<.002
FEB											
16...	<.003	<.007	<.004	<.013	E.004	<.010	<.007	<.013	<.002	<.001	<.002
MAR											
22...	<.003	<.007	<.004	<.013	.178	<.010	<.007	<.013	<.002	<.001	<.002
MAY											
19...	<.003	<.007	<.004	<.013	.064	<.010	<.007	<.013	<.002	<.001	<.002
JUN											
28...	<.003	<.007	<.004	<.013	.012	<.010	<.007	<.013	<.002	<.001	<.002
JUL											
24...	<.003	<.007	<.004	<.013	.030	<.010	<.007	<.013	<.002	<.001	<.002
SEP											
27...	<.003	<.007	<.004	<.013	.013	<.010	<.007	<.013	<.002	<.001	<.002

E Estimated value.

&lt; Actual value is known to be less than the value shown.

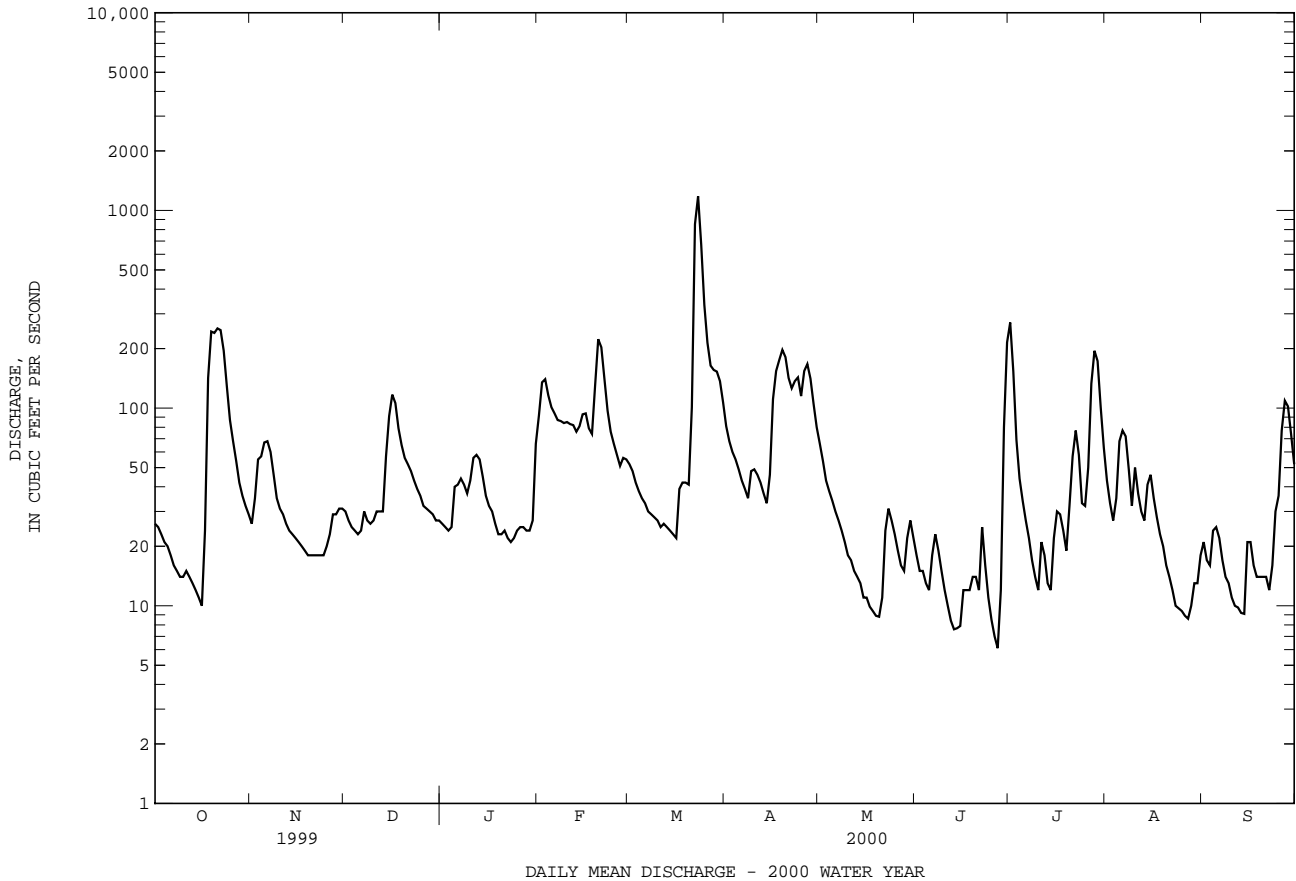
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01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	14134.5		20790.9		54.1	
ANNUAL MEAN	38.7		56.8		116	
HIGHEST ANNUAL MEAN					20.8	
LOWEST ANNUAL MEAN					2590	
HIGHEST DAILY MEAN	554	Mar 16	1180	Mar 23	Aug 19 1989	
LOWEST DAILY MEAN	1.6	Aug 4	6.1	Jun 27	(a)	
ANNUAL SEVEN-DAY MINIMUM	2.0	Jul 30	9.4	Jun 10	.86	
INSTANTANEOUS PEAK FLOW			1320	Mar 23	(b) 3930	
INSTANTANEOUS PEAK STAGE			7.31	Mar 23	9.07	
INSTANTANEOUS LOW FLOW			5.9	(c)	.77	
ANNUAL RUNOFF (CFSM)	.86		1.27		1.21	
ANNUAL RUNOFF (INCHES)	11.71		17.23		16.37	
10 PERCENT EXCEEDS	81		131		125	
50 PERCENT EXCEEDS	24		30		26	
90 PERCENT EXCEEDS	3.7		12		3.3	

- a Sept. 8-10, 1966.
- b From rating curve extended above 1,300 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 9.07 ft.
- c June 27, 28.
- d Oct. 2, 3, 1998.



## POCOMOKE RIVER BASIN

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-78, 1991, 1999 to current year.

REMARKS.--Chemical analyses were performed at the Maryland Department of Health and Mental Hygiene laboratory (DHMH), Baltimore, MD.

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

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT										
18...	0001	ENVIRONMENTAL	87	--	--	--	--	--	--	--
18...	2000	ENVIRONMENTAL	171	--	--	--	--	6.0	--	--
19...	1100	ENVIRONMENTAL	255	--	--	--	--	6.4	--	--
26...	1130	ENVIRONMENTAL	68	82	5.5	16.0	9.5	2.0	8.2	72
NOV										
16...	1115	ENVIRONMENTAL	21	81	6.0	8.0	8.5	7.7	6.8	58
DEC										
08...	1130	ENVIRONMENTAL	27	71	5.9	10.0	7.0	4.7	8.3	69
JAN										
12...	1529	BLANK	--	--	--	--	--	<.5	--	--
12...	1530	ENVIRONMENTAL	58	74	5.8	9.0	6.0	3.8	9.9	80
FEB										
01...	1100	ENVIRONMENTAL	78	--	--	--	--	4.7	--	--
01...	2200	ENVIRONMENTAL	118	--	--	--	--	4.2	--	--
02...	1000	ENVIRONMENTAL	123	--	--	--	--	3.8	--	--
02...	2200	ENVIRONMENTAL	150	--	--	--	--	4.1	--	--
03...	1000	ENVIRONMENTAL	136	--	--	--	--	3.6	--	--
16...	1045	ENVIRONMENTAL	95	--	5.6	12.5	4.0	3.9	11.3	86
MAR										
22...	1145	ENVIRONMENTAL	854	--	--	--	--	9.4	--	--
22...	1445	ENVIRONMENTAL	986	--	--	--	--	7.8	--	--
22...	1446	REPLICATE	--	--	--	--	--	8.0	--	--
22...	1447	REPLICATE	--	--	--	--	--	8.1	--	--
22...	1448	REPLICATE	--	--	--	--	--	8.2	--	--
22...	2345	ENVIRONMENTAL	1300	--	--	--	--	12	--	--
23...	1145	ENVIRONMENTAL	157	--	--	--	--	9.8	--	--
28...	1430	ENVIRONMENTAL	369	60	5.4	15.5	14.5	2.2	7.2	71
APR										
12...	1315	ENVIRONMENTAL	42	69	5.6	15.0	15.0	3.1	8.1	80
16...	2245	ENVIRONMENTAL	141	--	--	--	--	4.2	--	--
17...	1445	ENVIRONMENTAL	158	--	--	--	--	4.1	--	--
18...	1445	ENVIRONMENTAL	198	--	--	--	--	4.2	--	--
19...	0930	ENVIRONMENTAL	199	--	--	--	--	4.1	--	--
MAY										
25...	1000	ENVIRONMENTAL	23	70	6.2	23.5	18.0	7.4	--	--
JUN										
27...	1030	ENVIRONMENTAL	6.3	81	6.4	29.0	23.0	14	--	--
JUL										
27...	1130	ENVIRONMENTAL	129	55	5.7	24.0	21.0	6.2	--	--
28...	1200	ENVIRONMENTAL	200	--	--	--	--	--	--	--
29...	1200	ENVIRONMENTAL	175	--	--	--	--	--	--	--
30...	1200	ENVIRONMENTAL	99	--	--	--	--	4.6	--	--
31...	1200	ENVIRONMENTAL	63	--	--	--	--	5.9	--	--
AUG										
31...	1015	ENVIRONMENTAL	18	75	6.3	26.5	21.5	24	5.2	--
SEP										
14...	1345	ENVIRONMENTAL	9.1	76	6.5	26.5	19.5	21	6.3	69
26...	1310	ENVIRONMENTAL	80	--	--	--	--	13	--	--

&lt; Actual value is known to be less than the value shown.

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD--Continued

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

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT											
18...	--	--	--	--	--	--	--	--	--	--	--
18...	79	--	--	11.6	4	1.5	.205	.004	.209	.016	1.2
19...	79	--	--	10.5	4	1.6	.306	.005	.311	.017	1.3
26...	64	2.0	2	13.5	<1	1.3	.292	.003	.295	.021	.99
NOV											
16...	88	2.0	10	20.8	7	1.3	.010	.007	.017	<.003	1.3
DEC											
08...	<10	<1.4	8	18.8	4	.82	.061	.006	.067	.038	.75
JAN											
12...	<10	<.4	--	<.06	1	--	--	<.001	<.001	<.005	<.01
12...	40	<.2	4	12.4	5	1.0	.311	.004	.315	.025	.69
FEB											
01...	36	--	--	10.8	6	.55	.469	.006	.475	.121	.10
01...	34	--	--	10.9	3	1.4	.608	.004	.612	.108	.80
02...	35	--	--	10.8	3	1.5	.727	.004	.731	.119	.80
02...	33	--	--	10.6	1	1.6	.825	.004	.829	.111	.81
03...	27	--	--	10.4	2	1.8	.847	.005	.852	.103	.94
16...	25	<.3	2	8.1	<1	1.4	.804	.005	.809	.011	.60
MAR											
22...	60	--	--	3.9	20	1.3	.145	.006	.151	.046	1.1
22...	42	--	--	4.0	3	1.1	.184	.006	.190	.059	.94
22...	52	--	--	4.0	8	1.2	.194	.006	.200	.059	.97
22...	60	--	--	3.9	11	1.3	.171	.007	.178	.061	1.1
22...	57	--	--	3.9	9	1.3	.178	.006	.184	.061	1.1
22...	57	--	--	3.6	11	1.6	.351	.007	.358	.155	1.2
23...	60	--	--	3.3	4	--	--	.007	.360	.217	1.4
28...	41	<1.0	1	5.1	2	1.1	.267	.005	.272	.016	.78
APR											
12...	50	<.4	--	6.1	1	.99	.119	.003	.122	.017	.87
16...	65	--	--	5.8	3	1.1	.117	.005	.122	.014	.97
17...	67	--	--	5.4	3	1.0	.125	.005	.130	.018	.91
18...	59	--	--	5.7	3	1.1	.145	.005	.150	.020	.98
19...	11	--	--	5.7	1	1.1	.167	.006	.173	.032	.97
MAY											
25...	55	<1.9	8	18.1	7	1.1	.187	.012	.199	.075	.92
JUN											
27...	53	<1.6	16	25.2	4	1.2	.148	.007	.155	.065	1.1
JUL											
27...	78	<1.8	4	11.1	6	1.3	.108	.006	.114	.024	1.1
28...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
30...	83	--	--	12.0	7	1.5	.180	.006	.186	.034	1.3
31...	83	--	--	13.9	8	1.5	.198	.007	.205	.042	1.3
AUG											
31...	63	<1.7	15	26.0	18	1.2	.120	.005	.125	.037	1.1
SEP											
14...	50	<1.4	19	28.2	6	.94	.095	.005	.100	.023	.84
26...	70	2.4	--	16.7	19	1.2	.142	.005	.147	.020	1.0

&lt; Actual value is known to be less than the value shown.



## POCOMOKE RIVER BASIN

01485500 NASSAWANGO CREEK NEAR SNOW HILL, MD--Continued

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

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT											
18...	--	--	--	--	--	--	--	--	--	30	7.1
18...	.94	1.1	1.2	.92	.120	.054	.037	25	22	13	6.0
19...	1.0	1.3	1.3	.98	.108	.052	.033	26	24	8	5.6
26...	.93	1.2	.97	.91	.068	.052	.032	22	21	4	.64
NOV											
16...	1.2	1.2	--	--	.161	.107	.080	33	29	12	.67
DEC											
08...	.68	.75	.71	.64	.085	.053	.025	15	14	3	.23
JAN											
12...	<.01	--	--	--	.015	.012	<.001	.51	.44	M	--
12...	.64	.95	.67	.62	.065	.037	.016	15	14	5	.77
FEB											
01...	.62	1.1	--	.50	.049	.019	.015	14	13	11	2.3
01...	.65	1.3	.69	.54	.046	.023	.013	13	12	8	2.7
02...	.71	1.4	.68	.59	.046	.034	.016	13	14	6	2.1
02...	.67	1.5	.70	.56	.044	.024	.014	13	13	4	1.8
03...	.69	1.5	.84	.59	.450	.027	.015	14	14	8	2.8
16...	.52	1.3	.59	.51	.023	.022	.012	12	12	3	.69
MAR											
22...	.69	.84	1.1	.64	.115	.035	.036	20	19	31	71
22...	.73	.92	.88	.67	.091	.049	.034	20	19	9	25
22...	.73	.93	.91	.67	.090	.043	.035	19	19	10	--
22...	.73	.91	1.0	.67	.093	.046	.038	21	20	36	--
22...	.80	.98	1.0	.74	.101	.045	.040	20	20	34	--
22...	.94	1.3	1.1	.79	.217	.145	.092	20	19	39	138
23...	1.1	--	1.2	.86	.280	.220	.182	21	21	19	8.2
28...	.68	.95	.76	.66	.064	.046	.028	20	19	2	2.3
APR											
12...	.69	.81	.85	.67	.072	.038	.028	17	16	6	.69
16...	.81	.93	.96	.80	.090	.051	.024	21	19	18	6.7
17...	.78	.91	.89	.76	.083	.052	.029	21	20	M	.17
18...	.82	.97	.96	.80	.090	.052	.041	20	18	39	21
19...	.86	1.0	.94	.83	.085	.051	.038	22	21	12	6.5
MAY											
25...	.74	.94	.85	.67	.138	.063	.037	19	16	14	.89
JUN											
27...	.96	1.1	1.0	.89	.197	.089	.035	18	15	9	.15
JUL											
27...	1.0	1.2	1.1	1.0	.105	.068	.044	26	24	13	4.4
28...	--	--	--	--	--	--	--	--	--	15	8.2
29...	--	--	--	--	--	--	--	--	--	13	6.0
30...	1.1	1.3	1.3	1.1	.136	.079	.052	28	27	13	3.5
31...	1.1	1.3	1.2	1.0	.137	.082	.063	29	28	12	2.1
AUG											
31...	.76	.88	1.0	.72	.202	.070	.057	22	17	--	--
SEP											
14...	.65	.75	.82	.63	.174	.078	.053	21	18	4	.10
26...	.75	.90	.99	.73	.155	.067	.042	22	20	20	4.4

< Actual value is known to be less than the value shown.  
M Presence of material verified but not quantified.

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MANOKIN RIVER BASIN

01486000 MANOKIN BRANCH NEAR PRINCESS ANNE, MD

LOCATION.--Lat 38°12'50", long 75°40'18", Somerset County, Hydrologic Unit 02060009, on right bank 45 ft downstream from farm bridge, 1.4 mi northeast of Princess Anne, and 1.6 mi upstream from confluence with Loretto Branch.

DRAINAGE AREA.--4.80 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1951 to September 1971, October 1974 to current year.

REVISED RECORDS.--WDR MD-DE-75-1: Drainage area. WDR MD-DE-85-1: 1983-84 (P).

GAGE.--Water-stage recorder. Datum of gage is 7.03 ft above sea level. Artificial control since Apr. 30, 1975. Nov. 26, 1968, to Sept. 30, 1971, water-stage recorder above and nonrecording gage below gage height 1.4 ft. Prior to Nov. 26, 1968, recording gage at site 40 ft upstream at datum 1.0 ft higher.

REMARKS.--No estimated daily discharges. Records good below 170 ft<sup>3</sup>/s and poor above. Several measurements of water temperature were made during the year. Water-quality data for some prior years have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 20	1930	55	3.13	Mar 21	1930	*316	*5.78
Feb 19	1000	76	3.28	Jun 29	1215	98	3.41

Minimum discharge 0.88 ft<sup>3</sup>/s, Sep 22, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.8	2.4	3.0	16	7.2	10	7.7	2.1	7.7	2.9	1.5
2	3.8	4.5	2.3	2.9	12	6.4	8.0	6.8	1.9	4.9	2.4	1.5
3	3.3	7.4	2.3	2.9	10	5.6	7.5	5.2	1.9	3.6	2.5	1.5
4	3.2	5.4	2.2	3.2	11	5.2	7.4	4.5	1.6	5.5	5.5	1.5
5	3.0	4.5	2.1	10	11	4.8	6.2	4.1	1.6	5.1	16	1.4
6	2.8	4.1	2.5	7.1	9.8	4.4	5.6	3.7	2.2	3.8	8.2	1.3
7	2.6	3.6	3.3	6.1	10	4.1	5.1	3.4	2.2	2.9	5.7	1.3
8	2.4	3.3	3.0	5.3	11	4.0	4.8	3.1	1.7	2.5	4.3	1.3
9	2.4	3.2	2.7	5.0	10	4.0	10	2.8	1.5	2.3	3.3	1.2
10	2.5	3.1	2.9	7.3	11	3.6	8.6	2.6	1.5	2.5	6.1	1.2
11	2.6	3.1	3.4	9.3	11	3.6	7.1	2.4	1.4	5.3	6.9	1.1
12	2.4	3.0	3.0	6.8	10	3.9	6.4	2.3	1.3	3.4	4.7	1.1
13	2.3	2.9	2.9	6.0	9.0	3.6	5.1	2.2	1.3	2.6	4.3	1.0
14	2.2	2.9	12	4.8	15	3.4	4.6	2.1	1.3	2.3	7.8	.98
15	2.1	2.7	12	4.2	12	3.3	13	1.9	1.5	6.8	6.5	1.5
16	2.0	2.5	8.0	4.4	9.3	3.3	28	1.8	3.6	6.8	4.5	1.4
17	3.2	2.4	6.2	3.9	7.7	11	17	1.8	2.1	4.8	3.4	1.1
18	31	2.3	5.3	3.6	13	8.8	20	1.7	1.9	3.5	2.9	1.0
19	13	2.2	4.8	3.5	44	7.1	18	1.7	1.8	2.9	2.6	1.0
20	25	2.3	4.9	3.9	24	6.1	13	1.7	1.7	4.9	2.3	1.0
21	32	2.1	5.5	3.5	16	124	14	2.0	1.5	4.9	2.1	.97
22	17	2.1	5.0	3.2	12	141	28	2.8	1.8	3.5	1.9	.90
23	11	2.1	4.4	3.3	10	54	17	2.7	1.7	2.8	1.9	.97
24	8.8	2.1	4.1	3.3	9.0	31	13	2.3	1.4	2.6	1.8	1.0
25	7.1	2.3	3.7	3.9	8.1	21	19	2.1	1.3	3.1	1.6	1.2
26	5.8	2.6	3.6	4.2	7.3	21	29	1.8	1.3	3.5	1.6	3.4
27	5.6	3.2	3.5	3.9	6.9	17	17	1.8	1.2	3.5	1.5	4.7
28	4.9	3.1	3.3	3.4	8.9	31	14	1.8	1.5	3.1	1.6	3.2
29	4.4	2.7	3.3	3.3	8.2	20	11	3.1	41	5.1	1.5	2.4
30	4.1	2.6	3.2	4.8	---	15	8.9	3.2	17	4.5	1.5	2.1
31	3.9	---	3.2	21	---	12	---	2.6	---	3.3	1.5	---
TOTAL	221.4	94.1	131.0	161.0	353.2	590.4	376.3	89.7	105.8	124.0	121.3	45.72
MEAN	7.14	3.14	4.23	5.19	12.2	19.0	12.5	2.89	3.53	4.00	3.91	1.52
MAX	32	7.4	12	21	44	141	29	7.7	41	7.7	16	4.7
MIN	2.0	2.1	2.1	2.9	6.9	3.3	4.6	1.7	1.2	2.3	1.5	.90
CFSM	1.49	.65	.88	1.08	2.54	3.97	2.61	.60	.73	.83	.82	.32
IN.	1.72	.73	1.02	1.25	2.74	4.58	2.92	.70	.82	.96	.94	.35

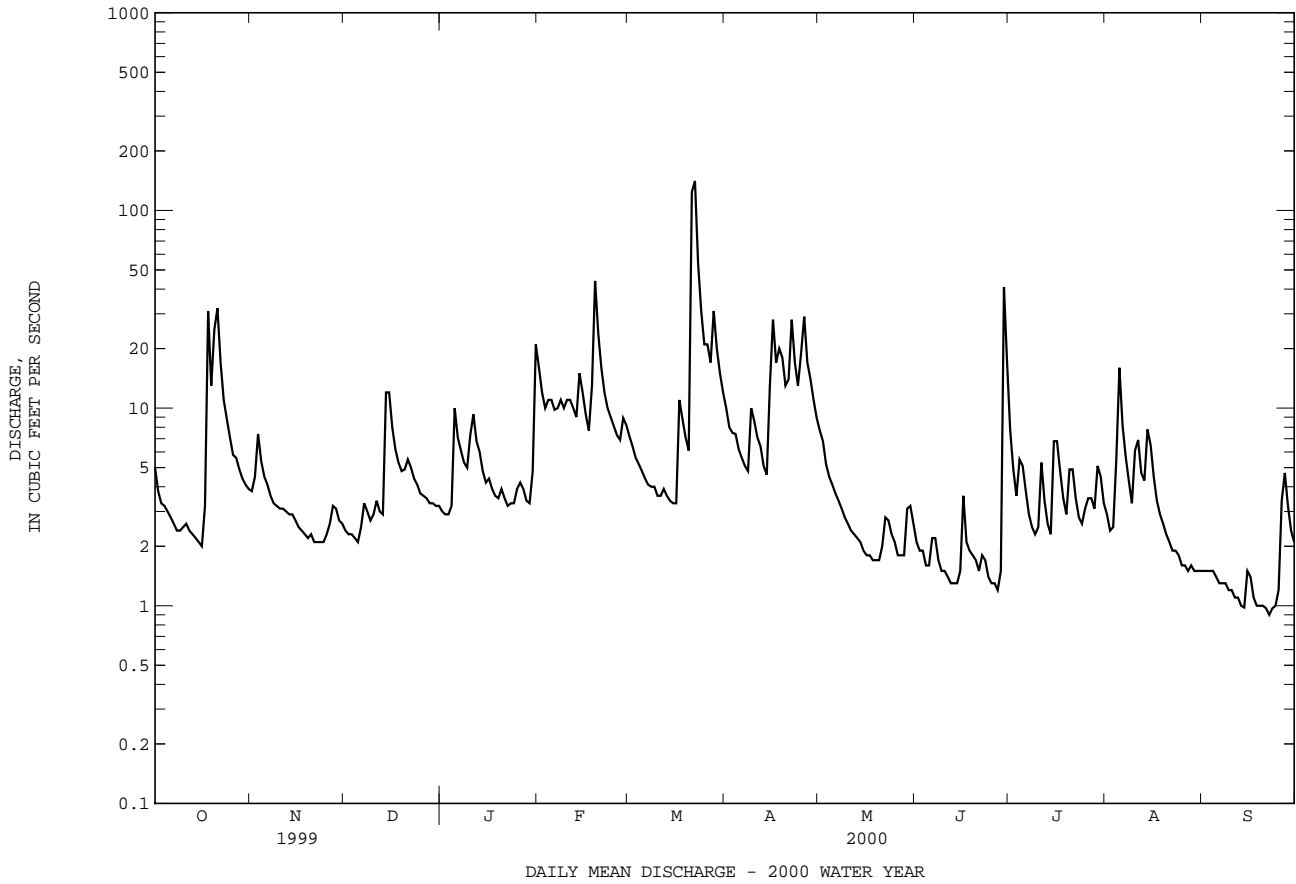
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

MEAN	1.89	2.48	5.06	8.42	9.54	11.2	7.36	3.91	2.41	1.74	3.61	1.94
MAX	10.5	17.5	22.5	24.9	29.1	30.3	17.3	12.2	12.7	9.20	27.8	18.7
(WY)	1980	1980	1997	1998	1998	1994	1983	1978	1979	1975	1969	1979
MIN	.030	.050	.13	.51	2.40	2.64	1.64	.62	.39	.16	.003	.017
(WY)	1967	1967	1967	1966	1981	1981	1967	1957	1964	1953	1966	1966

01486000 MANOKIN BRANCH NEAR PRINCESS ANNE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	1719.41		2413.92			
ANNUAL MEAN	4.71		6.60		4.95	
HIGHEST ANNUAL MEAN					10.3 1979	
LOWEST ANNUAL MEAN					1.41 1981	
HIGHEST DAILY MEAN	126	Sep 16	141	Mar 22	255	Jan 28 1998
LOWEST DAILY MEAN	.35	Jan 2	.90	Sep 22	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.45	Aug 7	.98	Sep 18	.00	Aug 23 1963
INSTANTANEOUS PEAK FLOW			316	Mar 21	(b)547	Aug 20 1969
INSTANTANEOUS PEAK STAGE			5.78	Mar 21	(c)7.08	Aug 19 1985
INSTANTANEOUS LOW FLOW			.88	(d)	.00	(a)
ANNUAL RUNOFF (CFSM)	.98		1.37		1.03	
ANNUAL RUNOFF (INCHES)	13.33		18.71		14.01	
10 PERCENT EXCEEDS	8.4		13		11	
50 PERCENT EXCEEDS	2.8		3.5		2.1	
90 PERCENT EXCEEDS	.56		1.5		.32	

- a No flow during 1954, 1963, 1964, and 1966.
- b From rating curve extended above 27 ft<sup>3</sup>/s on basis of channel-conveyance study.
- c Gage height of 5.44 ft occurred on Aug. 20, 1969 following ditching of stream channel.
- d Sept. 22, 23.



## NANTICOKE RIVER BASIN

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE

LOCATION.--Lat 38°43'42", long 75°33'44", Sussex County, Hydrologic Unit 02060008, on left bank at downstream side of highway bridge on county road No. 545, 800 ft downstream from Gum Branch, 2.5 mi southeast of Bridgeville, and 50.5 mi upstream from mouth.

DRAINAGE AREA.--75.4 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as Gravelly Fork near Bridgeville.

REVISED RECORDS.--WSP 1111: 1947. WSP 1232: 1945-49.

GAGE.--Water-stage recorder. Datum of gage is 13.64 ft above sea level (levels by Soil Conservation Service). Prior to Apr. 19, 1947, nonrecording gage, and Apr. 19, 1947 to Dec. 18, 1969, recording gage at present site and datum. Timber control Sept. 3, 1947 to Dec. 18, 1969. Feb. 18, 1970 to Oct. 1, 1973, recording gage at site 300 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. U.S. Geological Survey gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 11.0 ft in September 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 360 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0945	*754	*7.51	Mar 28	1030	389	6.55

Minimum discharge 36 ft<sup>3</sup>/s, Jul 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	92	79	84	99	124	203	156	93	53	82	52
2	109	103	79	83	93	123	196	154	87	50	78	71
3	105	138	78	82	90	118	193	148	83	48	76	77
4	106	125	77	84	92	115	190	143	77	49	84	71
5	110	114	76	109	90	113	185	140	76	46	86	65
6	103	110	83	93	87	109	178	132	84	45	78	60
7	98	107	92	91	87	105	173	127	81	40	74	58
8	93	106	86	89	90	105	169	122	73	40	71	56
9	92	101	81	89	91	105	181	118	68	39	67	55
10	94	99	87	95	102	104	176	114	61	39	65	53
11	96	99	97	96	116	102	168	112	60	42	61	53
12	91	96	90	89	124	110	165	106	56	39	60	52
13	88	95	88	88	115	109	159	101	58	39	63	49
14	88	95	114	85	128	102	158	98	58	39	91	48
15	85	97	137	82	138	99	164	94	57	132	95	71
16	83	97	120	84	124	100	194	88	66	135	83	58
17	89	92	112	83	118	134	190	84	59	94	75	53
18	109	87	108	79	121	125	196	82	69	79	73	52
19	96	85	105	81	166	114	220	79	65	74	72	54
20	113	83	107	84	162	113	208	78	59	103	67	54
21	150	84	106	82	149	194	199	86	57	88	64	52
22	134	82	103	77	138	673	221	119	63	78	61	50
23	131	81	100	76	134	378	203	135	57	71	57	52
24	124	80	99	76	131	283	189	120	53	70	56	52
25	115	81	95	85	128	248	187	126	50	69	56	72
26	113	81	96	81	127	240	188	116	48	81	54	170
27	109	97	97	75	123	225	182	108	49	117	53	172
28	101	91	96	72	131	339	177	109	58	97	54	135
29	97	83	93	71	128	281	172	111	60	90	53	116
30	94	81	89	75	---	237	164	105	60	86	53	107
31	92	---	87	104	---	217	---	98	---	85	53	---
TOTAL	3226	2862	2957	2624	3422	5544	5548	3509	1945	2157	2115	2140
MEAN	104	95.4	95.4	84.6	118	179	185	113	64.8	69.6	68.2	71.3
MAX	150	138	137	109	166	673	221	156	93	135	95	172
MIN	83	80	76	71	87	99	158	78	48	39	53	48
CFSM	1.38	1.27	1.27	1.12	1.56	2.37	2.45	1.50	.86	.92	.90	.95
IN.	1.59	1.41	1.46	1.29	1.69	2.74	2.74	1.73	.96	1.06	1.04	1.06

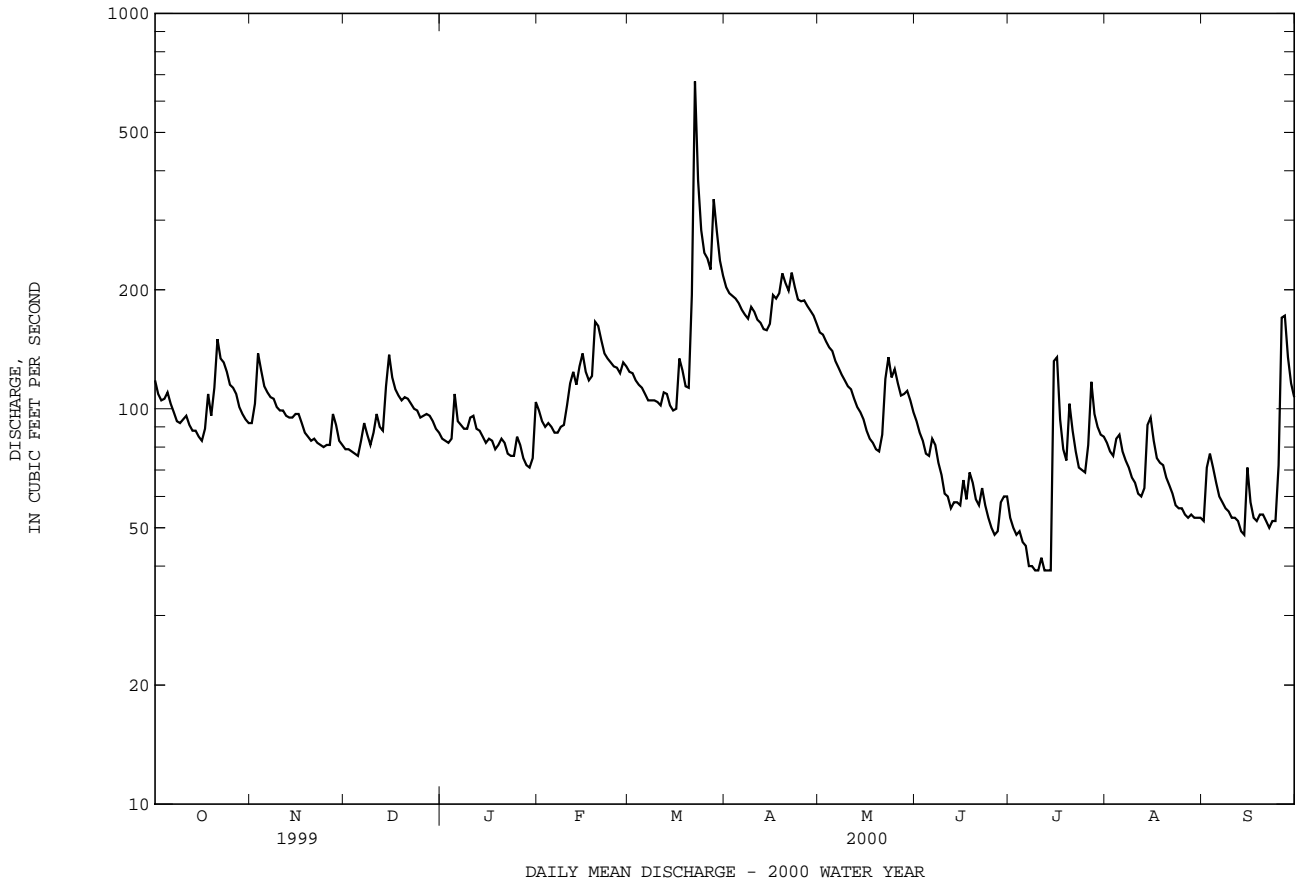
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
MEAN	45.9	60.1	87.6	119
MAX	137	192	294	311
(WY)	1980	1957	1949	1978
MIN	17.9	21.2	23.6	23.8
(WY)	1944	1988	1999	1966
				1950
				1977
				1985
				1951
				1986
				1944
				1943
				1943

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	32488		38049		91.5	
ANNUAL MEAN	89.0		104		170	
HIGHEST ANNUAL MEAN					43.8	
LOWEST ANNUAL MEAN					1958	
HIGHEST DAILY MEAN	1430	Sep 17	673	Mar 22	2880	Feb 26 1979
LOWEST DAILY MEAN	15	Aug 11	39	(a)	6.6	Sep 29 1943
ANNUAL SEVEN-DAY MINIMUM	17	Aug 7	40	Jul 8	7.8	Sep 23 1943
INSTANTANEOUS PEAK FLOW			754	Mar 22	3020	Feb 26 1979
INSTANTANEOUS PEAK STAGE			7.51	Mar 22	10.31	Feb 26 1979
INSTANTANEOUS LOW FLOW			36	Jul 10	(b)6.3	Sep 29 1943
ANNUAL RUNOFF (CFSM)	1.18		1.38		1.21	
ANNUAL RUNOFF (INCHES)	16.03		18.77		16.48	
10 PERCENT EXCEEDS	141		169		175	
50 PERCENT EXCEEDS	92		92		66	
90 PERCENT EXCEEDS	21		54		26	

a July 9, 10, 12-14.  
 b Minimum discharge observed.



## NANTICOKE RIVER BASIN

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961-72, 1974-80, 1991, 1994, 1995, 1998 to current year.

REMARKS.--Chemical analyses were performed at the Maryland Department of Health and Mental Hygiene laboratory (DHMH), Baltimore, MD.

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT										
27...	0815	ENVIRONMENTAL	109	132	6.4	12.0	11.0	2.9	--	--
NOV										
17...	1015	ENVIRONMENTAL	91	134	6.4	4.0	7.5	2.5	9.9	83
DEC										
08...	1345	ENVIRONMENTAL	83	134	6.4	11.0	9.0	2.3	10.8	95
JAN										
12...	1145	ENVIRONMENTAL	89	134	6.4	8.0	7.0	2.5	11.1	92
FEB										
11...	0045	ENVIRONMENTAL	109	--	--	--	--	--	--	--
12...	0445	ENVIRONMENTAL	126	--	--	--	--	--	--	--
13...	0845	ENVIRONMENTAL	115	--	--	--	--	--	--	--
14...	1045	REPLICATE	126	--	--	--	--	7.6	--	--
14...	1050	ENVIRONMENTAL	126	--	--	--	--	5.0	--	--
16...	1315	ENVIRONMENTAL	123	--	6.6	13.0	--	5.2	13.4	117
MAR										
22...	0645	ENVIRONMENTAL	727	--	--	--	--	120	--	--
22...	1130	ENVIRONMENTAL	754	--	--	--	--	82	--	--
22...	2245	ENVIRONMENTAL	546	--	--	--	--	39	--	--
28...	1115	ENVIRONMENTAL	387	101	6.4	--	13.0	52	7.9	75
APR										
12...	1100	ENVIRONMENTAL	167	120	6.3	14.0	13.5	2.1	9.4	91
18...	1045	ENVIRONMENTAL	193	--	--	--	--	3.3	--	--
MAY										
11...	0829	BLANK	--	--	--	--	--	<.5	--	--
11...	0830	ENVIRONMENTAL	115	122	6.4	17.0	18.0	2.6	7.9	84
JUN										
27...	1345	ENVIRONMENTAL	47	133	6.5	31.0	26.0	3.2	--	--
JUL										
27...	0830	ENVIRONMENTAL	122	129	6.3	22.0	19.5	9.5	--	--
AUG										
31...	1400	ENVIRONMENTAL	53	142	6.8	27.5	22.5	2.5	10.0	--
SEP										
13...	0845	ENVIRONMENTAL	50	142	6.3	19.0	18.0	2.2	8.0	85
26...	1555	ENVIRONMENTAL	199	--	--	--	--	35	--	--

&lt; Actual value is known to be less than the value shown.

01487000 NANTICOKE RIVER NEAR BRIDGEVILLE, DE--Continued

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

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	ANC WATER UNPLTRD IT FIELD (MG/L AS CACO3) (00419)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 27...	10	2.8	--	18.8	3	5.1	4.64	.006	4.65	.024	.46
NOV 17...	8	<1.2	11	19.7	<1	5.3	4.92	.006	4.93	.016	.34
DEC 08...	<10	<.7	10	19.0	3	4.9	4.67	.009	4.68	.057	.27
JAN 12...	<10	<.1	8	20.7	2	4.8	4.61	.006	4.61	.021	.17
FEB 11...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
14...	<10	--	--	19.0	10	4.9	4.55	.007	4.55	.027	.38
14...	<10	--	--	19.5	<1	4.8	4.55	.007	4.56	.030	.20
16...	--	<.1	10	18.7	3	4.7	4.46	.008	4.47	.013	.25
MAR 22...	49	--	--	7.1	127	3.7	1.52	.009	1.53	.339	2.2
22...	42	--	--	7.5	84	3.5	1.61	.009	1.62	.312	1.9
22...	32	--	--	10.4	28	3.6	2.16	.010	2.17	.203	1.4
28...	22	2.3	10	10.9	27	4.3	2.79	.011	2.80	.166	1.5
APR 12...	10	<.1	--	17.1	2	4.6	4.27	.006	4.27	.011	.35
18...	15	--	--	16.7	4	.64	.123	.005	.128	.071	.51
MAY 11...	<10	<.1	--	<.1	<1	--	.004	.002	.006	<.001	<.01
11...	<10	<.7	13	17.3	2	4.3	3.66	.016	3.67	.037	.59
JUN 27...	<10	<1.0	--	16.0	3	4.3	3.79	.012	3.80	.037	.49
JUL 27...	10	<1.3	17	16.7	17	3.9	3.14	.012	3.15	.049	.75
AUG 31...	10	<1.0	14	17.0	5	5.0	4.65	.012	4.66	.023	.31
SEP 13...	<10	<1.0	14	17.8	5	5.0	4.75	.006	4.76	.021	.22
26...	25	4.1	--	11.5	39	2.8	1.84	.009	1.85	.042	.99
DATE	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 27...	.38	5.0	.44	.36	.035	.013	.006	3.0	2.9	2	.62
NOV 17...	.16	5.1	.32	.14	.035	.015	.013	2.5	2.5	2	.37
DEC 08...	.23	4.9	.21	.17	.038	.017	.007	3.9	3.8	2	.40
JAN 12...	.18	4.8	.15	.16	.103	.017	.012	1.9	1.9	2	.53
FEB 11...	--	--	--	--	--	--	--	--	--	16	4.7
12...	--	--	--	--	--	--	--	--	--	12	4.1
13...	--	--	--	--	--	--	--	--	--	9	2.7
14...	.17	4.7	.35	.14	.028	.018	.008	2.7	2.6	14	4.7
14...	.20	4.8	.17	.17	.030	.021	.011	2.5	2.4	4	1.5
16...	.14	4.6	.24	.13	.035	.025	.016	2.7	2.7	3	.96
MAR 22...	.98	2.5	1.8	.64	.623	.154	.131	12	9.4	138	272
22...	.95	2.6	1.6	.64	.486	.155	.131	11	9.8	95	194
22...	.84	3.0	1.2	.64	.240	.095	.057	11	11	54	80
28...	1.0	3.8	1.3	.84	.316	.136	.092	9.0	8.2	44	46
APR 12...	.15	4.4	.34	.14	.027	.013	.011	3.5	3.5	3	1.4
18...	.38	.51	.44	.31	.043	.024	.028	5.1	5.4	5	2.8
MAY 11...	<.01	--	--	--	<.009	<.001	<.001	.69	.76	1	--
11...	.44	4.1	.55	.40	.031	<.008	.007	3.5	3.3	6	1.9
JUN 27...	.21	4.0	.45	.17	.056	.040	.034	2.9	3.0	7	.84
JUL 27...	.40	3.6	.70	.35	.098	.029	.020	4.4	4.3	15	5.1
AUG 31...	.29	4.9	.29	.27	.063	.047	.043	2.8	2.6	--	--
SEP 13...	.17	4.9	.20	.15	.042	.024	.015	2.2	2.1	--	--
26...	.60	2.4	.95	.56	.243	.091	.068	6.8	6.3	44	24

< Actual value is known to be less than the value shown.



## NANTICOKE RIVER BASIN

01488500 MARSHYHOPE CREEK NEAR ADAMSVILLE, DE

LOCATION.--Lat 38°50'59", long 75°40'24", Kent County, Hydrologic Unit 02060008, on left bank 45 ft upstream from highway bridge, 1.4 mi upstream from Cattail Branch, 1.6 mi northeast of Adamsville, 4.9 mi northwest of Greenwood, and 33 mi upstream from mouth.

DRAINAGE AREA.--43.9 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1943 to March 1969, October 1971 to current year.

REVISED RECORDS.--WSP 1141: 1948(P). WSP 1432: 1946(M), 1948, 1952.

GAGE.--Water-stage recorder. Datum of gage is 26.21 ft above sea level. Prior to Nov. 24, 1953, nonrecording gage and crest-stage gage, and Nov. 24, 1953, to March 1969, recording gage at site on old channel about 240 ft southeast of present site at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality data for some prior years have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.5 ft, present datum, in September 1935, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0130	*2,100	*9.89	Sep 26	1145	860	6.37
Mar 28	0615	735	5.95				

Minimum discharge 13 ft<sup>3</sup>/s, Jul 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	43	34	37	50	65	106	64	40	24	50	31
2	42	45	34	36	48	62	97	63	39	22	45	31
3	40	59	34	37	46	58	93	58	38	21	38	33
4	40	50	35	38	46	56	92	54	36	23	36	44
5	41	45	33	58	45	54	88	53	35	24	35	40
6	39	44	35	50	45	50	81	52	37	20	33	35
7	37	44	35	47	45	47	75	50	37	20	33	34
8	35	42	34	46	49	48	71	49	34	20	32	33
9	35	40	33	44	50	47	89	47	33	19	32	33
10	36	40	35	46	63	46	88	45	32	20	31	31
11	40	40	41	48	95	45	77	43	31	20	30	31
12	40	37	39	44	102	54	72	40	30	19	31	30
13	38	37	38	42	75	52	64	39	29	17	30	30
14	37	37	90	39	105	48	61	40	29	14	45	30
15	35	37	102	38	111	47	66	37	29	24	95	33
16	34	36	69	38	83	46	112	35	32	29	62	35
17	36	34	60	37	71	73	133	34	29	23	50	32
18	39	33	56	35	86	63	165	34	29	21	43	31
19	37	32	52	36	217	56	162	34	28	20	41	30
20	52	32	51	37	134	55	125	33	27	24	39	31
21	100	32	52	38	102	547	116	34	26	28	37	31
22	69	32	52	36	89	1270	145	46	29	22	36	29
23	71	31	49	35	81	354	113	60	27	19	35	28
24	65	30	48	36	76	219	96	50	25	19	35	29
25	56	31	45	38	72	171	92	50	25	19	34	32
26	52	31	46	37	70	153	100	44	25	28	32	533
27	50	39	45	34	66	132	90	42	25	88	33	203
28	47	41	43	30	72	439	84	44	25	55	33	103
29	45	37	42	32	70	208	78	47	25	39	32	79
30	44	36	42	35	---	154	71	45	26	34	32	66
31	42	---	39	48	---	124	---	42	---	33	32	---
TOTAL	1420	1147	1443	1232	2264	4843	2902	1408	912	808	1202	1791
MEAN	45.8	38.2	46.5	39.7	78.1	156	96.7	45.4	30.4	26.1	38.8	59.7
MAX	100	59	102	58	217	1270	165	64	40	88	95	533
MIN	34	30	33	30	45	45	61	33	25	14	30	28
CFSM	1.04	.87	1.06	.91	1.78	3.56	2.20	1.03	.69	.59	.88	1.36
IN.	1.20	.97	1.22	1.04	1.92	4.10	2.46	1.19	.77	.68	1.02	1.52

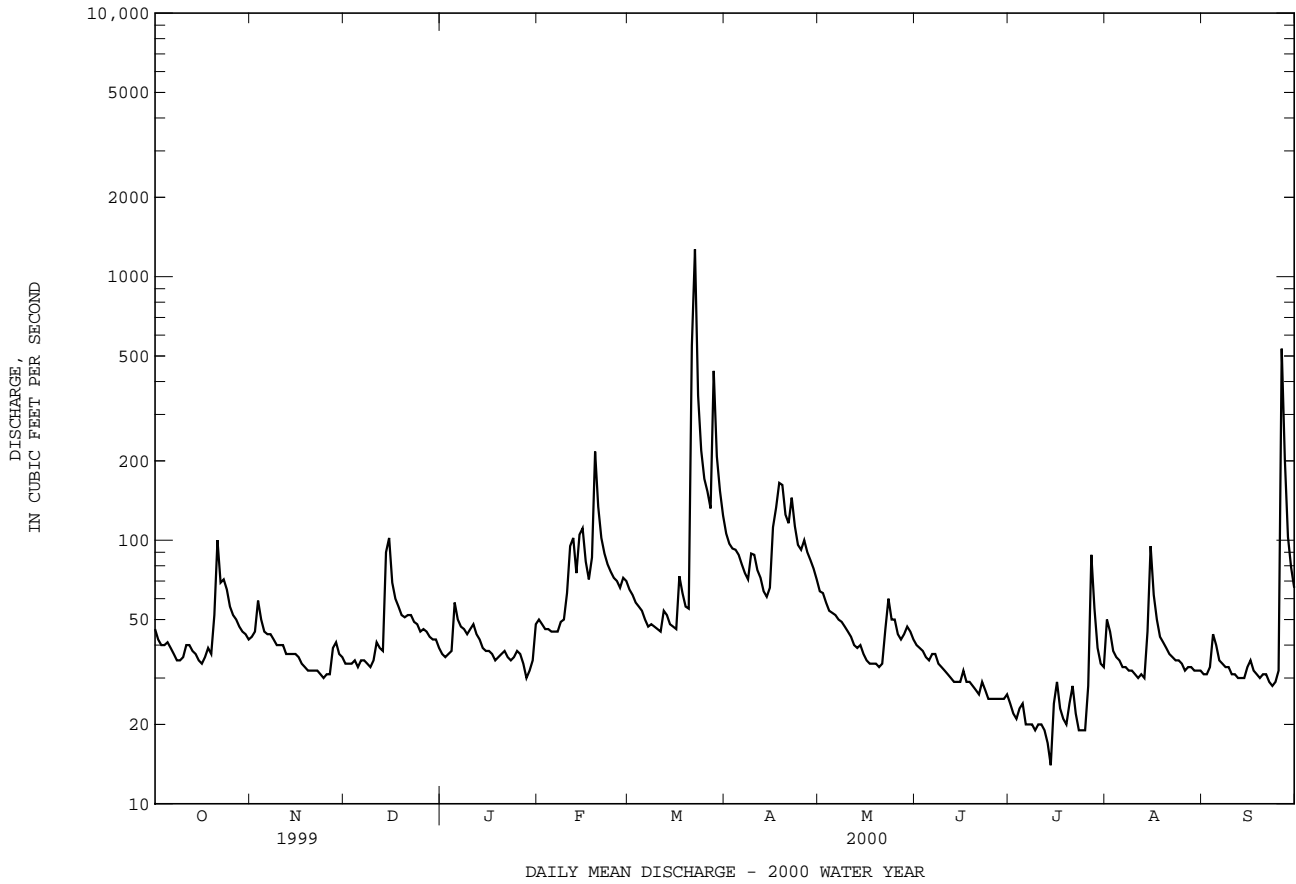
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

	MEAN	19.8	35.1	59.9	84.3	90.7	111	77.2	53.0	35.4	34.1	36.3	23.3
MAX	101	190	219	258	279	284	226	178	156	297	340	197	
(WY)	1972	1957	1997	1978	1998	1994	1983	1989	1948	1975	1967	1999	
MIN	3.46	4.95	3.22	4.30	27.8	27.8	21.7	15.5	7.32	4.58	2.83	2.78	
(WY)	1966	1966	1966	1966	1966	1966	1985	1957	1965	1944	1964	1964	

01488500 MARSHYHOPE CREEK NEAR ADAMSVILLE, DE--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	20661.0		21372			
ANNUAL MEAN	56.6		58.4		55.5	
HIGHEST ANNUAL MEAN					111	1958
LOWEST ANNUAL MEAN					16.2	1966
HIGHEST DAILY MEAN	2590	Sep 17	1270	Mar 22	2710	Aug 5 1967
LOWEST DAILY MEAN	5.7	Aug 7	14	Jul 14	1.2	(a)
ANNUAL SEVEN-DAY MINIMUM	6.7	Aug 3	18	Jul 8	1.3	Sep 5 1964
INSTANTANEOUS PEAK FLOW			2100	Mar 22	(b)3700	Jul 13 1975
INSTANTANEOUS PEAK STAGE			9.89	Mar 22	13.98	Aug 5 1967
INSTANTANEOUS LOW FLOW			13	Jul 14	1.0	(c)
ANNUAL RUNOFF (CFSM)	1.29		1.33		1.26	
ANNUAL RUNOFF (INCHES)	17.51		18.11		17.18	
10 PERCENT EXCEEDS	82		94		114	
50 PERCENT EXCEEDS	38		40		29	
90 PERCENT EXCEEDS	9.7		28		7.6	

- a Sept. 9, 10, 1964.
- b From rating curve extended above 3,300 ft<sup>3</sup>/s.
- c Sept. 9, 10, 1964; Aug. 20, 1965.



CHOPTANK RIVER BASIN

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD

LOCATION.--Lat 38°59'50", long 75°47'10", Caroline County, Hydrologic Unit 02060005, on left bank at highway bridge (removed), 0.1 mi upstream from Gravelly Branch, 2.0 mi northeast of Greensboro, and 60 mi upstream from mouth.

DRAINAGE AREA.--113 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1622: 1948. WDR MD-DE-79-1: 1961(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.51 ft above sea level.

REMARKS.--Water-discharge records good. Diversions for irrigation of about 500 acres upstream from station. U.S. Geological Survey gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1935 is believed to have been higher than that of Aug. 4, 1967, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	2045	*3,130	*10.28	Sep 27	0445	1,360	7.40
Mar 28	2245	1,420	7.53				

Minimum discharge 25 ft<sup>3</sup>/s, Jul 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	100	106	99	151	185	310	180	85	85	149	66
2	85	88	97	94	156	171	262	164	79	64	154	92
3	76	100	92	93	139	157	235	152	74	47	125	155
4	76	105	89	97	135	145	233	139	69	54	107	250
5	113	97	86	167	133	138	250	131	64	60	99	348
6	98	88	90	203	129	131	238	119	77	49	86	253
7	83	84	121	166	126	122	211	112	87	36	79	155
8	76	81	117	144	134	117	187	107	74	32	71	118
9	68	78	105	132	138	117	223	100	64	32	62	102
10	66	77	102	132	150	114	270	89	57	32	56	93
11	92	75	122	143	199	109	251	97	53	33	55	84
12	74	73	124	140	267	119	209	87	50	30	52	77
13	71	72	114	127	264	125	179	85	60	27	51	72
14	70	70	173	118	241	117	160	105	62	26	96	67
15	66	70	417	105	383	110	157	94	60	51	508	87
16	79	68	406	101	397	107	186	79	69	126	547	99
17	77	66	259	100	273	144	458	73	67	311	299	92
18	76	64	198	94	243	175	688	71	64	194	193	90
19	70	62	169	98	548	153	675	65	84	89	149	83
20	104	61	155	96	784	135	522	66	98	92	129	104
21	142	62	157	94	516	285	421	72	75	88	113	125
22	166	62	158	88	e340	2350	538	108	73	101	98	111
23	157	61	148	95	e260	2010	537	151	68	132	87	89
24	156	61	138	89	233	828	393	130	58	88	79	81
25	141	62	129	86	195	558	304	112	51	71	74	120
26	119	64	121	97	201	462	306	97	47	102	67	610
27	106	135	120	93	223	418	309	86	49	181	64	1170
28	98	188	116	81	212	982	273	90	47	197	66	650
29	91	163	111	80	203	1040	234	106	60	150	65	403
30	87	124	106	80	---	577	207	107	70	112	68	276
31	83	---	104	122	---	408	---	95	---	107	68	---
TOTAL	2973	2561	4550	3454	7373	12609	9426	3269	1995	2799	3916	6122
MEAN	95.9	85.4	147	111	254	407	314	105	66.5	90.3	126	204
MAX	166	188	417	203	784	2350	688	180	98	311	547	1170
MIN	66	61	86	80	126	107	157	65	47	26	51	66
CFSM	.85	.76	1.30	.99	2.25	3.60	2.78	.93	.59	.80	1.12	1.81
IN.	.98	.84	1.50	1.14	2.43	4.15	3.10	1.08	.66	.92	1.29	2.02

e Estimated

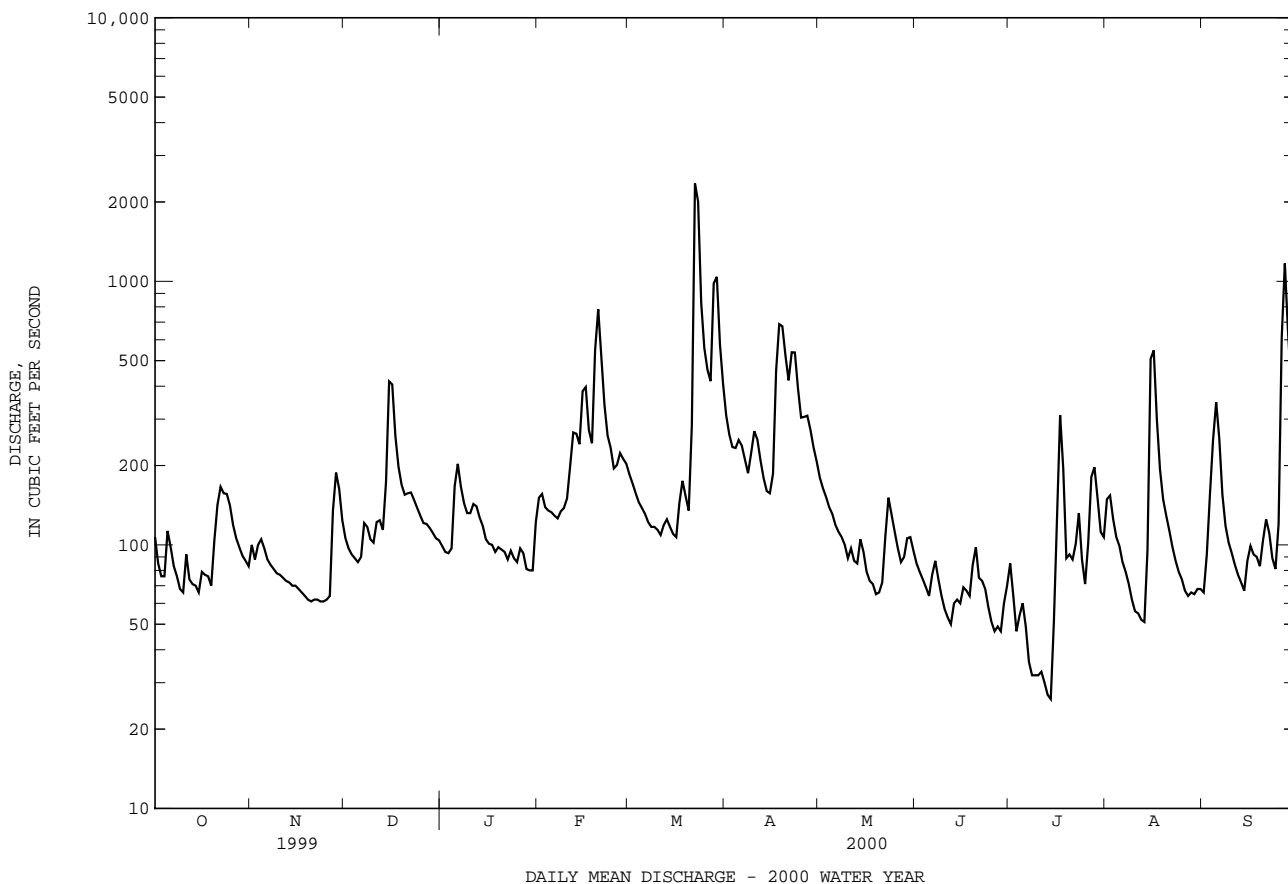
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	54.1	87.5	150	200	225	271	202	133	93.3	58.2	83.4	55.9
MAX	402	476	680	559	646	826	649	457	381	421	829	425
(WY)	1972	1957	1997	1978	1979	1994	1983	1989	1996	1975	1967	1999
MIN	9.85	10.9	13.3	17.9	42.8	43.7	47.2	30.3	19.5	9.49	5.31	9.38
(WY)	1966	1966	1966	1966	1966	1966	1966	1977	1986	1977	1966	1987

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	45748.6		61047		133	
ANNUAL MEAN	125		167		237	
HIGHEST ANNUAL MEAN					1972	
LOWEST ANNUAL MEAN					26.6	
HIGHEST DAILY MEAN	5600	Sep 17	2350	Mar 22	6160	Aug 4 1967
LOWEST DAILY MEAN	1.0	Aug 13	26	Jul 14	1.0	Aug 13 1999
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 7	30	Jul 8	2.2	Aug 26 1966
INSTANTANEOUS PEAK FLOW			3130	Mar 22	(a)6970	Aug 4 1967
INSTANTANEOUS PEAK STAGE			10.28	Mar 22	14.47	Aug 4 1967
INSTANTANEOUS LOW FLOW			25	Jul 14	.83	Aug 13 1999
ANNUAL RUNOFF (CFSM)	1.11		1.48		1.18	
ANNUAL RUNOFF (INCHES)	15.06		20.10		16.04	
10 PERCENT EXCEEDS	196		307		288	
50 PERCENT EXCEEDS	84		106		74	
90 PERCENT EXCEEDS	10		62		15	

a From rating curve extended above 3,600 ft<sup>3</sup>/s.



## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981, October 1984 to September 1991.

WATER TEMPERATURE: October 1974 to September 1991.

SUSPENDED-SEDIMENT DISCHARGE: October 1980 to September 1991.

REMARKS.--On May 5 and Nov. 15, 1994 samples were collected and analyzed using ultraclean methodologies. Data on trace metals for these dates are available from the University of Delaware. Data on organics for these dates are available from George Mason University. Sample for Sept. 17, 1999 was collected at highway bridge on MD State Rte. 287, approximately 3 mi upstream from gaging station.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1975-81, 1988, 1990-91): Maximum daily, 313 microsiemens, Dec. 20, 1987; minimum daily, 40 microsiemens, Jan. 31, 1980.

WATER TEMPERATURE (water years 1975-81, 1985, 1988-91): Maximum daily, 28.5°C, Aug. 14, 1988; minimum daily, 0.0°C, on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 107 mg/L, Dec. 26, 1986; minimum daily mean, 1 mg/L, on many days during water years 1982-91.

SEDIMENT LOAD: Maximum daily, 448 tons, Dec. 26, 1986; minimum daily, 0.02 ton, Aug. 30, Sept. 7, 1982, July 25, 1986, Oct. 16, 23, 26, 27, 1987, Sept. 23, 1988.

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)
OCT										
07...	1030	ENVIRONMENTAL	83	155	6.6	10.5	14.0	773	8.1	77
NOV										
04...	1100	ENVIRONMENTAL	106	142	6.8	10.5	11.0	770	7.7	69
DEC										
03...	1130	ENVIRONMENTAL	93	141	7.0	12.0	3.5	768	12.3	92
JAN										
04...	1200	ENVIRONMENTAL	95	143	6.9	21.0	11.5	755	9.8	90
FEB										
03...	1230	ENVIRONMENTAL	146	173	6.9	4.0	.0	760	12.6	87
15...	1245	ENVIRONMENTAL	406	119	7.0	6.0	5.5	768	11.3	89
19...	1345	ENVIRONMENTAL	589	110	6.9	7.0	4.0	760	14.2	109
MAR										
23...	1530	ENVIRONMENTAL	1640	54	6.5	16.5	7.5	769	12.7	106
JUN										
05...	1114	BLANK	--	--	--	--	--	--	--	--
05...	1115	ENVIRONMENTAL	64	138	7.1	20.5	20.0	763	7.7	84
05...	1116	REPLICATE	--	--	--	--	--	--	--	--
JUL										
05...	1215	ENVIRONMENTAL	62	132	7.0	26.5	25.0	758	6.9	84
27...	1200	ENVIRONMENTAL	148	119	6.8	23.0	21.0	764	6.7	75
AUG										
03...	1014	BLANK	--	--	--	--	--	--	--	--
03...	1015	ENVIRONMENTAL	127	119	6.9	26.5	25.0	762	6.0	73
15...	0800	ENVIRONMENTAL	353	--	--	--	--	--	--	--
15...	1400	ENVIRONMENTAL	681	--	--	--	--	--	--	--
SEP										
05...	1200	ENVIRONMENTAL	376	94	6.9	17.5	21.5	768	6.3	71
05...	1201	REPLICATE	--	--	--	--	--	--	--	--
13...	1045	ENVIRONMENTAL	74	130	7.2	26.5	22.5	760	7.1	82
13...	1046	REPLICATE	--	--	--	--	--	--	--	--
13...	1047	REPLICATE	--	--	--	--	--	--	--	--

E Estimated value.

01491000 CHOPTANK RIVER NEAR GREENSBORO, MD--Continued

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

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)
OCT 07...	18	22	19.0	--	1.8	1.39	.010	1.40	.050	.36	.38
NOV 04...	20	24	19.5	--	1.4	--	<.001	.987	<.020	.42	.35
DEC 03...	--	--	21.1	--	1.8	1.42	.005	1.42	.054	.42	.40
JAN 04...	<18	--	21.3	--	1.9	1.58	.010	1.59	.035	.36	.19
FEB 03...	12	14	20.7	--	1.9	1.53	.011	1.54	.102	.38	.29
15...	10	13	16.1	--	1.9	1.37	.007	1.37	.055	.55	.37
19...	--	--	13.4	--	2.2	1.24	.007	1.24	.091	.92	.43
MAR 23...	--	--	6.4	--	1.5	.511	.005	.516	.106	.95	.63
JUN 05...	--	--	<.1	<10	--	--	<.001	<.050	<.020	<.10	<.10
05...	20	25	19.0	<10	1.5	1.11	.008	1.11	.022	.41	.31
05...	--	--	19.2	<10	1.5	1.10	.008	1.11	.026	.37	.30
JUL 05...	21	26	16.9	<10	1.4	.896	.007	.903	.055	.48	.41
27...	20	24	16.0	<10	1.4	.881	.007	.888	.050	.53	.50
AUG 03...	--	--	<.1	<10	--	--	<.001	<.050	<.020	<.10	<.10
03...	22	27	18.5	<10	1.3	.688	.006	.694	.039	.60	.48
15...	--	--	15.7	34	1.6	.770	.011	.781	.064	.83	.48
15...	--	--	11.3	26	1.4	.495	.009	.504	.068	.88	.56
SEP 05...	--	--	14.3	<10	1.1	.432	.005	.437	.028	.70	.65
05...	--	--	14.3	<10	1.2	.424	.006	.430	.035	.72	.63
13...	22	27	21.4	<10	1.5	1.09	.005	1.09	.021	.39	.31
13...	--	--	21.2	<10	1.5	1.05	.005	1.05	<.020	.43	.34
13...	--	--	21.1	<10	1.5	1.09	.006	1.10	.024	.41	.32

DATE	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC (MG/L AS C) (00680)	SEDI-MENT, TOTAL (MG/L) (80154)	SEDI-MENT, DIS-CHARGE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 07...	1.8	.31	.33	.052	.018	.012	5.9	3	.76	--
NOV 04...	1.3	--	--	.056	.052	.015	8.0	2	.72	--
DEC 03...	1.8	.37	.34	.072	.025	.015	5.7	4	.95	--
JAN 04...	1.8	.32	.16	.041	.015	.012	7.5	4	.90	--
FEB 03...	1.8	.28	.19	.051	.006	.002	4.2	4	1.6	--
15...	1.7	.50	.32	.105	.020	.011	7.8	18	20	90
19...	1.7	.82	.34	.129	.034	.018	8.9	22	34	--
MAR 23...	1.1	.84	.52	.172	.062	.046	16	29	128	--
JUN 05...	--	--	--	<.008	<.006	<.001	<.27	<1	--	--
05...	1.4	.39	.28	.097	.048	.040	6.4	3	.52	--
05...	1.4	.35	.27	.096	.051	.042	6.0	2	--	--
JUL 05...	1.3	.43	.35	.100	.027	.020	6.7	4	.60	--
27...	1.4	.48	.44	.107	.045	.030	8.3	4	1.6	--
AUG 03...	--	--	--	<.008	<.006	.002	<.27	--	--	--
03...	1.2	.56	.44	.135	.074	.053	9.6	3	1.2	--
15...	1.3	.76	.42	.218	.039	.026	--	--	--	--
15...	1.1	.81	.49	.216	.061	.041	--	--	--	--
SEP 05...	1.1	.67	.62	.165	.082	.062	11	13	13	--
05...	1.1	.69	.60	.175	.090	.067	--	9	--	--
13...	1.4	.37	.29	.077	.030	.025	5.4	4	.70	--
13...	1.4	--	--	.082	.030	.025	--	12	--	--
13...	1.4	.39	.30	.081	.026	.022	--	5	--	--

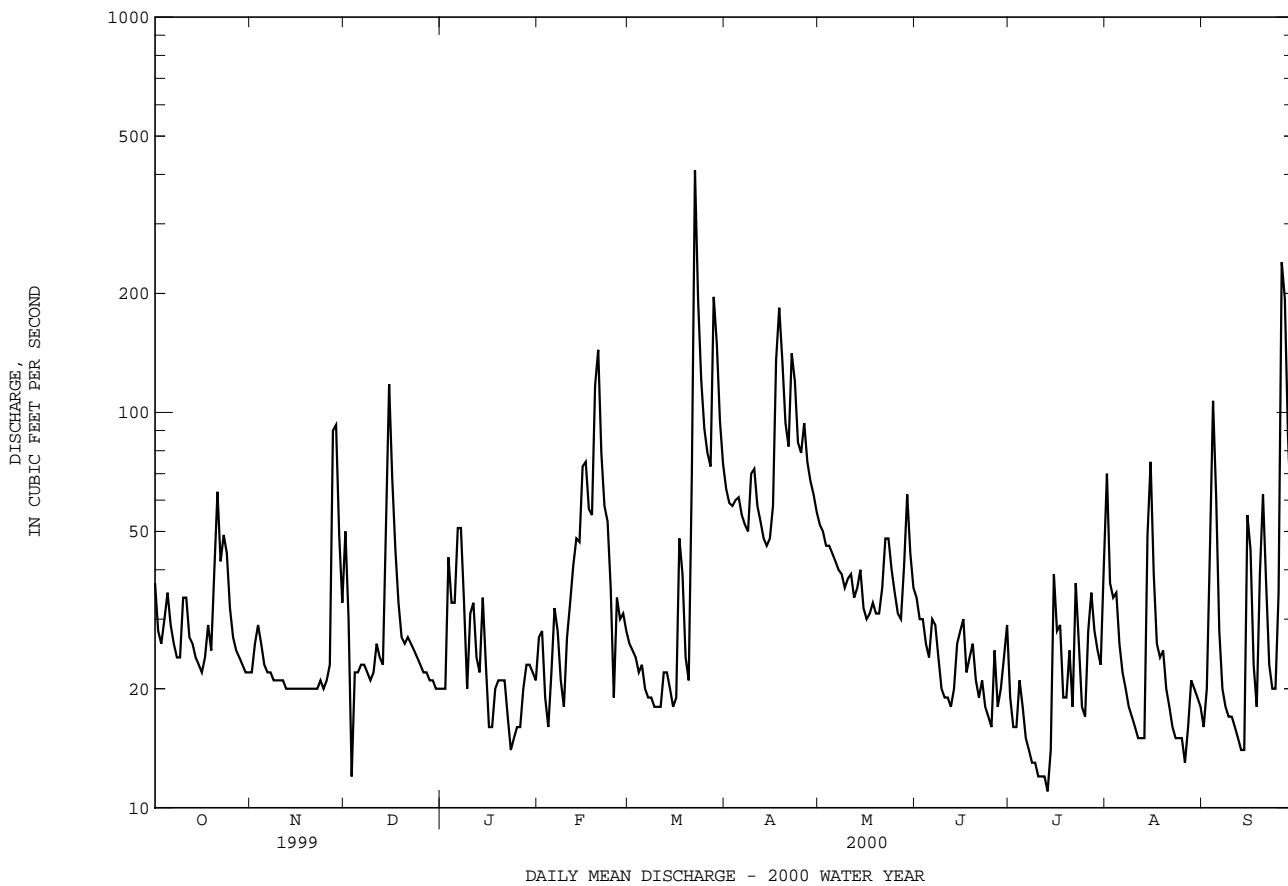
< Actual value is known to be less than the value shown.



01493000 UNICORN BRANCH NEAR MILLINGTON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	9766.4		13885		25.4	
ANNUAL MEAN	26.8		37.9		51.8	
HIGHEST ANNUAL MEAN					7.08	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	1200	Sep 16	410	Mar 22	1200	Sep 16 1999
LOWEST DAILY MEAN	3.6	Aug 13	11	Jul 13	.10	Jun 9 1965
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 3	12	Jul 7	.14	Jun 8 1965
INSTANTANEOUS PEAK FLOW			498	Mar 22	(a)2600	Sep 16 1999
INSTANTANEOUS PEAK STAGE			4.77	Mar 22	9.40	Sep 16 1999
INSTANTANEOUS LOW FLOW			11	Jul 13	.00	(b)
ANNUAL RUNOFF (CFSM)	1.36		1.93		1.29	
ANNUAL RUNOFF (INCHES)	18.46		26.25		17.56	
10 PERCENT EXCEEDS	34		70		48	
50 PERCENT EXCEEDS	17		26		17	
90 PERCENT EXCEEDS	7.5		17		7.3	

a From rating curve extended above 600 ft<sup>3</sup>/s on basis of USGS Culvert Analysis Program of peak flow.  
 b No flow for part of each day June 13, 14, 1965, and Jan. 6, 7, 10, 13-16, 20, 21, 23, 24, 27, 31, Feb. 2, 3, 14, 20, 1997, caused by regulation at Unicorn Lake Dam.





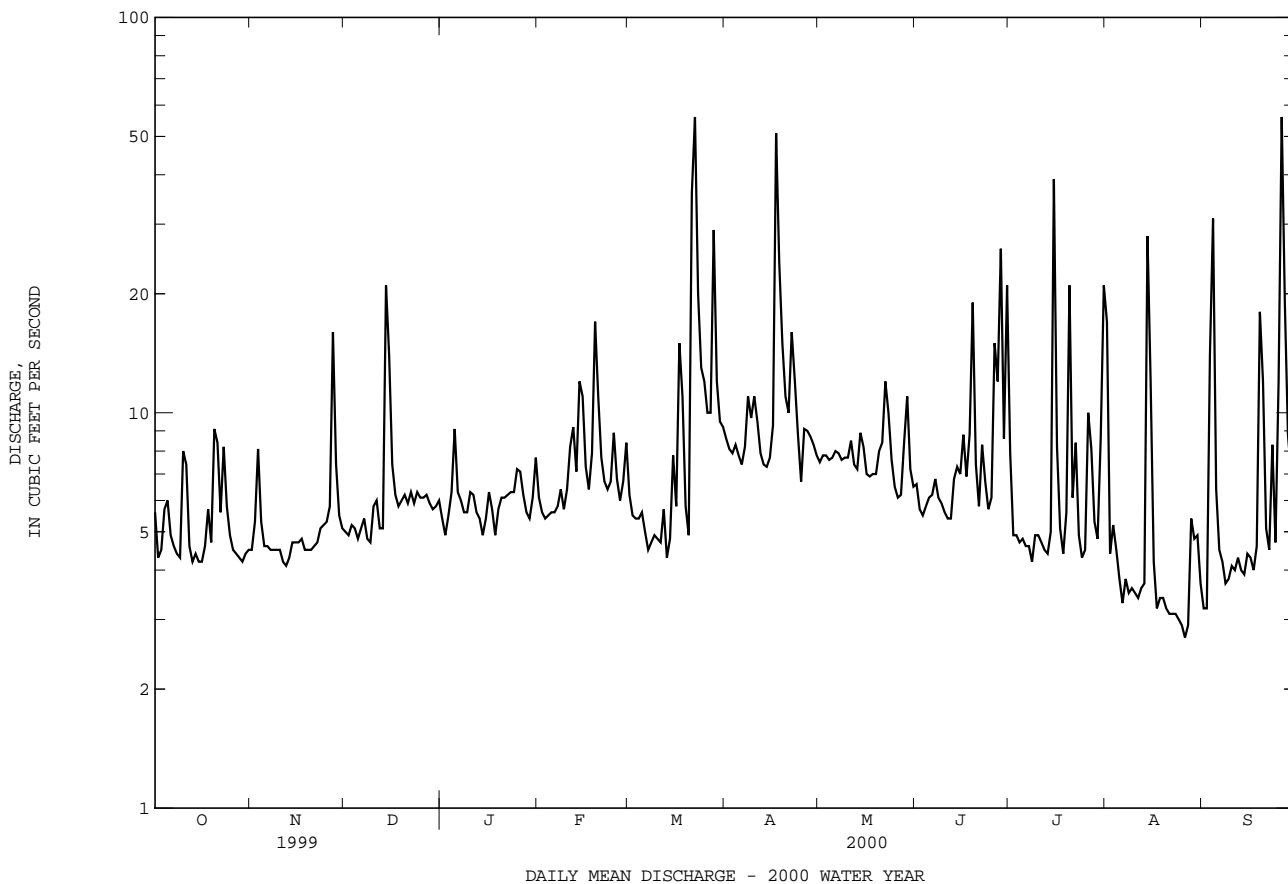


01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	2768.1		2777.0			
ANNUAL MEAN	7.58		7.59		8.14	
HIGHEST ANNUAL MEAN					9.00	1997
LOWEST ANNUAL MEAN					7.26	1999
HIGHEST DAILY MEAN	722	Sep 16	56	(a)	722	Sep 16 1999
LOWEST DAILY MEAN	1.7	Aug 30	2.7	Aug 26	1.7	Aug 30 1999
ANNUAL SEVEN-DAY MINIMUM	2.3	Aug 4	3.0	Aug 21	2.3	Aug 4 1999
INSTANTANEOUS PEAK FLOW			108	Mar 21	(b)3220	Sep 16 1999
INSTANTANEOUS PEAK STAGE			5.97	Mar 21	10.22	Sep 16 1999
INSTANTANEOUS LOW FLOW			1.9	Aug 26	1.1	Aug 30 1999
ANNUAL RUNOFF (CFSM)	1.24		1.24		1.33	
ANNUAL RUNOFF (INCHES)	16.83		16.88		18.08	
10 PERCENT EXCEEDS	8.0		12		12	
50 PERCENT EXCEEDS	4.8		5.9		5.9	
90 PERCENT EXCEEDS	2.8		4.2		3.6	

a Mar. 22, Sept. 26.

b From rating curve extended above 60 ft<sup>3</sup>/s on basis of culvert determination of peak flow.



## CHESTER RIVER BASIN

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

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

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
OCT											
01...	1030	ENVIRONMENTAL	5.1	153	6.4	21.0	16.5	761	7.0	72	51
13...	1230	ENVIRONMENTAL	4.3	155	6.4	15.0	15.5	765	9.1	91	55
NOV											
10...	1200	ENVIRONMENTAL	4.5	163	6.2	19.0	11.0	761	8.7	79	--
DEC											
08...	1200	ENVIRONMENTAL	4.5	173	8.0	15.0	7.5	761	--	--	--
08...	1205	REPLICATE	--	--	--	--	--	--	--	--	--
14...	1515	ENVIRONMENTAL	28	145	--	--	--	--	--	--	--
14...	1715	ENVIRONMENTAL	33	141	--	--	--	--	--	--	--
JAN											
04...	1005	BLANK	--	--	--	--	--	--	--	--	--
04...	1010	ENVIRONMENTAL	5.1	153	7.3	20.0	11.5	755	9.3	86	60
17...	1200	ENVIRONMENTAL	5.4	178	6.0	8.0	4.5	772	--	--	--
FEB											
17...	1230	ENVIRONMENTAL	6.3	143	6.3	6.5	5.5	775	11.3	88	50
19...	0915	ENVIRONMENTAL	17	154	7.1	--	--	--	--	--	--
MAR											
22...	1000	ENVIRONMENTAL	53	70	6.9	6.0	5.5	770	11.4	90	--
22...	1001	REPLICATE	--	--	--	--	--	--	--	--	--
28...	1130	ENVIRONMENTAL	36	121	7.0	16.0	13.5	742	9.9	98	--
31...	1100	ENVIRONMENTAL	9.2	137	6.9	13.0	11.0	774	9.6	86	--
APR											
17...	1215	ENVIRONMENTAL	73	98	6.6	11.0	14.5	762	8.1	79	--
JUN											
07...	1100	ENVIRONMENTAL	7.1	160	6.3	24.0	17.5	773	10.1	104	57
19...	0600	ENVIRONMENTAL	30	151	7.1	--	--	--	--	--	--
26...	2130	ENVIRONMENTAL	34	109	--	--	--	--	--	--	--
JUL											
14...	0930	ENVIRONMENTAL	4.5	167	6.5	23.0	20.0	--	--	--	56
AUG											
14...	1100	ENVIRONMENTAL	27	148	5.9	18.0	19.0	--	--	--	52
14...	1500	ENVIRONMENTAL	45	96	6.9	24.0	20.0	760	7.2	79	--
SEP											
03...	2300	ENVIRONMENTAL	49	--	--	--	--	--	--	--	--
05...	1430	ENVIRONMENTAL	6.0	129	7.1	--	--	768	--	--	--
19...	1545	ENVIRONMENTAL	42	--	--	--	--	--	--	--	--
26...	1000	ENVIRONMENTAL	67	78	5.6	13.0	14.0	766	8.0	77	32

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ANC BICAR- BONATE IT FIELD (MG/L AS HCO3) (00450)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT											
01...	13.5	4.19	4.7	5.1	28	--	34	--	4.8	12.6	<.1
13...	14.5	4.58	5.1	4.5	31	--	37	--	5.6	13.3	<.1
NOV											
10...	--	--	--	--	32	--	38	--	--	--	--
DEC											
08...	--	--	--	--	32	--	39	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	16.5	4.66	5.1	3.2	27	61	33	--	4.0	12.9	<.1
17...	--	--	--	--	--	27	--	33	--	--	--
FEB											
17...	13.2	4.20	5.9	3.3	26	--	32	--	5.7	13.0	<.1
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	19	--	23	--	--	--	--
31...	--	--	--	--	26	--	31	--	--	--	--
APR											
17...	--	--	--	--	15	--	18	--	--	--	--
JUN											
07...	14.7	4.90	5.1	3.4	31	--	38	--	3.4	12.6	<.1
19...	--	--	--	--	26	--	32	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	15.0	4.49	4.9	2.8	36	--	44	--	2.7	11.9	<.1
AUG											
14...	13.9	4.13	4.3	4.2	31	--	38	--	3.7	10.4	<.1
14...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
26...	7.65	3.14	3.1	6.1	21	--	25	--	5.8	7.9	<.1

&lt; Actual value is known to be less than the value shown.

## CHESTER RIVER BASIN

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
OCT											
01...	8.6	--	94	4.4	3.99	.023	4.01	<.020	.42	.28	4.3
13...	6.8	--	96	5.1	4.85	.014	4.87	.035	.27	.23	5.1
NOV											
10...	8.6	--	--	5.8	5.47	.012	5.49	<.020	.27	.19	5.7
DEC											
08...	10.4	--	--	5.9	5.45	.022	5.47	.026	.41	.18	5.7
08...	--	--	--	6.1	5.82	.025	5.85	.025	.24	.20	6.0
14...	8.8	--	--	5.4	4.47	.030	4.50	.079	.92	.38	4.9
14...	8.3	--	--	4.7	4.12	.032	4.15	.116	.55	.44	4.6
JAN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	10.4	--	105	7.3	7.00	.041	7.04	.032	.26	.17	7.2
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	8.0	--	102	5.9	5.33	.044	5.37	.101	.51	.26	5.6
19...	--	--	--	5.4	4.43	.033	4.46	.259	.96	.57	5.0
MAR											
22...	--	--	--	3.0	1.14	.013	1.15	.465	1.9	.95	2.1
22...	--	--	--	3.0	1.14	.013	1.15	.465	1.9	.95	2.1
28...	--	--	--	4.2	3.09	.045	3.14	.222	1.1	.74	3.9
31...	7.4	--	--	6.4	5.17	.053	5.23	.134	1.2	.45	5.7
APR											
17...	--	--	--	4.6	2.38	.038	2.41	.682	2.2	1.6	4.0
JUN											
07...	8.4	--	112	5.8	5.29	.030	5.32	.066	.48	.29	5.6
19...	--	--	--	4.3	3.42	.073	3.49	.110	.79	.58	4.1
26...	--	51	--	4.1	3.31	.050	3.36	.085	.79	.65	4.0
JUL											
14...	7.7	--	109	5.4	5.04	.024	5.07	.028	.31	.18	5.2
AUG											
14...	6.9	--	98	4.1	3.37	.025	3.40	.079	.67	.58	4.0
14...	--	54	--	3.2	2.25	.023	2.28	.066	.93	.58	2.9
SEP											
03...	--	89	--	3.2	2.11	.031	2.14	.100	1.1	.74	2.9
05...	--	10	--	--	--	--	--	--	--	--	--
19...	7.1	51	--	4.5	3.77	.019	3.79	.053	.75	.40	4.2
26...	5.1	--	74	3.0	2.15	.023	2.17	.046	.87	.56	2.7

&lt; Actual value is known to be less than the value shown.

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
OCT											
01...	--	--	.060	.008	.027	--	--	--	--	--	--
13...	.24	.20	.033	.006	<.010	--	2.4	.2	<15	<1	<2.0
NOV											
10...	--	--	.019	.006	.001	--	--	--	--	--	--
DEC											
08...	.39	.15	.034	.007	.001	--	--	--	--	--	--
08...	.21	.17	.030	E.005	.002	--	--	--	--	--	--
14...	.84	.30	.293	.050	.031	--	--	--	--	--	--
14...	.43	.33	.276	.064	.044	--	--	--	--	--	--
JAN											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	.22	.14	.024	E.004	.001	2.0	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	.41	.16	.065	.007	<.010	--	--	--	--	--	--
19...	.71	.31	.138	.031	.020	--	--	--	--	--	--
MAR											
22...	1.4	.49	.921	.261	.249	--	--	--	--	--	--
22...	1.4	.49	.921	.261	.249	--	--	--	--	--	--
28...	.86	.52	.343	.068	.057	--	--	--	--	--	--
31...	1.0	.31	.125	.017	.012	--	--	--	--	--	--
APR											
17...	1.5	.95	M	.142	.109	--	--	--	--	--	--
JUN											
07...	.41	.23	.039	.010	.024	--	--	--	--	--	--
19...	.68	.47	.148	.042	.026	--	--	--	--	--	--
26...	.70	.57	.223	.093	.071	8.2	--	--	--	--	--
JUL											
14...	.28	.15	.031	.007	<.010	2.5	--	--	--	--	--
AUG											
14...	.60	.50	.193	.084	.019	--	--	--	--	--	--
14...	.86	.52	.305	.129	.101	9.9	--	--	--	--	--
SEP											
03...	.95	.64	.365	.128	.102	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
19...	.69	.35	.321	.151	.128	--	--	--	--	--	--
26...	.82	.51	.260	.097	.078	--	--	--	--	--	--

E Estimated value.

&lt; Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

## CHESTER RIVER BASIN

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
OCT											
01...	80	89	--	--	<.003	<.002	.035	<.002	.043	<.002	<.002
13...	40	89	<.1	<2.4	<.003	<.002	.031	<.002	.035	<.002	<.002
NOV											
10...	--	--	--	--	<.003	<.002	.039	<.002	.033	<.002	<.002
DEC											
08...	--	--	--	--	<.003	<.002	.040	<.002	.029	<.002	<.002
08...	--	--	--	--	<.003	<.002	.041	<.002	.030	<.002	<.002
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	--	--	--	--	<.003	<.002	<.002	<.002	<.001	<.002	<.002
04...	90	132	--	--	<.003	<.002	.039	<.002	.032	<.002	<.002
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	80	157	--	--	<.003	<.002	.050	<.002	.033	<.002	<.002
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	<.003	<.002	.412	<.002	.053	<.002	<.002
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	70	111	--	--	E.001	<.002	.060	<.002	.071	<.002	<.002
19...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	20	82	--	--	<.003	<.002	.041	<.002	.037	<.002	<.002
AUG											
14...	150	141	--	--	<.003	<.002	.029	<.002	.123	<.002	<.002
14...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
26...	110	67	--	--	<.003	<.002	.052	<.002	.021	<.002	<.002

E Estimated value.

&lt; Actual value is known to be less than the value shown.

## 01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL- ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS- (UG/L) (39572)	DI-ELDRIN DIS- (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
OCT											
01...	E.005	<.003	<.004	<.004	<.002	E.13	121	<.002	<.001	<.017	<.002
13...	<.003	<.003	<.004	<.004	<.002	E.13	142	<.002	<.001	<.017	<.002
NOV											
10...	<.003	<.020	<.004	<.004	<.002	E.15	117	<.002	<.001	<.017	<.002
DEC											
08...	<.003	<.003	<.004	<.004	<.002	E.12	107	<.002	<.001	<.017	<.002
08...	<.003	<.003	<.004	<.004	<.002	E.12	110	<.002	<.001	<.017	<.002
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	<.003	<.003	<.004	<.004	<.002	<.002	100	<.002	<.001	<.017	<.002
04...	<.003	<.003	<.004	<.004	<.002	E.17	98	<.002	<.001	<.017	<.002
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	<.003	<.018	E.003	<.004	<.002	E.11	111	<.002	<.001	<.017	<.002
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
31...	<.003	E.10	.014	.005	<.002	E.092	91	E.002	<.001	<.017	<.002
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	<.003	<.003	<.004	<.004	<.002	E.14	117	<.002	<.001	<.017	<.002
19...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	<.003	E.024	<.004	<.004	<.002	E.16	98	<.002	<.001	<.017	<.002
AUG											
14...	<.003	<.020	<.004	<.004	<.002	E.10	107	<.002	<.001	<.017	<.002
14...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
26...	E.005	<.060	E.003	<.004	<.002	E.046	110	E.004	<.001	<.017	<.002

E Estimated value.

&lt; Actual value is known to be less than the value shown.



## CHESTER RIVER BASIN

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)
OCT											
01...	<.004	<.003	<.003	112	<.004	<.002	<.005	<.001	<.006	.293	<.004
13...	<.004	<.003	<.003	107	<.004	<.002	<.005	<.001	<.006	.303	<.004
NOV											
10...	<.004	<.003	<.003	107	<.004	<.002	<.005	<.001	<.006	.184	<.004
DEC											
08...	<.004	<.003	<.003	94	<.004	<.002	<.005	<.001	<.006	.177	<.004
08...	<.004	<.003	<.003	96	<.004	<.002	<.005	<.001	<.006	.174	<.004
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	<.004	<.003	<.003	101	<.004	<.002	<.005	<.001	<.006	.011	<.004
04...	<.004	<.003	<.003	107	<.004	<.002	<.005	<.001	<.006	.143	<.004
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	<.004	<.003	<.003	99	<.004	<.002	<.005	<.001	<.006	.266	<.004
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
31...	<.004	<.003	<.003	79	<.004	<.002	<.005	<.001	<.006	E5.39	<.004
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	<.004	<.003	<.003	108	<.004	<.002	<.005	<.001	<.006	.365	<.004
19...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	<.004	<.003	<.003	94	<.004	<.002	<.005	<.001	<.006	.289	<.004
AUG											
14...	<.004	<.003	<.003	95	<.004	<.002	.007	<.001	<.006	.367	<.004
14...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
26...	<.004	<.003	<.003	110	<.004	<.002	<.005	<.001	<.006	.400	<.004

E Estimated value.

&lt; Actual value is known to be less than the value shown.

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV DDE (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
OCT											
01...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	.007	<.007
13...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
NOV											
10...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
DEC											
08...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	E.004	<.007
08...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	.004	<.007
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
04...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
31...	<.004	<.003	<.006	<.004	<.004	.006	<.005	<.002	<.018	.286	<.007
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	<.004	<.003	<.006	<.004	<.004	<.008	<.005	<.002	<.018	.015	<.007
19...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	.008	<.007
AUG											
14...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
14...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
26...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007

E Estimated value.

&lt; Actual value is known to be less than the value shown.

## CHESTER RIVER BASIN

01493112 CHESTERVILLE BRANCH NEAR CRUMPTON, MD--Continued

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

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI-ALIN WAT FLT 0.7 U GF, REC (82661)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT											
01...	<.004	<.013	.215	<.010	<.007	<.013	<.002	<.001	<.002	--	--
13...	<.004	<.013	.193	<.010	<.007	<.013	<.002	<.001	<.002	--	--
NOV											
10...	<.004	<.013	.126	<.010	<.007	<.013	<.002	<.001	<.004	--	--
DEC											
08...	<.004	<.013	.272	<.010	<.007	<.013	<.002	<.001	<.002	--	--
08...	<.004	<.013	.273	<.010	<.007	<.013	<.002	<.001	<.005	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	--	--
04...	<.004	<.013	.098	<.010	<.007	<.013	<.002	<.001	<.002	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	<.004	<.013	.130	<.010	<.007	<.013	<.002	<.001	<.002	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	194	28
22...	--	--	--	--	--	--	--	--	--	182	--
28...	--	--	--	--	--	--	--	--	--	69	6.7
31...	<.004	<.013	E5.67	<.010	<.007	<.013	<.002	<.001	<.002	--	--
APR											
17...	--	--	--	--	--	--	--	--	--	139	27
JUN											
07...	<.004	<.013	.406	<.010	<.007	<.013	<.002	<.001	<.002	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	<.004	<.013	.181	<.010	<.007	<.013	<.002	<.001	<.004	--	--
AUG											
14...	<.004	<.013	.233	<.010	<.007	<.013	<.002	<.001	<.002	52	3.8
14...	--	--	--	--	--	--	--	--	--	61	7.4
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	18	.28
19...	--	--	--	--	--	--	--	--	--	--	--
26...	<.004	<.013	.770	<.010	<.007	<.013	<.002	<.001	<.002	--	--

E Estimated value.

&lt; Actual value is known to be less than the value shown.

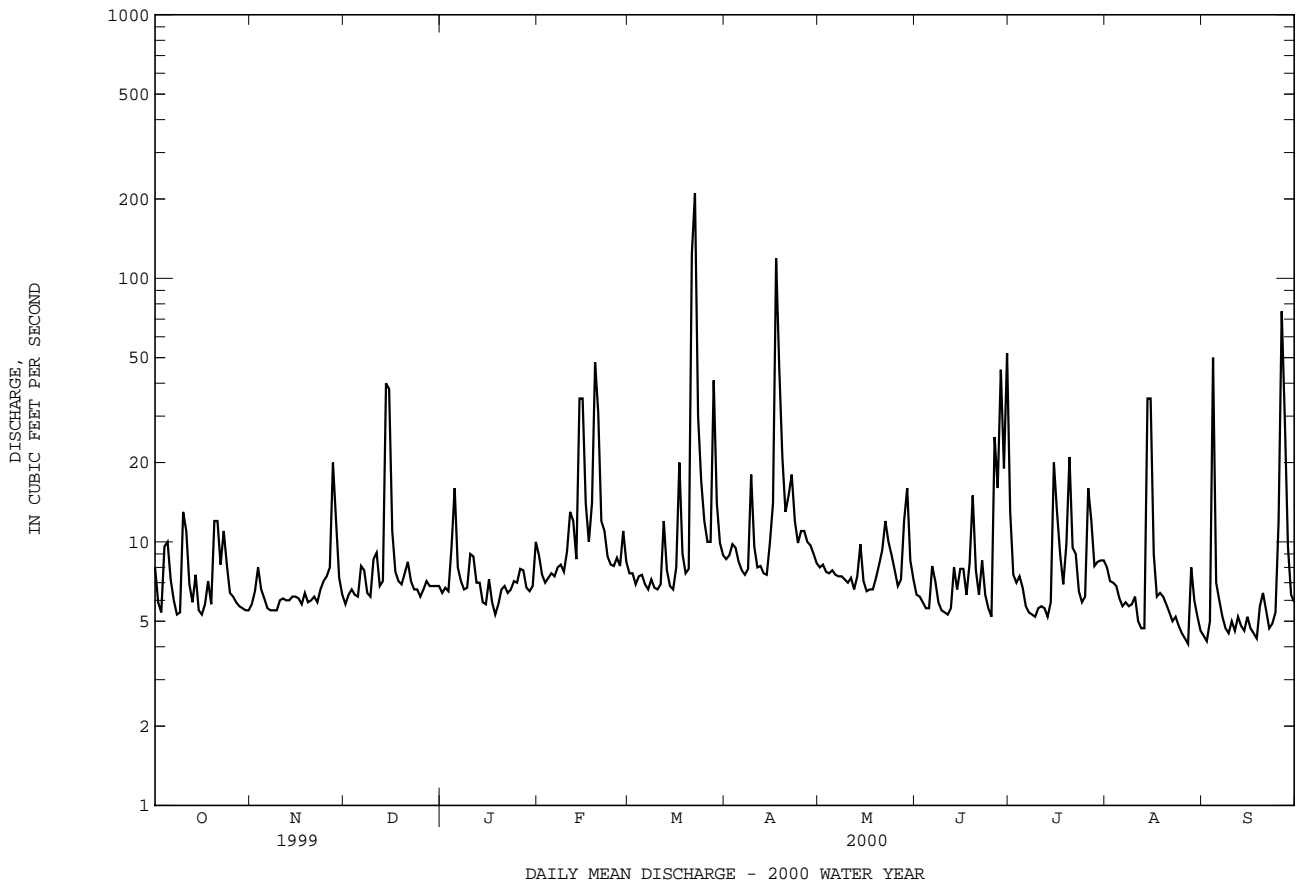
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01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	6647.2		3845.7		11.0	
ANNUAL MEAN	18.2		10.5		24.2	
HIGHEST ANNUAL MEAN					3.67	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	3600	Sep 16	210	Mar 22	(e)3600	Sep 16 1999
LOWEST DAILY MEAN	2.1	(a)	(e)4.1	Aug 27	.70	(b)
ANNUAL SEVEN-DAY MINIMUM	2.3	Aug 1	4.8	Aug 21	.71	Sep 7 1966
INSTANTANEOUS PEAK FLOW			493	Mar 22	(c)11200	Sep 16 1999
INSTANTANEOUS PEAK STAGE			6.06	Mar 22	(d)15.03	Sep 16 1999
INSTANTANEOUS LOW FLOW			UNKNOWN		.60	(f)
ANNUAL RUNOFF (CFSM)	1.43		.83		.87	
ANNUAL RUNOFF (INCHES)	19.47		11.26		11.80	
10 PERCENT EXCEEDS	13		14		16	
50 PERCENT EXCEEDS	6.3		7.1		6.4	
90 PERCENT EXCEEDS	3.0		5.4		3.2	

- e Estimated.
- a Aug. 3, 4, 19.
- b July 21, Aug. 28-31, Sept. 4, 8-13, 1966.
- c From rating curve extended above 640 ft<sup>3</sup>/s on basis of USGS Culvert Analysis Program and flow-over-road measurement of peak flow.
- d From floodmark.
- f Aug. 28, 29, 1966.



CHESTER RIVER BASIN

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-80, 1991, 1998 to current year.

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

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
FEB 22...	1000	12	226	7.1	6.0	3.5	776	11.2	83	47	11.4	
		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
		4.41	11.9	5.8	30	37	7.8	25.1	<.1	7.5	121	3.7
		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHORUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
		2.73	.029	2.76	.304	.95	.66	3.4	.65	.35	.151	.020
		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, 0.7 U GF, REC (UG/L) (82680)
		.012	150	183	<.003	.004	.038	<.002	.054	<.002	.005	<.003
		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-ZINE, PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
		E.013	<.004	<.004	<.002	E.054	116	<.002	<.001	<.017	<.002	<.004
		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONO-FOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THON, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-OS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THON WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	
		<.003	<.003	100	<.004	<.002	<.005	<.001	<.006	.331	<.004	

E Estimated value.  
 < Actual value is known to be less than the value shown.

CHESTER RIVER BASIN

01493500 MORGAN CREEK NEAR KENNEDYVILLE, MD--Continued

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

DATE	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
FEB 22...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.003	<.003
	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
	<.007	<.004	<.013	.016	<.010	E.018	<.013	<.002	<.001	<.002

E Estimated value.  
 < Actual value is known to be less than the value shown.



ELK RIVER BASIN

01495000 BIG ELK CREEK AT ELK MILLS, MD

LOCATION.--Lat 39°39'26", long 75°49'20", Cecil County, Hydrologic Unit 02060002, on right bank 100 ft downstream from highway bridge at Elk Mills (State Highway 277), 3.5 mi north of Elkton, and 7 mi upstream from confluence with Little Elk Creek.

DRAINAGE AREA.--52.6 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1932 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1932-33, 1934(M), 1935, 1936(M), 1938, 1919-40(M), 1942(M), 1943-51, 1952-53(P).

GAGE.--Water-stage recorder. Datum of gage is 68.69 ft above sea level. Prior to May 17, 1946, nonrecording gage at bridge 100 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Slight diurnal fluctuation caused by mills upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1884 reached a stage of about 19 ft, from information by local residents; discharge, about 18,000 ft<sup>3</sup>/s.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0400	*4,370	*8.30	No other peak greater than base discharge.			

Minimum discharge 19 ft<sup>3</sup>/s, Aug 26, 27, Sep 11-13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	37	45	45	95	74	97	68	51	41	53	34
2	40	52	42	45	80	70	95	72	48	35	36	29
3	36	165	42	46	74	65	94	66	44	33	34	29
4	47	52	42	79	80	62	126	64	42	42	34	26
5	166	44	41	143	74	61	101	63	42	36	32	23
6	57	42	79	62	66	57	90	62	69	31	29	20
7	43	40	73	56	65	56	85	59	75	29	32	20
8	39	39	49	52	66	56	84	56	48	28	29	21
9	37	39	45	51	59	57	167	54	44	27	27	21
10	209	39	62	69	62	55	120	86	41	28	25	20
11	100	38	93	103	74	66	91	159	39	26	24	20
12	55	37	54	60	94	116	87	69	38	25	23	20
13	46	37	61	56	64	73	81	72	47	24	25	32
14	42	37	335	50	161	62	79	107	49	31	43	26
15	39	36	173	50	182	59	82	64	48	42	42	87
16	38	35	87	49	111	65	104	58	49	99	41	31
17	39	35	69	48	140	245	174	65	44	100	30	23
18	43	34	63	e47	92	93	178	60	58	39	28	22
19	38	34	58	e47	400	74	109	96	49	39	29	128
20	66	35	60	e50	205	68	93	90	39	53	25	119
21	67	37	89	e50	116	809	128	77	42	36	23	38
22	46	37	63	e46	92	1900	200	77	98	31	22	28
23	60	38	56	e46	94	244	110	87	45	28	22	27
24	46	46	53	e48	93	168	95	116	37	30	23	29
25	41	51	50	e45	95	138	87	74	34	32	22	42
26	39	60	52	e60	101	121	84	61	42	136	20	295
27	38	304	49	e54	81	120	82	57	35	134	22	84
28	37	80	48	e46	127	302	81	62	43	51	65	46
29	37	56	46	e50	85	136	77	63	101	38	31	37
30	37	49	46	e60	---	112	72	55	85	39	27	33
31	36	---	46	123	---	103	---	52	---	40	46	---
TOTAL	1722	1665	2171	1836	3128	5687	3153	2271	1526	1403	964	1410
MEAN	55.5	55.5	70.0	59.2	108	183	105	73.3	50.9	45.3	31.1	47.0
MAX	209	304	335	143	400	1900	200	159	101	136	65	295
MIN	36	34	41	45	59	55	72	52	34	24	20	20
CFSM	1.06	1.06	1.33	1.13	2.05	3.49	2.00	1.39	.97	.86	.59	.89
IN.	1.22	1.18	1.54	1.30	2.21	4.02	2.23	1.61	1.08	.99	.68	1.00

e Estimated

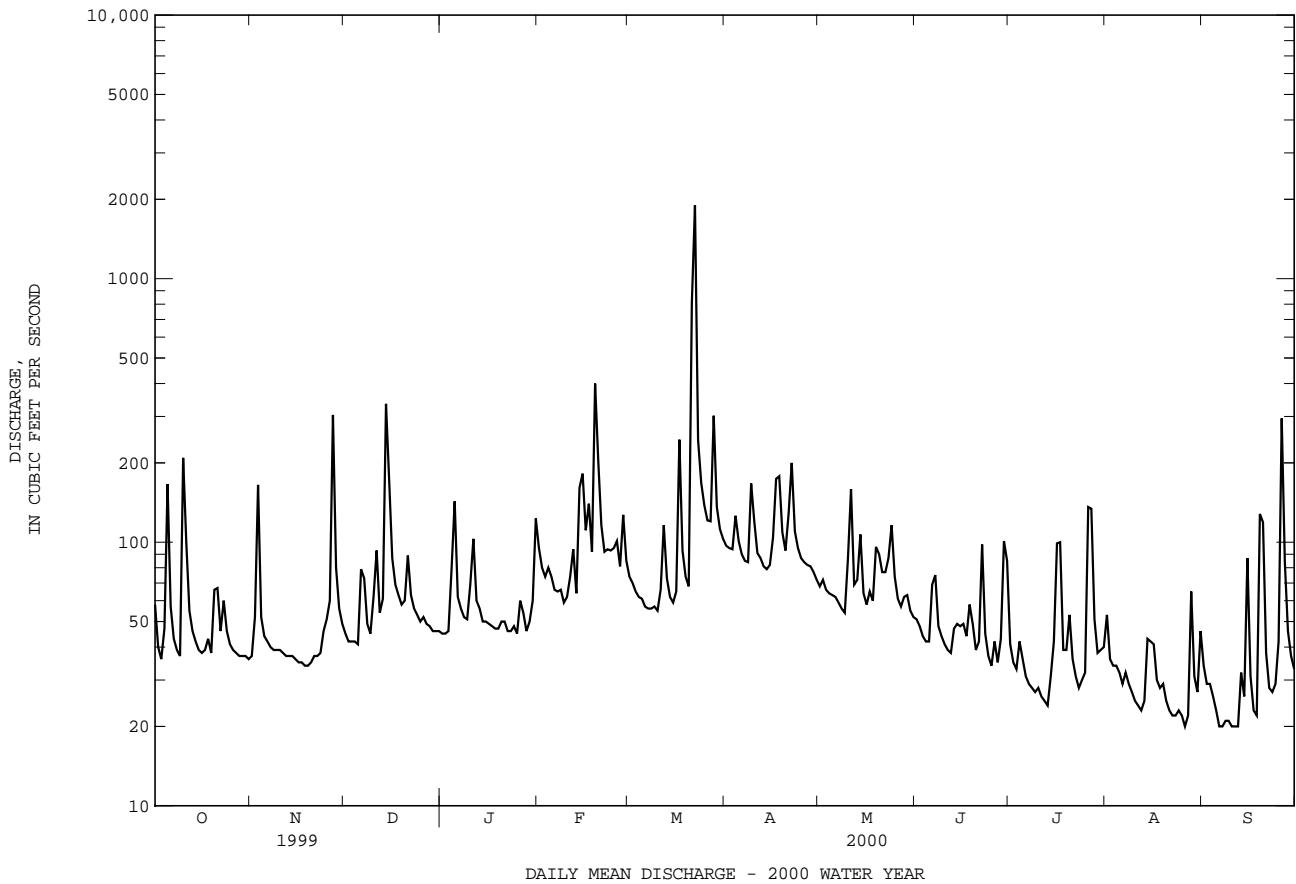
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)
MEAN	42.1	54.8	68.9	87.2	98.1	102	90.4	76.6	58.5	56.1	51.4	45.8
MAX	152	125	276	283	236	247	191	160	216	248	241	205
(WY)	1997	1997	1997	1979	1936	1994	1993	1958	1972	1975	1933	1999
MIN	11.1	17.1	18.7	19.2	41.4	35.6	34.5	26.8	21.4	10.5	8.32	9.95
(WY)	1964	1966	1966	1966	1947	1981	1963	1955	1963	1963	1966	1932

01495000 BIG ELK CREEK AT ELK MILLS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	23389.8		26936		69.4	
ANNUAL MEAN	64.1		73.6		109	
HIGHEST ANNUAL MEAN					35.4	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	4570	Sep 16	1900	Mar 22	4570	Sep 16 1999
LOWEST DAILY MEAN	5.7	Aug 7	20	(a)	4.8	(b)
ANNUAL SEVEN-DAY MINIMUM	6.2	Aug 2	20	Sep 6	4.9	Sep 7 1966
INSTANTANEOUS PEAK FLOW			4370	Mar 22	(c)10600	Jul 5 1937
INSTANTANEOUS PEAK STAGE			8.30	Mar 22	(d)14.54	Sep 16 1999
INSTANTANEOUS LOW FLOW			19	(f)	4.5	(g)
ANNUAL RUNOFF (CFSM)	1.22		1.40		1.32	
ANNUAL RUNOFF (INCHES)	16.54		19.05		17.93	
10 PERCENT EXCEEDS	90		119		114	
50 PERCENT EXCEEDS	39		52		46	
90 PERCENT EXCEEDS	12		29		20	

- a Aug. 26, Sept. 6, 7, 10-12.
- b Sept. 8-10, 1966.
- c From rating curve extended above 1,700 ft<sup>3</sup>/s on basis of velocity-area and conveyance studies.
- d From floodmarks.
- f Aug. 26, 27, Sept. 11-13.
- g Result of freezeup.



## SUSQUEHANNA RIVER BASIN

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD

LOCATION.--Lat 39°39'28", long 76°10'29", Harford County, Hydrologic Unit 02050306, at downstream side of Conowingo Dam, 1.0 mi southwest of Conowingo, and 9.9 mi upstream from mouth.

DRAINAGE AREA.--27,100 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft above sea level.

REMARKS.--Water-discharge records good. Flow regulated by Conowingo Reservoir beginning October 1928, usable capacity, 55,070,000,000 gal; dead storage, 45,290,000,000 gal. Records do not include a small infrequent diversion upstream from station to augment municipal supply of city of Baltimore. Records of diversion available from Baltimore Department of Public Works. U.S. Geological Survey gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 228,000 ft<sup>3</sup>/s, Feb 29, gage height, 22.12 ft; minimum discharge, 1,000 ft<sup>3</sup>/s, Dec 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37000	17900	57000	20200	14600	199000	62600	56200	49600	27500	19100	18600
2	32500	13700	38700	13500	17400	179000	54300	48300	42800	20700	22900	8590
3	30400	15000	45800	20200	12500	141000	59100	44600	26100	30000	21900	13100
4	28800	9330	27000	20400	19200	112000	59200	36800	29000	20500	25400	11500
5	31900	9230	21000	31500	12000	80300	61300	35800	29100	22400	22100	6620
6	34400	12200	33700	20800	6600	77600	102000	29800	29300	20700	12400	7800
7	19100	10300	27600	27500	19900	72700	130000	26200	27700	21400	28100	12600
8	21900	15300	26800	34300	17700	67600	102000	37400	43800	16500	17000	7790
9	21300	17800	18600	26500	14400	52900	96100	31200	40300	14700	16100	6660
10	17300	13900	16400	35000	15700	53300	104000	26400	30800	19700	18700	6680
11	24600	14900	15900	36800	15400	40500	112000	21200	29700	11400	21300	6530
12	26900	12300	13400	36200	15500	44600	105000	26300	26800	14600	12500	6450
13	22400	9690	22000	41000	8310	64100	90200	29400	32700	14500	6860	16100
14	19300	5840	22800	47800	20200	71200	77300	36600	37400	14700	15900	8510
15	16100	15500	43000	38300	23600	70900	67500	44400	40300	12100	17300	15500
16	18400	12500	51700	26200	33700	70800	56900	48600	46000	8150	17500	12300
17	18400	11600	55200	41900	49600	69400	68000	53400	58300	17500	12600	3760
18	20800	11700	53200	16600	50000	59600	63500	52300	54100	15100	9530	11400
19	20800	11500	40500	19600	46300	55400	64900	46200	54100	17500	9860	18500
20	17200	4910	48100	12400	36800	70000	77300	42800	46300	18600	7110	21700
21	13500	3610	44800	21700	48700	74800	85400	42600	45700	17000	11600	16200
22	10400	11600	43300	14100	46600	124000	77400	66200	48300	11900	8310	14000
23	12700	13500	38200	7570	44700	112000	88300	66800	53200	8380	14500	4020
24	7050	15600	36100	16700	43800	103000	107000	63000	50500	17500	16000	4160
25	18700	3610	27700	24800	52500	72200	119000	72200	41000	10900	9920	4280
26	13200	9580	28700	19900	51500	71300	104000	100000	55900	10200	6200	19200
27	13500	15000	26000	18600	79900	71700	84000	97600	44500	17000	6110	14300
28	10800	23800	24700	16700	145000	66100	71300	77500	39900	11200	9790	10100
29	7780	61200	26400	14600	190000	68200	62700	65500	33400	7350	6400	22000
30	5490	66800	24400	4400	---	63200	49000	66000	35400	5500	11200	4290
31	5370	---	19300	15100	---	58800	---	54100	---	18700	15100	---
TOTAL	597990	469400	1018000	740870	1152110	2537200	2461300	1545400	1222000	493880	449290	333240
MEAN	19290	15650	32840	23900	39730	81850	82040	49850	40730	15930	14490	11110
MAX	37000	66800	57000	47800	190000	199000	130000	100000	58300	30000	28100	22000
MIN	5370	3610	13400	4400	6600	40500	49000	21200	26100	5500	6110	3760
CFSM	.71	.58	1.21	.88	1.47	3.02	3.03	1.84	1.50	.59	.53	.41
IN.	.82	.64	1.40	1.02	1.58	3.48	3.38	2.12	1.68	.68	.62	.46

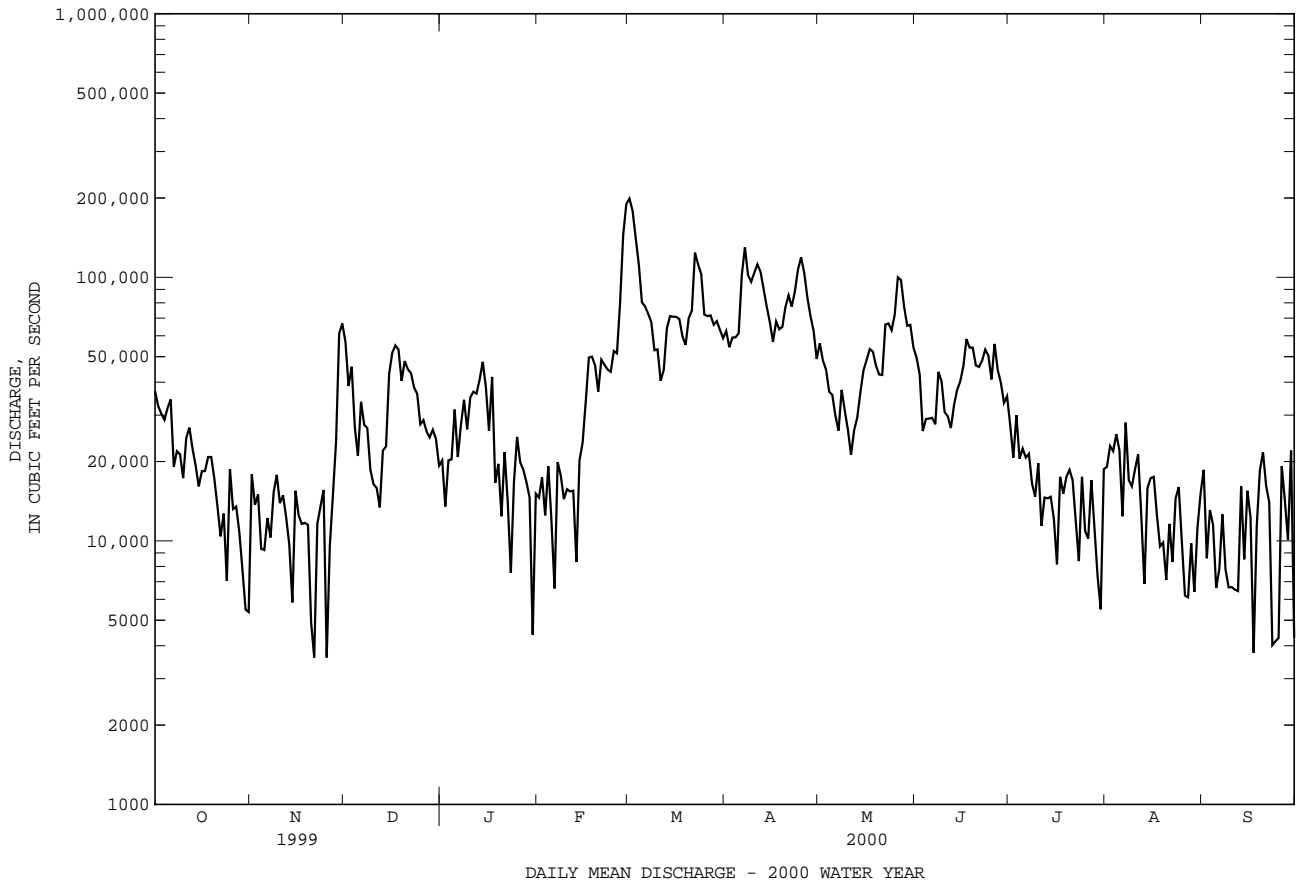
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	23180	35440	48700	43100	52750	74280	79510	48290	34730	19590	13690	16170
MAX	81800	73170	113700	122500	115800	147800	250100	108200	208000	59050	48580	88450
(WY)	1977	1978	1997	1996	1984	1994	1993	1989	1972	1972	1994	1975
MIN	5557	5465	6733	7164	13050	28320	33850	19980	7691	5338	5304	3476
(WY)	1970	1999	1999	1981	1980	1969	1995	1999	1999	1999	1999	1995

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	9793150		13020680		40690	
ANNUAL MEAN	26830		35580		61090	
HIGHEST ANNUAL MEAN					22850	
LOWEST ANNUAL MEAN					1120000	
HIGHEST DAILY MEAN	222000	Jan 26	199000	Mar 1	Jun 24 1972	
LOWEST DAILY MEAN	2110	Jan 10	3610	(a)	Jul 13 1969	
ANNUAL SEVEN-DAY MINIMUM	2530	Aug 7	7790	Sep 6	Sep 24 1980	
INSTANTANEOUS PEAK FLOW			228000	Feb 29	1130000	
INSTANTANEOUS PEAK STAGE			22.12	Feb 29	36.83	
INSTANTANEOUS LOW FLOW			1000	Dec 31	144	
ANNUAL RUNOFF (CFSM)	.99		1.31		1.50	
ANNUAL RUNOFF (INCHES)	13.44		17.87		20.40	
10 PERCENT EXCEEDS	57900		71800		85000	
50 PERCENT EXCEEDS	18400		24600		27300	
90 PERCENT EXCEEDS	4670		9040		5710	

a Nov. 21, 25.



01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1979 to April 1981, July 1984 to September 1992.

WATER TEMPERATURE: June 1979 to April 1981, July 1984 to September 1992.

SUSPENDED-SEDIMENT DISCHARGE: October 1979 to April 1981, July 1984 to September 1992.

REMARKS.--During the period Oct. 1994 to Jan. 1995, monthly samples were collected and analyzed using ultraclean methodologies. Data on trace metals for this period are available from the University of Delaware. Data on organics for this period are available from George Mason University.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1980, 1985-89, 1991-92): Maximum daily, 475 microsiemens, Nov. 13-15, 1980 and Aug. 31, 1991; minimum daily, 100 microsiemens, May 1, 1991.

WATER TEMPERATURE (water years 1980, 1985-89, 1991-92): Maximum daily, 30.5°C, Aug. 18, 1988; minimum daily, 1.0°C, Feb. 5, 6, 9, 1980, Feb. 12, 1988.

SEDIMENT CONCENTRATION: Maximum daily mean, 207 mg/L, Mar. 17, 1986; minimum daily mean, 1 mg/L, June 27, 1987, May 27, 28, 30, Nov. 1-3, 10, 11, Dec. 22-24, 27, 30, 31, 1991.

SEDIMENT LOAD: Maximum daily, 197,000 tons, Mar. 16, 17, 1986; minimum daily, 4.4 tons, Feb. 10, 1985.

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	
OCT	06...	0715	ENVIRONMENTAL	35300	232	7.5	18.0	17.5	764	--	8.4	88
NOV	02...	1015	ENVIRONMENTAL	4450	281	7.8	17.0	15.5	764	--	8.8	88
DEC	01...	1115	ENVIRONMENTAL	71400	283	8.0	.0	8.5	--	--	11.3	--
	01...	1116	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1117	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1118	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1119	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1120	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1121	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1122	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1123	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1124	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1125	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1126	REPLICATE	--	--	--	--	--	--	--	--	--
	01...	1127	REPLICATE	--	--	--	--	--	--	7.6	--	--
	01...	1128	REPLICATE	--	--	--	--	--	--	8.8	--	--
	01...	1129	REPLICATE	--	--	--	--	--	--	9.5	--	--
	01...	1130	REPLICATE	--	--	--	--	--	--	8.9	--	--
	01...	1131	REPLICATE	--	--	--	--	--	--	9.8	--	--
	01...	1132	REPLICATE	--	--	--	--	--	--	9.9	--	--
	01...	1133	REPLICATE	--	--	--	--	--	--	9.6	--	--
	01...	1134	REPLICATE	--	--	--	--	--	10	--	--	--
JAN	06...	1215	ENVIRONMENTAL	7120	212	--	4.0	3.5	775	--	12.9	96
FEB	02...	1215	ENVIRONMENTAL	14500	231	7.8	.5	2.0	765	--	13.7	99
	28...	1500	ENVIRONMENTAL	165000	216	7.8	12.0	6.0	762	--	13.2	106
	29...	1300	ENVIRONMENTAL	180000	188	7.5	10.5	5.0	767	--	13.1	102
MAR	01...	1145	ENVIRONMENTAL	209000	154	7.6	10.0	5.5	761	--	13.6	108
	02...	1045	ENVIRONMENTAL	194000	139	7.5	13.0	8.5	757	--	13.3	115
	02...	1046	REPLICATE	--	--	--	--	--	--	--	--	--
	23...	1145	ENVIRONMENTAL	137000	176	7.7	14.5	7.0	770	--	13.1	107
APR	06...	1214	BLANK	--	--	--	--	--	--	--	--	--
	06...	1215	ENVIRONMENTAL	76700	203	7.8	20.0	12.5	750	--	10.9	104
	11...	1215	ENVIRONMENTAL	122000	153	7.5	12.5	10.0	766	--	12.5	110
MAY	02...	1215	ENVIRONMENTAL	54300	180	8.0	19.5	15.0	760	--	10.5	104
	02...	1216	REPLICATE	--	--	--	--	--	--	--	--	--
	24...	0930	ENVIRONMENTAL	48400	205	7.5	23.5	17.5	750	--	9.5	101
JUN	07...	1030	ENVIRONMENTAL	43200	190	8.0	23.5	21.5	764	--	8.5	96
	07...	1031	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1032	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1033	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1034	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1035	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1036	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1037	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1038	REPLICATE	--	--	--	--	--	--	10	--	--
	07...	1039	REPLICATE	--	--	--	--	--	--	10	--	--
	07...	1040	REPLICATE	--	--	--	--	--	--	10	--	--
	07...	1041	REPLICATE	--	--	--	--	--	--	9.6	--	--
	07...	1042	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1043	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1044	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1045	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1046	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1047	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1048	REPLICATE	--	--	--	--	--	--	--	--	--
	07...	1049	REPLICATE	--	--	--	--	--	--	--	--	--
	20...	0930	ENVIRONMENTAL	64700	226	7.7	25.5	23.5	766	--	8.1	95
JUL	07...	1059	BLANK	--	--	--	--	--	--	--	--	--
	07...	1100	ENVIRONMENTAL	26800	229	7.9	23.0	28.0	761	--	7.8	99
	18...	1130	ENVIRONMENTAL	33800	245	7.7	29.0	27.0	758	--	5.4	68
AUG	04...	1259	BLANK	--	--	--	--	--	--	--	--	--
	04...	1300	ENVIRONMENTAL	54700	306	7.9	28.0	28.0	761	--	6.6	84
	04...	1301	REPLICATE	--	--	--	--	--	--	--	--	--
	21...	1315	ENVIRONMENTAL	6400	263	7.5	--	26.5	769	--	6.7	83
SEP	07...	1200	ENVIRONMENTAL	6800	S296	7.8	20.0	26.5	770	--	6.5	--
	21...	0845	ENVIRONMENTAL	3730	308	7.8	23.5	23.0	756	--	10.3	121

## SUSQUEHANNA RIVER BASIN

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

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

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT											
06...	--	--	87	24.4	6.38	9.5	2.7	48	59	27.7	15.2
NOV											
02...	--	--	100	27.4	8.12	11.9	2.2	58	71	36.8	18.5
DEC											
01...	--	--	110	31.3	8.70	11.6	2.0	--	--	42.0	19.3
01...	--	--	110	31.2	8.70	11.7	2.0	--	--	41.9	19.3
01...	--	--	110	31.5	8.77	11.7	2.0	--	--	42.1	18.8
01...	--	--	110	31.4	8.74	11.8	2.0	--	--	42.1	19.0
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	15	<1.3	--	--	--	--	--	--	--	--	--
01...	11	<1.2	--	--	--	--	--	--	--	--	--
01...	<10	<1.3	--	--	--	--	--	--	--	--	--
01...	18	<1.3	--	--	--	--	--	--	--	--	--
JAN											
06...	--	--	84	23.8	6.04	7.8	1.4	--	--	29.3	14.1
FEB											
02...	--	--	81	22.6	5.91	10.2	1.5	43	52	29.1	16.3
28...	--	--	70	19.6	5.19	11.5	1.5	34	42	24.6	20.9
29...	--	--	58	16.2	4.15	9.9	1.5	27	33	20.1	17.7
MAR											
01...	--	--	47	13.3	3.22	7.6	1.3	25	30	15.9	14.0
02...	--	--	44	12.5	2.99	6.7	1.4	22	26	14.9	12.1
02...	--	--	44	12.5	2.99	6.6	1.4	--	--	14.9	12.4
23...	--	--	61	17.1	4.41	7.1	2.0	--	--	17.9	12.3
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	72	20.2	5.27	7.8	1.4	34	42	23.6	15.1
11...	--	--	--	--	--	--	--	29	35	--	--
MAY											
02...	--	--	77	22.7	4.93	7.6	1.2	34	41	23.6	10.3
02...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	46	57	--	--
JUN											
07...	--	--	69	19.5	4.96	7.3	1.3	--	--	21.7	11.1
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	15	<1.2	--	--	--	--	--	--	--	--	--
07...	14	<1.1	--	--	--	--	--	--	--	--	--
07...	11	<1.3	--	--	--	--	--	--	--	--	--
07...	16	<.9	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	45	55	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	80	22.1	5.96	8.5	1.9	50	60	23.2	12.6
18...	--	--	--	--	--	--	--	52	63	--	--
AUG											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	110	28.5	8.82	13.3	2.1	62	75	40.9	21.1
04...	--	--	110	28.4	8.82	13.2	2.2	--	--	40.8	20.9
21...	--	--	--	--	--	--	--	46	57	--	--
SEP											
07...	--	--	110	28.5	8.90	14.4	2.1	61	74	47.5	21.2
21...	--	--	--	--	--	--	--	65	79	--	--

&lt; Actual value is known to be less than the value shown.

SUSQUEHANNA RIVER BASIN

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

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

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)
OCT											
06...	<.1	4.5	--	142	2.3	--	--	1.84	.042	.42	.30
NOV											
02...	<.1	1.9	--	181	1.9	1.57	.023	1.59	.092	.34	.26
DEC											
01...	<.1	1.5	--	164	1.6	1.14	.008	1.14	.037	.41	.19
01...	<.1	1.5	--	170	1.5	1.13	.008	1.14	.038	.38	<.10
01...	<.1	1.5	--	166	1.6	1.14	.008	1.15	.039	.42	.23
01...	<.1	1.5	--	168	1.5	1.14	.008	1.15	.036	.36	.23
01...	--	--	--	--	1.6	--	--	1.05	<.020	--	--
01...	--	--	--	--	1.6	--	--	1.06	<.020	--	--
01...	--	--	--	--	1.7	--	--	1.05	<.020	--	--
01...	--	--	--	--	1.6	--	--	1.05	<.020	--	--
01...	--	1.4	8	--	1.3	--	--	.920	.050	.39	.25
01...	--	1.3	9	--	1.5	--	--	1.02	.050	.44	.24
01...	--	1.4	8	--	1.4	--	--	1.01	.050	.34	.24
01...	--	1.4	9	--	1.4	--	--	1.01	.040	.40	.25
01...	--	1.6	10	--	--	1.03	.009	1.04	.033	--	--
01...	--	1.6	9	--	--	1.07	.009	1.08	.034	--	--
01...	--	1.6	9	--	--	1.09	.009	1.10	.034	--	--
01...	--	1.6	9	--	--	1.07	.009	1.08	.034	--	--
01...	--	1.5	10	--	1.5	1.11	.010	1.12	.038	.41	.32
01...	--	1.5	13	--	1.6	1.11	.009	1.12	.031	.45	.31
01...	--	1.5	13	--	1.5	1.10	.009	1.11	.036	.43	.31
01...	--	1.5	14	--	1.5	1.11	.009	1.11	.035	.42	.32
JAN											
06...	<.1	5.1	--	123	1.8	1.55	.008	1.55	.073	.26	.18
FEB											
02...	<.1	4.9	--	128	1.9	1.63	.012	1.65	.086	.27	.21
28...	<.1	4.5	--	137	1.9	1.47	.009	1.48	.055	.40	.18
29...	<.1	4.5	--	101	1.8	1.15	.007	1.16	.067	.64	.22
MAR											
01...	<.1	4.4	--	87	1.7	1.07	.006	1.08	.063	.63	.23
02...	<.1	4.5	--	81	1.5	1.01	.004	1.01	.036	.49	.23
02...	<.1	4.4	--	82	1.5	1.01	.004	1.01	.043	.51	.22
23...	<.1	4.3	--	101	2.2	1.38	.010	1.39	.095	.78	.31
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<.1	4.1	3	117	1.6	1.32	.006	1.32	.037	.27	.18
11...	--	--	--	--	--	--	--	--	--	--	--
MAY											
02...	<.1	4.4	2	97	1.1	.900	.005	.905	<.020	.24	.13
02...	--	--	--	--	--	--	--	--	--	--	--
24...	--	4.0	18	--	1.2	.798	.014	.812	.077	.42	.31
JUN											
07...	<.1	2.9	12	101	1.2	.691	.010	.701	.073	.47	.24
07...	--	2.7	<10	--	1.2	.688	.009	.697	.078	.46	.23
07...	--	2.7	14	--	1.2	.692	.009	.701	.079	.48	.24
07...	--	2.6	12	--	1.2	.694	.009	.703	.085	.47	.27
07...	--	--	--	--	1.2	--	--	.690	.070	--	--
07...	--	--	--	--	1.3	--	--	.680	.070	--	--
07...	--	--	--	--	1.2	--	--	.680	.070	--	--
07...	--	--	--	--	1.0	--	--	.690	.070	--	--
07...	--	3.1	14	--	1.3	.714	.010	.724	.069	.59	.25
07...	--	3.0	14	--	1.2	.737	.010	.747	.071	.50	.25
07...	--	3.0	15	--	1.2	.740	.010	.750	.070	.48	.26
07...	--	3.0	16	--	1.2	.730	.010	.740	.071	.47	.27
07...	--	2.9	11	--	1.2	--	--	.770	.070	.47	.45
07...	--	3.0	10	--	1.2	--	--	.760	.070	.43	.27
07...	--	3.0	10	--	1.2	--	--	.750	.070	.46	.27
07...	--	2.9	10	--	1.3	--	--	.750	.070	.51	.21
07...	--	3.3	11	--	--	.695	.011	.706	.069	--	--
07...	--	2.7	13	--	--	.703	.011	.714	.079	--	--
07...	--	2.7	8	--	--	.660	.011	.671	.084	--	--
07...	--	2.7	12	--	--	.704	.011	.715	.070	--	--
20...	--	3.0	<10	--	1.4	.993	.013	1.01	.036	.38	.22
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
07...	<.1	4.4	<10	128	1.6	1.17	.031	1.21	.037	.42	.25
18...	--	2.6	<10	--	1.4	.821	.033	.854	.181	.53	.37
AUG											
04...	--	<.1	--	--	--	--	--	--	--	--	--
04...	<.1	2.0	--	178	1.4	.985	.039	1.02	.066	.39	.25
04...	<.1	2.1	--	174	1.4	.991	.039	1.03	.066	.41	.24
21...	--	3.9	<10	--	1.5	1.03	.126	1.15	.020	.32	.23
SEP											
07...	<.1	2.0	<10	178	1.2	.778	.063	.841	.057	.38	.26
21...	--	2.9	<10	--	1.6	1.13	.067	1.19	.068	.45	.34

< Actual value is known to be less than the value shown.



## SUSQUEHANNA RIVER BASIN

01578310 SUSQUEHANNA RIVER AT CONOWINGO, MD--Continued

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

DATE	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT											
06...	2.1	.38	.25	--	.073	.043	.033	--	5.1	--	10
NOV											
02...	1.9	.25	.17	--	.030	.008	.005	--	3.3	--	<10
DEC											
01...	1.3	.37	.15	--	.037	.015	.002	--	3.3	--	40
01...	--	.34	--	--	.039	.015	.003	--	3.6	--	40
01...	1.4	.38	.19	--	.038	.017	<.001	--	3.9	--	40
01...	1.4	.32	.20	--	.039	.015	.005	--	3.4	--	30
01...	1.5	--	--	1.0	.046	.030	.018	--	3.1	--	--
01...	1.6	--	--	1.1	.042	.029	.015	--	3.1	--	--
01...	1.5	--	--	1.1	.043	.020	.024	--	3.1	--	--
01...	1.5	--	--	1.1	.042	.039	.022	--	2.8	--	--
01...	1.2	.34	.20	--	.040	.020	.010	--	2.3	--	--
01...	1.3	.39	.19	--	.050	.020	<.010	--	3.5	3.5	--
01...	1.2	.29	.19	--	.040	.020	<.010	--	3.4	3.4	--
01...	1.3	.36	.21	--	.040	.020	<.010	--	3.5	3.5	--
01...	--	--	--	--	--	.010	.008	--	--	--	--
01...	--	--	--	--	--	.010	.009	--	--	--	--
01...	--	--	--	--	--	.010	.009	--	--	--	--
01...	--	--	--	--	--	.010	.008	--	--	--	--
01...	1.4	.37	.28	--	.034	.012	.008	--	2.9	2.9	--
01...	1.4	.42	.28	--	.034	.010	.009	--	3.1	2.9	--
01...	1.4	.39	.27	--	.081	<.009	.009	--	3.0	2.9	--
01...	1.4	.38	.28	--	.043	.012	.008	--	3.1	3.0	--
JAN											
06...	1.7	.19	.11	--	.026	.013	.010	--	2.1	--	70
FEB											
02...	1.9	.18	.12	--	.028	.013	.009	--	2.2	--	50
28...	1.7	.34	.12	--	.064	.015	.011	--	3.0	--	50
29...	1.4	.57	.16	--	.115	.014	.008	--	4.8	--	30
MAR											
01...	1.3	.57	.17	--	.129	.015	.009	--	5.7	--	30
02...	1.2	.46	.20	--	.114	.012	.009	--	5.2	--	30
02...	1.2	.47	.18	--	.115	.013	.009	--	5.2	--	30
23...	1.7	.68	.21	--	.266	.074	.069	--	6.1	--	40
APR											
06...	--	--	--	--	--	--	--	--	<.27	--	--
06...	1.5	.23	.14	--	.042	.011	.009	--	--	--	50
11...	--	--	--	--	--	--	--	--	--	--	--
MAY											
02...	1.0	--	--	--	.030	.009	.002	--	2.9	--	60
02...	--	--	--	--	--	--	--	--	--	--	--
24...	1.1	.34	.23	--	.051	.020	.017	--	4.0	--	--
JUN											
07...	.94	.40	.17	--	.046	.009	<.001	--	4.0	--	20
07...	.93	.38	.16	--	.045	.008	.001	--	4.3	--	--
07...	.94	.40	.16	--	.046	.008	<.001	--	4.1	--	--
07...	.97	.39	.19	--	.046	.011	.001	--	4.1	--	--
07...	1.0	--	--	.7	.040	.012	.011	--	3.2	--	--
07...	1.0	--	--	.7	.046	.010	<.010	--	3.1	--	--
07...	1.0	--	--	.7	.048	.010	<.010	--	3.1	--	--
07...	1.0	--	--	.7	.045	.037	<.010	--	3.2	--	--
07...	.97	.52	.18	--	.055	.015	<.003	--	2.8	2.6	--
07...	1.0	.43	.18	--	.052	.015	<.003	--	2.8	2.6	--
07...	1.0	.41	.19	--	.053	.015	<.003	--	2.8	2.6	--
07...	1.0	.40	.20	--	.049	.011	<.003	--	2.8	2.6	--
07...	1.2	.40	.38	--	.050	.020	<.000	--	2.4	2.1	--
07...	1.0	.36	.20	--	.060	.010	<.000	--	2.1	2.0	--
07...	1.0	.39	.20	--	.060	<.000	<.000	--	2.3	2.3	--
07...	.96	.44	.14	--	.070	.020	<.000	--	2.2	2.0	--
07...	--	--	--	--	--	--	.002	--	--	--	--
07...	--	--	--	--	--	--	.002	--	--	--	--
07...	--	--	--	--	--	--	.003	--	--	--	--
07...	--	--	--	--	--	--	.002	--	--	--	--
20...	1.2	.34	.18	--	.045	.012	.002	--	3.5	--	--
JUL											
07...	--	--	--	--	--	--	--	--	3.8	--	--
07...	1.5	.38	.22	--	.033	.007	.004	--	5.8	--	20
18...	1.2	.35	.19	--	.044	.015	.013	--	2.8	--	--
AUG											
04...	--	--	--	--	--	--	--	--	--	--	--
04...	1.3	.33	.18	--	.031	.006	.005	1.4	3.2	--	<10
04...	1.3	.35	.18	--	.037	.006	.005	--	3.5	--	<10
21...	1.4	.30	.21	--	.037	.016	.007	--	3.2	--	--
SEP											
07...	1.1	.32	.20	--	.028	.008	.001	--	3.0	--	<10
21...	1.5	.38	.28	--	.057	.030	.019	--	3.4	--	--

&lt; Actual value is known to be less than the value shown.











## SUSQUEHANNA RIVER BASIN

01580000 DEER CREEK AT ROCKS, MD

LOCATION.--Lat 39°37'49", long 76°24'13", Harford County, Hydrologic Unit 02050306, on right bank 0.3 mi upstream from bridge on Cherry Hill Road, 0.8 mi southeast of Rocks, 1.2 mi upstream from Stirrup Run, and 23.5 mi upstream from mouth.

DRAINAGE AREA.--94.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1926 to current year. Monthly discharge only for November and December 1926, published in WSP 1302.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1502: 1927-36 (maximum and minimum only 1927-29, maximum only 1930-32, 1936).

GAGE.--Water-stage recorder. Concrete control since Sept. 7, 1938. Datum of gage is 250.40 ft above sea level (Baltimore City bench mark).

REMARKS.--Records good except those for estimated daily discharges (ice effect, missing record), which are fair. Prior to 1965, some regulation at low flow by mills upstream from station. U.S. Geological Survey gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1888, that of Aug. 23, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1900	*2,590	*6.95	No other peak greater than base discharge.			

Minimum discharge 43 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	58	73	79	e77	152	157	141	108	85	71	134
2	74	83	70	79	e77	143	154	147	103	75	76	118
3	66	138	71	80	e76	132	152	136	97	71	70	91
4	76	78	e72	84	e76	124	175	132	96	76	73	86
5	110	71	e70	96	e76	120	153	130	95	69	69	60
6	79	69	e100	80	e77	114	143	128	117	63	64	54
7	71	65	97	78	e77	111	137	123	106	60	68	52
8	66	63	79	75	e78	109	146	121	95	58	62	52
9	62	63	e74	76	92	108	253	118	91	57	64	53
10	255	62	98	94	110	105	170	118	88	59	60	51
11	145	60	117	119	113	120	149	117	85	56	56	50
12	97	59	86	89	126	160	145	114	83	54	53	58
13	84	59	87	84	118	118	137	158	85	56	55	67
14	78	60	387	78	123	111	134	184	93	66	58	58
15	72	58	262	87	163	107	135	123	97	250	57	217
16	70	57	149	80	137	105	144	116	104	178	53	79
17	72	57	121	e79	e150	134	394	119	92	130	50	63
18	84	56	110	e77	e135	111	325	115	91	83	52	57
19	70	57	101	e76	365	106	270	e130	86	97	54	67
20	82	57	108	e76	254	104	250	e125	81	120	49	92
21	84	60	122	e76	169	892	254	e122	85	84	47	63
22	73	58	101	e75	150	812	265	e143	183	72	46	55
23	72	58	94	e75	145	330	231	136	96	68	46	54
24	68	60	90	e76	143	255	211	156	82	67	48	56
25	65	60	e86	e76	147	219	e200	132	77	70	47	69
26	65	80	e84	80	176	196	e180	113	96	148	45	220
27	64	268	e84	77	146	187	e165	111	85	132	48	114
28	61	108	e81	e77	e280	306	158	125	88	90	72	82
29	63	85	e81	e76	e170	205	152	170	120	87	54	71
30	59	79	e81	e78	---	181	144	124	125	77	56	66
31	58	---	e80	e77	---	167	---	113	---	77	56	---
TOTAL	2539	2246	3316	2509	4026	6144	5683	4040	2930	2735	1779	2409
MEAN	81.9	74.9	107	80.9	139	198	189	130	97.7	88.2	57.4	80.3
MAX	255	268	387	119	365	892	394	184	183	250	76	220
MIN	58	56	70	75	76	104	134	111	77	54	45	50
CFSM	.87	.79	1.13	.86	1.47	2.10	2.01	1.38	1.03	.93	.61	.85
IN.	1.00	.89	1.31	.99	1.59	2.42	2.24	1.59	1.15	1.08	.70	.95

e Estimated

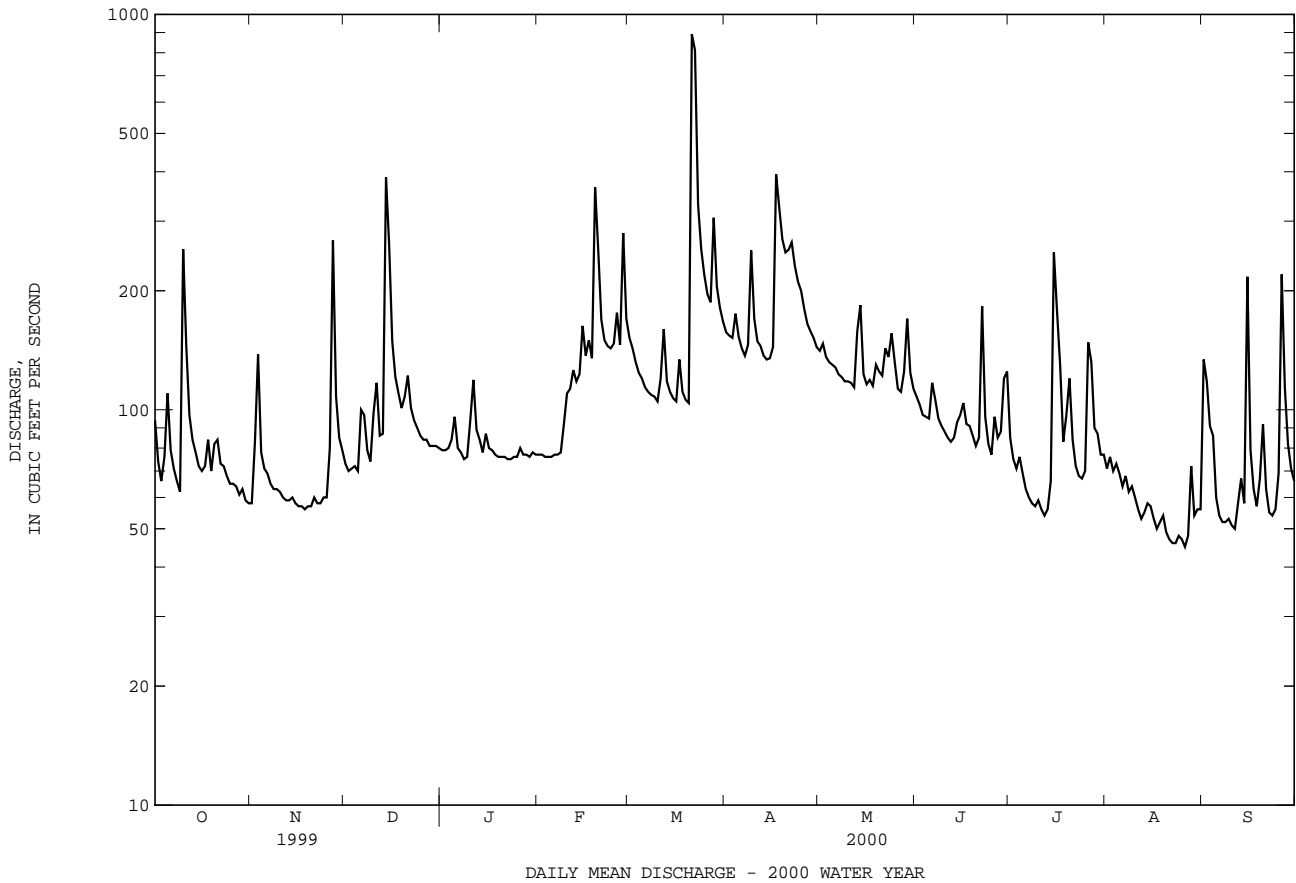
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2000, BY WATER YEAR (WY)

	MEAN	84.0	103	117	144	162	171	170	150	124	104	94.0	87.3
MAX	317	266	392	422	415	486	379	421	576	279	362	345	
(WY)	1980	1927	1997	1996	1979	1994	1984	1989	1972	1972	1933	1975	
MIN	26.0	32.5	37.8	41.7	60.2	62.2	63.2	50.9	42.8	21.0	17.4	29.0	
(WY)	1964	1932	1966	1966	1932	1981	1963	1963	1966	1966	1966	1986	

01580000 DEER CREEK AT ROCKS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1927 - 2000	
ANNUAL TOTAL	33328		40356			
ANNUAL MEAN	91.3		110		126	
HIGHEST ANNUAL MEAN					224 1972	
LOWEST ANNUAL MEAN					58.2 1966	
HIGHEST DAILY MEAN	1430	Sep 16	892	Mar 21	6610	Jun 22 1972
LOWEST DAILY MEAN	14	Aug 19	45	Aug 26	8.6	(a)
ANNUAL SEVEN-DAY MINIMUM	18	Aug 7	47	Aug 21	9.0	Sep 7 1966
INSTANTANEOUS PEAK FLOW			2590	Mar 21	(b)13600	Aug 23 1933
INSTANTANEOUS PEAK STAGE			6.95	Mar 21	(c)17.70	Aug 23 1933
INSTANTANEOUS LOW FLOW			43	Aug 27	8.0	(d)
ANNUAL RUNOFF (CFSM)	.97		1.17		1.33	
ANNUAL RUNOFF (INCHES)	13.13		15.90		18.08	
10 PERCENT EXCEEDS	125		172		212	
50 PERCENT EXCEEDS	78		86		93	
90 PERCENT EXCEEDS	28		57		45	

- a Sept. 11, 12, 1966.
- b From rating curve extended above 3,000 ft<sup>3</sup>/s, on basis of slope-area measurements at gage heights 13.3 ft and 17.7 ft.
- c From floodmarks.
- d Dec. 16, 1930, Jan. 26, 1939, result of regulation.







01581500 BYNUM RUN AT BEL AIR, MD--Continued

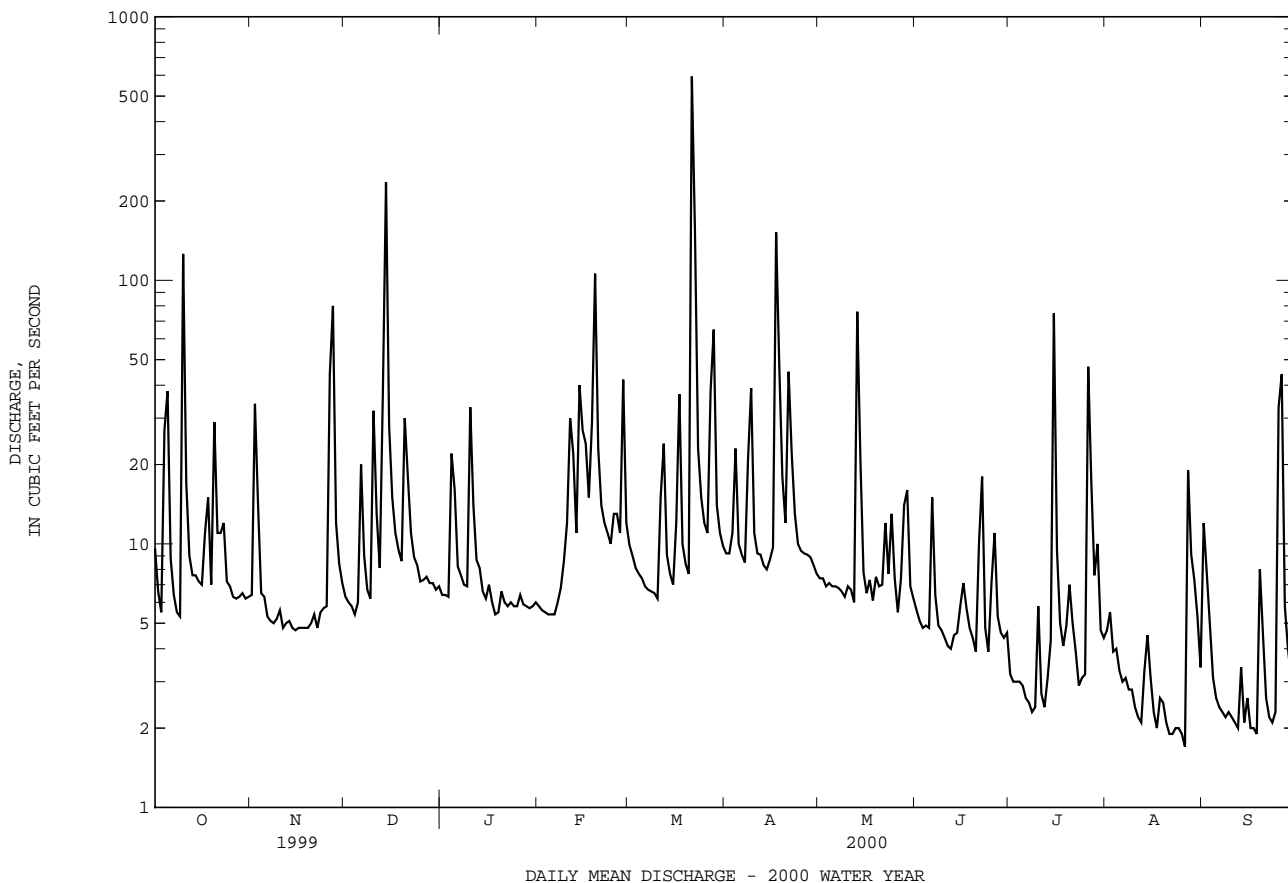
SUMMARY STATISTICS

FOR 2000 WATER YEAR

WATER YEARS 1944 - 1951  
1955 - 1970  
1999 - 2000

ANNUAL TOTAL	4940.7		
ANNUAL MEAN	13.5		10.4
HIGHEST ANNUAL MEAN			19.2
LOWEST ANNUAL MEAN			5.58
HIGHEST DAILY MEAN	593	Mar 21	2320
LOWEST DAILY MEAN	1.7	Aug 26	.02
ANNUAL SEVEN-DAY MINIMUM	1.9	Aug 20	.11
INSTANTANEOUS PEAK FLOW	1990	Mar 21	(a)7330
INSTANTANEOUS PEAK STAGE	6.06	Mar 21	9.91
INSTANTANEOUS LOW FLOW	1.7	(b)	.00
ANNUAL RUNOFF (CFSM)	1.58		1.22
ANNUAL RUNOFF (INCHES)	21.57		16.58
10 PERCENT EXCEEDS	23		19
50 PERCENT EXCEEDS	6.8		4.9
90 PERCENT EXCEEDS	2.7		1.6

- a From rating curve extended above 560 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 6.18 ft.
- b Aug. 25-27.
- c Sept. 8-10, 1966.

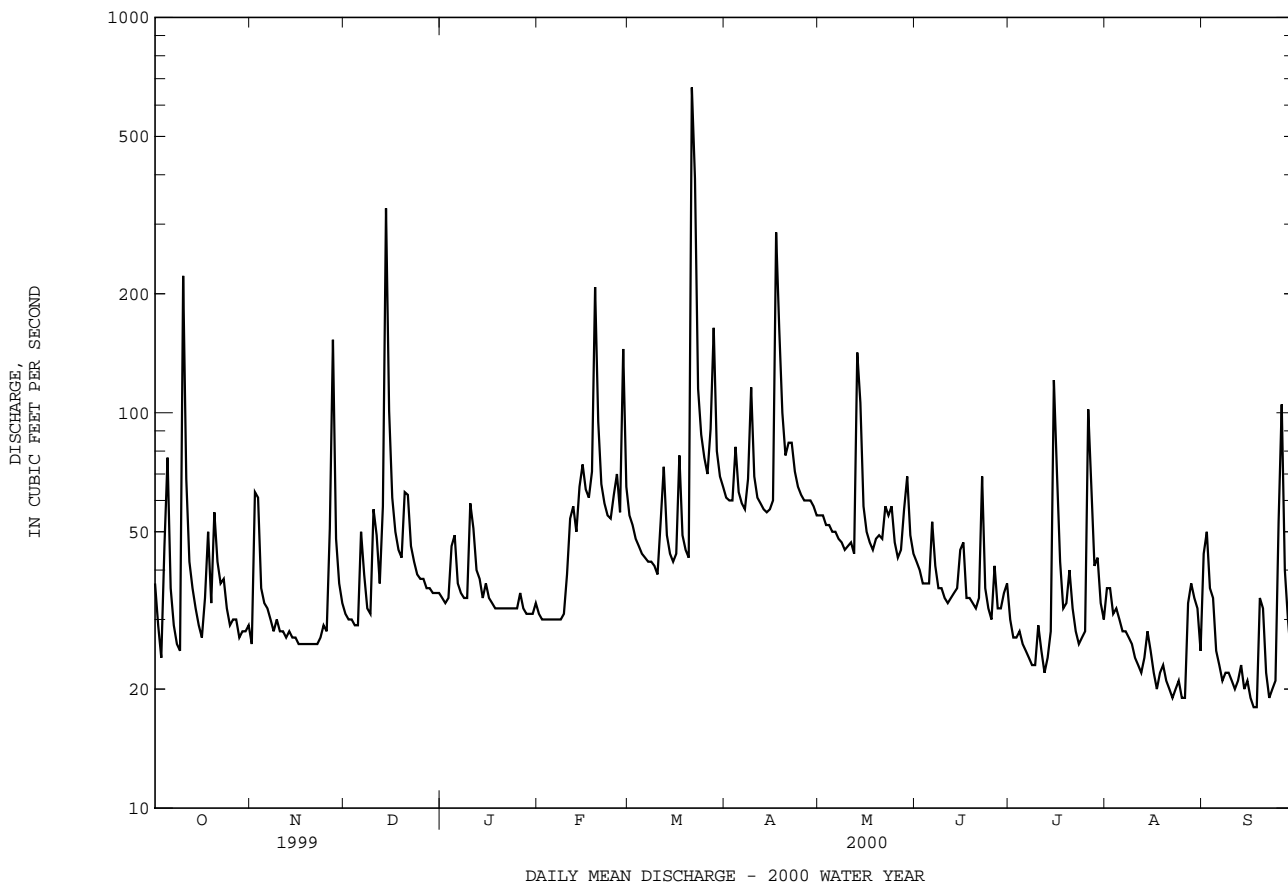




01581700 WINTERS RUN NEAR BENSON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1967 - 2000	
ANNUAL TOTAL	14833.3		17754		53.0	
ANNUAL MEAN	40.6		48.5		86.0	
HIGHEST ANNUAL MEAN					22.9	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	1890	Sep 16	665	Mar 21	3000	Jun 22 1972
LOWEST DAILY MEAN	4.5	(a)	18	(b)	4.5	(a)
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 7	20	Aug 20	5.2	Aug 7 1999
INSTANTANEOUS PEAK FLOW			1940	Mar 21	(c) 7600	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.92	Mar 21	11.60	Jun 22 1972
INSTANTANEOUS LOW FLOW			17	(d)	(f) 3.0	Jan 10 1982
ANNUAL RUNOFF (CFSM)	1.17		1.39		1.52	
ANNUAL RUNOFF (INCHES)	15.86		18.98		20.70	
10 PERCENT EXCEEDS	60		70		88	
50 PERCENT EXCEEDS	30		36		38	
90 PERCENT EXCEEDS	9.6		24		16	

- a Aug. 12, 13, 19, 1999.
- b Sept. 17, 18.
- c From rating curve extended above 4,600 ft<sup>3</sup>/s.
- d Sept. 18, 19.
- f Result of freezeup.





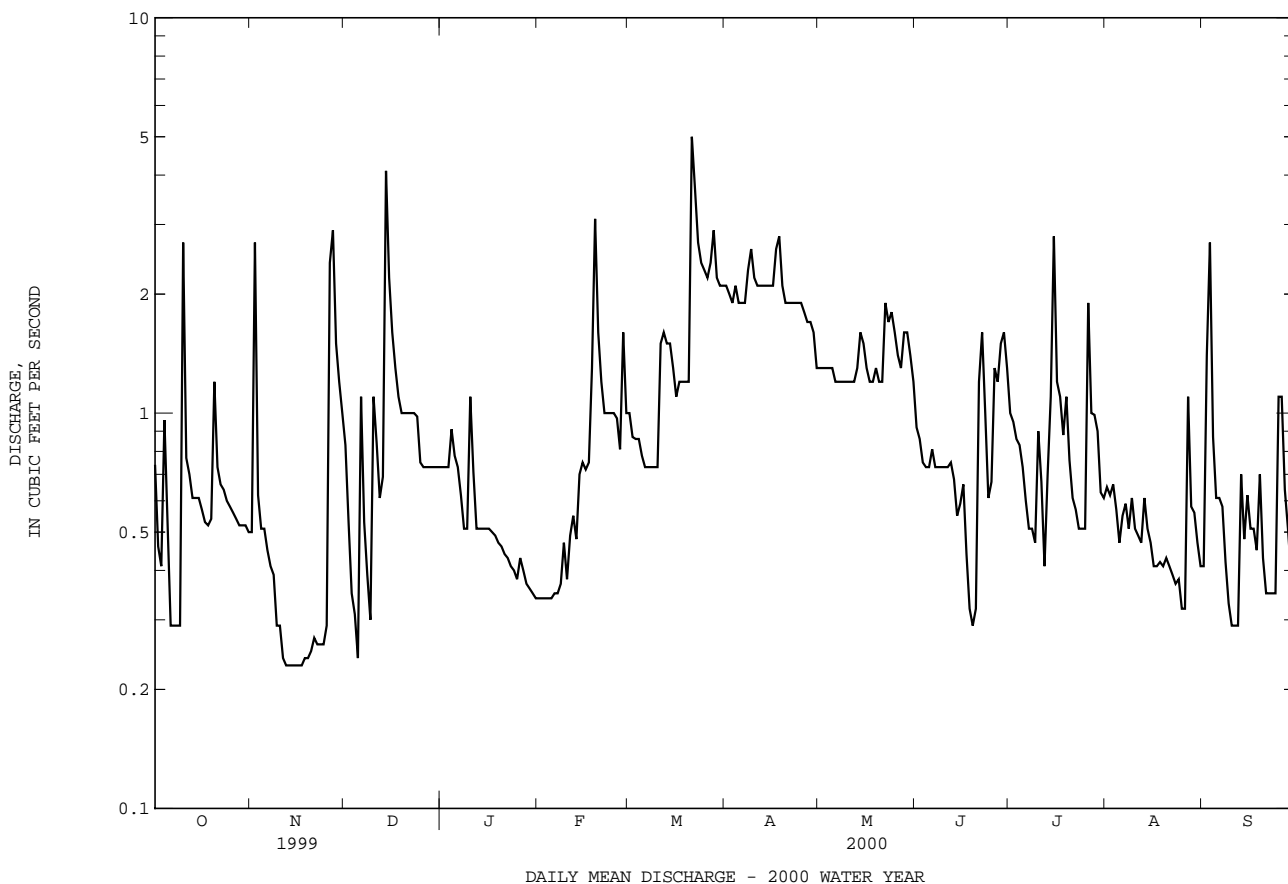
01581940 MINGO BRANCH NEAR HEREFORD, MD--Continued

SUMMARY STATISTICS

FOR 2000 WATER YEAR

ANNUAL TOTAL	349.30	
ANNUAL MEAN	.95	
HIGHEST DAILY MEAN	5.0	Mar 21
LOWEST DAILY MEAN	.23	(a)
ANNUAL SEVEN-DAY MINIMUM	.23	Nov 11
INSTANTANEOUS PEAK FLOW	(b) 56	Sep 3
INSTANTANEOUS PEAK STAGE	1.22	Sep 3
INSTANTANEOUS LOW FLOW	.19	(c)
ANNUAL RUNOFF (CFSM)	1.22	
ANNUAL RUNOFF (INCHES)	16.66	
10 PERCENT EXCEEDS	1.9	
50 PERCENT EXCEEDS	.73	
90 PERCENT EXCEEDS	.34	

- a Nov. 12-17, 1999.
- b From rating curve extended above 11 ft<sup>3</sup>/s.
- c Dec. 5, 6, 1999.





01581960 BEETREE RUN AT BENTLEY SPRINGS, MD--Continued

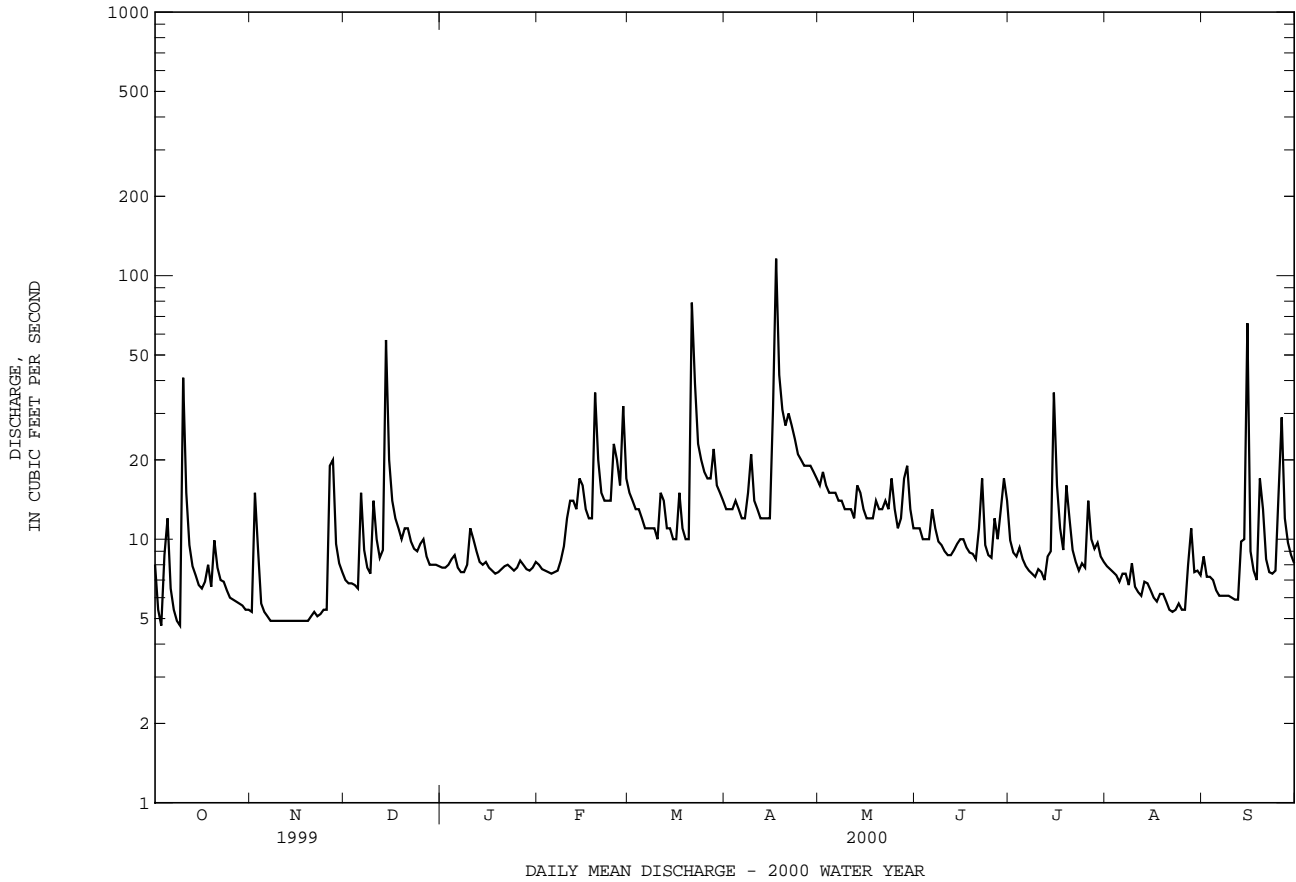
SUMMARY STATISTICS

FOR 2000 WATER YEAR

ANNUAL TOTAL	4260.3	
ANNUAL MEAN	11.6	
HIGHEST DAILY MEAN	116	Apr 17
LOWEST DAILY MEAN	4.7	(a)
ANNUAL SEVEN-DAY MINIMUM	4.9	Nov 7
INSTANTANEOUS PEAK FLOW	(b)1150	Apr 17
INSTANTANEOUS PEAK STAGE	3.87	Apr 17
INSTANTANEOUS LOW FLOW	4.1	Aug 25
ANNUAL RUNOFF (CFSM)	1.20	
ANNUAL RUNOFF (INCHES)	16.30	
10 PERCENT EXCEEDS	17	
50 PERCENT EXCEEDS	9.1	
90 PERCENT EXCEEDS	5.7	

a Oct. 3, 9, 1999.

b From rating curve extended above 185 ft<sup>3</sup>/s.







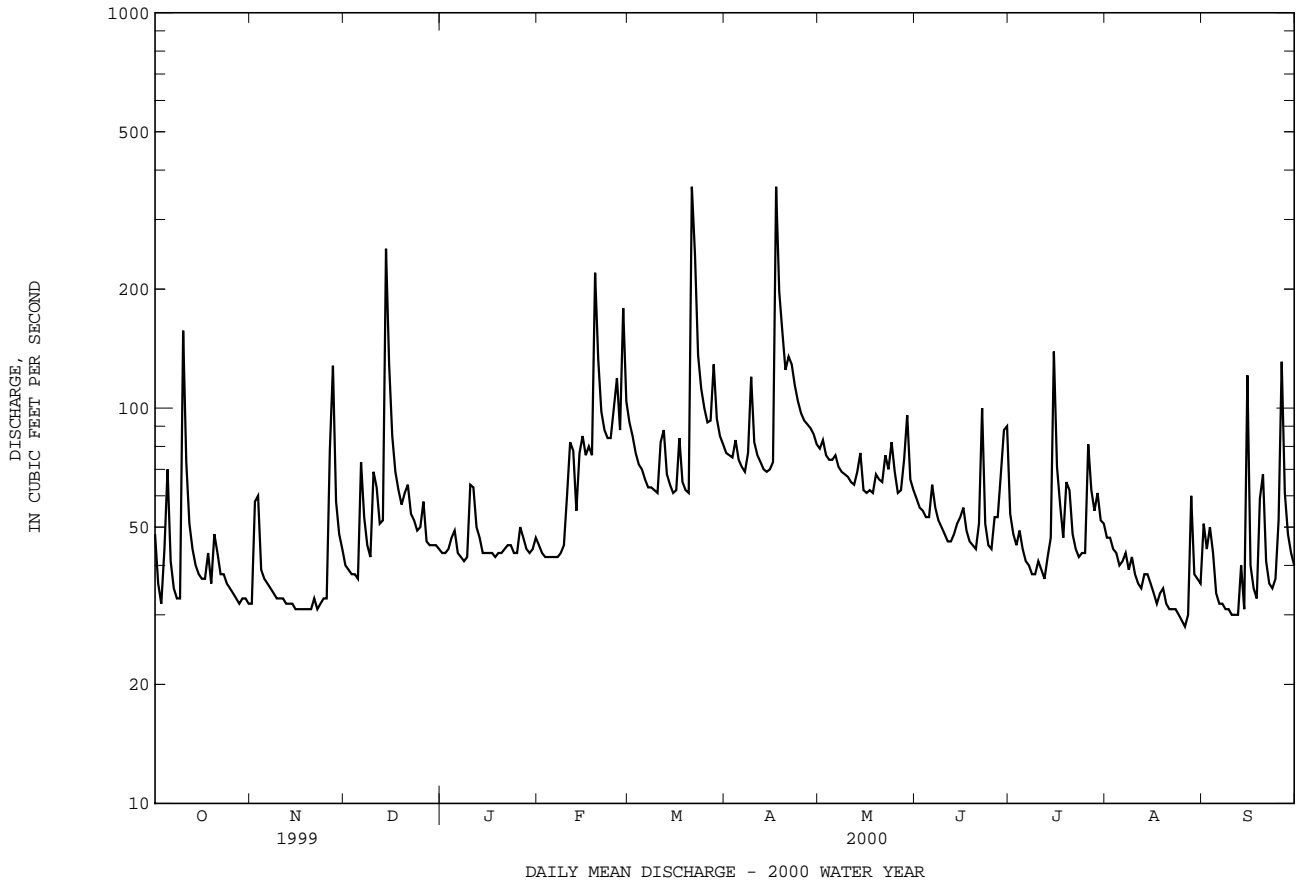
01582000 LITTLE FALLS AT BLUE MOUNT, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	17706.7		22317			
ANNUAL MEAN	48.5		61.0		68.6	
HIGHEST ANNUAL MEAN					132	1972
LOWEST ANNUAL MEAN					31.8	1966
HIGHEST DAILY MEAN	684	Jan 18	363	(a)	4730	Jun 22 1972
LOWEST DAILY MEAN	9.1	Aug 19	28	Aug 26	4.5	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	11	Aug 7	30	Aug 21	4.8	Sep 6 1966
INSTANTANEOUS PEAK FLOW			1340	Apr 17	(b)8280	Jun 22 1972
INSTANTANEOUS PEAK STAGE			4.79	Apr 17	18.54	Jun 22 1972
INSTANTANEOUS LOW FLOW			(c)21	Jan 17	1.9	Aug 26 1966
ANNUAL RUNOFF (CFSM)	.92		1.15		1.30	
ANNUAL RUNOFF (INCHES)	12.45		15.69		17.63	
10 PERCENT EXCEEDS	73		92		118	
50 PERCENT EXCEEDS	40		50		52	
90 PERCENT EXCEEDS	14		33		25	

a March 21, April 17.

b From rating curve extended above 1,600 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.

c Result of freezeup.



## GUNPOWDER RIVER BASIN

01582500 GUNPOWDER FALLS AT GLENCOE, MD

LOCATION.--Lat 39°32'59", long 76°38'11", Baltimore County, Hydrologic Unit 02060003, on right downstream wingwall of bridge on Glencoe Road at intersection of Upper Glencoe Road and Lower Glencoe Road in Glencoe, and 0.7 mi upstream from Piney Creek.

DRAINAGE AREA.--160 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to June 1980, December 1982 to current year.

REVISED RECORDS.--WDR MD-DE-89-1: 1985(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (ice effect and battery failure), which are fair. Flow regulated by Prettyboy Reservoir, 12 mi upstream, beginning Apr. 10, 1933, for water supply of Baltimore City (usable capacity, 20,000,000,000 gal; dead storage, 1,080,000,000 gal). Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,490 ft<sup>3</sup>/s, Apr 17, gage height, 6.00 ft; minimum discharge, 45 ft<sup>3</sup>/s, Jan 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	64	75	73	124	135	129	215	181	217	153	120
2	61	87	72	72	115	127	126	225	168	178	172	113
3	54	122	72	71	109	117	126	214	165	164	174	126
4	70	77	71	74	111	112	137	202	152	166	161	116
5	e180	72	69	83	109	108	125	203	146	162	152	97
6	e110	70	110	70	104	104	119	225	166	152	150	91
7	e84	68	95	69	103	101	115	207	164	116	155	90
8	e76	66	80	68	265	99	121	195	146	113	149	89
9	e72	66	76	68	304	98	192	199	138	113	150	90
10	e270	66	102	88	307	96	138	211	102	123	130	88
11	e160	65	113	105	324	115	127	221	105	115	99	88
12	e110	64	88	81	305	136	124	193	114	112	97	88
13	e96	63	88	77	198	107	118	187	152	97	101	99
14	e86	63	332	71	220	100	116	215	150	114	101	89
15	e82	63	218	75	246	97	116	181	152	236	99	189
16	e78	62	144	76	228	96	122	167	161	165	96	124
17	79	61	121	70	240	123	438	164	152	145	91	106
18	90	62	101	e70	235	102	279	161	143	169	94	96
19	78	62	93	e70	394	97	221	172	139	185	97	124
20	90	62	96	e70	319	96	189	178	130	202	92	297
21	82	64	103	e72	265	432	226	176	132	168	89	235
22	73	64	90	84	235	394	306	198	269	157	88	170
23	72	63	84	e78	129	219	303	196	190	152	87	110
24	70	64	82	e70	124	181	281	222	156	153	89	110
25	67	64	80	78	124	163	267	226	139	155	88	127
26	66	96	86	102	169	151	256	195	151	209	86	308
27	66	225	79	100	128	147	248	180	155	144	101	254
28	64	102	77	97	231	206	246	198	157	120	139	196
29	64	86	74	100	149	155	242	273	245	145	103	160
30	64	79	75	103	---	141	232	226	267	134	103	139
31	64	---	73	124	---	134	---	196	---	147	97	---
TOTAL	2755	2292	3119	2509	5914	4489	5785	6221	4787	4728	3583	4129
MEAN	88.9	76.4	101	80.9	204	145	193	201	160	153	116	138
MAX	270	225	332	124	394	432	438	273	269	236	174	308
MIN	54	61	69	68	103	96	115	161	102	97	86	88
(†)	11657	12241	13635	14865	15371	18145	20018	19925	19111	19851	19851	19916

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1980, 1983 - 2000, BY WATER YEAR (WY)

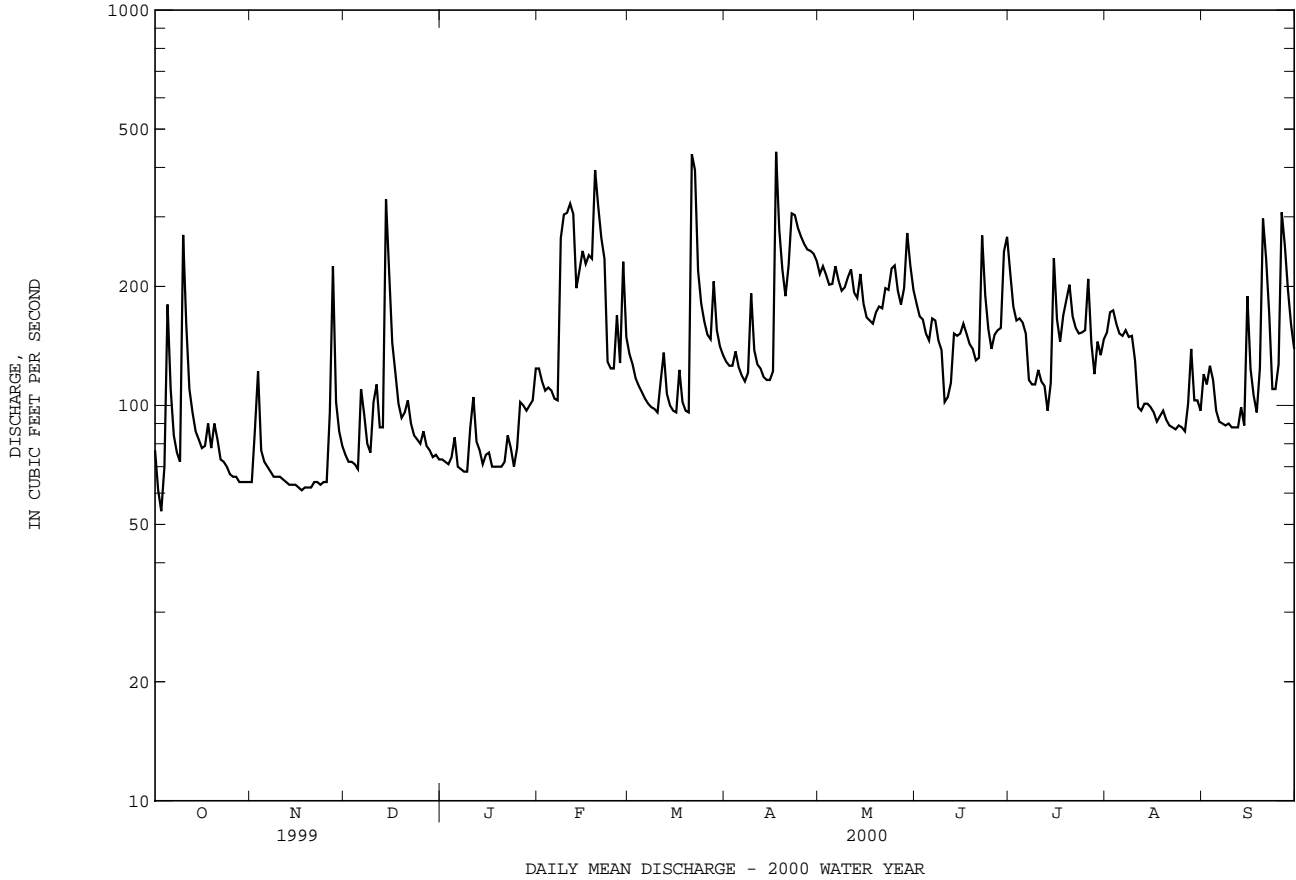
	1978	1979	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
MEAN	162	169	193	232	237	270	270	258	187	177	152	159										
MAX	603	342	604	625	598	755	586	476	284	280	267	512										
(WY)	1980	1997	1997	1979	1979	1994	1993	1989	1989	1986	1996	1979										
MIN	52.4	76.4	84.6	63.3	85.8	127	114	85.5	82.4	94.8	70.8	69.6										
(WY)	1987	2000	1998	1983	1983	1992	1992	1992	1992	1985	1985	1983										

(†) Monthend contents, in millions of gallons, in Prettyboy Reservoir (contents on Sept. 30, 1999, 11,100,000,000 gal). Records furnished by Baltimore Department of Public Works.

01582500 GUNPOWDER FALLS AT GLENCOE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1978 - 1980 1983 - 2000	
ANNUAL TOTAL	51099		50311		206	
ANNUAL MEAN	140		137		314	
HIGHEST ANNUAL MEAN					118	
LOWEST ANNUAL MEAN					118	
HIGHEST DAILY MEAN	945	Jan 18	438	Apr 17	4500	Sep 6 1979
LOWEST DAILY MEAN	31	Sep 3	54	Oct 3	31	Sep 3 1999
ANNUAL SEVEN-DAY MINIMUM	35	Aug 29	62	Nov 14	35	Aug 29 1999
INSTANTANEOUS PEAK FLOW			1490	Apr 17	(a)6110	Sep 6 1979
INSTANTANEOUS PEAK STAGE			6.00	Apr 17	15.30	Sep 6 1979
INSTANTANEOUS LOW FLOW			45	Jan 17	30	Sep 3 1999
ANNUAL RUNOFF (CFSM)	.87		.86		1.29	
ANNUAL RUNOFF (INCHES)	11.88		11.70		17.53	
10 PERCENT EXCEEDS	281		231		358	
50 PERCENT EXCEEDS	117		116		163	
90 PERCENT EXCEEDS	64		70		82	

a From rating curve extended above 2,400 ft<sup>3</sup>/s on basis of slope-area measurement at gage height of 12.65 ft.



## GUNPOWDER RIVER BASIN

01583100 PINEY RUN AT DOVER, MD

LOCATION.--Lat 39°31'15", long 76°46'02", Baltimore County, Hydrologic Unit 02060003, on right bank 400 ft downstream from bridge on Maryland Route 128, 0.7 mi upstream from mouth, and 2.4 mi southwest of Butler.

DRAINAGE AREA.--12.3 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1982 to February 1988. October 1996 to current year.

REVISED RECORDS.--WDR MD-DE-87-1: 1984-86(P).

GAGE.--Water-stage recorder. Elevation of gage is 380 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 14	1500	*419	*4.64	Aug 27	1930	351	4.37

Minimum discharge 5.5 ft<sup>3</sup>/s, Sep 18, 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.9	8.5	10	e9.1	15	14	13	9.9	7.8	13	11
2	8.7	9.1	8.3	10	e8.3	14	13	12	9.7	7.3	10	11
3	7.9	10	8.3	10	e9.1	13	13	12	9.0	7.2	9.0	19
4	12	8.5	8.3	12	8.8	12	15	12	8.7	7.3	7.9	12
5	19	8.1	8.2	11	8.3	12	13	12	9.0	6.9	7.4	8.7
6	10	8.0	17	10	8.3	11	12	12	12	6.7	8.0	7.7
7	8.7	7.9	12	9.9	8.4	11	12	11	9.9	6.6	8.3	7.3
8	8.0	7.9	10	10	9.8	11	15	11	8.8	6.3	7.3	6.9
9	7.6	7.8	9.4	9.9	13	11	24	11	8.7	6.3	7.6	6.9
10	42	8.0	18	16	9.2	11	15	11	8.3	7.7	6.9	6.8
11	17	7.4	14	14	12	16	14	11	8.1	6.7	6.7	6.6
12	12	7.2	12	12	13	16	13	10	7.7	6.2	6.4	6.6
13	11	7.3	13	11	10	12	13	10	7.9	10	8.0	8.0
14	10	7.5	80	10	21	12	12	10	8.1	8.9	7.2	6.3
15	8.8	7.6	26	10	19	11	12	9.9	8.8	25	6.8	9.6
16	8.6	7.3	20	10	18	11	13	9.5	9.9	11	6.4	6.0
17	9.8	7.2	17	e9.8	16	16	21	9.8	8.5	9.0	6.1	5.9
18	11	7.2	15	e9.5	17	12	36	9.5	8.1	7.8	6.4	5.7
19	8.4	7.2	14	9.3	71	11	24	10	8.3	12	6.6	38
20	11	7.0	15	9.7	28	11	20	10	7.9	12	6.2	16
21	9.5	7.2	15	e10	21	79	22	10	11	8.8	6.1	9.7
22	8.7	7.3	13	e10	18	38	21	15	24	7.8	6.0	7.9
23	8.6	7.3	13	9.0	17	25	19	12	9.6	7.5	6.0	7.6
24	8.2	7.5	12	8.9	16	21	17	12	8.1	8.0	6.3	7.6
25	8.1	7.3	12	9.1	15	19	15	11	8.1	8.0	6.0	14
26	7.9	19	12	10	14	17	14	9.8	9.1	14	5.8	32
27	7.6	23	11	e10	14	18	14	10	8.0	11	40	14
28	7.6	12	11	e9.8	27	26	14	15	9.9	11	16	11
29	7.6	9.9	11	e9.8	16	19	14	19	10	19	9.8	9.3
30	7.8	8.9	10	e9.6	---	16	13	12	8.7	11	10	8.1
31	7.8	---	10	9.6	---	14	---	11	---	12	9.4	---
TOTAL	331.9	265.5	464.0	319.9	475.3	541	487	353.5	283.8	296.8	273.6	327.2
MEAN	10.7	8.85	15.0	10.3	16.4	17.5	16.2	11.4	9.46	9.57	8.83	10.9
MAX	42	23	80	16	71	79	36	19	24	25	40	38
MIN	7.6	7.0	8.2	8.9	8.3	11	12	9.5	7.7	6.2	5.8	5.7
CFSM	.87	.72	1.22	.84	1.33	1.42	1.32	.93	.77	.78	.72	.89
IN.	1.00	.80	1.40	.97	1.44	1.64	1.47	1.07	.86	.90	.83	.99

e Estimated

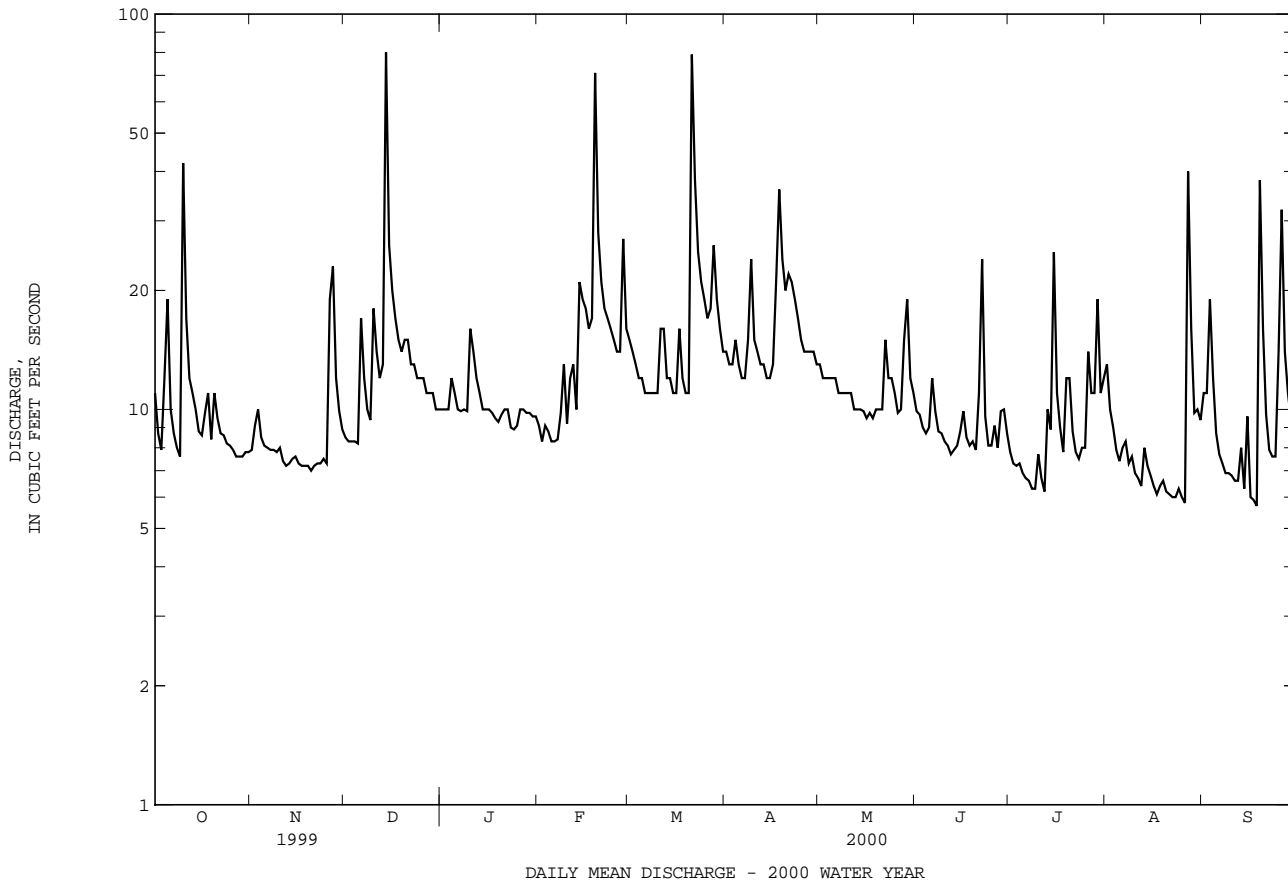
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1988, 1997 - 2000, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1997	1998	1999	2000	
MEAN	10.5	13.5	17.3	16.5	20.6	20.1	21.1	17.0	12.6	10.5	8.25	9.47
MAX	26.0	28.7	49.8	31.1	37.9	35.5	36.1	28.5	20.0	25.7	18.2	21.3
(WY)	1997	1997	1997	1985	1998	1998	1983	1998	1984	1984	1984	1987
MIN	4.68	7.36	7.13	8.26	11.2	12.5	11.7	7.57	5.57	4.75	5.05	3.95
(WY)	1987	1999	1999	1983	1999	1999	1985	1999	1986	1999	1986	1986

01583100 PINEY RUN AT DOVER, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1982 - 1988 1997 - 2000	
ANNUAL TOTAL	4128.2		4419.5		14.8	
ANNUAL MEAN	11.3		12.1		21.6	
HIGHEST ANNUAL MEAN					9.56	
LOWEST ANNUAL MEAN					1997	
HIGHEST DAILY MEAN	197	Sep 16	80	Dec 14	599	Feb 12 1985
LOWEST DAILY MEAN	3.1	Aug 12	5.7	Sep 18	2.6	Aug 15 1986
ANNUAL SEVEN-DAY MINIMUM	3.3	Aug 7	6.1	Aug 20	3.0	Aug 9 1986
INSTANTANEOUS PEAK FLOW			419	Dec 14	3220	Sep 8 1987
INSTANTANEOUS PEAK STAGE			4.64	Dec 14	8.28	Sep 8 1987
INSTANTANEOUS LOW FLOW			5.5	(a)	2.4	Aug 15 1986
ANNUAL RUNOFF (CFSM)	.92		.98		1.20	
ANNUAL RUNOFF (INCHES)	12.49		13.37		16.35	
10 PERCENT EXCEEDS	16		18		25	
50 PERCENT EXCEEDS	8.7		10		11	
90 PERCENT EXCEEDS	4.1		7.2		5.5	

a Sept. 18, 19.



GUNPOWDER RIVER BASIN

01583500 WESTERN RUN AT WESTERN RUN, MD

LOCATION.--Lat 39°30'38", long 76°40'37", Baltimore County, Hydrologic Unit 02060003, on right bank 100 ft downstream from bridge on Western Run Road, 0.3 mi southeast of Western Run, 2.5 mi northwest of Cockeysville, 3.2 mi upstream from Beaverdam Run, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--59.8 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1944 to current year.

REVISED RECORDS.--WSP 1502: 1945-46, 1948(M).

GAGE.--Water-stage recorder. Datum of gage is 262.78 ft above sea level (Baltimore County bench mark).

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 14	1730	*1,060	*4.39	No other peak greater than base discharge.			

Minimum discharge 17 ft<sup>3</sup>/s, Jun 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	41	47	52	e58	81	78	72	56	41	51	42
2	46	46	46	52	e54	76	76	72	53	38	50	72
3	42	56	45	52	e52	73	76	69	49	37	42	67
4	59	44	44	57	e50	70	87	68	49	38	42	59
5	108	42	44	61	e50	68	76	68	50	35	36	42
6	59	42	73	53	e49	66	74	70	61	33	36	37
7	51	41	60	52	e49	65	71	65	53	32	40	34
8	47	40	51	50	e49	65	77	63	48	30	33	33
9	45	40	49	51	49	63	127	61	46	30	34	33
10	173	40	75	73	50	62	85	63	44	34	32	31
11	92	40	73	75	60	79	78	64	42	32	30	30
12	65	38	58	61	72	84	77	59	41	30	29	31
13	59	38	62	58	58	69	73	67	44	36	36	37
14	54	39	339	53	86	65	72	67	47	45	34	29
15	50	38	147	e50	104	63	73	57	51	94	31	34
16	49	37	98	e50	86	63	74	56	61	56	29	28
17	51	37	83	50	88	78	115	57	46	49	26	27
18	62	37	75	e50	91	65	186	56	43	39	29	26
19	50	37	70	e50	254	62	126	58	43	48	31	65
20	62	38	74	e50	139	61	103	60	41	60	27	69
21	58	38	76	e54	104	290	104	60	42	42	26	39
22	52	37	67	66	92	220	106	80	62	37	26	32
23	52	38	63	55	86	127	95	69	52	34	26	31
24	47	39	61	e50	84	106	88	70	45	36	26	33
25	45	38	57	e54	80	97	84	61	45	38	25	48
26	43	77	58	63	75	91	81	55	57	64	23	142
27	43	141	58	56	74	91	80	58	45	60	109	66
28	42	65	56	e52	139	136	79	71	45	48	125	50
29	42	55	55	e50	89	97	76	90	57	72	50	44
30	41	50	54	e49	---	87	73	64	47	49	52	40
31	41	---	54	e60	---	81	---	59	---	44	45	---
TOTAL	1786	1389	2272	1709	2371	2801	2670	2009	1465	1361	1231	1351
MEAN	57.6	46.3	73.3	55.1	81.8	90.4	89.0	64.8	48.8	43.9	39.7	45.0
MAX	173	141	339	75	254	290	186	90	62	94	125	142
MIN	41	37	44	49	49	61	71	55	41	30	23	26
CFSM	.96	.77	1.23	.92	1.37	1.51	1.49	1.08	.82	.73	.66	.75
IN.	1.11	.86	1.41	1.06	1.47	1.74	1.66	1.25	.91	.85	.77	.84

e Estimated

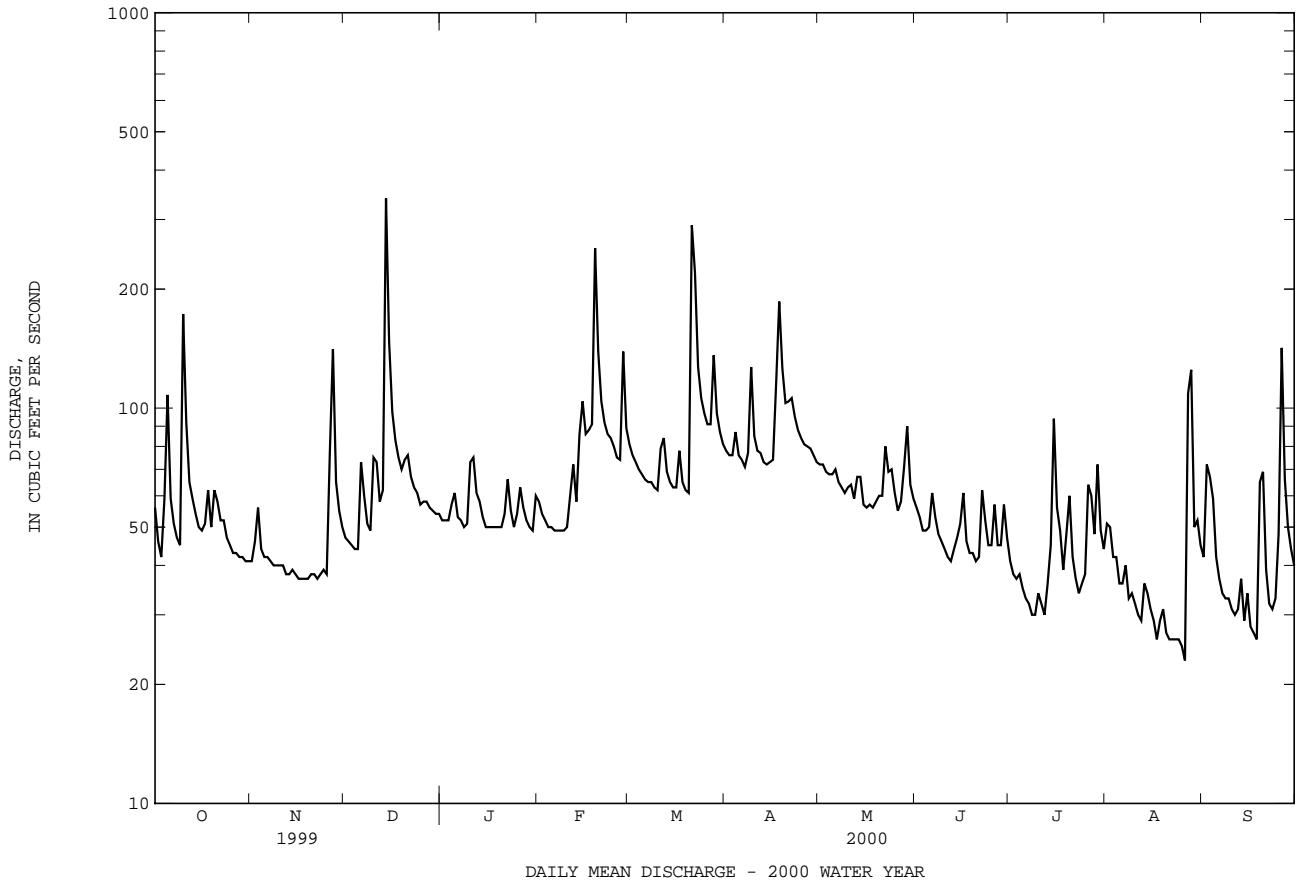
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	46.1	56.9	68.3	81.9	92.1	96.7	90.8	82.3	70.1	55.5	49.0	47.7
MAX	209	143	217	222	240	237	209	227	395	164	183	261
(WY)	1980	1997	1997	1979	1979	1994	1952	1952	1972	1972	1971	1975
MIN	16.4	20.4	19.0	20.5	34.4	45.9	39.8	31.5	21.1	11.3	7.78	14.8
(WY)	1964	1966	1966	1966	1967	1981	1963	1963	1966	1966	1966	1963

01583500 WESTERN RUN AT WESTERN RUN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	20049		22415		69.7	
ANNUAL MEAN	54.9		61.2		138	
HIGHEST ANNUAL MEAN					28.9	
LOWEST ANNUAL MEAN					7000	
HIGHEST DAILY MEAN	725	Sep 16	339	Dec 14	Jun 22 1972	
LOWEST DAILY MEAN	11	Aug 19	23	Aug 26	2.5	
ANNUAL SEVEN-DAY MINIMUM	12	Aug 7	26	Aug 20	3.8	
INSTANTANEOUS PEAK FLOW			1060	Dec 14	(a)38000	
INSTANTANEOUS PEAK STAGE			4.39	Dec 14	(b)26.00	
INSTANTANEOUS LOW FLOW			17	Jun 22	2.4	
ANNUAL RUNOFF (CFSM)	.92		1.02		1.17	
ANNUAL RUNOFF (INCHES)	12.47		13.94		15.83	
10 PERCENT EXCEEDS	77		89		118	
50 PERCENT EXCEEDS	46		54		52	
90 PERCENT EXCEEDS	16		34		24	

a From rating curve extended above 3,200 ft<sup>3</sup>/s, on basis of slope-area measurement and contracted-opening measurement of peak flow.  
 b From floodmarks.





## GUNPOWDER RIVER BASIN

01583570 POND BRANCH AT OREGON RIDGE, MD

LOCATION.--Lat 39°28'49", long 76°41'16", Baltimore County, Hydrologic Unit 02060003, on left bank 500 ft upstream from pond, 600 ft above mouth, 1.0 mi southwest of Beaver Dam Road and Ivy Hill Road interchange, and 2.3 mi west of Cockeysville.

DRAINAGE AREA.--0.16 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1983 to September 1986, April 1998 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and triple V-notch sharp-crested weir plate. Datum of gage is 450 ft above sea level.

REMARKS.--Water-discharge records fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.8 ft<sup>3</sup>/s, Apr 17, gage height, 1.70 ft; minimum discharge, 0.05 ft<sup>3</sup>/s, Nov 1, 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.05	.09	.09	.10	.12	.13	.23	.16	.10	.12	.12
2	.09	.22	.09	.09	.09	.12	.12	.23	.16	.10	.13	.29
3	.07	.18	.08	.09	.09	.12	.15	.23	.16	.09	.18	.16
4	.16	.12	.08	.13	.09	.11	.26	.23	.16	.08	.14	.12
5	.10	.08	.08	.09	.09	.10	.20	.23	.16	.08	.12	.09
6	.07	.07	.14	.09	.09	.10	.19	.22	.16	.08	.13	.09
7	.07	.07	.09	.09	.09	.10	.19	.20	.16	.08	.14	.08
8	.07	.07	.07	.09	.09	.10	.30	.19	.16	.08	.12	.07
9	.07	.08	.07	.09	.09	.10	.29	.19	.16	.08	.13	.07
10	.25	.07	.13	.13	.12	.10	.24	.24	.16	.08	.12	.07
11	.10	.07	.09	.09	.15	.18	.23	.23	.15	.08	.12	.07
12	.08	.07	.08	.09	.12	.17	.21	.22	.15	.08	.11	.07
13	.08	.07	.12	.09	.12	.11	.20	.38	.16	.18	.14	.07
14	.08	.07	.35	.09	.18	.09	.19	.28	.16	.18	.12	.07
15	.08	.07	.17	.09	.15	.09	.19	.26	.23	.21	.10	.08
16	.07	.07	.15	.09	.16	.10	.20	.24	.17	.14	.09	.07
17	.09	.07	.14	.08	.14	.13	.55	.26	.14	.14	.09	.07
18	.11	.07	.13	.09	.21	.11	.43	.26	.15	.12	.11	.07
19	.07	.07	.12	.09	.36	.09	.35	.27	.14	.15	.10	.11
20	.12	.07	.14	.09	.23	.09	.27	.25	.14	.13	.09	.09
21	.09	.07	.12	.09	.19	.48	.30	.25	.22	.11	.10	.09
22	.08	.07	.12	.09	.18	.34	.27	.35	.20	.10	.10	.09
23	.07	.07	.12	.09	.16	.23	.25	.29	.14	.10	.10	.09
24	.08	.07	.11	.09	.13	.18	.24	.27	.14	.11	.10	.09
25	.07	.07	.10	.10	.13	.18	.23	.23	.18	.11	.09	.15
26	.08	.31	.09	.10	.13	.17	.23	.23	.19	.23	.09	.16
27	.07	.22	.09	.10	.16	.21	.23	.25	.15	.16	.17	.12
28	.07	.09	.09	.10	.23	.20	.23	.30	.14	.15	.13	.11
29	.07	.09	.09	.10	.13	.16	.23	.26	.12	.16	.12	.10
30	.06	.09	.09	.10	---	.16	.23	.20	.10	.13	.10	.08
31	.06	---	.09	.10	---	.15	---	.18	---	.11	.11	---
TOTAL	2.73	2.86	3.52	2.93	4.20	4.69	7.33	7.65	4.77	3.73	3.61	3.01
MEAN	.088	.095	.11	.095	.14	.15	.24	.25	.16	.12	.12	.10
MAX	.25	.31	.35	.13	.36	.48	.55	.38	.23	.23	.18	.29
MIN	.06	.05	.07	.08	.09	.09	.12	.18	.10	.08	.09	.07
CFSM	.55	.60	.71	.59	.91	.95	1.53	1.54	.99	.75	.73	.63
IN.	.63	.66	.82	.68	.98	1.09	1.70	1.78	1.11	.87	.84	.70

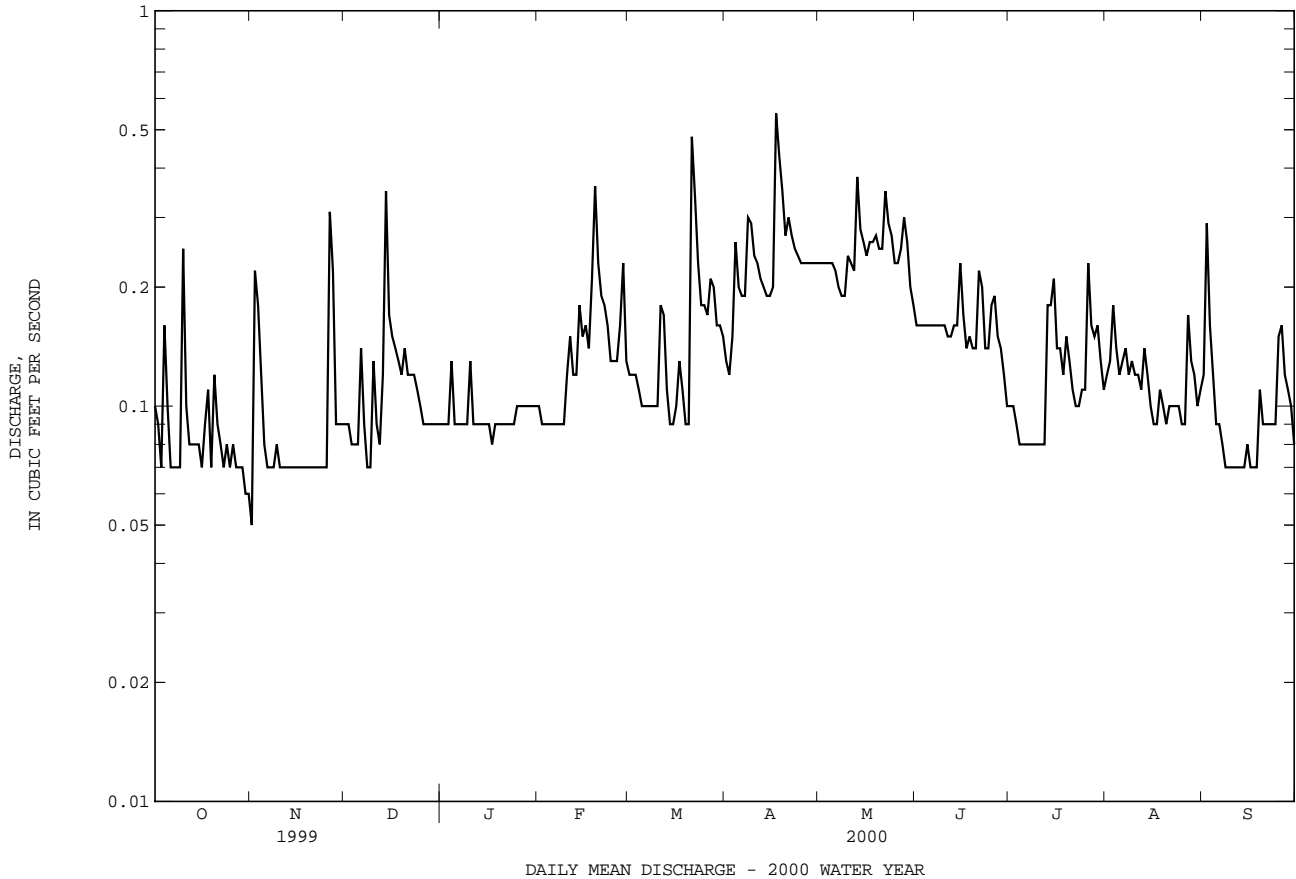
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1986, 1998 - 2000, BY WATER YEAR (WY)

MEAN	.10	.12	.14	.11	.15	.16	.23	.24	.16	.12	.091	.078
MAX	.13	.20	.30	.17	.20	.24	.40	.41	.28	.27	.16	.13
(WY)	1985	1984	1984	1999	1984	1983	1983	1984	1983	1984	1984	1984
MIN	.077	.077	.081	.078	.10	.098	.099	.069	.040	.014	.008	.009
(WY)	1986	1999	1986	1986	1986	1986	1985	1986	1986	1986	1986	1986

01583570 POND BRANCH AT OREGON RIDGE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS	1983 - 1988	1998 - 2000
ANNUAL TOTAL	39.51	51.03			
ANNUAL MEAN	.11	.14	.13		
HIGHEST ANNUAL MEAN			.23		1984
LOWEST ANNUAL MEAN			.065		1986
HIGHEST DAILY MEAN	1.1 Sep 16	.55 Apr 17	1.8		Jul 1 1984
LOWEST DAILY MEAN	.01 (a)	.05 Nov 1	.00		(b)
ANNUAL SEVEN-DAY MINIMUM	.01 Jul 16	.07 Oct 26	.00		Jul 11 1986
INSTANTANEOUS PEAK FLOW		2.8 Apr 17	18		Jul 1 1984
INSTANTANEOUS PEAK STAGE		1.70 Apr 17	2.19		Jul 1 1984
INSTANTANEOUS LOW FLOW		.05 (c)	.00		(d)
ANNUAL RUNOFF (CFSM)	.68	.87	.81		
ANNUAL RUNOFF (INCHES)	9.19	11.86	11.00		
10 PERCENT EXCEEDS	.17	.23	.29		
50 PERCENT EXCEEDS	.10	.12	.11		
90 PERCENT EXCEEDS	.03	.07	.05		

- a July 16-21.
- b July 7-9, 10-19, 31, Aug. 1, 3-16, 18, 19, 24-27, Sept. 11-30, 1986.
- c Nov. 1, 2.
- d No flow at times in 1986, 1999.



GUNPOWDER RIVER BASIN

01583570 POND BRANCH AT OREGON RIDGE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to September 2000.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
SEP 07...	0830	.11	24	7.3	15.5	13.7	6	1.24	.81	
		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
		1.8	.9	.7	2.3	<.1	10.6	.8	200	23

< Actual value is known to be less than the value shown.

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## GUNPOWDER RIVER BASIN

01583580 BAISMAN RUN AT BROADMOOR, MD

LOCATION.--Lat 39°28'45", long 76°40'42", Baltimore County, Hydrologic Unit 02060003, on right bank at upstream side of bridge on Ivy Hill Road, 0.3 mi upstream from mouth, 0.6 mi southwest of Broadmoor, and 1.8 mi west of Cockeysville.

DRAINAGE AREA.--1.47 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1964 to September 1969, October 1999 to September 2000.

GAGE.--Water-stage recorder, crest-stage gage, weir plate. Datum of gage is 330 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (missing record, ice effect, instrument malfunction), which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 25 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan 19	----	ICE JAM	*2.85	Sep 2	1430	*39	2.29
Mar 21	1345	26	2.10				

Minimum discharge 0.65 ft<sup>3</sup>/s, Sep 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.6	1.1	1.4	1.5	1.3	2.0	2.6	3.0	2.1	1.2	1.3	.84
2	e1.3	1.9	1.3	1.5	1.3	2.0	2.6	3.0	1.9	1.2	1.1	3.6
3	e1.2	1.4	1.3	1.5	1.3	1.9	2.7	3.0	1.8	1.2	1.4	1.4
4	e1.7	1.2	1.3	1.9	1.4	1.9	3.3	2.9	1.8	1.2	1.1	1.1
5	e2.3	1.2	1.3	1.7	1.3	1.8	2.7	2.9	1.8	1.1	.98	.98
6	e1.6	1.2	2.3	1.5	1.3	1.8	2.6	2.9	2.3	1.1	1.1	.92
7	e1.3	1.2	1.6	1.5	1.4	1.7	2.5	2.8	1.8	1.1	1.1	.91
8	e1.2	1.1	1.4	1.4	1.4	1.8	3.6	2.7	1.7	1.0	.98	.92
9	e1.1	1.1	1.4	1.4	1.7	1.8	3.6	2.7	1.6	1.0	.94	.89
10	e4.0	1.2	2.2	2.3	1.5	1.7	2.9	3.1	1.5	1.1	.89	.88
11	e2.6	1.1	1.7	1.7	1.8	2.4	2.8	2.9	1.5	1.0	e.86	.84
12	e1.8	1.1	1.5	1.5	1.7	2.7	2.8	2.8	1.5	.97	e.95	.82
13	e1.6	1.1	2.0	1.5	1.6	2.0	2.7	4.4	1.6	1.8	e1.1	.92
14	e1.4	1.1	6.6	1.4	2.2	1.8	2.6	2.9	1.7	1.5	e.92	.82
15	e1.3	1.1	3.2	e1.5	2.0	1.8	2.7	2.4	2.4	2.3	e.88	.93
16	e1.3	1.1	2.6	1.4	2.0	2.0	2.8	2.3	2.0	1.4	e.83	.79
17	e1.5	1.1	2.2	e1.5	1.9	2.4	7.8	2.4	1.6	1.2	e.80	.77
18	e1.8	1.1	2.1	e1.5	2.6	1.9	7.1	2.3	1.6	1.1	e.82	.76
19	e1.4	1.1	1.9	e1.5	4.3	1.9	4.7	2.5	1.5	1.5	e.84	1.5
20	e1.7	1.1	2.3	e1.4	2.8	1.8	4.0	2.5	1.4	1.3	e.80	1.0
21	e1.5	1.1	2.0	e1.4	2.5	7.6	4.1	2.5	2.0	1.1	e.78	.82
22	e1.3	1.1	1.8	e1.4	2.3	5.6	3.9	3.3	2.2	1.0	e.76	.74
23	e1.3	1.1	1.8	e1.4	2.2	3.7	3.6	2.7	1.5	.96	e.76	.80
24	e1.2	1.2	1.7	1.4	2.1	3.3	3.4	3.2	1.4	1.1	e.82	.85
25	e1.2	1.2	2.2	1.3	2.1	3.1	3.4	2.6	1.6	1.0	e.78	2.6
26	e1.2	3.8	1.7	1.4	2.0	2.9	3.3	2.3	1.9	3.1	e.84	2.2
27	e1.2	3.2	1.6	1.3	2.0	3.4	3.3	2.6	1.4	1.6	e2.0	1.1
28	e1.2	1.8	1.6	1.0	3.3	3.8	3.3	3.3	1.5	1.5	e1.1	.89
29	e1.1	1.6	1.5	1.0	2.1	2.9	3.2	2.9	1.5	1.4	e.95	.80
30	e1.1	1.4	1.5	1.1	---	2.8	3.0	2.4	1.3	1.2	e.95	.78
31	e1.1	---	1.5	1.2	---	2.7	---	2.2	---	1.1	e.90	---
TOTAL	47.1	41.1	60.5	45.0	57.4	80.9	103.6	86.4	51.4	40.33	30.33	33.17
MEAN	1.52	1.37	1.95	1.45	1.98	2.61	3.45	2.79	1.71	1.30	.98	1.11
MAX	4.0	3.8	6.6	2.3	4.3	7.6	7.8	4.4	2.4	3.1	2.0	3.6
MIN	1.1	1.1	1.3	1.0	1.3	1.7	2.5	2.2	1.3	.96	.76	.74
CFSM	1.03	.93	1.33	.99	1.35	1.78	2.35	1.90	1.17	.89	.67	.75
IN.	1.19	1.04	1.53	1.14	1.45	2.05	2.62	2.19	1.30	1.02	.77	.84

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1969, 2000, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	2000
MEAN	.83	.92	1.13	1.07	1.27	1.68	1.67
MAX	1.52	1.37	1.95	1.69	1.98	2.61	3.45
(WY)	2000	2000	2000	1968	2000	2000	2000
MIN	.49	.44	.41	.46	.93	.96	1.01
(WY)	1967	1966	1966	1966	1969	1966	1969

01583580 BAISMAN RUN AT BROADMOOR, MD--Continued

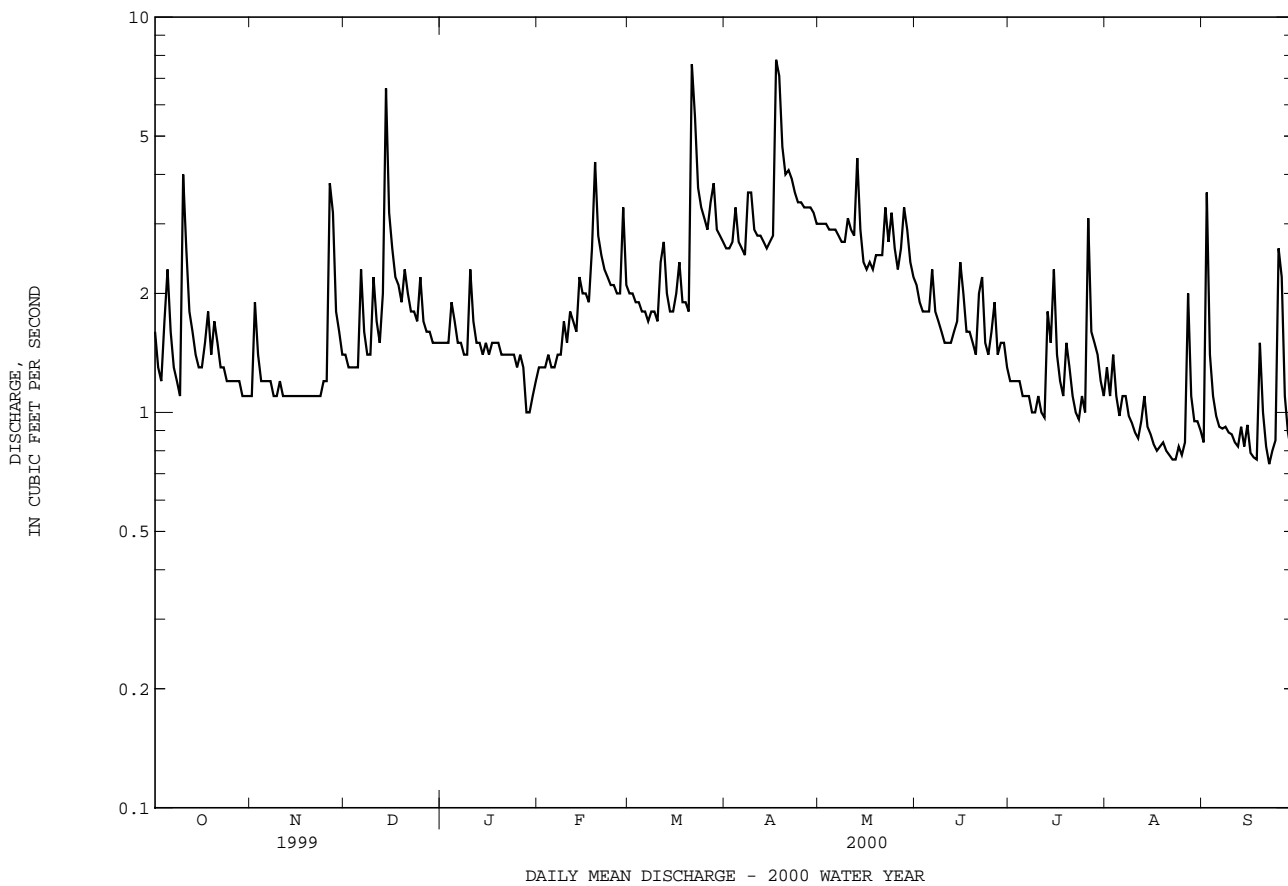
SUMMARY STATISTICS

FOR 2000 WATER YEAR

WATER YEARS 1964 - 1969  
2000

ANNUAL TOTAL	677.23		
ANNUAL MEAN	1.85		1.16
HIGHEST ANNUAL MEAN			1.85
LOWEST ANNUAL MEAN			.61
HIGHEST DAILY MEAN	7.8	Apr 17	41
LOWEST DAILY MEAN	.74	Sep 22	.00
ANNUAL SEVEN-DAY MINIMUM	.79	Aug 19	.00
INSTANTANEOUS PEAK FLOW	39	Sep 2	(a)490
INSTANTANEOUS PEAK STAGE	2.29	Sep 2	5.43
INSTANTANEOUS LOW FLOW	.65	Sep 22	.00
ANNUAL RUNOFF (CFSM)	1.26		.79
ANNUAL RUNOFF (INCHES)	17.14		10.75
10 PERCENT EXCEEDS	3.1		2.0
50 PERCENT EXCEEDS	1.5		.91
90 PERCENT EXCEEDS	.93		.40

a From rating curve extended above 30 ft<sup>3</sup>/s on basis of culvert and flow-over-road measurement and on basis of slope-area measurement at gage height of 2.87 ft.  
b No flow Aug. 28-31, Sept. 1-4, 7-12, 1966.



## GUNPOWDER RIVER BASIN

01583600 BEAVERDAM RUN AT COCKEYSVILLE, MD

LOCATION.--Lat 39°29'08", long 76°38'45", Baltimore County, Hydrologic Unit 02060003, on left bank of bridge on Maryland Route 45 at Cockeysville, and 0.45 mi upstream from mouth.

DRAINAGE AREA.--20.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1982 to current year.

REVISED RECORDS.--WDR MD-DE-88: 1983-87.

GAGE.--Water-stage recorder. Datum of gage is 240.42 ft above sea level. Previously operated as a low-flow site during water years 1955-59 and 1962-64 at same site. Dec. 15, 1982 to June 15, 1993, water-stage recorder 600 ft downstream and 50 ft upstream from bridge on Beaverdam Run Lane at datum 1.38 ft lower.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1345	732	5.48	Sep 2	1430	*738	*5.51

Minimum discharge 9.6 ft<sup>3</sup>/s, Aug 22, 23, 25-27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	18	20	20	18	27	29	25	21	15	36	15
2	22	63	19	20	18	25	28	27	20	14	24	159
3	21	29	18	20	17	24	31	24	20	13	22	46
4	66	19	18	33	18	23	50	23	19	14	19	25
5	52	17	18	25	18	22	28	26	18	13	18	20
6	25	19	50	20	18	22	27	24	35	12	21	17
7	22	19	23	20	20	22	26	23	20	12	18	17
8	21	18	19	19	20	23	64	21	18	13	15	16
9	18	18	19	19	20	23	63	22	16	13	15	17
10	149	17	49	51	24	22	32	29	17	13	14	17
11	33	17	27	27	34	49	28	23	16	15	13	16
12	24	16	22	22	29	48	28	22	15	13	14	15
13	21	16	50	21	21	25	25	92	16	29	17	18
14	19	15	211	19	44	24	25	42	17	37	14	14
15	18	14	51	19	35	23	27	24	32	68	13	18
16	20	14	33	19	29	29	30	22	27	38	12	14
17	33	14	29	18	26	39	152	23	17	20	13	14
18	33	15	27	e18	57	24	127	21	24	18	16	13
19	20	17	25	e18	115	22	50	24	18	27	13	40
20	49	18	39	e18	44	21	39	25	16	23	13	20
21	26	18	29	19	33	248	68	24	42	18	12	15
22	25	15	24	e20	28	130	47	56	50	19	11	14
23	24	15	23	e19	27	51	39	27	19	17	11	16
24	20	18	23	18	26	41	35	42	18	17	12	18
25	20	19	22	19	26	38	33	27	18	17	10	97
26	20	93	22	20	25	35	31	22	31	105	12	83
27	20	76	22	18	42	56	31	31	16	31	48	25
28	19	26	21	e17	83	68	31	58	16	36	28	19
29	20	22	20	17	31	37	30	43	17	33	22	18
30	21	21	20	18	---	31	27	26	16	21	16	19
31	28	---	20	20	---	29	---	22	---	23	15	---
TOTAL	935	716	1013	651	946	1301	1281	940	645	757	537	855
MEAN	30.2	23.9	32.7	21.0	32.6	42.0	42.7	30.3	21.5	24.4	17.3	28.5
MAX	149	93	211	51	115	248	152	92	50	105	48	159
MIN	18	14	18	17	17	21	25	21	15	12	10	13
CFSM	1.44	1.14	1.56	1.00	1.56	2.01	2.04	1.45	1.03	1.17	.83	1.36
IN.	1.66	1.27	1.80	1.16	1.68	2.32	2.28	1.67	1.15	1.35	.96	1.52

e Estimated

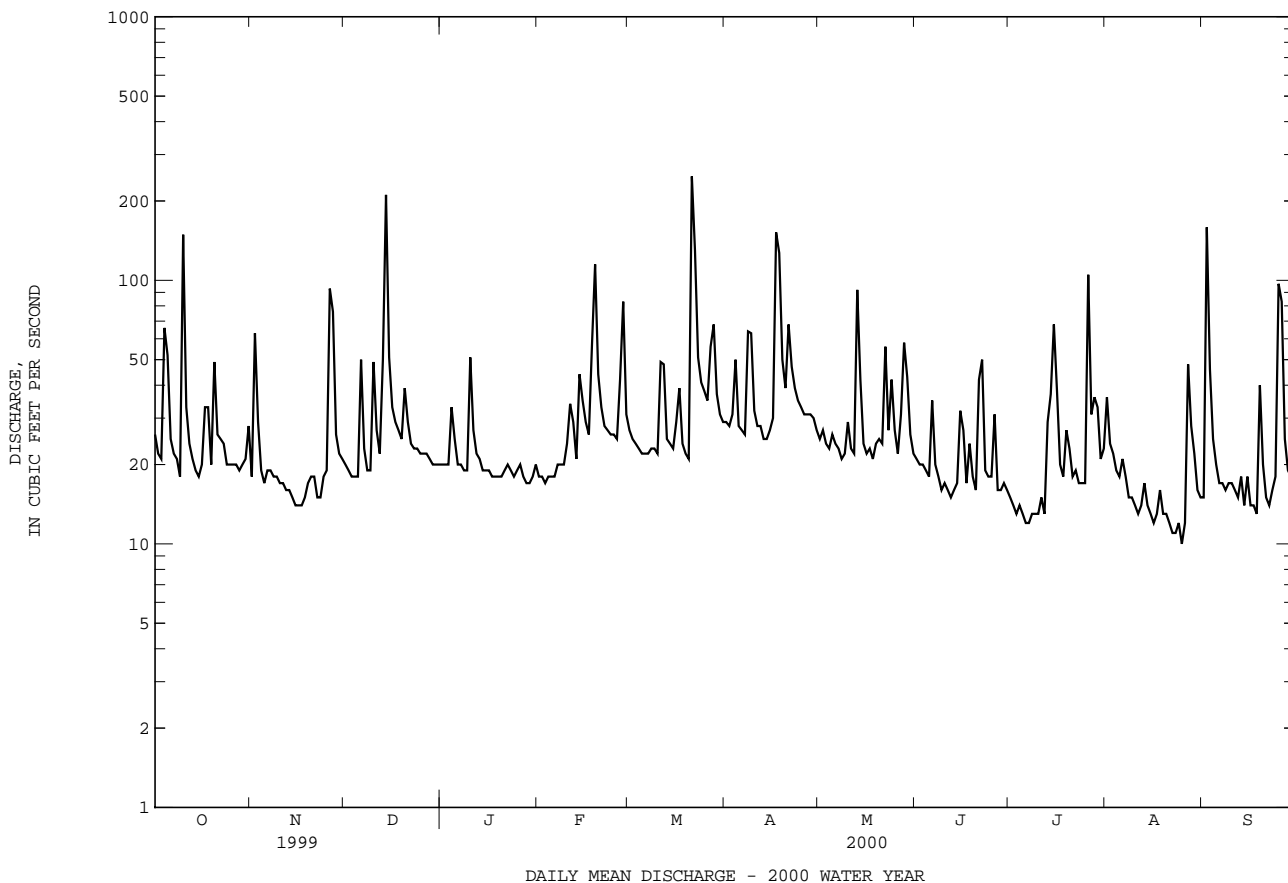
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	21.2	29.6	31.2	33.4	34.2	43.4	38.6	37.2	25.7	26.3	21.6	23.3						
MAX	45.3	55.4	91.0	69.5	57.5	90.2	81.6	80.5	50.7	72.7	46.0	60.9						
(WY)	1997	1997	1997	1994	1994	1994	1983	1989	1996	1996	1996	1999						
MIN	10.4	14.1	12.7	16.9	18.5	21.4	18.5	14.5	9.23	8.94	10.0	7.29						
(WY)	1983	1999	1999	1992	1992	1985	1985	1986	1986	1986	1985	1986						

01583600 BEAVERDAM RUN AT COCKEYSVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	10600.8		10577		30.5	
ANNUAL MEAN	29.0		28.9		45.8	
HIGHEST ANNUAL MEAN					17.2	
LOWEST ANNUAL MEAN					1996	
HIGHEST DAILY MEAN	759	Sep 16	248	Mar 21	903	Jan 19 1996
LOWEST DAILY MEAN	5.6	Jul 21	10	Aug 25	5.5	(a)
ANNUAL SEVEN-DAY MINIMUM	6.4	Jul 13	12	Aug 20	5.8	Aug 10 1986
INSTANTANEOUS PEAK FLOW			738	Sep 2	(b)3360	Jul 1 1984
INSTANTANEOUS PEAK STAGE			5.51	Sep 2	(c)12.10	Jul 1 1984
INSTANTANEOUS LOW FLOW			9.6	(d)	4.1	Oct 1 1986
ANNUAL RUNOFF (CFSM)	1.39		1.38		1.46	
ANNUAL RUNOFF (INCHES)	18.87		18.83		19.80	
10 PERCENT EXCEEDS	49		49		52	
50 PERCENT EXCEEDS	20		22		22	
90 PERCENT EXCEEDS	8.7		15		11	

- a Aug. 16, 1986, Sept. 1, 1992.
- b From rating curve extended above 1,000 ft<sup>3</sup>/s.
- c From floodmarks.
- d Aug. 22, 23, 25-27.





GUNPOWDER RIVER BASIN

01583980 MINEBANK RUN AT LOCH RAVEN, MD

LOCATION.--Lat 39°24'59", long 76°32'48", Baltimore County, Hydrologic Unit 02060003, on left bank 15 ft downstream from bridge on lane leading to Cromwell Valley Park-Willow Grove Farm, 0.3 mi off Cromwell Bridge Road, 0.4 mi west of Loch Raven, and 0.6 mi upstream from mouth.

DRAINAGE AREA.--2.90 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 185 ft above sea level, from topographic map.

REMARKS.--Records good except those above 150 ft<sup>3</sup>/s and estimated daily discharges (missing record, ice effect), which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 13	1910	*573	*4.79	Aug 27	1855	560	4.75

Minimum discharge 0.54 ft<sup>3</sup>/s, Aug 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.4	1.1	e1.5	e1.4	3.3	3.0	2.4	1.5	1.2	2.4	1.5
2	1.3	5.8	1.1	e1.5	e1.4	2.9	2.8	2.7	1.5	1.1	1.7	2.2
3	1.1	2.1	1.2	e2.5	e1.4	2.8	5.1	2.4	1.4	1.1	1.3	3.6
4	10	1.7	1.2	e3.8	e1.4	2.8	5.4	2.4	1.4	1.6	1.2	1.8
5	6.3	1.6	1.2	e2.8	e1.4	2.6	2.8	2.4	1.4	1.2	1.2	1.4
6	2.7	1.6	4.5	e1.6	e1.4	2.2	2.1	2.4	6.5	1.3	2.3	1.2
7	2.1	1.6	1.3	e1.5	e1.4	2.0	2.0	2.0	1.7	1.5	1.4	1.2
8	2.0	1.6	1.2	e1.5	e1.5	2.0	6.7	1.8	1.3	1.1	1.2	1.1
9	2.0	1.6	1.2	e1.6	e2.0	2.0	5.7	1.8	1.2	.96	.99	.96
10	20	1.6	6.3	e4.5	4.5	2.0	2.8	2.9	1.2	1.4	.96	.96
11	4.2	1.5	1.7	e3.5	7.3	4.0	2.4	1.8	1.2	1.1	1.3	.96
12	3.0	1.4	1.3	e2.5	5.2	3.4	2.4	1.7	3.9	.74	1.3	.96
13	2.6	1.4	5.1	e1.7	3.4	1.8	2.4	12	1.8	3.4	.96	.96
14	2.2	1.4	21	e1.6	7.2	1.8	2.2	2.9	1.4	11	1.3	.96
15	1.9	1.4	4.5	e1.5	5.1	1.6	2.1	1.7	8.3	16	1.2	2.7
16	1.8	1.4	2.7	e1.5	4.6	3.4	2.6	1.5	2.7	16	.96	1.3
17	3.2	1.4	2.3	e1.5	4.1	3.9	12	2.3	1.5	2.5	.96	.96
18	2.4	1.4	1.9	e1.5	9.1	1.8	11	1.6	1.5	1.4	.85	.86
19	1.5	1.3	1.7	e1.5	13	1.6	4.4	3.5	1.4	3.5	.85	5.3
20	5.6	1.2	5.4	e1.5	5.5	1.5	3.7	2.0	1.2	2.3	.85	1.7
21	1.7	1.2	2.7	e1.5	4.8	30	5.4	2.1	5.3	1.4	.83	1.0
22	2.0	1.2	e2.1	e1.5	4.2	17	4.1	5.9	3.7	1.2	.65	.96
23	1.7	1.2	e1.8	e1.6	3.7	5.5	3.3	2.0	1.6	1.2	.65	.85
24	1.5	1.6	e1.6	e1.8	3.4	4.3	3.3	5.2	1.5	1.8	.65	.80
25	1.4	1.4	e1.6	e1.8	3.3	3.7	2.9	2.9	1.3	1.5	.65	18
26	1.4	6.1	e1.6	e1.9	3.0	3.6	2.8	1.6	8.8	26	.65	7.1
27	1.4	5.2	e1.5	e1.6	5.2	8.8	3.1	3.1	1.6	8.2	20	2.1
28	1.4	1.6	e1.5	e1.5	6.7	7.9	2.8	9.2	2.5	15	4.0	1.5
29	1.4	1.3	e1.5	e1.5	3.1	3.8	2.8	3.9	1.6	4.3	6.0	1.4
30	1.4	1.2	e1.5	e1.5	---	3.4	2.8	2.0	1.4	2.0	2.0	1.0
31	1.4	---	e1.5	e1.5	---	3.3	---	1.7	---	2.5	2.0	---
TOTAL	94.2	56.4	86.8	58.8	119.7	140.7	116.9	93.8	73.3	135.50	63.26	67.29
MEAN	3.04	1.88	2.80	1.90	4.13	4.54	3.90	3.03	2.44	4.37	2.04	2.24
MAX	20	6.1	21	4.5	13	30	12	12	8.8	26	20	18
MIN	1.1	1.2	1.1	1.5	1.4	1.5	2.0	1.5	1.2	.74	.65	.80
CFSM	1.05	.65	.97	.65	1.42	1.57	1.34	1.04	.84	1.51	.70	.77
IN.	1.21	.72	1.11	.75	1.54	1.80	1.50	1.20	.94	1.74	.81	.86

e Estimated

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

	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
MEAN	2.25	3.07	3.92	4.16	4.81	6.00	3.76	3.10	3.04	2.26	2.62	5.13
MAX	3.69	5.01	9.99	5.83	8.31	9.03	4.32	4.94	5.51	4.37	4.55	11.6
(WY)	1997	1998	1997	1998	1998	1998	1997	1998	1998	2000	1999	1999
MIN	1.01	.78	.70	1.90	2.33	3.34	2.59	1.48	1.29	.96	1.86	2.24
(WY)	1999	1999	1999	2000	1999	1999	1999	1999	1999	1997	1997	1998

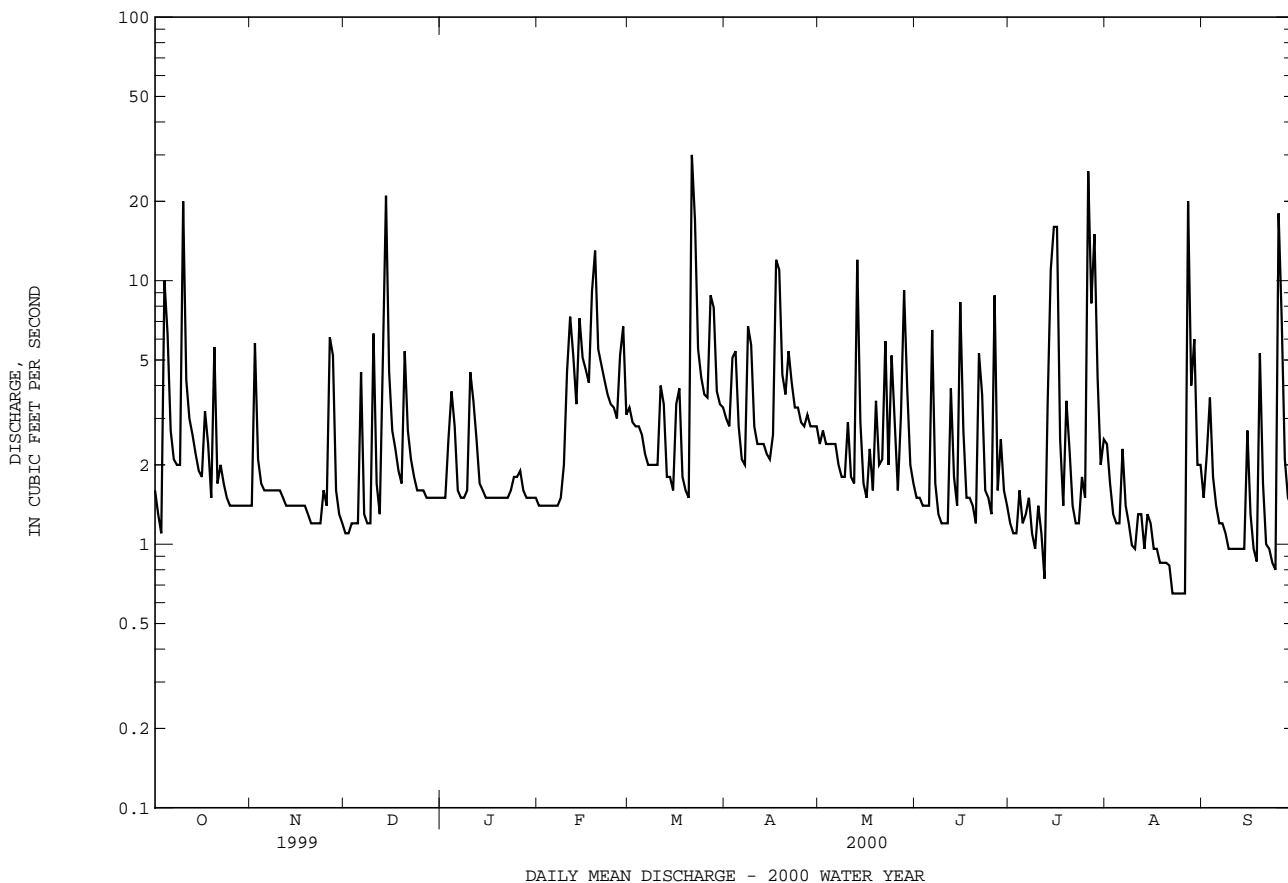
01583980 MINEBANK RUN AT LOCH RAVEN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1997 - 2000	
ANNUAL TOTAL	1225.65	1106.65		
ANNUAL MEAN	3.36	3.02	3.67	
HIGHEST ANNUAL MEAN			4.37	1997
LOWEST ANNUAL MEAN			2.92	1999
HIGHEST DAILY MEAN	150 Sep 16	30 Mar 21	150	Sep 16 1999
LOWEST DAILY MEAN	.31 (a)	.65 (b)	.31	(a)
ANNUAL SEVEN-DAY MINIMUM	.41 Aug 7	.70 Aug 20	.41	Aug 7 1999
INSTANTANEOUS PEAK FLOW		573 May 13	(c)1960	Sep 2 1997
INSTANTANEOUS PEAK STAGE		4.79 May 13	7.94	Sep 2 1997
INSTANTANEOUS LOW FLOW		.54 Aug 21	.08	Jul 20 1999
ANNUAL RUNOFF (CFSM)	1.16	1.04	1.26	
ANNUAL RUNOFF (INCHES)	15.72	14.20	17.19	
10 PERCENT EXCEEDS	5.9	5.6	6.8	
50 PERCENT EXCEEDS	1.5	1.8	1.8	
90 PERCENT EXCEEDS	.69	1.1	.69	

a July 21, Aug. 12, 13, 1999.

b Aug. 22-26.

c From rating curve extended above 150 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow.



## GUNPOWDER RIVER BASIN

01584050 LONG GREEN CREEK AT GLEN ARM, MD

LOCATION.--Lat 39°27'17", long 76°28'45", Baltimore County, Hydrologic Unit 02060003, on right bank 0.5 mi downstream from bridge on Glen Arm Road, 0.6 mi upstream from State Highway 147 (Harford Road), 0.8 mi east of Glen Arm, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--9.40 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 230 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1400	*345	*3.64	No other peak greater than base discharge.			

Minimum discharge 3.3 ft<sup>3</sup>/s, Aug 25-27, Sep 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.3	8.3	9.1	8.5	14	14	12	8.6	7.2	12	5.2
2	9.5	18	8.3	9.1	8.3	13	15	12	7.9	6.5	9.7	6.5
3	8.8	12	8.3	9.3	8.3	12	15	12	7.4	6.3	7.1	6.6
4	18	9.3	8.1	12	8.3	12	18	11	7.4	6.3	6.5	6.2
5	24	9.0	8.0	12	8.3	12	14	11	7.3	5.8	5.8	5.1
6	11	8.8	12	10	8.1	11	14	11	11	5.4	5.9	4.6
7	9.8	8.5	9.2	9.8	8.5	11	14	10	7.9	5.0	6.0	4.6
8	9.3	8.3	8.5	9.6	8.5	11	17	9.8	7.2	4.7	5.2	4.5
9	9.2	8.3	8.3	9.6	8.6	10	24	9.4	7.0	4.8	5.1	4.5
10	54	8.3	15	15	9.5	9.9	15	9.7	6.7	4.9	4.8	4.4
11	16	8.2	11	12	12	12	14	9.3	6.5	4.8	4.6	4.3
12	12	7.7	9.8	11	13	14	14	9.1	6.4	4.5	4.4	4.2
13	11	7.7	16	10	10	10	13	32	6.8	4.7	4.5	5.0
14	10	7.8	74	9.3	16	10	13	16	7.0	5.0	4.9	4.1
15	9.6	7.7	20	9.2	20	9.9	14	9.9	9.0	21	4.6	4.0
16	9.5	7.6	15	9.6	22	11	14	9.1	8.9	10	4.2	3.7
17	11	7.3	13	8.8	16	15	36	9.2	7.0	6.8	3.9	3.7
18	13	7.3	12	e8.8	19	11	33	8.8	7.7	6.0	4.6	3.7
19	9.7	7.3	11	e8.8	64	10	21	9.2	7.4	6.1	4.5	6.4
20	17	7.5	15	e8.9	21	10	18	9.3	6.9	6.5	4.0	5.5
21	12	7.7	14	8.9	17	111	19	9.4	7.4	5.3	3.8	4.1
22	11	7.4	12	e8.8	15	65	18	14	11	5.4	3.7	3.8
23	11	7.5	11	8.7	14	22	16	11	6.9	4.8	3.7	4.0
24	9.7	8.0	11	8.7	14	19	15	10	6.5	5.1	3.9	4.3
25	9.3	7.7	9.9	e8.7	13	17	14	9.2	6.4	5.2	3.7	16
26	9.0	11	10	e10	13	16	14	8.4	9.3	24	3.5	24
27	8.8	21	10	8.9	13	20	14	9.3	6.8	11	14	7.6
28	8.5	10	9.7	e8.7	31	34	13	12	7.7	8.6	9.2	6.0
29	8.7	9.2	9.6	8.4	15	17	13	14	18	11	6.7	5.3
30	8.3	8.7	9.6	8.6	---	15	13	9.7	11	7.1	6.0	5.0
31	8.3	---	9.5	9.2	---	15	---	8.9	---	6.3	5.4	---
TOTAL	388.0	273.1	407.1	299.5	442.9	579.8	499	345.7	243.0	226.1	175.9	176.9
MEAN	12.5	9.10	13.1	9.66	15.3	18.7	16.6	11.2	8.10	7.29	5.67	5.90
MAX	54	21	74	15	64	111	36	32	18	24	14	24
MIN	8.3	7.3	8.0	8.4	8.1	9.9	13	8.4	6.4	4.5	3.5	3.7
CFSM	1.33	.97	1.40	1.03	1.62	1.99	1.77	1.19	.86	.78	.60	.63
IN.	1.54	1.08	1.61	1.19	1.75	2.29	1.97	1.37	.96	.89	.70	.70

e Estimated

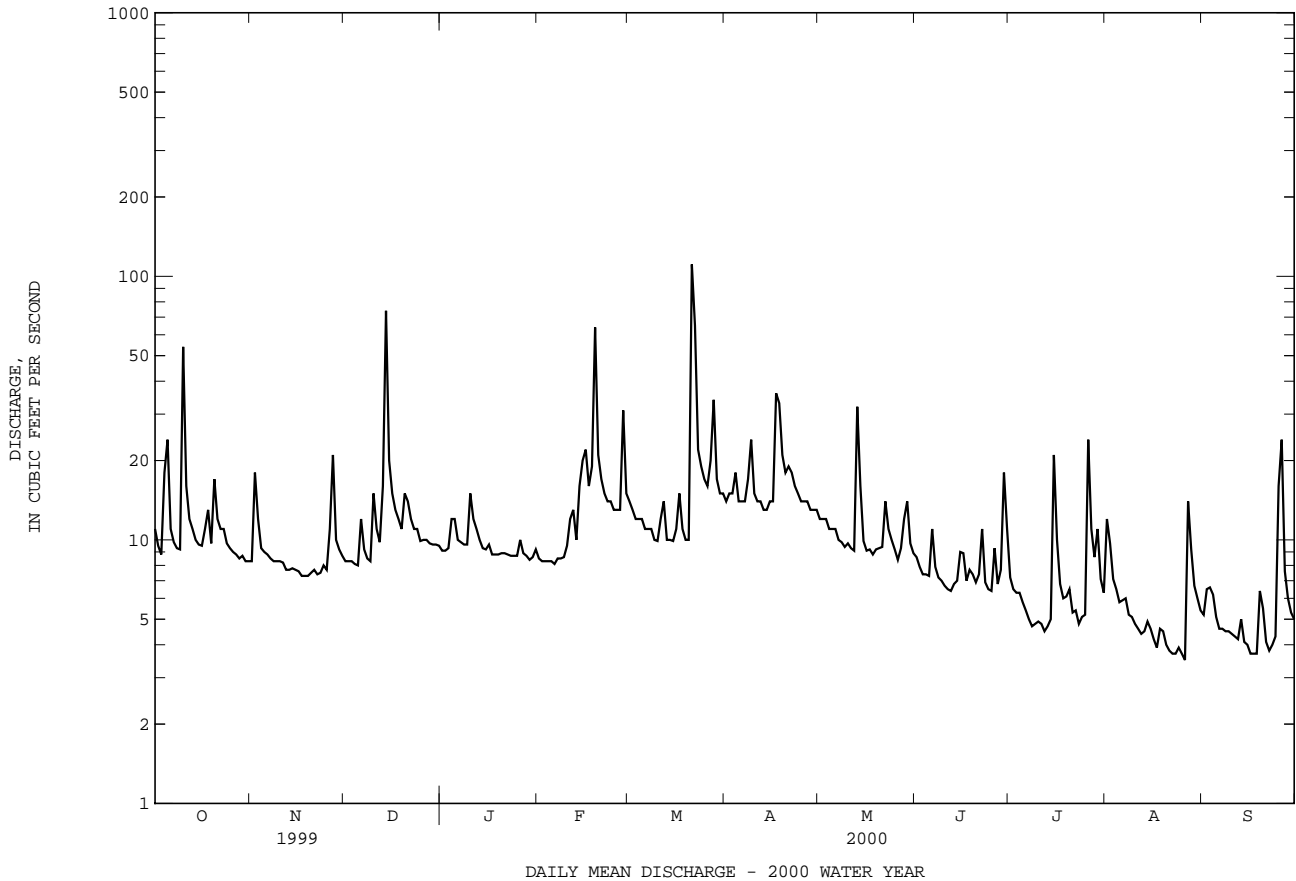
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2000, BY WATER YEAR (WY)

	7.95	9.03	11.7	14.9	14.7	17.2	14.3	12.9	10.1	8.91	7.67	8.26
MEAN	7.95	9.03	11.7	14.9	14.7	17.2	14.3	12.9	10.1	8.91	7.67	8.26
MAX	25.1	18.0	33.0	38.4	39.3	39.2	35.3	28.1	18.5	28.0	26.9	32.2
(WY)	1980	1980	1997	1979	1979	1994	1983	1989	1996	1989	1978	1979
MIN	2.85	3.05	3.43	3.67	6.16	6.02	7.35	4.79	3.43	2.07	2.87	2.41
(WY)	1998	1982	1999	1981	1992	1981	1999	1999	1999	1999	1995	1986

01584050 LONG GREEN CREEK AT GLEN ARM, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1976 - 2000	
ANNUAL TOTAL	3389.4		4057.0		11.5	
ANNUAL MEAN	9.29		11.1		18.1 1979	
HIGHEST ANNUAL MEAN					5.33 1981	
LOWEST ANNUAL MEAN					408 Jan 26 1978	
HIGHEST DAILY MEAN	396	Sep 16	111	Mar 21		
LOWEST DAILY MEAN	1.2	(a)	3.5	Aug 26	1.2 (a)	
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 7	3.8	Aug 20	1.3 Aug 7 1999	
INSTANTANEOUS PEAK FLOW			345	Mar 21	(b)3250 Jul 1 1984	
INSTANTANEOUS PEAK STAGE			3.64	Mar 21	6.70 Jul 1 1984	
INSTANTANEOUS LOW FLOW			3.3	(c)	(d)1.0 Jan 29 1977	
ANNUAL RUNOFF (CFSM)	.99		1.18		1.22	
ANNUAL RUNOFF (INCHES)	13.41		16.06		16.55	
10 PERCENT EXCEEDS	13		17		18	
50 PERCENT EXCEEDS	6.9		9.3		8.4	
90 PERCENT EXCEEDS	2.2		4.8		3.5	

a Aug. 7, 12, 13, 1999.  
 b From rating curve extended above 1,300 ft<sup>3</sup>/s.  
 c Aug. 25-27, Sept. 17.  
 d Result of freezeup.

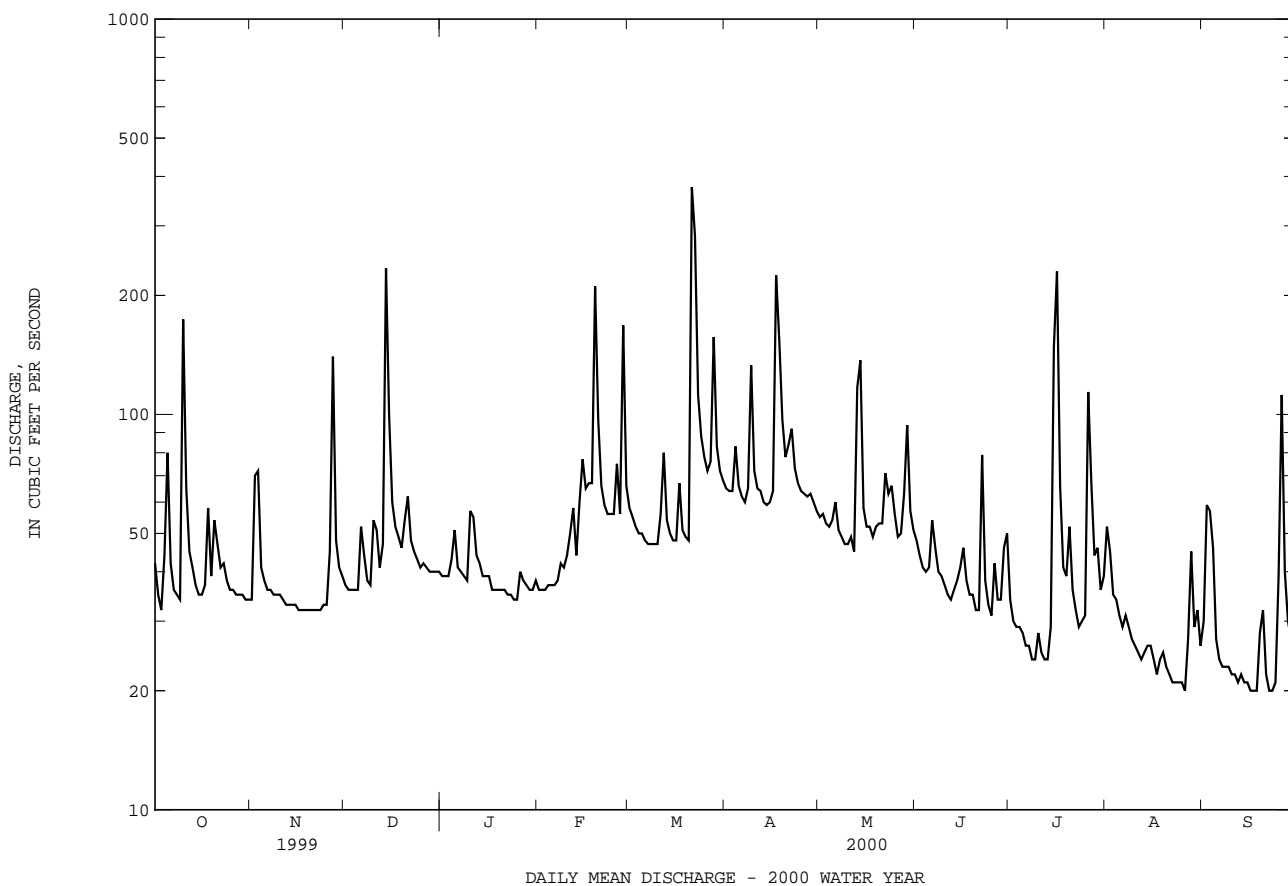




01584500 LITTLE GUNPOWDER FALLS AT LAUREL BROOK, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1927 - 1970 1999 - 2000	
ANNUAL TOTAL	14903		18520		44.1	
ANNUAL MEAN	40.8		50.6		81.5	
HIGHEST ANNUAL MEAN					1952	
LOWEST ANNUAL MEAN					20.2	
HIGHEST DAILY MEAN	1530	Sep 16	376	Mar 21	2800	Aug 23 1933
LOWEST DAILY MEAN	12	(a)	20	(b)	(e)3.0	(c)
ANNUAL SEVEN-DAY MINIMUM	13	Jul 6	21	Sep 12	3.2	Sep 6 1966
INSTANTANEOUS PEAK FLOW			1440	Jul 16	(d)9200	Aug 23 1933
INSTANTANEOUS PEAK STAGE			5.13	Jul 16	10.30	Aug 23 1933
INSTANTANEOUS LOW FLOW			20	(f)	UNKNOWN	
ANNUAL RUNOFF (CFSM)	1.13		1.40		1.22	
ANNUAL RUNOFF (INCHES)	15.36		19.08		16.59	
10 PERCENT EXCEEDS	54		72		72	
50 PERCENT EXCEEDS	33		41		32	
90 PERCENT EXCEEDS	13		25		15	

- a Sept. 2-4.
- b Aug. 26, Sept. 16-18, 22, 23.
- e Estimated.
- c Sept. 7-11, 1966.
- d From rating curve extended above 2,300 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.
- f Sept. 17-19.



GUNPOWDER RIVER BASIN

01585090 WHITEMARSH RUN NEAR FULLERTON, MD

LOCATION.--Lat 39°22'46", long 76°29'46", Baltimore County, Hydrologic Unit 02060003, on right bank 200 ft downstream of Route 43 bridge, 1.0 mi west of White Marsh. and 5.0 mi upstream from mouth.

DRAINAGE AREA.--2.73 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 125 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (ice effect, backwater, missing record), which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 13	1930	1,180	4.46	Jul 16	1300	*3,480	*5.99
Jul 14	1845	1,410	4.67				

Minimum discharge 0.49 ft<sup>3</sup>/s, Aug 19-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.4	.74	.78	e1.7	2.3	2.1	1.5	e1.3	.91	7.1	e.46
2	1.4	13	.74	.74	e1.5	2.1	2.0	1.5	e1.6	e.91	2.3	e1.8
3	1.2	2.2	.77	.78	e1.4	1.9	5.1	1.5	e2.4	e1.1	1.6	e1.3
4	34	1.2	.84	20	e1.3	1.9	9.2	1.4	e1.3	e1.4	1.4	e.62
5	15	1.1	.74	3.8	e1.3	1.8	2.2	1.4	e4.7	e1.1	1.2	e.52
6	2.3	1.2	10	1.5	e1.5	1.6	2.0	1.5	e3.0	e.74	2.5	e.50
7	1.5	1.2	1.4	1.3	e2.2	1.5	1.8	1.4	e1.2	e.78	1.4	e.47
8	1.2	1.2	1.0	1.1	e3.0	1.5	16	1.3	1.2	e.68	1.2	e.45
9	1.2	1.3	.97	1.1	4.2	1.4	13	1.3	1.1	e.70	1.0	e.43
10	57	1.2	17	16	8.3	1.3	2.6	3.2	1.0	e.80	1.1	e.43
11	4.0	1.1	2.4	2.7	15	5.2	2.2	1.3	.98	e.70	.97	e.42
12	1.9	1.1	1.4	1.6	4.7	4.2	2.0	1.1	5.3	e.90	.99	e.39
13	1.5	1.0	13	1.3	2.5	1.5	1.9	36	1.7	e4.0	1.0	e.35
14	1.6	1.0	67	1.2	11	1.4	1.9	4.0	1.1	e10	3.5	e.31
15	1.3	.80	5.8	1.1	3.8	1.3	2.2	1.5	10	54	1.0	e1.7
16	1.3	.70	2.9	e1.1	3.1	11	2.7	1.3	2.6	126	.75	e.39
17	3.7	.70	2.1	e1.1	2.2	11	25	2.2	1.0	4.4	.67	e.41
18	2.9	.64	1.8	e1.1	25	1.9	20	1.5	.95	1.6	1.0	e.52
19	1.2	.68	1.5	e1.1	39	1.7	3.9	3.1	.88	4.0	.65	e7.8
20	14	.67	11	e1.1	4.9	1.5	2.7	2.4	.68	2.6	.53	e3.0
21	2.0	.84	3.3	e1.1	3.1	103	11	2.1	12	1.4	.53	e.80
22	2.9	.57	1.9	e1.1	2.6	40	5.1	9.4	5.6	1.4	.59	e.25
23	2.2	1.1	1.5	1.1	2.3	5.1	2.6	1.8	.93	.86	.69	e.52
24	1.5	1.3	1.3	1.2	2.2	3.3	2.2	12	.69	1.7	.91	e.50
25	1.5	.62	1.1	1.2	1.9	2.8	2.6	2.8	3.9	1.1	.77	e48
26	1.5	20	1.1	e1.9	1.8	2.4	2.2	1.5	41	58	.68	e10
27	1.4	18	1.1	e1.5	7.7	21	2.4	3.2	2.3	6.6	25	e3.0
28	1.3	2.0	1.0	e1.4	20	17	2.0	24	3.6	20	e7.0	e1.1
29	1.4	1.2	.97	e1.3	2.8	3.3	1.6	5.4	1.7	6.9	e6.4	e.56
30	1.4	.82	.97	e1.2	---	2.6	1.5	e2.0	1.1	2.6	e1.5	e.54
31	1.4	---	.97	e2.0	---	2.2	---	e1.5	---	1.8	e.70	---
TOTAL	168.7	79.84	158.31	75.50	182.0	260.7	153.7	136.1	116.81	319.68	76.63	87.54
MEAN	5.44	2.66	5.11	2.44	6.28	8.41	5.12	4.39	3.89	10.3	2.47	2.92
MAX	57	20	67	20	39	103	25	36	41	126	25	48
MIN	1.2	.57	.74	.74	1.3	1.3	1.5	1.1	.68	.68	.53	.25
CFSM	1.99	.97	1.87	.89	2.30	3.08	1.88	1.61	1.43	3.78	.91	1.07
IN.	2.30	1.09	2.16	1.03	2.48	3.55	2.09	1.85	1.59	4.36	1.04	1.19

e Estimated

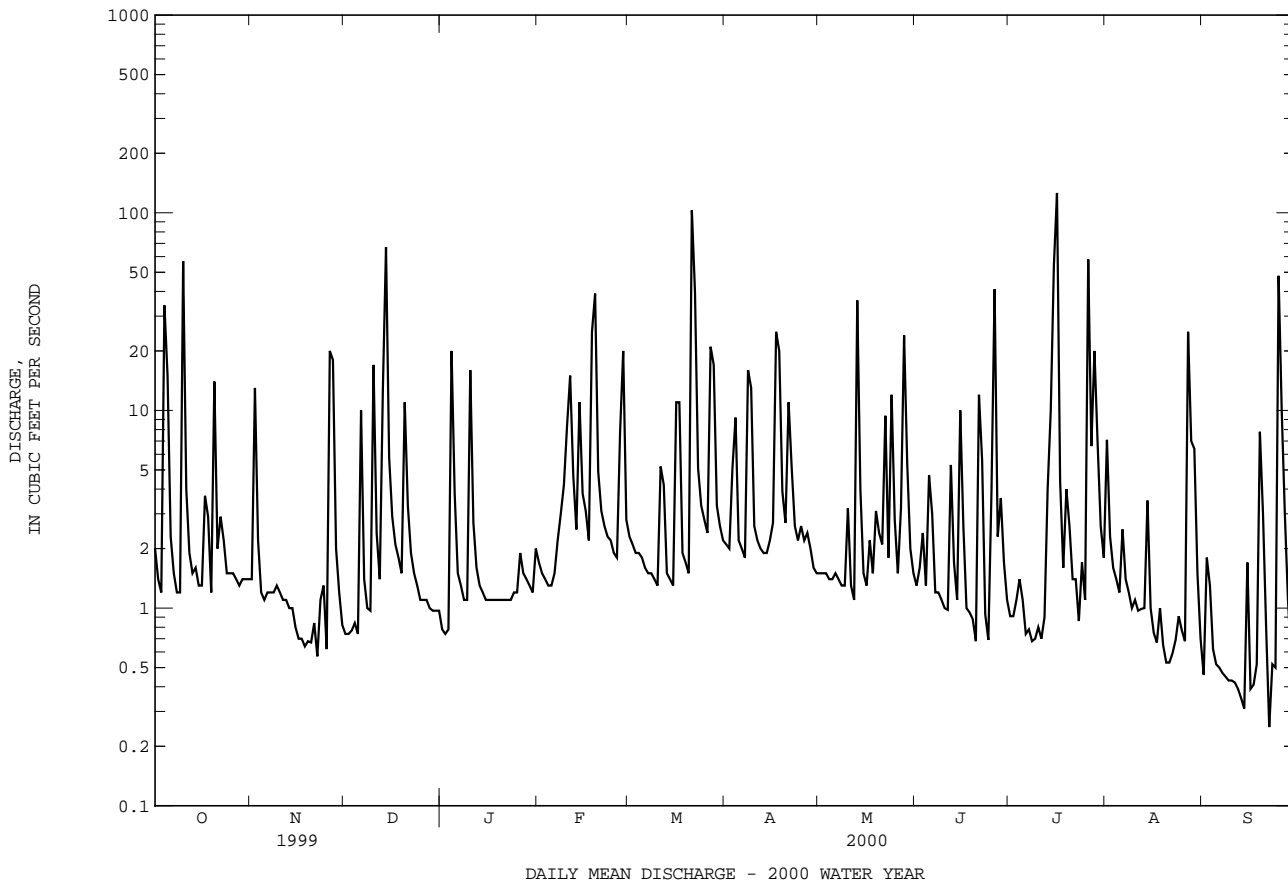
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000
MEAN	4.89	4.58	4.90	7.51	5.82	7.61
MAX	10.8	7.49	12.6	13.2	12.0	13.1
(WY)	1996	1998	1997	1996	1998	1996
MIN	1.41	1.02	.95	2.44	2.95	4.61
(WY)	1999	1999	1999	2000	1995	1995
	4.20	4.13	4.71	3.94	3.74	6.07
	6.58	6.88	13.5	10.3	9.81	20.2
	1996	1996	2000	1999	1999	1999
	1.99	1.64	1.44	.41	.96	2.41
	1995	1997	1995	1997	1995	1995

01585090 WHITEMARSH RUN NEAR FULLERTON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1995 - 2000	
ANNUAL TOTAL	2097.79	1815.51		
ANNUAL MEAN	5.75	4.96	5.52	
HIGHEST ANNUAL MEAN			7.35	1996
LOWEST ANNUAL MEAN			4.71	1997
HIGHEST DAILY MEAN	418 Sep 16	126 Jul 16	418	Sep 16 1999
LOWEST DAILY MEAN	.02 Aug 13	.25 Sep 22	.01	(a)
ANNUAL SEVEN-DAY MINIMUM	.05 Jul 15	.40 Sep 8	.02	Aug 23 1995
INSTANTANEOUS PEAK FLOW		3480 Jul 16	(b) 3480	Jul 16 2000
INSTANTANEOUS PEAK STAGE		5.99 Jul 16	5.99	Jul 16 2000
INSTANTANEOUS LOW FLOW		.49 (c)	.00	(d)
ANNUAL RUNOFF (CFSM)	2.11	1.82	2.02	
ANNUAL RUNOFF (INCHES)	28.59	24.74	27.46	
10 PERCENT EXCEEDS	13	11	11	
50 PERCENT EXCEEDS	1.3	1.5	1.6	
90 PERCENT EXCEEDS	.27	.70	.35	

- a Aug. 25-27, 1995.
- b From rating curve extended above 120 ft<sup>3</sup>/s.
- c Aug. 19-21.
- d Aug. 26, 1995, Aug. 14, 1999.





GUNPOWDER RIVER BASIN

01585095 NORTH FORK WHITEMARSH RUN NEAR WHITE MARSH, MD

LOCATION.--Lat 39°23'07", long 76°28'09", Baltimore County, Hydrologic Unit 02060003, on left bank 100 ft upstream of culverts under Baconsfield Drive, 0.6 mi upstream from confluence with Whitemarsh Run, 0.9 mi southeast of Perry Hall, and 2.1 mi east of White Marsh.

DRAINAGE AREA.--1.34 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 75 ft above sea level, from topographic map.

REMARKS.--Records good above 0.5 ft<sup>3</sup>/s and fair below except those for estimated daily discharges (backwater, ice effect), which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 15	1430	*328	*3.78	Aug 27	1845	255	3.27

Minimum discharge 0.09 ft<sup>3</sup>/s, Aug 25-27, Sep 13-15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.42	.42	.23	e.41	.72	.96	.49	.40	.48	1.5	.22
2	.44	6.1	e.40	.23	e.39	.59	.67	.41	.35	.44	.70	.91
3	.37	.91	e.38	.46	e.39	.53	2.9	.33	.62	.56	.41	.59
4	16	.58	e.40	9.6	e.39	.50	5.5	.22	.35	.73	.37	.30
5	5.7	.42	.38	2.1	e.45	.50	1.2	.21	.32	.34	.32	.24
6	.81	.39	5.6	.90	e.65	.44	.96	.30	3.9	.26	.84	.20
7	.57	.65	.71	.55	e.90	.40	.88	.22	.33	.29	.37	.18
8	.50	.42	.49	.50	e1.3	.28	7.4	.28	.18	.18	.26	.18
9	.51	.42	.58	.50	1.9	.28	7.0	.36	.20	.16	.30	.18
10	26	.31	8.2	7.8	3.8	.28	1.4	.60	.20	.30	.34	.18
11	1.7	.40	1.3	1.4	7.5	3.4	1.2	.71	.20	.20	.29	.18
12	.81	.37	.62	.68	2.5	2.3	1.0	.76	1.2	.17	.27	.18
13	.72	.37	6.3	.63	1.0	.51	.86	11	.39	1.6	.26	.15
14	e.64	.37	31	.43	6.3	.42	.86	1.5	.27	14	1.5	.09
15	e.62	.40	3.0	.42	1.7	.36	1.1	.68	3.5	26	.24	.81
16	e.65	.49	1.2	.42	1.1	7.0	1.2	.67	.88	9.8	.17	.12
17	e.80	.59	1.0	.32	.84	6.0	14	1.2	.24	1.0	.13	.18
18	.81	.45	.59	.28	10	.79	11	.76	.42	.49	.27	.19
19	.63	.36	.58	e.26	17	.59	2.6	2.0	.27	1.7	.20	4.7
20	.89	.29	5.6	e.28	1.9	.52	1.7	1.5	.18	1.1	.15	.46
21	.82	.28	1.6	e.32	.96	57	12	1.2	4.3	.82	.11	.16
22	.78	.28	.76	e.31	.75	16	4.4	3.6	2.2	.54	.11	.11
23	.80	.60	.66	e.30	.72	2.3	1.8	.54	.29	.31	.11	.25
24	.50	.44	.58	e.32	.72	1.6	1.4	6.6	.26	.71	.11	.17
25	.53	.17	.43	.32	.72	1.4	1.9	1.3	1.2	.42	.10	23
26	.50	12	.42	e.50	.57	1.1	1.2	.35	15	29	.09	9.0
27	.50	9.0	.42	e.42	1.9	11	1.2	1.6	1.0	3.0	11	.61
28	.54	.91	.42	.42	6.5	8.8	.91	14	2.0	11	1.3	.26
29	.57	.62	.40	e.41	.81	1.5	.67	2.7	5.1	3.5	3.1	.26
30	.42	.49	.51	e.41	---	1.2	.64	.60	1.0	.86	.40	.25
31	.42	---	.27	e.43	---	.97	---	.44	---	.65	.32	---
TOTAL	66.17	39.50	75.22	32.15	74.07	129.28	90.51	57.13	46.75	110.61	25.64	44.31
MEAN	2.13	1.32	2.43	1.04	2.55	4.17	3.02	1.84	1.56	3.57	.83	1.48
MAX	26	12	31	9.6	17	57	14	14	15	29	11	23
MIN	.37	.17	.27	.23	.39	.28	.64	.21	.18	.16	.09	.09
CFSM	1.59	.98	1.81	.77	1.91	3.11	2.25	1.38	1.16	2.66	.62	1.10
IN.	1.84	1.10	2.09	.89	2.06	3.59	2.51	1.59	1.30	3.07	.71	1.23

e Estimated

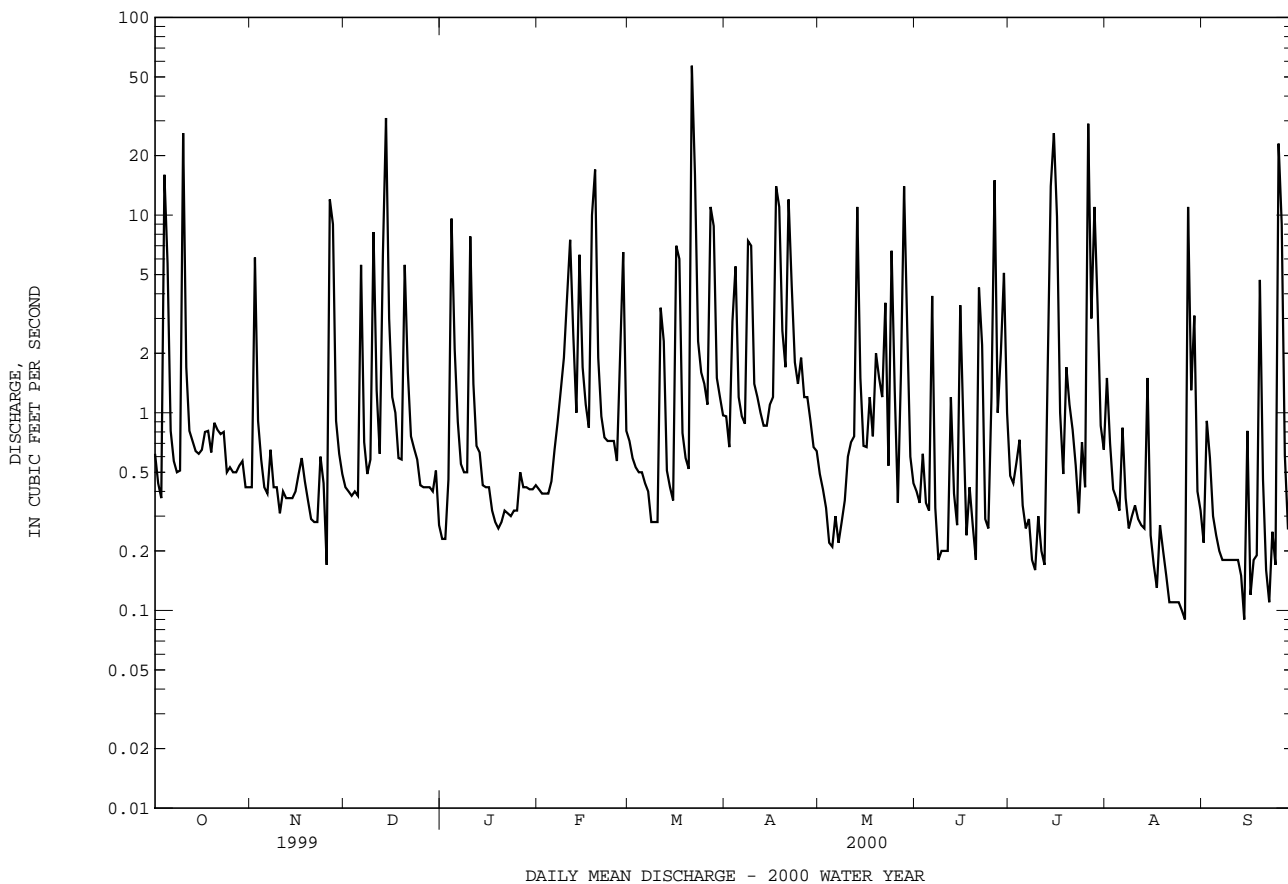
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	1.72	2.35	2.63	3.38	2.79	4.47	2.11	1.80	1.56
MAX	4.75	3.46	6.03	5.39	4.74	6.79	3.61	3.11	4.72
(WY)	1996	1998	1997	1996	1998	1993	1996	1996	1996
MIN	.68	.56	.41	1.04	1.53	2.38	.92	.74	.59
(WY)	1998	1999	1999	2000	1995	1996	1995	1997	1994

01585095 NORTH FORK WHITEMARSH RUN NEAR WHITE MARSH, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000	
ANNUAL TOTAL	868.81	791.34		
ANNUAL MEAN	2.38	2.16	2.40	
HIGHEST ANNUAL MEAN			3.39	1996
LOWEST ANNUAL MEAN			1.63	1995
HIGHEST DAILY MEAN	140 Sep 16	57 Mar 21	140	Sep 16 1999
LOWEST DAILY MEAN	.00 (a)	.09 (b)	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.03 Jul 5	.11 Aug 20	.03	Jul 5 1999
INSTANTANEOUS PEAK FLOW		328 Jul 15	(c)502	Jun 19 1996
INSTANTANEOUS PEAK STAGE		3.78 Jul 15	5.05	Jun 19 1996
INSTANTANEOUS LOW FLOW		.09 (d)	.00	(f)
ANNUAL RUNOFF (CFSM)	1.78	1.61	1.79	
ANNUAL RUNOFF (INCHES)	24.12	21.97	24.29	
10 PERCENT EXCEEDS	5.5	6.2	5.5	
50 PERCENT EXCEEDS	.60	.58	.65	
90 PERCENT EXCEEDS	.13	.22	.17	

- a Aug. 7, 10-13, 1999.
- b Aug. 26, Sept. 14.
- c From rating curve extended above 200 ft<sup>3</sup>/s.
- d Aug. 25-27, Sept. 13-15.
- f Aug. 6-8, 10-14, 1999.



## GUNPOWDER RIVER BASIN

01585100 WHITEMARSH RUN AT WHITE MARSH, MD

LOCATION.--Lat 39°22'15", long 76°26'46", Baltimore County, Hydrologic Unit 02060003, on left bank at upstream side of bridge on State Highway 7, 1.0 mi southwest of White Marsh, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--7.61 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1959 to September 1989, March 1992 to current year.

REVISED RECORDS.--WDR MD-DE-73-1: 1960(M), 1967-68, 1969(M). WDR MD-DE-79-1: 1965-66(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 38.96 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (flow bypassing gage, ice effect), which are poor. Low flow affected by operations of sand and gravel plant in vicinity of gage. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1400	*1,310	*6.88	Jul 16	1430	1,310	6.86
May 13	2045	803	4.54	Jul 26	1000	1,130	5.99
Jul 14	2015	1,090	5.80	Jul 28	2300	1,050	5.58
Jul 15	1545	1,200	6.33	Sep 25	2230	827	4.63

Minimum discharge 0.70 ft<sup>3</sup>/s, Aug 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	2.3	2.6	2.3	e4.0	5.9	5.4	3.8	3.8	2.9	11	2.8
2	3.3	26	2.8	2.3	e3.5	5.0	5.3	3.8	3.3	2.5	7.2	4.6
3	2.5	6.4	3.0	2.4	e3.4	4.5	5.5	3.4	2.9	2.5	4.5	4.2
4	42	3.6	3.0	42	e3.3	4.3	28	3.4	2.9	4.6	3.8	3.5
5	58	2.4	2.7	14	e3.3	4.0	5.9	3.4	2.6	2.3	3.1	1.9
6	6.4	e2.3	25	4.8	e3.5	3.8	4.7	3.5	23	1.9	5.8	1.9
7	4.8	e2.3	5.0	6.6	e4.0	3.8	4.3	3.2	3.5	2.0	4.0	2.0
8	3.9	e2.2	3.7	3.4	e6.4	3.5	31	3.0	2.8	1.7	2.8	1.9
9	3.2	e2.2	3.5	3.3	11	4.0	39	2.9	2.6	1.7	2.7	1.8
10	129	e2.1	37	38	19	3.4	7.5	4.5	2.6	3.7	2.3	1.8
11	14	e2.1	8.7	9.6	30	15	5.5	2.8	2.2	2.2	2.2	1.8
12	6.4	e2.1	4.8	4.5	30	16	4.9	2.8	7.1	1.8	2.4	1.7
13	4.9	e2.1	26	3.7	9.6	4.3	4.2	63	6.4	11	2.1	1.6
14	3.6	e2.0	182	5.3	19	3.7	4.2	15	3.1	132	9.4	1.4
15	3.2	e2.0	18	3.8	24	3.4	5.6	4.5	18	281	3.3	5.1
16	3.1	e2.0	7.4	2.9	12	29	6.5	3.4	11	158	2.1	1.6
17	4.6	e2.0	5.1	17	9.1	49	65	5.7	3.4	12	1.8	1.6
18	8.8	2.0	4.1	5.9	58	6.9	60	3.7	3.7	5.6	2.9	1.4
19	3.1	2.1	3.5	e4.5	104	4.8	16	8.4	3.2	10	2.2	20
20	20	2.0	23	e3.7	17	4.1	7.7	10	2.6	9.4	1.9	5.8
21	5.8	2.0	9.2	e3.5	8.8	320	44	7.0	17	3.9	1.7	2.3
22	4.4	2.0	4.5	e3.4	7.1	108	21	22	23	4.6	1.5	1.7
23	6.5	2.8	3.6	e3.3	6.0	16	8.5	6.4	3.5	2.9	1.6	2.4
24	2.9	3.7	3.0	e3.3	6.6	9.9	6.6	25	2.8	4.4	1.7	2.3
25	2.6	2.4	3.6	e3.5	5.8	8.0	10	8.9	3.3	3.4	1.8	113
26	2.6	41	3.0	e7.0	5.0	6.5	6.4	4.6	97	351	1.7	60
27	2.4	56	2.7	e4.0	6.8	46	6.5	9.2	10	19	46	6.9
28	3.8	6.0	2.6	e3.4	53	58	5.5	56	9.5	104	18	3.5
29	3.0	3.9	2.7	e3.3	7.7	10	4.6	23	12	48	17	2.7
30	2.3	3.0	2.5	e3.3	---	7.5	4.0	6.5	4.9	7.2	4.5	2.6
31	2.3	---	2.3	e5.0	---	6.1	---	4.6	---	5.1	4.2	---
TOTAL	368.4	195.0	410.6	223.0	480.9	774.4	433.3	327.4	293.7	1202.3	177.2	265.8
MEAN	11.9	6.50	13.2	7.19	16.6	25.0	14.4	10.6	9.79	38.8	5.72	8.86
MAX	129	56	182	42	104	320	65	63	97	351	46	113
MIN	2.3	2.0	2.3	2.3	3.3	3.4	4.0	2.8	2.2	1.7	1.5	1.4
CFSM	1.56	.85	1.74	.95	2.18	3.28	1.90	1.39	1.29	5.10	.75	1.16
IN.	1.80	.95	2.01	1.09	2.35	3.79	2.12	1.60	1.44	5.88	.87	1.30

e Estimated

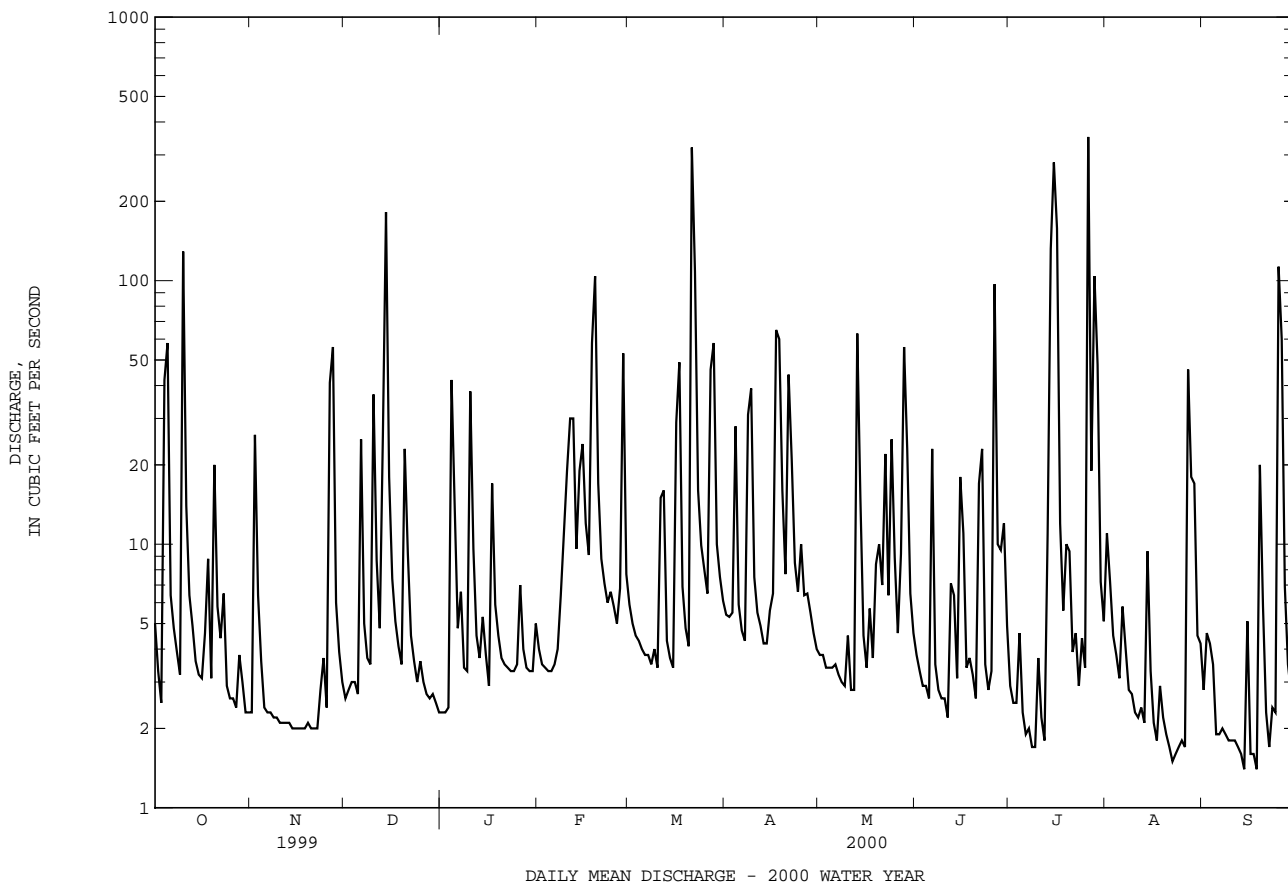
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1989, 1992 - 2000, BY WATER YEAR (WY)

	7.59	10.5	13.2	14.8	15.8	17.3	13.0	11.3	9.21	9.53	10.2	10.7
MEAN	7.59	10.5	13.2	14.8	15.8	17.3	13.0	11.3	9.21	9.53	10.2	10.7
MAX	27.2	31.8	41.5	45.2	42.7	43.2	43.5	43.7	44.5	45.4	90.1	48.6
(WY)	1972	1973	1984	1978	1979	1993	1983	1989	1972	1989	1971	1999
MIN	1.92	1.82	1.69	1.82	4.11	4.66	4.35	2.24	2.01	1.34	1.18	1.41
(WY)	1970	1966	1966	1981	1968	1969	1985	1969	1986	1966	1962	1980

01585100 WHITEMARSH RUN AT WHITE MARSH, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1959 - 1989 1992 - 2000	
ANNUAL TOTAL	5444.79		5152.0		12.2	
ANNUAL MEAN	14.9		14.1		21.0	
HIGHEST ANNUAL MEAN					4.27	
LOWEST ANNUAL MEAN					1971	
HIGHEST DAILY MEAN	980	Sep 16	351	Jul 26	980	Sep 16 1999
LOWEST DAILY MEAN	.28	Jul 18	1.4	Sep 14	.10	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	.41	Jul 15	1.7	Aug 20	.39	Sep 1 1966
INSTANTANEOUS PEAK FLOW			1310	Mar 21	(a)8000	Aug 1 1971
INSTANTANEOUS PEAK STAGE			6.88	Mar 21	14.05	Aug 1 1971
INSTANTANEOUS LOW FLOW			.70	Aug 21	(b).00	Mar 20 1965
ANNUAL RUNOFF (CFSM)	1.96		1.85		1.60	
ANNUAL RUNOFF (INCHES)	26.62		25.18		21.73	
10 PERCENT EXCEEDS	26		29		22	
50 PERCENT EXCEEDS	3.8		4.2		4.1	
90 PERCENT EXCEEDS	.97		2.1		1.4	

a From rating curve extended above 1,300 ft<sup>3</sup>/s on the basis of a culvert measurement at a gage height of 10.04 ft and on the basis of a culvert and flow-over-road measurement of peak flow.  
 b Result of construction work upstream from station.





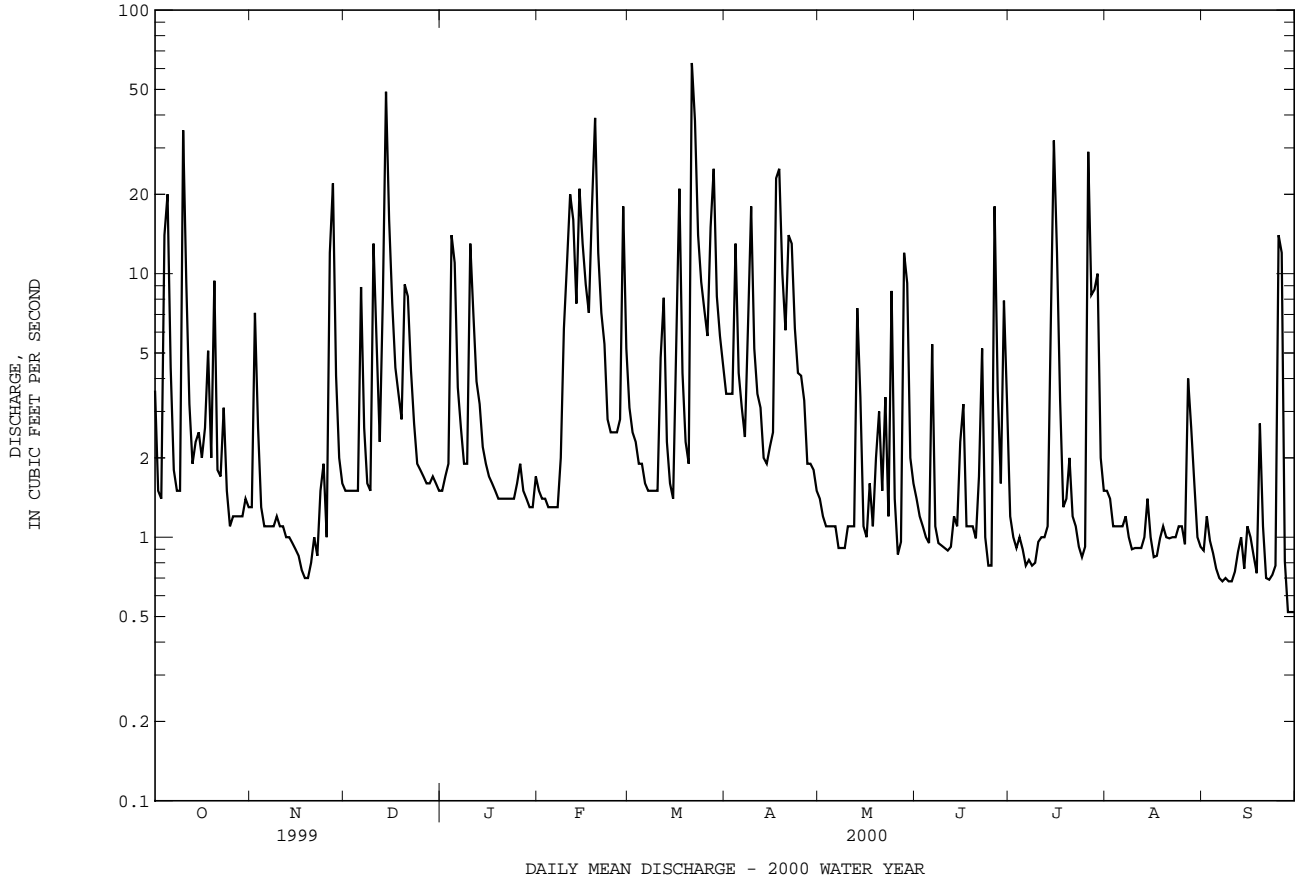
01585104 HONEYGO RUN NEAR WHITE MARSH, MD--Continued

SUMMARY STATISTICS

FOR 2000 WATER YEAR

ANNUAL TOTAL	1559.29	
ANNUAL MEAN	4.26	
HIGHEST DAILY MEAN	63	Mar 21
LOWEST DAILY MEAN	.52	(a)
ANNUAL SEVEN-DAY MINIMUM	.71	Sep 5
INSTANTANEOUS PEAK FLOW	(b)180	Mar 21
INSTANTANEOUS PEAK STAGE	2.89	Mar 21
INSTANTANEOUS LOW FLOW	.52	(c)
ANNUAL RUNOFF (CFSM)	1.70	
ANNUAL RUNOFF (INCHES)	23.20	
10 PERCENT EXCEEDS	12	
50 PERCENT EXCEEDS	1.6	
90 PERCENT EXCEEDS	.89	

- a Sept. 28-30, 2000
- b From rating curve extended above 90 ft<sup>3</sup>/s.
- c Sept. 27-30, 2000.

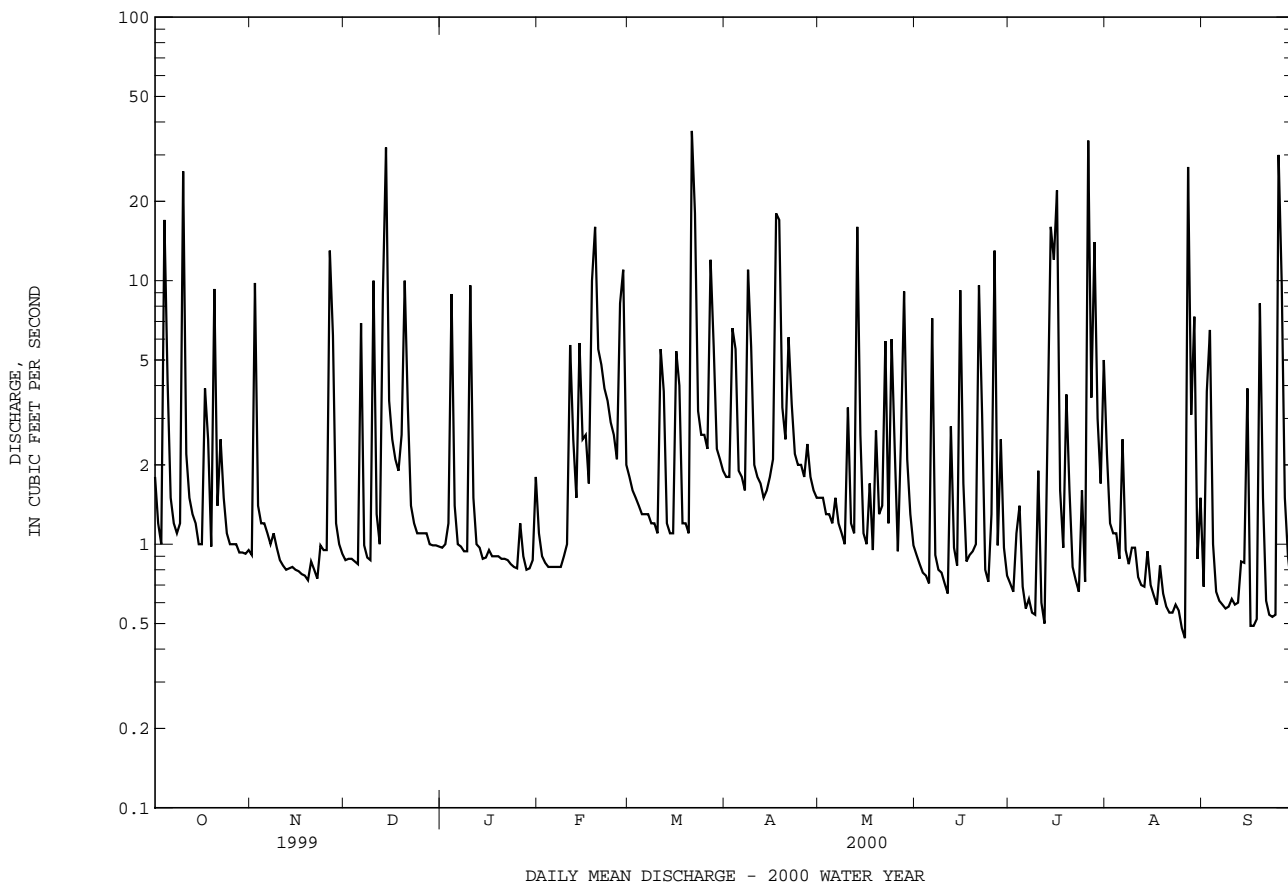




01585200 WEST BRANCH HERRING RUN AT IDLEWYLDE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS	1957 - 1987	1997 - 2000
ANNUAL TOTAL	1278.27	1072.99			
ANNUAL MEAN	3.50	2.93	2.67		
HIGHEST ANNUAL MEAN			4.26		1972
LOWEST ANNUAL MEAN			1.42		1959
HIGHEST DAILY MEAN	115 Sep 16	37 Mar 21	137		Jun 22 1972
LOWEST DAILY MEAN	(e).18 Aug 11	.44 Aug 26	.00		(a)
ANNUAL SEVEN-DAY MINIMUM	.24 Aug 7	.54 Aug 20	.00		Aug 14 1957
INSTANTANEOUS PEAK FLOW		659 Aug 27	(b)1740		Sep 11 1971
INSTANTANEOUS PEAK STAGE		4.67 Aug 27	6.80		Sep 11 1971
INSTANTANEOUS LOW FLOW		.40 Aug 26	.00		(a)
ANNUAL RUNOFF (CFSM)	1.64	1.38	1.25		
ANNUAL RUNOFF (INCHES)	22.32	18.74	17.01		
10 PERCENT EXCEEDS	8.6	7.2	5.3		
50 PERCENT EXCEEDS	1.1	1.2	1.1		
90 PERCENT EXCEEDS	.61	.69	.40		

e Estimated  
 a Aug. 14-24, 1957.  
 b From rating curve extended above 90 ft<sup>3</sup>/s on basis of slope-area measurement at gage height of 6.37 ft.





BACK RIVER BASIN

01585225 MOORES RUN TRIBUTARY NEAR TODD AVE AT BALTIMORE, MD

LOCATION.--Lat 39°20'12", long 76°32'27", Baltimore City, Hydrologic Unit 02060003, on left bank at upstream side of culvert inlet off of Todd Ave, at Baltimore, and 20 ft upstream from mouth.

DRAINAGE AREA.--0.21 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above sea level, from topographic map.

REMARKS.--Records good between 0.20 and 20 ft<sup>3</sup>/s, poor above and below, except those for estimated daily discharges (recorder malfunction), which are fair. Baltimore City gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr 17	0536	50	1.61	Jul 14	2253	68	1.94
Apr 21	1703	*239	*5.21	Jul 15	1406	74	2.05
May 13	1841	54	1.68	Aug 27	2146	103	2.59
Jun 12	1954	60	1.78				

Minimum discharge 0.00 ft<sup>3</sup>/s, Dec 9, Jun 30, Jul 10, 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.03	.02	.05	.11	.11	.18	.05	.02	.02	.73	.02
2	.05	.55	.02	.05	.11	.09	.16	.07	.02	.02	.07	.17
3	.05	.05	.02	.05	.11	.05	.16	.05	.02	.12	.03	.18
4	2.2	.02	.02	.92	.11	.04	.24	.05	.02	.03	.02	.05
5	.35	.02	.02	.23	.11	.02	.11	.05	.09	.02	.02	.02
6	.11	.02	.30	.18	.11	.02	.11	.05	.35	.02	.12	.02
7	.11	.02	.02	.12	.11	.02	.11	.05	.05	.02	.27	.02
8	.11	.02	.02	.11	.11	.02	.62	.05	.05	.02	.03	.02
9	.08	.02	.01	.11	.11	.02	.38	.05	.05	.02	.03	.02
10	1.5	.02	.53	.56	.11	.02	.14	.05	.05	.12	.02	.02
11	.15	.02	.07	.18	.14	.26	.11	.02	.04	.02	.02	.02
12	.11	.02	.03	.18	.18	.14	.11	.02	.44	.02	.02	.04
13	.09	.02	.49	.18	.12	.05	.09	1.2	.03	.06	.02	.05
14	.11	.02	2.0	.18	.43	.05	.05	.11	.02	5.0	.20	.03
15	.11	.02	.28	.18	.39	.05	.05	.11	.42	2.6	.03	.07
16	.11	.02	.18	.18	.20	.79	.05	.09	.14	.35	.02	.09
17	.30	.02	.11	.18	.18	.29	1.5	.08	.06	.22	.02	.05
18	.20	.02	.11	.18	.93	.11	1.0	.02	.18	.12	.18	.03
19	.13	.02	.11	.14	1.2	.11	.27	.12	.02	.33	.11	.71
20	.56	.02	.45	.11	.32	.08	.18	.07	.02	.21	.11	.04
21	.11	.02	.19	.11	.27	3.2	3.0	.07	.45	.37	.11	.02
22	.26	.02	.18	.11	.18	.86	.45	.41	.11	.11	.11	.02
23	.18	.02	.18	.11	.16	.27	.16	.07	.02	.11	.11	.02
24	.18	.02	.18	e.11	.11	.18	.05	.11	.02	.13	.11	.02
25	.12	.06	.16	.11	.21	.18	.13	.09	.12	.05	.11	2.6
26	.05	.81	.11	.11	.11	.18	.04	.05	.75	2.2	.11	.92
27	.05	.29	.11	.11	.46	1.1	.02	.11	.03	.16	2.7	.05
28	.05	.02	.11	.11	.61	.55	.03	.54	.04	1.6	.14	.05
29	.05	.02	.08	.11	.20	.24	.02	.02	.02	.16	.56	.05
30	.05	.02	.07	.11	---	.18	.02	.02	.02	.18	.21	.05
31	.05	---	.05	.11	---	.18	---	.02	---	.03	.06	---
TOTAL	7.63	2.27	6.23	5.28	7.50	9.46	9.54	3.87	3.67	14.44	6.40	5.47
MEAN	.25	.076	.20	.17	.26	.31	.32	.12	.12	.47	.21	.18
MAX	2.2	.81	2.0	.92	1.2	3.2	3.0	1.2	.75	5.0	2.7	2.6
MIN	.05	.02	.01	.05	.11	.02	.02	.02	.02	.02	.02	.02
CFSM	1.17	.36	.96	.81	1.23	1.45	1.51	.59	.58	2.22	.98	.87
IN.	1.35	.40	1.10	.94	1.33	1.68	1.69	.69	.65	2.56	1.13	.97

e Estimated

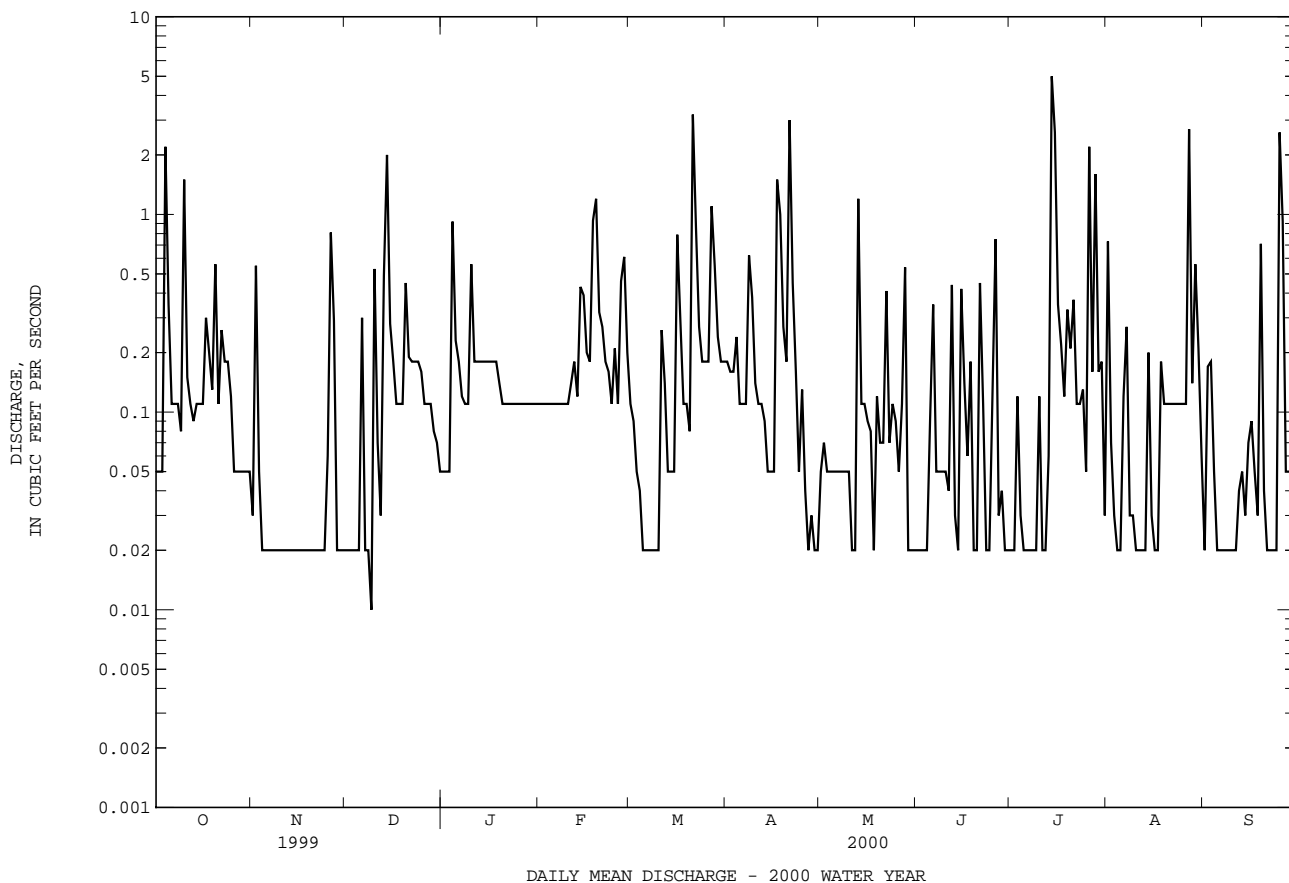
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000
MEAN	.16	.20	.20	.34	.37	.33	.21	.14	.13	.21	.19	.28	.19	.29	.28
MAX	.25	.41	.44	.53	.57	.40	.32	.29	.17	.47	.29	.73	.29	.29	.73
(WY)	2000	1998	1997	1999	1998	1997	2000	1998	1998	2000	1999	1999	1999	1999	1999
MIN	.080	.076	.045	.17	.22	.25	.12	.074	.086	.025	.065	.092	.065	.065	.092
(WY)	1999	2000	1999	2000	1997	1999	1999	1999	1999	1997	1998	1997	1998	1997	1997

01585225 MOORES RUN TRIBUTARY NEAR TODD AVE AT BALTIMORE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1996 - 2000
ANNUAL TOTAL	98.17	81.76	
ANNUAL MEAN	.27	.22	.23
HIGHEST ANNUAL MEAN			.25 1998
LOWEST ANNUAL MEAN			.21 1997
HIGHEST DAILY MEAN	13 Sep 16	5.0 Jul 14	13 Sep 16 1999
LOWEST DAILY MEAN	.01 Dec 9	.01 Dec 9	.00 (a)
ANNUAL SEVEN-DAY MINIMUM	.02 Apr 26	.02 Nov 4	.00 Dec 15 1998
INSTANTANEOUS PEAK FLOW		239 Apr 21	247 Sep 2 1998
INSTANTANEOUS PEAK STAGE		5.21 Apr 21	5.38 Sep 2 1998
INSTANTANEOUS LOW FLOW		.00 (b)	.00 (c)
ANNUAL RUNOFF (CFSM)	1.28	1.06	1.10
ANNUAL RUNOFF (INCHES)	17.39	14.48	14.88
10 PERCENT EXCEEDS	.51	.45	.51
50 PERCENT EXCEEDS	.06	.11	.09
90 PERCENT EXCEEDS	.02	.02	.02

a Many days.  
 b Dec. 9, June 30, July 10, 11.  
 c No flow at times during 1997-2000.

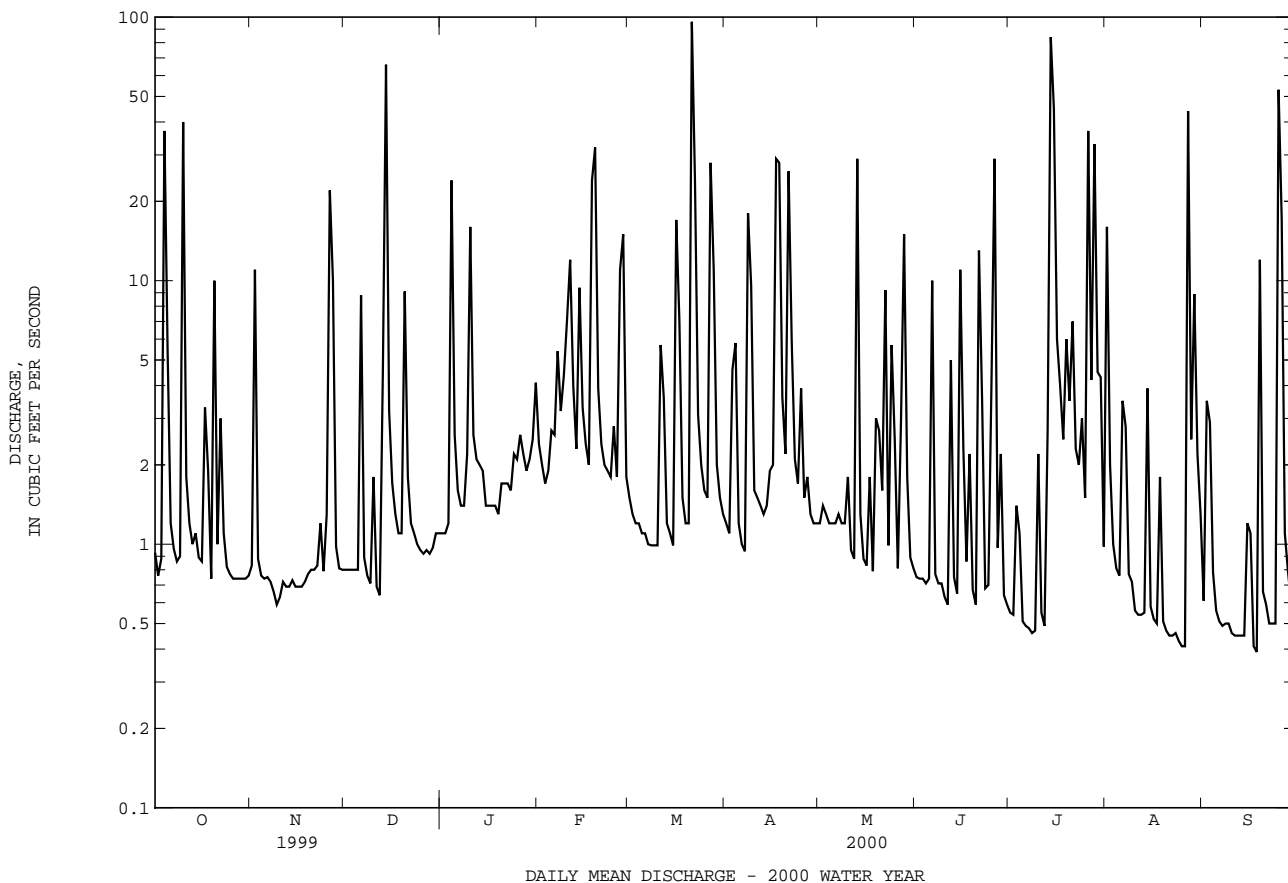




01585230 MOORES RUN AT RADECKE AVE AT BALTIMORE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1996 - 2000
ANNUAL TOTAL	1714.80	1617.66	
ANNUAL MEAN	4.70	4.42	4.34
HIGHEST ANNUAL MEAN			4.99 1998
LOWEST ANNUAL MEAN			3.77 1997
HIGHEST DAILY MEAN	310 Sep 16	96 Mar 21	310 Sep 16 1999
LOWEST DAILY MEAN	.20 Aug 6	.39 Sep 18	.17 (a)
ANNUAL SEVEN-DAY MINIMUM	.42 Jul 25	.44 Aug 20	.18 Oct 1 1997
INSTANTANEOUS PEAK FLOW		1940 May 13	4160 Aug 14 1999
INSTANTANEOUS PEAK STAGE		6.90 May 13	8.60 Aug 14 1999
INSTANTANEOUS LOW FLOW		.37 (b)	.15 (c)
ANNUAL RUNOFF (CFSM)	1.33	1.26	1.23
ANNUAL RUNOFF (INCHES)	18.12	17.10	16.75
10 PERCENT EXCEEDS	9.0	10	9.5
50 PERCENT EXCEEDS	1.0	1.2	.97
90 PERCENT EXCEEDS	.52	.55	.44

a Oct. 1, 2, 1997.  
 b July 7, Sept. 18, 19.  
 c Oct. 20, 1997, Aug. 12, 1999.





01585500 CRANBERRY BRANCH NEAR WESTMINSTER, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	597.66		842.74		3.31	
ANNUAL MEAN	(a)1.64		(a)2.30		7.82	
HIGHEST ANNUAL MEAN					.86	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	35	Jan 18	38	Sep 19	440	Jun 22 1972
LOWEST DAILY MEAN	.26	Aug 18	.22	Aug 26	.01	(b)
ANNUAL SEVEN-DAY MINIMUM	.28	Aug 5	.31	Jan 28	.01	Sep 6 1995
INSTANTANEOUS PEAK FLOW			368	Sep 15	(c)2220	Sep 26 1975
INSTANTANEOUS PEAK STAGE			3.93	Sep 15	7.47	Sep 26 1975
INSTANTANEOUS LOW FLOW			.16	(d)	(f).00	Sep 5 1995
ANNUAL RUNOFF (CFSM)	.50		.70		1.01	
ANNUAL RUNOFF (INCHES)	6.76		9.53		13.66	
10 PERCENT EXCEEDS	3.3		4.8		5.9	
50 PERCENT EXCEEDS	.70		.92		2.2	
90 PERCENT EXCEEDS	.37		.39		.63	

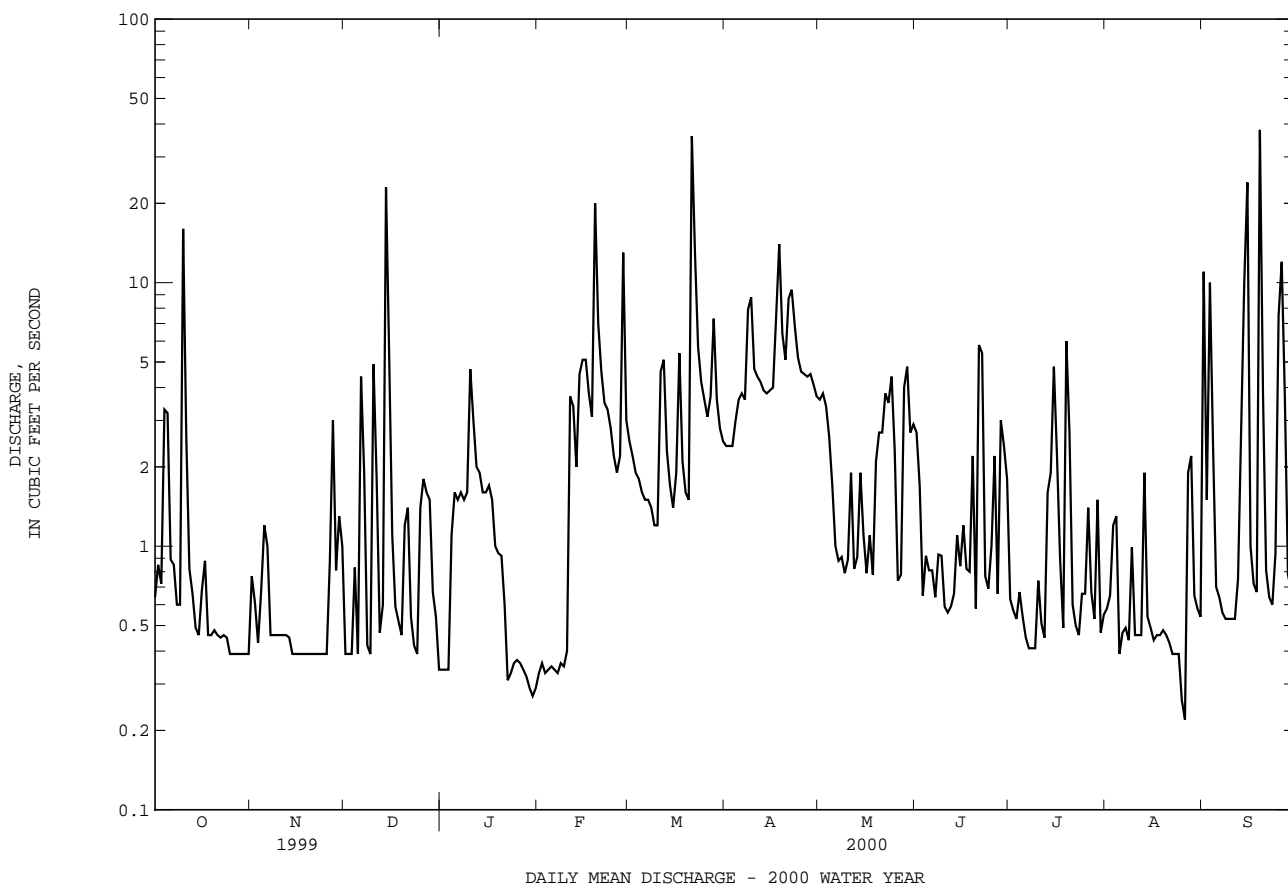
a Unadjusted for storage and diversions.

b Sept. 6-16, 1995.

c From rating curve extended above 200 ft<sup>3</sup>/s on basis of culvert measurement at gage heights 5.54 ft and 7.47 ft.

d Jan. 21 (result of freeze-up), Aug. 26.

f Result of regulation.

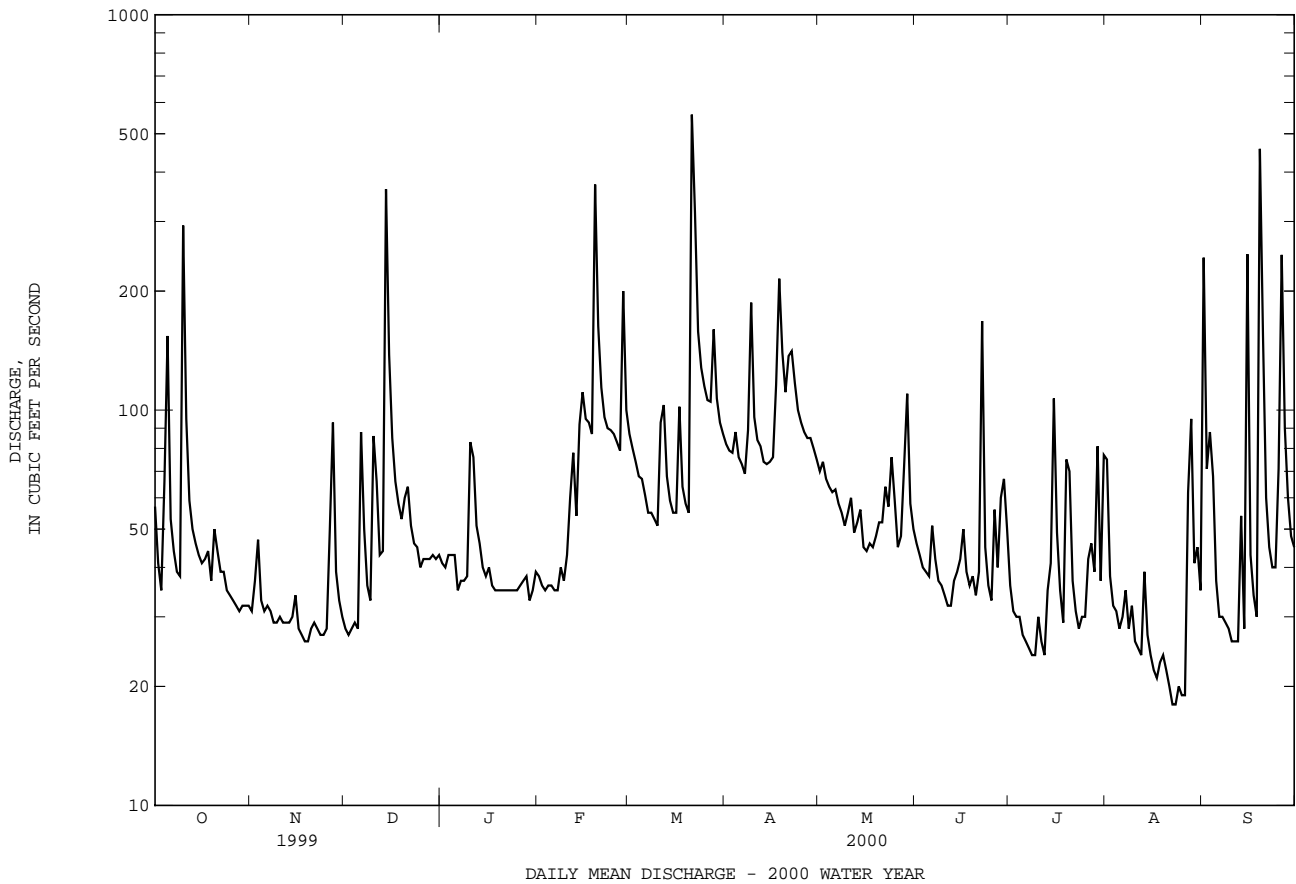




01586000 NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1945 - 2000	
ANNUAL TOTAL	18073.3		22589		64.3	
ANNUAL MEAN	49.5		61.7		121	
HIGHEST ANNUAL MEAN					30.1	
LOWEST ANNUAL MEAN					1966	
HIGHEST DAILY MEAN	935	Sep 16	559	Mar 21	6000	Jun 22 1972
LOWEST DAILY MEAN	9.5	Jul 20	18	(a)	3.1	(b)
ANNUAL SEVEN-DAY MINIMUM	10	Jul 15	19	Aug 20	3.5	Sep 7 1966
INSTANTANEOUS PEAK FLOW			1860	Sep 19	(c)27800	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.83	Sep 19	(d)20.75	Jun 22 1972
INSTANTANEOUS LOW FLOW			8.2	Aug 6	(f)1.3	(g)
ANNUAL RUNOFF (CFSM)	.87		1.09		1.14	
ANNUAL RUNOFF (INCHES)	11.88		14.85		15.43	
10 PERCENT EXCEEDS	81		101		114	
50 PERCENT EXCEEDS	36		44		44	
90 PERCENT EXCEEDS	14		28		19	

- a Aug. 22, 23.
- b Sept. 10, 12, 1996.
- c From rating curve extended above 4,100 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.
- d From high-water mark in well.
- f Result of regulation.
- g Sept. 17, 1983 and Aug. 10, 1985.





PATAPSCO RIVER BASIN

01586210 BEAVER RUN NEAR FINKSBURG, MD

LOCATION.--Lat 39°29'22", long 76°54'12", Carroll County, Hydrologic Unit 02060003, on downstream center line of bridge pier on Hughes Road, 0.25 mi northwest of intersection of Hughes Road and Maryland Route 91, and 0.75 mi southwest of Finksburg.

DRAINAGE AREA.--14.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 428.70 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1530	*270	*2.75	No peak greater than base discharge.			

Minimum discharge 3.1 ft<sup>3</sup>/s, Aug 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.4	7.7	9.2	e9.0	22	21	17	11	7.5	16	47
2	11	10	7.5	8.8	e9.0	20	20	18	10	7.1	10	13
3	10	12	7.5	8.9	e9.0	18	20	17	9.6	6.8	8.9	11
4	18	8.8	7.4	9.8	e9.2	18	22	16	9.3	7.0	8.3	9.7
5	31	8.4	7.4	10	e9.0	17	19	16	9.4	6.6	7.6	8.0
6	14	8.4	20	8.7	e8.6	16	18	15	11	6.4	9.7	6.5
7	12	8.3	12	8.4	e9.0	15	18	14	10	6.1	12	6.2
8	11	7.8	9.6	8.4	9.0	15	25	14	9.2	5.9	8.8	6.0
9	10	7.9	8.9	8.4	10	15	38	14	8.8	5.9	9.0	5.9
10	53	7.9	21	20	9.7	15	23	17	8.3	6.0	8.0	5.8
11	20	7.7	15	15	14	25	20	15	7.9	6.3	7.4	5.6
12	15	7.6	11	12	15	22	20	14	7.9	6.1	7.1	5.7
13	13	7.4	12	11	12	16	18	13	9.3	6.2	12	8.4
14	12	7.4	73	9.7	20	15	18	13	8.7	7.1	8.9	5.7
15	11	7.2	31	9.6	21	14	18	12	9.8	19	7.8	9.7
16	11	7.2	21	9.8	20	14	18	11	11	13	7.2	5.6
17	11	7.2	17	9.1	19	22	29	11	8.9	8.6	6.6	5.5
18	12	6.9	15	e8.6	23	15	55	11	8.4	8.7	6.4	5.1
19	10	6.9	14	e8.6	77	14	34	11	8.3	15	6.9	40
20	13	7.0	15	e8.6	39	14	28	12	7.7	16	6.4	21
21	12	7.1	15	e8.6	30	98	31	12	11	9.5	6.0	10
22	10	7.2	12	e8.6	25	64	30	15	25	7.9	4.4	8.6
23	10	7.2	12	e8.6	23	41	26	13	9.3	7.2	3.7	7.9
24	9.7	7.3	11	e8.6	22	34	24	14	8.2	7.9	3.9	7.7
25	8.9	7.1	11	e8.6	21	31	22	12	7.9	8.1	3.8	19
26	8.7	13	11	e9.0	20	28	21	11	13	11	3.5	43
27	8.7	18	10	e8.6	19	29	20	11	8.3	11	36	19
28	8.5	10	9.6	e8.4	44	37	20	16	8.3	12	19	14
29	8.4	8.6	9.4	e8.2	24	27	19	17	9.0	14	8.4	11
30	8.4	8.1	9.4	e8.2	---	24	18	12	8.8	9.2	9.2	10
31	8.4	---	9.4	e9.4	---	22	---	11	---	16	9.2	---
TOTAL	413.7	254.0	452.8	297.4	579.5	777	713	425	293.3	285.1	282.1	381.6
MEAN	13.3	8.47	14.6	9.59	20.0	25.1	23.8	13.7	9.78	9.20	9.10	12.7
MAX	53	18	73	20	77	98	55	18	25	19	36	47
MIN	8.4	6.9	7.4	8.2	8.6	14	18	11	7.7	5.9	3.5	5.1
CFSM	.95	.60	1.04	.69	1.43	1.79	1.70	.98	.70	.66	.65	.91
IN.	1.10	.67	1.20	.79	1.54	2.06	1.89	1.13	.78	.76	.75	1.01

e Estimated

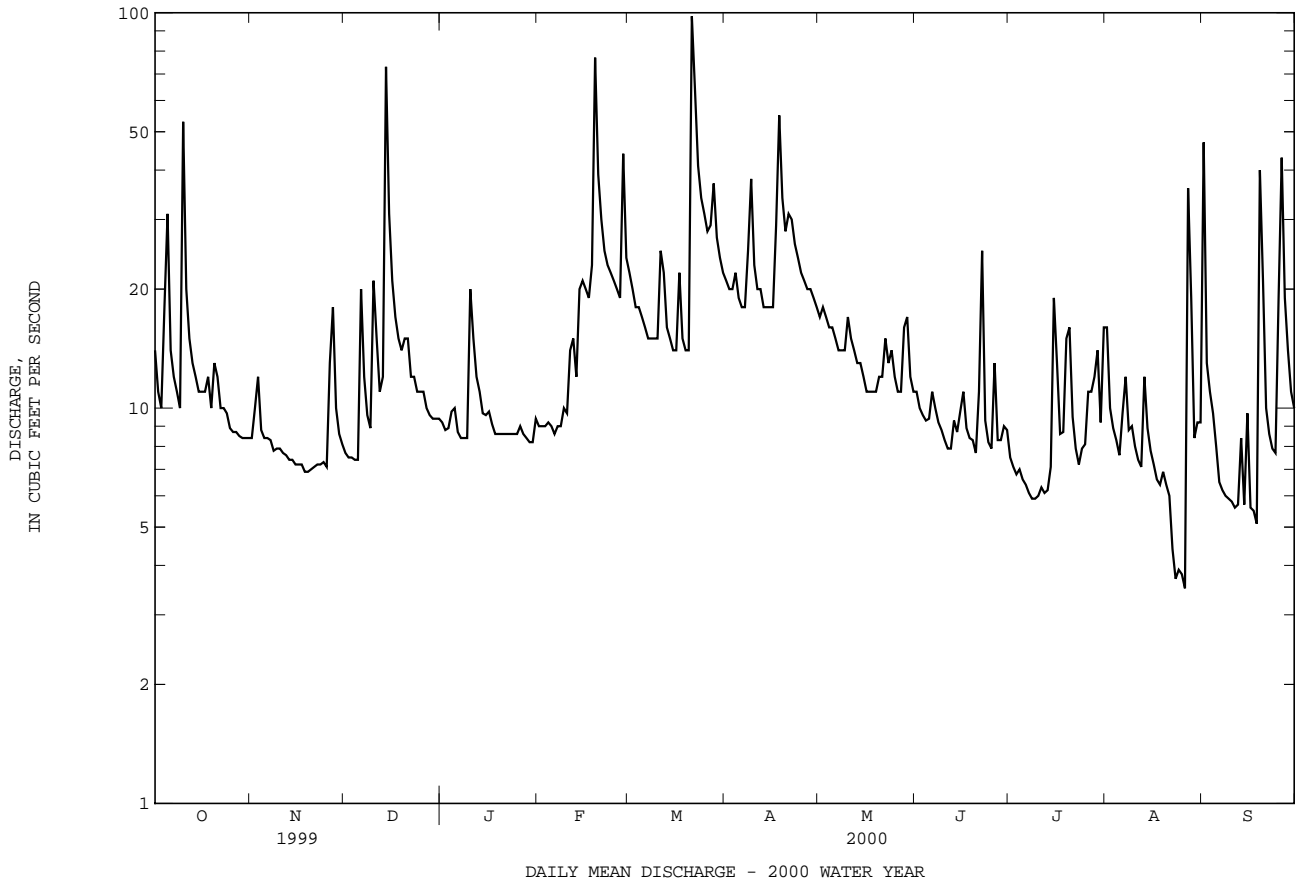
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	10.1	13.9	18.1	19.9	22.1	26.6	25.0	21.9	13.0	10.6	9.61	8.89						
MAX	30.0	27.5	56.0	49.6	41.4	62.0	54.7	51.9	25.3	32.4	29.9	25.1						
(WY)	1997	1997	1996	1996	1994	1993	1993	1989	1989	1996	1984	1996						
MIN	3.73	5.41	4.94	8.41	10.7	13.8	11.9	8.18	5.14	3.61	4.00	2.78						
(WY)	1987	1999	1999	1983	1992	1990	1985	1999	1999	1999	1997	1986						

01586210 BEAVER RUN NEAR FINKSBURG, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	3977.5		5154.5		16.6	
ANNUAL MEAN	10.9		14.1		25.2	
HIGHEST ANNUAL MEAN					9.21	
LOWEST ANNUAL MEAN					1.6	
HIGHEST DAILY MEAN	161	Sep 16	98	Mar 21	528	Jan 19 1996
LOWEST DAILY MEAN	1.6	(a)	3.5	Aug 26	1.6	(a)
ANNUAL SEVEN-DAY MINIMUM	1.9	Aug 7	4.5	Aug 20	1.9	Aug 7 1999
INSTANTANEOUS PEAK FLOW			270	Mar 21	(b)2150	May 6 1989
INSTANTANEOUS PEAK STAGE			2.75	Mar 21	(c)5.70	May 6 1989
INSTANTANEOUS LOW FLOW			3.1	Aug 22	1.5	(a)
ANNUAL RUNOFF (CFSM)	.78		1.01		1.19	
ANNUAL RUNOFF (INCHES)	10.57		13.70		16.13	
10 PERCENT EXCEEDS	17		23		30	
50 PERCENT EXCEEDS	9.1		11		12	
90 PERCENT EXCEEDS	3.0		7.1		5.0	

a Aug. 12, 13, 1999.  
 b From rating curve extended above 600 ft<sup>3</sup>/s.  
 c From floodmarks.



## PATAPSCO RIVER BASIN

01586610 MORGAN RUN NEAR LOUISVILLE, MD

LOCATION.--Lat 39°27'07", long 76°57'20", Carroll County, Hydrologic Unit 02060003, on right downstream wingwall of bridge on London Bridge Road, 1.4 mi southwest of Gamber, and 1.65 mi south of the intersection of Maryland Route 32, and 1.7 mi west of Louisville.

DRAINAGE AREA.--28.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1982 to current year.

REVISED RECORDS.--WRD MD-DE-84: 1983(P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 430 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1630	*577	*3.76	No peak greater than base discharge.			

Minimum discharge 7.5 ft<sup>3</sup>/s, Aug 22, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	16	14	18	e18	46	48	41	22	14	20	45
2	20	19	14	18	e17	43	46	42	20	13	14	18
3	17	22	14	18	e17	39	46	39	19	13	13	28
4	29	17	14	19	e18	36	50	38	18	13	13	17
5	55	16	13	19	18	34	45	37	19	12	12	17
6	25	16	38	17	17	31	43	36	23	12	15	12
7	21	16	23	17	18	29	40	34	19	11	15	11
8	19	16	19	16	18	29	53	33	18	11	12	11
9	18	16	17	17	18	28	85	32	17	11	12	10
10	108	16	38	34	21	27	55	37	16	12	11	9.8
11	44	15	30	29	34	46	51	36	15	11	10	9.5
12	31	15	22	22	36	49	48	30	19	10	9.9	9.6
13	26	15	25	21	24	34	45	30	22	11	15	15
14	24	14	141	19	41	30	43	30	19	12	12	9.6
15	21	14	64	20	47	29	42	25	25	22	11	10
16	20	14	44	19	43	29	43	24	25	14	9.8	9.0
17	21	13	34	18	41	45	63	24	18	12	8.9	9.1
18	21	13	30	e17	50	31	103	23	17	12	9.7	8.6
19	19	13	26	e17	182	29	78	25	17	18	10	83
20	27	13	30	e17	84	28	65	25	15	19	9.0	34
21	22	14	29	e17	63	217	71	26	23	13	8.7	16
22	20	13	24	e17	55	135	71	32	60	12	8.3	13
23	20	13	22	e17	50	87	61	28	20	11	8.5	13
24	19	14	21	e17	48	74	56	31	17	13	9.0	12
25	18	13	22	17	45	68	54	30	20	13	8.7	30
26	18	22	22	e18	41	63	52	23	33	15	8.2	68
27	17	36	20	e17	40	63	50	25	18	15	14	27
28	16	18	19	e17	83	76	49	34	18	15	14	20
29	17	16	19	17	50	61	46	37	18	19	11	17
30	16	15	19	e16	---	55	44	26	15	13	12	15
31	16	---	19	e19	---	52	---	23	---	22	11	---
TOTAL	791	483	886	581	1237	1643	1646	956	625	424	355.7	607.2
MEAN	25.5	16.1	28.6	18.7	42.7	53.0	54.9	30.8	20.8	13.7	11.5	20.2
MAX	108	36	141	34	182	217	103	42	60	22	20	83
MIN	16	13	13	16	17	27	40	23	15	10	8.2	8.6
CFSM	.91	.57	1.02	.67	1.52	1.89	1.96	1.10	.74	.49	.41	.72
IN.	1.05	.64	1.18	.77	1.64	2.18	2.19	1.27	.83	.56	.47	.81

e Estimated

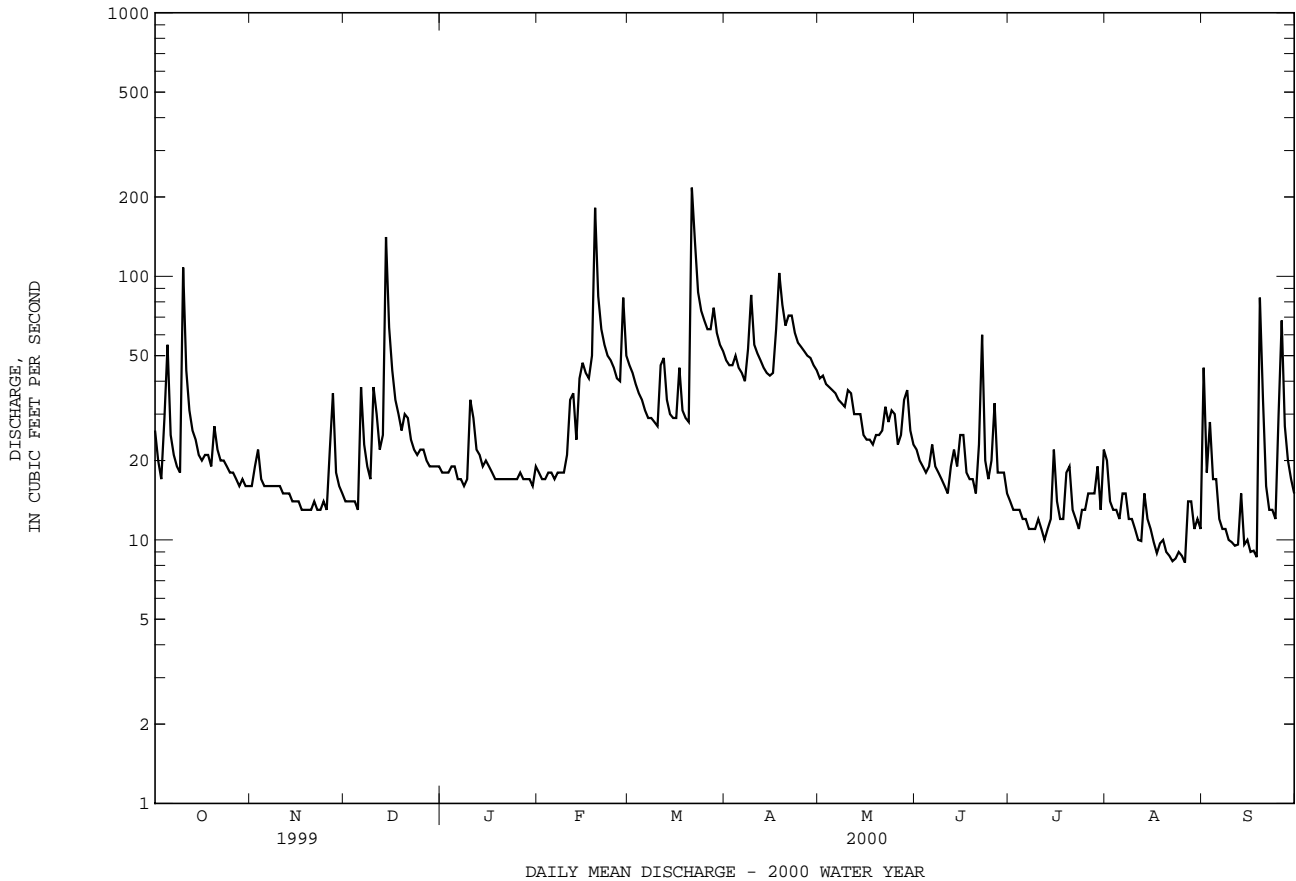
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	20.1	26.9	37.9	42.2	45.2	60.2	56.5	45.4	28.4	20.9	18.0	18.1						
MAX	65.7	63.0	132	117	91.2	154	141	111	71.4	71.8	59.0	77.8						
(WY)	1997	1997	1997	1996	1984	1993	1993	1989	1996	1996	1996	1996						
MIN	5.69	10.3	9.70	17.0	20.6	29.1	27.0	18.0	10.2	5.90	6.44	5.15						
(WY)	1987	1999	1999	1992	1992	1985	1985	1999	1999	1999	1999	1986						

01586610 MORGAN RUN NEAR LOUISVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	7887.0		10234.9		35.0	
ANNUAL MEAN	21.6		28.0		58.3	
HIGHEST ANNUAL MEAN					18.4	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	330	Sep 16	217	Mar 21	1370	Jan 19 1996
LOWEST DAILY MEAN	2.4	(a)	8.2	Aug 26	2.4	(a)
ANNUAL SEVEN-DAY MINIMUM	3.3	Aug 7	8.6	Aug 20	3.3	Aug 7 1999
INSTANTANEOUS PEAK FLOW			577	Mar 21	(b)3550	Jan 19 1996
INSTANTANEOUS PEAK STAGE			3.76	Mar 21	8.45	Jan 19 1996
INSTANTANEOUS LOW FLOW			7.5	(c)	2.2	(d)
ANNUAL RUNOFF (CFSM)	.77		1.00		1.25	
ANNUAL RUNOFF (INCHES)	10.48		13.60		16.96	
10 PERCENT EXCEEDS	37		51		67	
50 PERCENT EXCEEDS	17		19		24	
90 PERCENT EXCEEDS	5.4		12		9.4	

- a Aug. 13, 19, 1999.
- b From rating curve extended above 1,900 ft<sup>3</sup>/s.
- c Aug. 22, 23.
- d Aug. 12, 13, 19, 20, 1999.

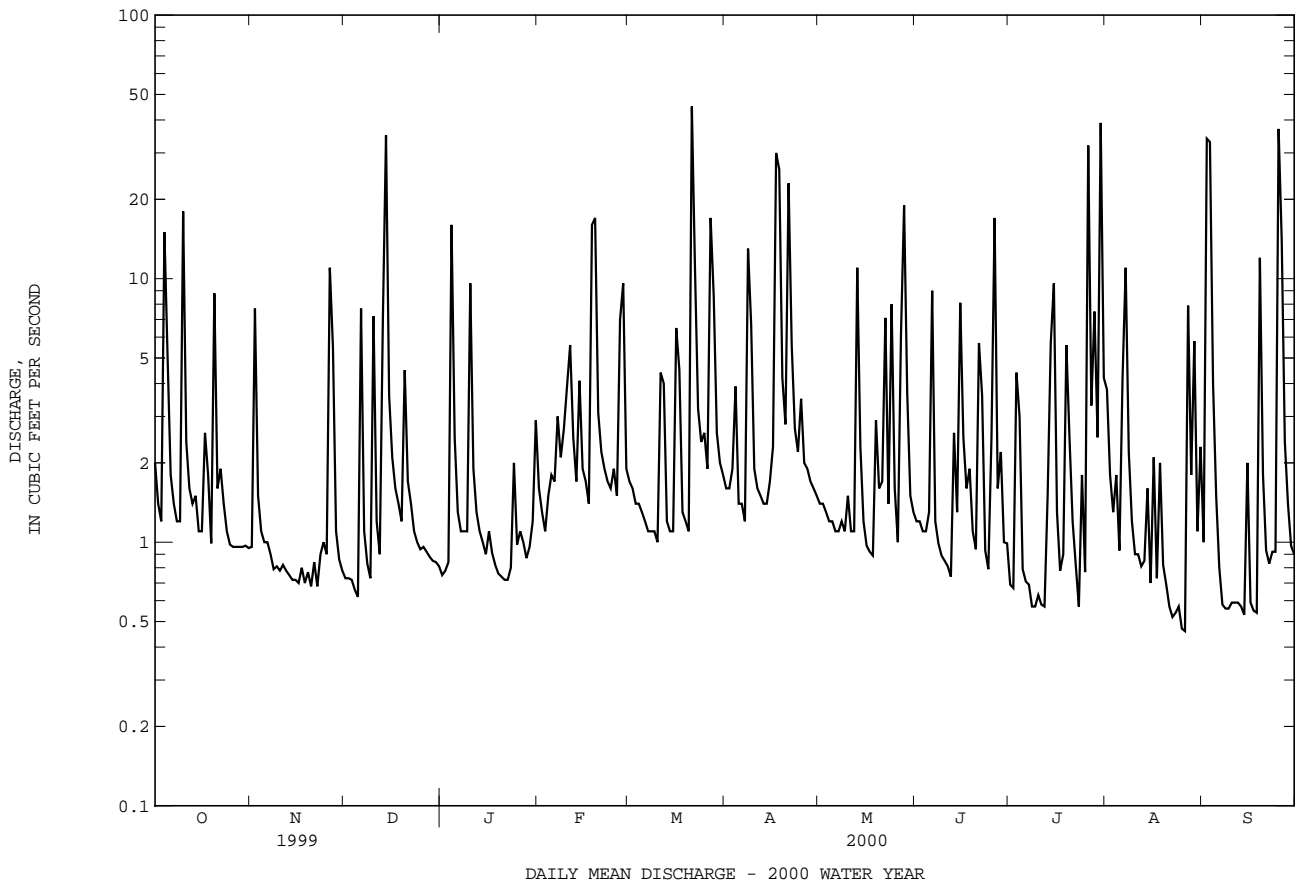




01589100 EAST BRANCH HERBERT RUN AT ARBUTUS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1957 - 1989 1999 - 2000	
ANNUAL TOTAL	1431.67	1197.34		
ANNUAL MEAN	3.92	3.27	3.30	
HIGHEST ANNUAL MEAN			6.85	1979
LOWEST ANNUAL MEAN			2.02	1977
HIGHEST DAILY MEAN	200 Sep 16	45 Mar 21	200	Jun 22 1972
LOWEST DAILY MEAN	.21 Aug 10	.46 Aug 26	.21	Aug 10 1999
ANNUAL SEVEN-DAY MINIMUM	.24 Aug 6	.55 Aug 20	.24	Aug 6 1999
INSTANTANEOUS PEAK FLOW		642 Jul 30	(a)2460	Sep 6 1979
INSTANTANEOUS PEAK STAGE		5.17 Jul 30	(b)13.70	Sep 6 1979
INSTANTANEOUS LOW FLOW		(c).30 Feb 3	.16	(d)
ANNUAL RUNOFF (CFSM)	1.59	1.32	1.33	
ANNUAL RUNOFF (INCHES)	21.56	18.03	18.14	
10 PERCENT EXCEEDS	7.4	7.6	5.8	
50 PERCENT EXCEEDS	.96	1.3	1.5	
90 PERCENT EXCEEDS	.41	.72	.66	

- a From rating curve extended above 280 ft<sup>3</sup>/s on basis of culvert measurement at gage height 5.0 ft, present site, and culvert and flow-over-road measurement of peak flow at gage height 13.7 ft, present site.
- b From floodmarks.
- c Result of unknown regulation.
- d Aug. 7, 10, 1999.





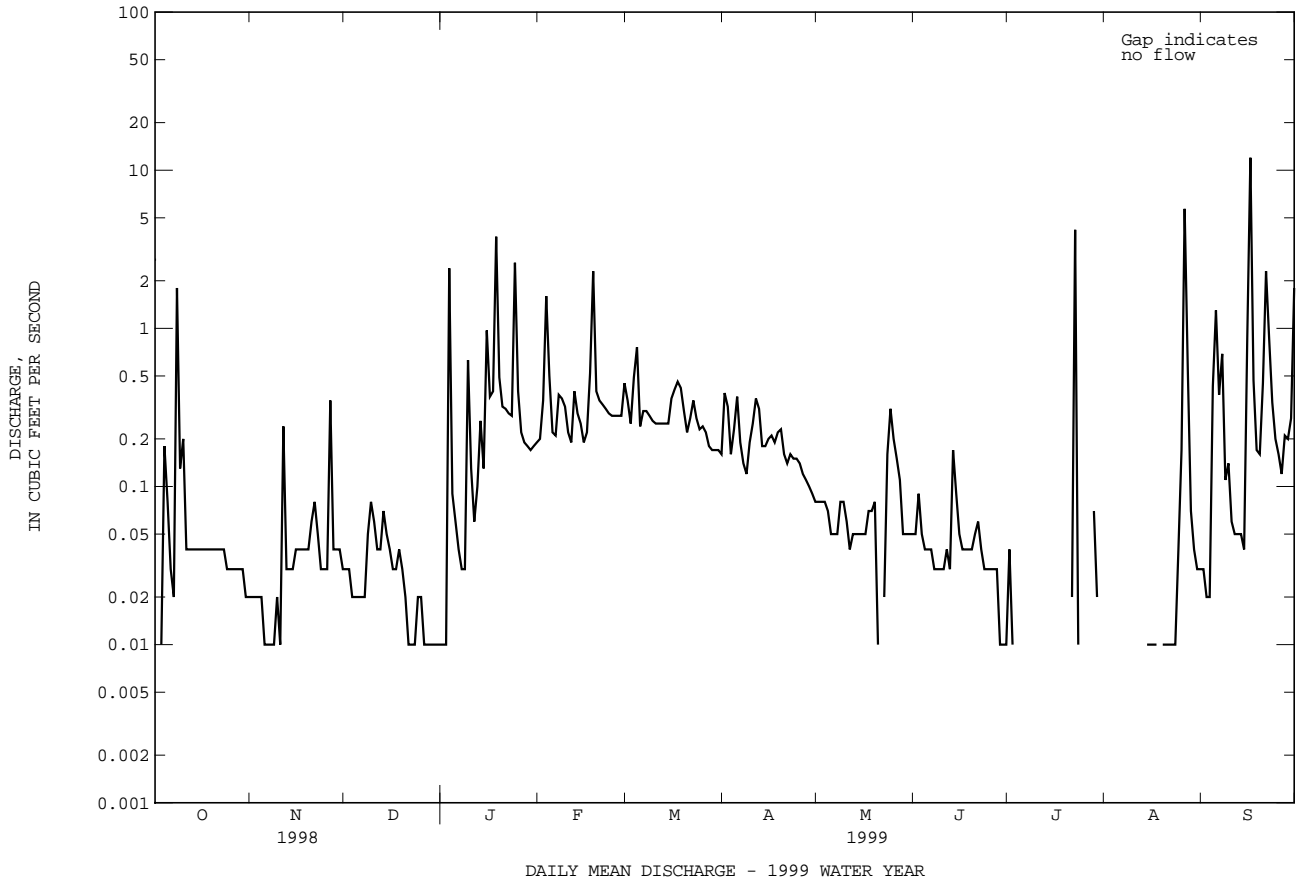
01589180 GWYNNS FALLS AT GLYNDON, MD--Continued

SUMMARY STATISTICS

FOR 1999 WATER YEAR

ANNUAL TOTAL	86.44	
ANNUAL MEAN	.24	
HIGHEST DAILY MEAN	12	Sep 16
LOWEST DAILY MEAN	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 3
INSTANTANEOUS PEAK FLOW	87	Aug 26
INSTANTANEOUS PEAK STAGE	3.59	Aug 26
INSTANTANEOUS LOW FLOW	.00	(b)
ANNUAL RUNOFF (CFSM)	.74	
ANNUAL RUNOFF (INCHES)	10.05	
10 PERCENT EXCEEDS	.38	
50 PERCENT EXCEEDS	.05	
90 PERCENT EXCEEDS	.00	

a Many days.  
 b No flow at times.





## PATAPSCO RIVER BASIN

01589180 GWYNNS FALLS AT GLYNDON, MD--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	e.08	.15	.14	e.09	.29	.24	.17	.10	.03	.22	.07
2	.22	e.40	.14	.14	e.09	.25	.22	.14	.08	.03	.08	.18
3	.14	e.05	.14	.14	e.09	.22	.26	.11	.08	.02	.05	.06
4	1.4	e.04	.10	.48	e.09	.20	.64	.10	.07	.02	.05	.04
5	.54	e.04	.10	.24	e.08	.19	.24	.12	.08	.03	.04	.03
6	e.19	e.04	.94	.17	e.09	.18	.21	.15	.29	.02	.18	.03
7	e.16	e.04	.25	.15	e.09	.16	.19	.12	.09	.03	.05	.03
8	e.15	.04	.20	.14	e.10	.16	1.3	.12	.07	.02	.05	.03
9	e.15	.04	.19	.14	e.12	.15	.98	.11	.06	.02	.04	.03
10	e3.5	.04	1.6	1.2	.28	.15	.30	.35	.05	.02	.04	.02
11	e.22	.04	.31	.32	.73	1.1	.25	.13	.05	.02	.03	.02
12	e.10	.04	.23	.23	.48	.55	.24	.10	.09	.02	.03	.08
13	e.09	.04	1.0	.22	.27	.23	.22	.17	.06	.14	.29	.25
14	e.08	.04	5.5	.16	1.4	.21	.20	.11	.05	.19	.05	.03
15	e.08	.04	.70	.14	.54	.18	.19	.08	.72	.35	.04	.04
16	e.08	.04	.37	e.12	.56	.31	.25	.08	.17	.09	.04	.02
17	e.09	.04	.30	e.11	.35	.46	1.8	.09	.06	.04	.03	.02
18	e.10	.05	.26	e.11	1.2	.21	3.1	.08	.05	.10	.03	.01
19	e.09	.05	.25	.12	4.0	.19	.52	.15	.05	.35	.03	1.4
20	e.11	.04	.54	e.10	.57	.19	.35	.11	.05	.10	.03	.14
21	e.10	.05	.32	e.11	.38	6.7	.80	.11	.63	.04	.03	.05
22	e.10	.04	.24	e.10	.33	2.1	.54	.50	.47	.03	.02	.04
23	e.09	.04	.22	.10	.30	.51	.35	.16	.07	.02	.02	.04
24	e.09	.04	.20	.10	.28	.37	.28	.27	.04	.04	.02	.04
25	e.09	.04	.17	e.10	.30	.43	.25	.35	.17	.03	.02	1.6
26	e.08	2.7	.17	e.10	.26	.33	.23	.11	.19	.67	.02	1.3
27	e.07	1.3	.16	e.09	.79	1.4	.22	.21	.05	.07	.70	.16
28	e.07	.26	.14	e.09	1.9	1.2	.22	.46	.05	.45	.10	.09
29	e.07	.19	.14	e.08	.34	.36	.20	.20	.05	.14	.14	.07
30	e.08	.18	.14	e.09	---	.30	.18	.13	.04	.05	.05	.07
31	e.08	---	.14	e.09	---	.26	---	.11	---	.28	.13	---
TOTAL	8.59	6.07	15.31	5.62	16.10	19.54	14.97	5.20	4.08	3.46	2.65	5.99
MEAN	.28	.20	.49	.18	.56	.63	.50	.17	.14	.11	.085	.20
MAX	3.5	2.7	5.5	1.2	4.0	6.7	3.1	.50	.72	.67	.70	1.6
MIN	.07	.04	.10	.08	.08	.15	.18	.08	.04	.02	.02	.01
CFSM	.87	.63	1.54	.57	1.73	1.97	1.56	.52	.42	.35	.27	.62
IN.	1.00	.71	1.78	.65	1.87	2.27	1.74	.60	.47	.40	.31	.70

e Estimated

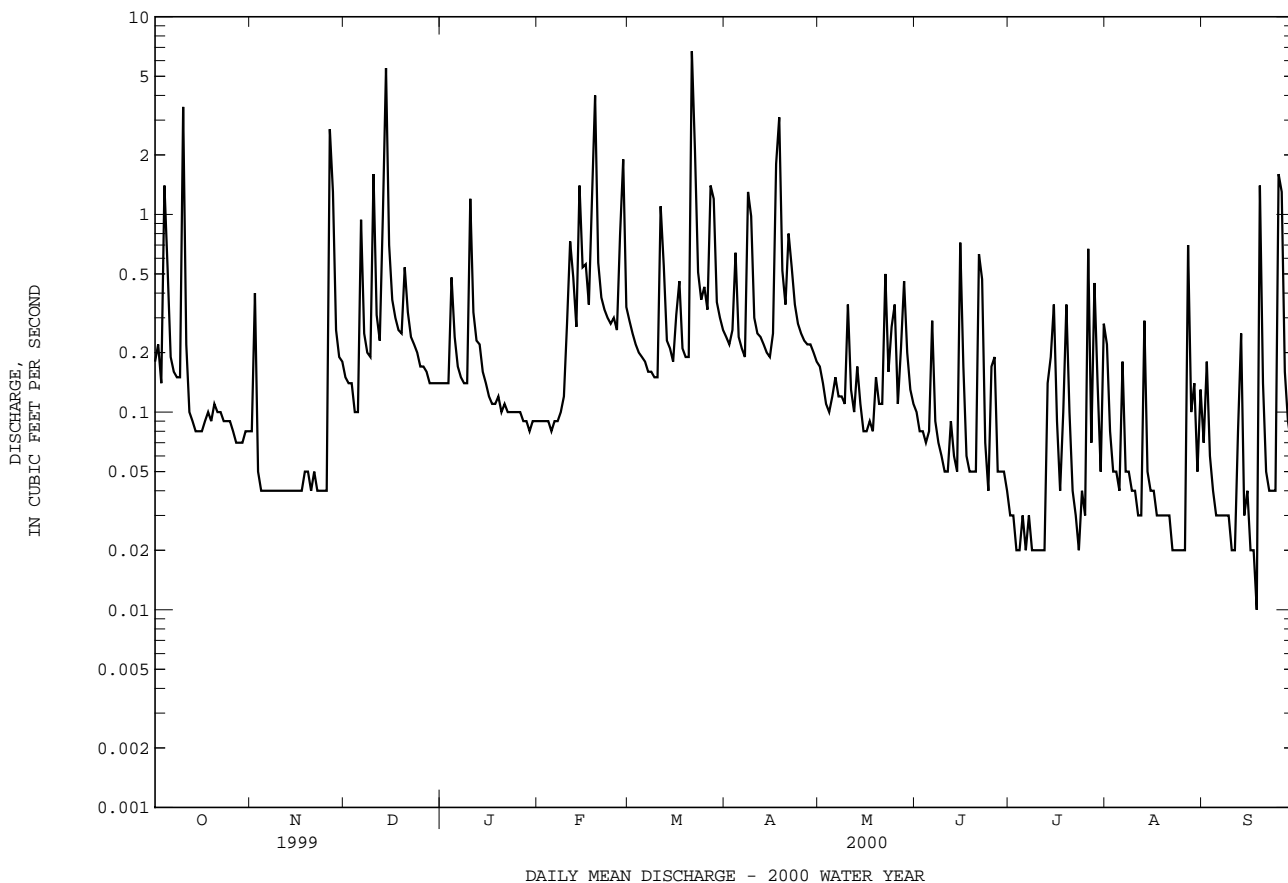
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	.19	.13	.26	.34	.49	.46	.35	.12	.090	.13	.15	.50
MAX	.28	.20	.49	.49	.56	.63	.50	.17	.14	.14	.22	.80
(WY)	2000	2000	2000	1999	2000	2000	2000	2000	2000	1999	1999	1999
MIN	.10	.049	.028	.18	.43	.29	.19	.076	.043	.11	.085	.20
(WY)	1999	1999	1999	2000	1999	1999	1999	1999	1999	2000	2000	2000

01589180 GWYNNS FALLS AT GLYNDON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1999 - 2000	
ANNUAL TOTAL	110.89	107.58		
ANNUAL MEAN	.30	.29	.27	
HIGHEST ANNUAL MEAN			.29	2000
LOWEST ANNUAL MEAN			.24	1999
HIGHEST DAILY MEAN	12 Sep 16	6.7 Mar 21	12	Sep 16 1999
LOWEST DAILY MEAN	.00 (a)	.01 Sep 18	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 3	.02 Jul 6	.00	Jul 3 1999
INSTANTANEOUS PEAK FLOW		29 Dec 14	(b)87	Aug 26 1999
INSTANTANEOUS PEAK STAGE		2.22 Dec 14	3.59	Aug 26 1999
INSTANTANEOUS LOW FLOW		.01 (c)	.00	(d)
ANNUAL RUNOFF (CFSM)	.95	.92	.83	
ANNUAL RUNOFF (INCHES)	12.89	12.51	11.27	
10 PERCENT EXCEEDS	.45	.55	.46	
50 PERCENT EXCEEDS	.12	.13	.10	
90 PERCENT EXCEEDS	.00	.03	.01	

- a Many days.
- b From rating curve extended above 16 ft<sup>3</sup>/s.
- c Sept. 17-19.
- d No flow at times in 1999.



PATAPSCO RIVER BASIN

01589180 GWYNNS FALLS AT GLYNDON, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to September 2000.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
SEP 07...	1145	.03	643	7.4	22.0	17.0	290	67.3	29.0	
		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
		16.9	1.9	28.0	76.2	.1	35.0	14	10	31

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PATAPSCO RIVER BASIN

01589197 GWYNNNS FALLS NEAR DELIGHT, MD

LOCATION.--Lat 39°26'35", long 76°47'02", Baltimore County, Hydrologic Unit 02060003, on downstream side of bridge on Gwynbrook Avenue, 1.2 mi east of Delight, and 1.6 mi north of Owings Mills, and 1.6 miles northeast of Belltown.

DRAINAGE AREA.--4.23 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 534.20 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect, recorder malfunction), which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 10	0730	180	2.83	Jun 15	2045	187	2.89
Nov 26	1715	238	3.30	Jun 21	2245	251	3.40
Dec 14	1400	*382	*4.28	Aug 27	1915	281	3.62
Mar 21	1400	325	3.92	Sep 25	2200	175	2.79

Minimum discharge 1.2 ft<sup>3</sup>/s, Sep 12, 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.2	3.2	3.0	e1.8	3.5	3.6	3.0	2.4	2.2	5.7	2.4
2	3.2	7.3	2.9	3.0	e1.8	3.6	3.3	3.1	2.4	2.1	2.9	7.2
3	3.2	4.2	2.9	3.0	e1.7	3.8	3.6	2.9	2.4	2.1	4.2	3.8
4	14	3.9	2.7	4.1	e1.7	3.8	8.4	2.8	2.4	2.1	2.3	2.0
5	7.0	3.8	2.7	3.5	e1.7	3.9	3.8	2.8	2.4	2.1	1.7	1.6
6	4.2	3.6	4.3	3.1	e1.7	3.6	3.4	2.8	5.2	2.0	3.4	1.4
7	3.6	3.6	4.0	3.0	e1.8	3.4	3.3	2.7	2.6	2.0	2.1	1.4
8	3.6	3.6	3.5	2.5	e1.9	3.2	12	2.6	2.5	1.9	1.7	1.4
9	3.5	3.6	3.2	2.1	e2.2	3.0	11	2.5	2.4	1.8	1.5	1.4
10	38	3.6	16	2.5	2.8	2.8	4.4	5.7	2.4	2.0	1.5	1.4
11	6.1	3.6	5.8	3.1	e4.0	9.4	3.9	3.1	2.4	1.9	1.5	1.4
12	4.2	3.6	4.0	3.2	e3.4	6.0	3.7	2.5	3.4	1.8	1.5	1.3
13	3.6	2.9	6.9	e2.9	2.9	3.7	3.4	6.5	2.9	2.9	3.0	4.4
14	3.4	2.9	63	e2.7	e5.6	3.3	3.3	3.4	2.3	2.6	1.6	1.4
15	3.3	2.9	9.2	e2.5	e5.6	2.9	3.4	2.5	17	8.1	1.6	2.2
16	3.3	2.7	5.1	e2.4	3.0	3.9	4.1	2.4	5.9	2.5	1.4	1.4
17	3.4	2.4	4.5	e2.2	2.9	5.8	20	2.5	3.0	2.2	1.4	1.4
18	3.9	2.4	3.7	e2.1	e4.7	3.2	27	2.4	2.8	2.5	1.4	1.4
19	3.7	2.3	3.2	e2.1	e7.2	3.0	6.8	3.2	2.6	5.5	1.4	21
20	4.3	2.3	4.0	e2.0	e4.4	2.9	4.8	2.7	2.3	3.5	1.4	4.4
21	4.1	2.3	3.8	e2.1	e3.5	71	6.8	2.8	15	2.1	1.4	2.2
22	4.0	2.3	3.2	e2.0	2.9	19	5.4	8.1	11	1.9	1.4	1.7
23	3.9	2.3	3.2	e1.9	2.7	6.3	4.3	3.1	3.1	1.8	1.4	1.7
24	3.6	2.3	3.1	e2.0	2.6	4.8	3.9	6.0	2.4	2.2	1.4	1.7
25	3.6	2.3	3.0	e1.9	2.8	4.6	3.6	5.2	4.5	2.1	1.3	27
26	3.2	34	3.0	e1.9	3.2	4.1	3.7	2.6	5.7	12	1.3	21
27	2.9	16	3.0	e1.8	3.4	10	3.7	3.9	2.5	3.1	27	4.4
28	2.9	5.3	3.0	e1.7	6.7	11	3.5	7.7	2.7	5.2	5.4	2.8
29	2.9	4.0	3.0	e1.6	3.7	4.6	3.3	4.8	2.7	4.2	4.0	2.2
30	3.2	3.5	3.0	e1.7	---	4.0	3.1	2.8	2.3	2.3	2.1	2.0
31	3.2	---	3.0	e1.8	---	3.8	---	2.5	---	4.9	2.4	---
TOTAL	160.7	142.7	189.1	75.4	94.3	221.9	178.5	111.6	123.6	95.6	92.3	131.0
MEAN	5.18	4.76	6.10	2.43	3.25	7.16	5.95	3.60	4.12	3.08	2.98	4.37
MAX	38	34	63	4.1	7.2	71	27	8.1	17	12	27	27
MIN	2.9	2.3	2.7	1.6	1.7	2.8	3.1	2.4	2.3	1.8	1.3	1.3
CFSM	1.23	1.12	1.44	.58	.77	1.69	1.41	.85	.97	.73	.70	1.03
IN.	1.41	1.25	1.66	.66	.83	1.95	1.57	.98	1.09	.84	.81	1.15

e Estimated

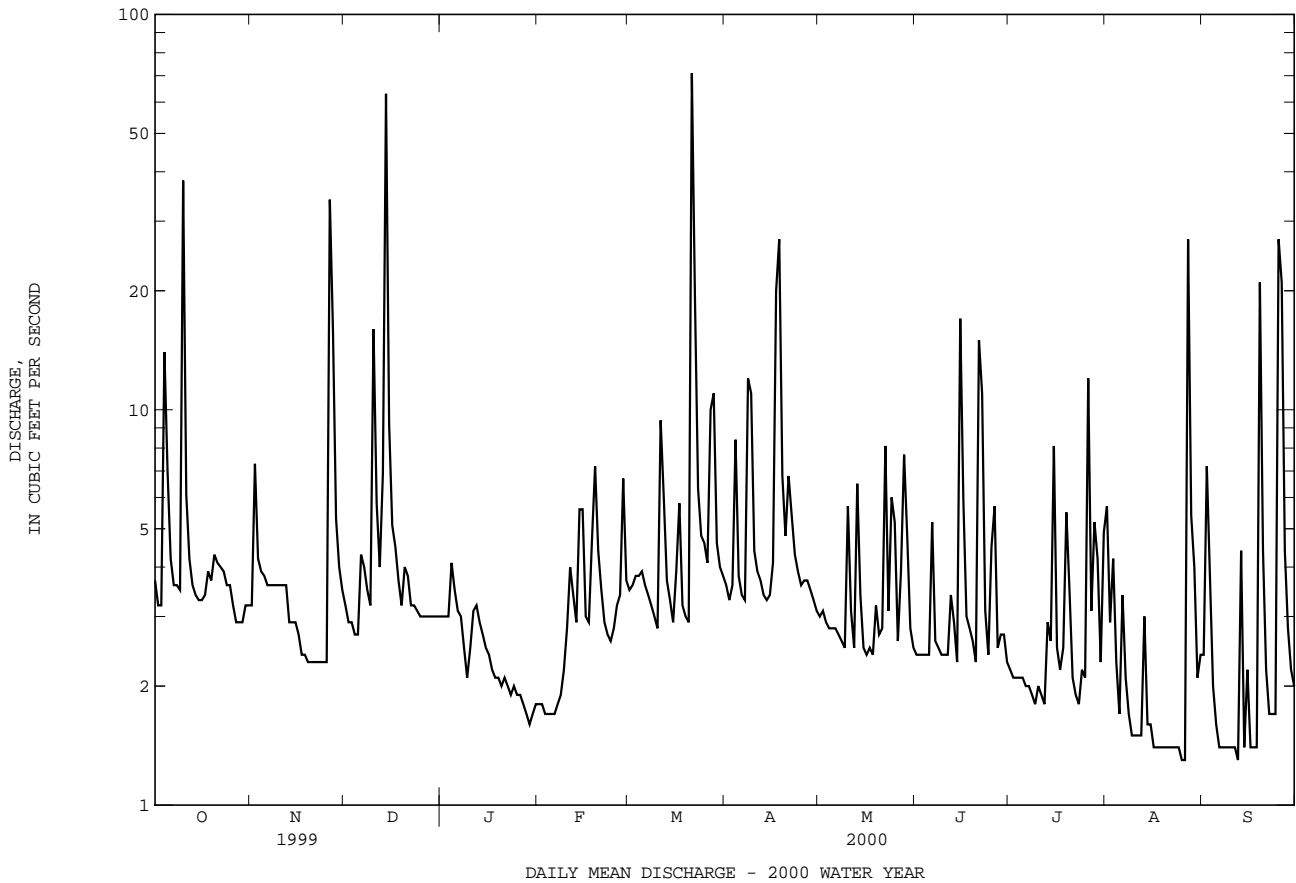
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	3.67	3.42	4.10	5.18	4.17	5.74	5.26	3.09	3.01	4.28	4.88	7.74
MAX	5.18	4.76	6.10	7.92	5.12	7.16	5.95	3.60	4.12	5.48	6.79	11.1
(WY)	2000	2000	2000	1999	1999	2000	2000	2000	2000	1999	1999	1999
MIN	2.15	2.08	2.09	2.43	3.25	4.32	4.58	2.57	1.89	3.08	2.98	4.37
(WY)	1999	1999	1999	2000	2000	1999	1999	1999	1999	2000	2000	2000

01589197 GWYNNS FALLS NEAR DELIGHT, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	2003.04		1616.7			
ANNUAL MEAN	5.49		4.42		4.54	
HIGHEST ANNUAL MEAN					4.67 1999	
LOWEST ANNUAL MEAN					4.42 2000	
HIGHEST DAILY MEAN	151	Sep 16	71	Mar 21	151	Sep 16 1999
LOWEST DAILY MEAN	.79	Jul 19	1.3	(a)	.79	Jul 19 1999
ANNUAL SEVEN-DAY MINIMUM	.84	Jul 15	1.4	Aug 20	.84	Jul 15 1999
INSTANTANEOUS PEAK FLOW			382	Dec 14	(b)856	Jul 22 1999
INSTANTANEOUS PEAK STAGE			4.28	Dec 14	6.65	Jul 22 1999
INSTANTANEOUS LOW FLOW			1.2	(c)	.76	(d)
ANNUAL RUNOFF (CFSM)	1.30		1.04		1.07	
ANNUAL RUNOFF (INCHES)	17.62		14.22		14.59	
10 PERCENT EXCEEDS	6.9		6.6		6.3	
50 PERCENT EXCEEDS	3.2		3.0		2.8	
90 PERCENT EXCEEDS	1.2		1.7		1.4	

- a Aug. 25, 26, Sept. 12.
- b From rating curve extended above 380 ft<sup>3</sup>/s.
- c Sept. 12, 14.
- d July 9, 10, 15-20, 1999.



PATAPSCO RIVER BASIN

01589300 GWYNNS FALLS AT VILLA NOVA, MD

LOCATION.--Lat 39°20'45", long 76°44'01", Baltimore County, Hydrologic Unit 02060003, on right bank 300 ft downstream from bridge on Essex Road, 300 ft north of State Highway 26 (Liberty Road), in Villa Nova, 1.1 mi west of Baltimore city limits, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--32.5 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1957 to September 1988, October 1996 to current year.

REVISED RECORDS.--WDR MD-DE-83: 1981-82(P). WDR MD-DE-84: 1981(P).

GAGE.--Water-stage recorder. Datum of gage is 361.32 ft above sea level (Baltimore County bench mark). Prior to Aug. 27, 1963 and Oct. 25, 1972, to Sept. 20, 1973, water-stage recorder, and June 26, 1972 to Oct. 24, 1972, nonrecording gage, at site 300 ft upstream at same datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges (backwater, ice effect), which are fair. Slight diurnal fluctuation at times from unknown source upstream from station. Small diversion for irrigation upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 21, 1956, reached a stage of 12.6 ft, discharge, 5,270 ft<sup>3</sup>/s on basis of contracted-opening measurement

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 14	1630	1,030	5.22	Jun 26	0045	931	4.94
Mar 21	1915	1,240	5.78	Sep 25	2145	921	4.91
Mar 22	0245	*1,520	*6.46				

Minimum discharge 9.8 ft<sup>3</sup>/s, Aug 26, 27, gage height, 0.81 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	23	24	22	e28	34	32	27	21	17	45	27
2	25	44	24	23	e27	31	31	28	20	16	33	45
3	22	38	23	23	e26	28	34	26	17	38	21	81
4	124	24	22	44	e26	26	77	25	17	46	22	31
5	144	22	22	41	e26	26	37	25	18	18	18	18
6	37	21	90	25	25	25	32	24	44	15	33	14
7	28	21	37	24	26	24	30	23	22	14	28	13
8	24	e20	27	23	27	24	87	22	18	13	19	13
9	23	e20	25	24	31	24	158	22	17	14	16	13
10	289	e19	97	93	34	23	44	28	16	18	15	12
11	57	e19	48	48	70	64	37	29	15	14	14	12
12	34	e19	31	31	58	70	34	22	17	13	14	12
13	29	e19	85	29	31	32	31	63	35	16	16	16
14	26	e19	518	27	75	27	30	49	19	28	14	11
15	23	e19	97	23	57	26	32	24	67	104	13	34
16	21	19	48	24	37	30	40	22	93	65	13	14
17	33	18	38	23	36	59	186	22	26	33	11	12
18	58	18	34	e24	105	30	302	20	30	23	16	11
19	25	19	30	e24	289	26	79	27	31	31	13	156
20	69	20	41	23	67	25	49	24	20	36	12	59
21	36	21	39	e24	41	530	80	24	32	19	11	22
22	30	19	29	e24	34	438	58	59	133	18	11	16
23	32	20	28	23	30	69	41	30	27	15	11	15
24	24	19	27	22	30	46	37	48	20	19	11	15
25	22	19	25	e25	29	39	35	35	21	19	11	181
26	22	177	25	e27	29	36	32	24	192	109	10	258
27	21	195	25	e26	56	66	32	27	29	39	40	48
28	21	41	24	e25	190	135	31	64	25	81	53	28
29	21	33	23	24	43	45	30	68	23	93	45	22
30	22	28	23	e24	---	37	28	28	20	30	25	19
31	22	---	23	e26	---	35	---	23	---	35	22	---
TOTAL	1398	1013	1652	888	1583	2130	1786	982	1085	1049	636	1228
MEAN	45.1	33.8	53.3	28.6	54.6	68.7	59.5	31.7	36.2	33.8	20.5	40.9
MAX	289	195	518	93	289	530	302	68	192	109	53	258
MIN	21	18	22	22	25	23	28	20	15	13	10	11
CFSM	1.39	1.04	1.64	.88	1.68	2.11	1.83	.97	1.11	1.04	.63	1.26
IN.	1.60	1.16	1.89	1.02	1.81	2.44	2.04	1.12	1.24	1.20	.73	1.41

e Estimated

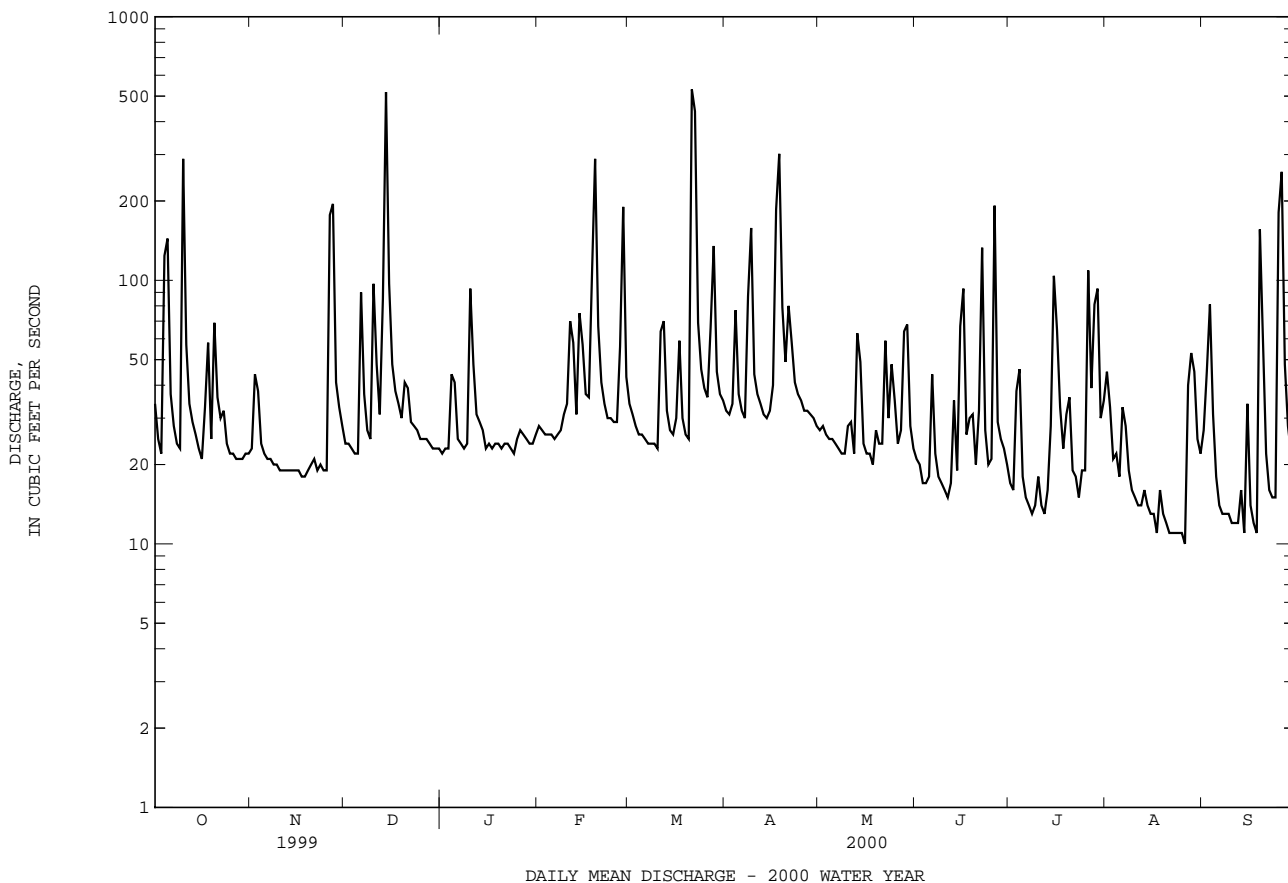
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1988, 1997 - 2000, BY WATER YEAR (WY)

MEAN	26.7	34.0	42.0	44.7	53.3	56.1	50.5	42.6	36.3	26.3	29.0	33.7
MAX	111	82.1	135	146	130	107	129	78.9	244	79.5	186	173
(WY)	1980	1997	1997	1979	1979	1998	1973	1983	1972	1975	1984	1979
MIN	7.10	10.4	9.18	10.5	23.0	21.4	20.7	14.4	8.95	6.37	5.02	7.35
(WY)	1964	1966	1966	1981	1969	1981	1963	1969	1986	1966	1966	1986

01589300 GWYNNS FALLS AT VILLA NOVA, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 1988 1997 - 2000	
ANNUAL TOTAL	18929.9		15430		39.7	
ANNUAL MEAN	51.9		42.2		76.8	
HIGHEST ANNUAL MEAN					20.5	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	1590	Sep 16	530	Mar 21	5000	Jun 22 1972
LOWEST DAILY MEAN	6.1	Aug 19	10	Aug 26	1.7	(a)
ANNUAL SEVEN-DAY MINIMUM	10	Aug 7	11	Aug 20	2.1	Sep 6 1966
INSTANTANEOUS PEAK FLOW			1520	Mar 22	(b)16200	Jun 22 1972
INSTANTANEOUS PEAK STAGE			6.46	Mar 22	(c)21.50	Jun 22 1972
INSTANTANEOUS LOW FLOW			9.8	(d)	1.7	Sep 7 1966
ANNUAL RUNOFF (CFSM)	1.60		1.30		1.22	
ANNUAL RUNOFF (INCHES)	21.67		17.66		16.61	
10 PERCENT EXCEEDS	87		72		66	
50 PERCENT EXCEEDS	31		26		23	
90 PERCENT EXCEEDS	19		16		9.7	

- a Sept. 7, 8, 1966.
- b From rating curve extended above 4,200 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.
- c From floodmarks.
- d Aug. 26, 27.





## PATAPSCO RIVER BASIN

01589300 GWYNNS FALLS AT VILLA NOVA, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1970, 1971, 1995, 1996, October 1999 to September 2000.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
SEP 08...	0755	14	297	6.6	19.5	15.7	110	27.7	10.2	
		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
		13.1	2.7	9.2	37.4	.2	12.8	37	E10	34

E Estimated value.

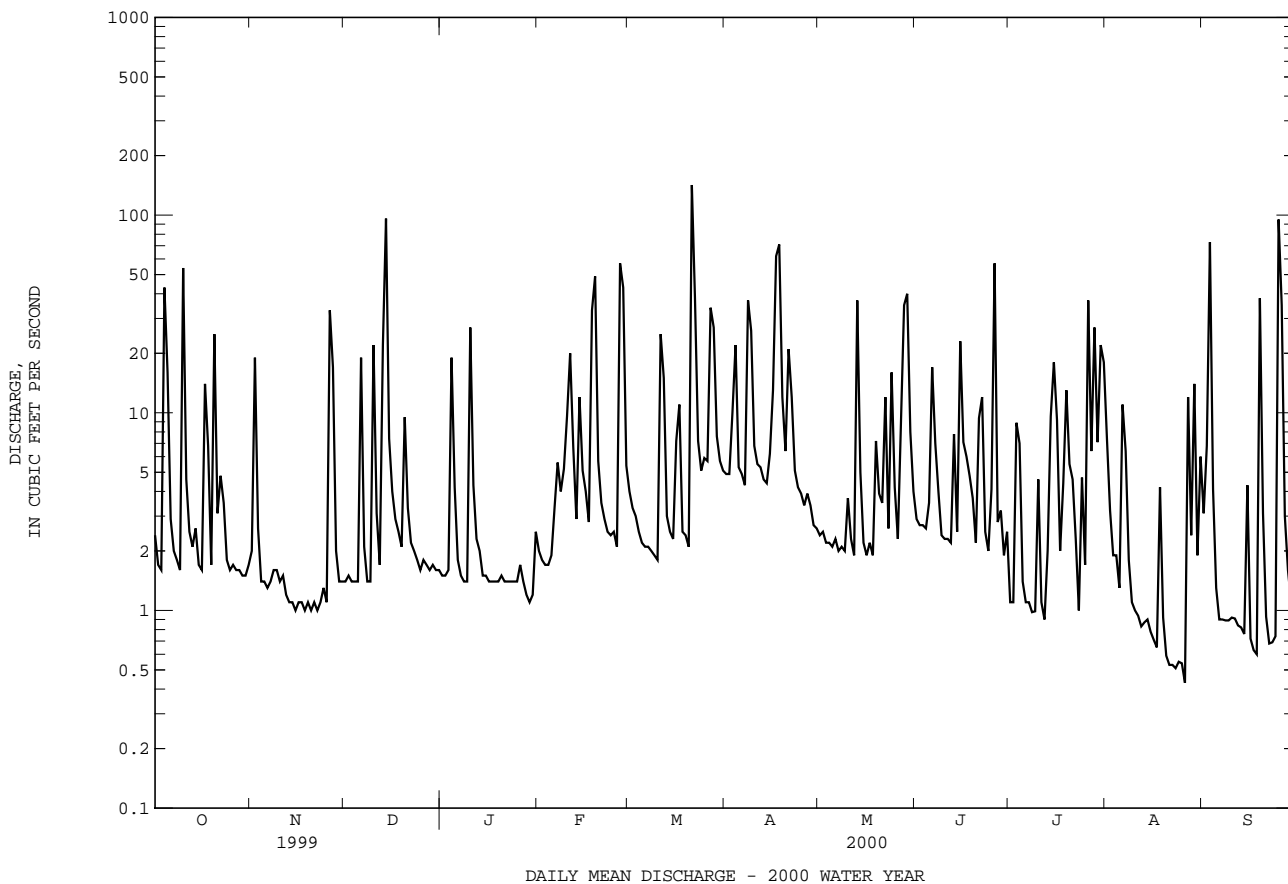
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01589330 DEAD RUN AT FRANKLINTOWN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	3135.03		2727.77			
ANNUAL MEAN	8.59		7.45		7.91	
HIGHEST ANNUAL MEAN					15.5 1979	
LOWEST ANNUAL MEAN					3.78 1963	
HIGHEST DAILY MEAN	432	Sep 16	142	Mar 21	800	Aug 13 1984
LOWEST DAILY MEAN	.22	Aug 13	.43	Aug 26	.20	Aug 5 1963
ANNUAL SEVEN-DAY MINIMUM	.28	Aug 7	.53	Aug 20	.20	Aug 24 1966
INSTANTANEOUS PEAK FLOW			1110	Sep 3	(a)7400	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.47	Sep 3	(b)12.50	Jun 22 1972
INSTANTANEOUS LOW FLOW			.41	(c)	.10	(d)
ANNUAL RUNOFF (CFSM)	1.56		1.35		1.43	
ANNUAL RUNOFF (INCHES)	21.13		18.38		19.46	
10 PERCENT EXCEEDS	18		19		15	
50 PERCENT EXCEEDS	1.7		2.4		2.0	
90 PERCENT EXCEEDS	.49		1.0		.70	

- a From rating curve extended above 1,600 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow at bridge 0.6 mi downstream, adjusted for flow from intervening area.
- b From floodmarks.
- c Aug. 23, 26, 27.
- d Sept. 11, 12, 1966.





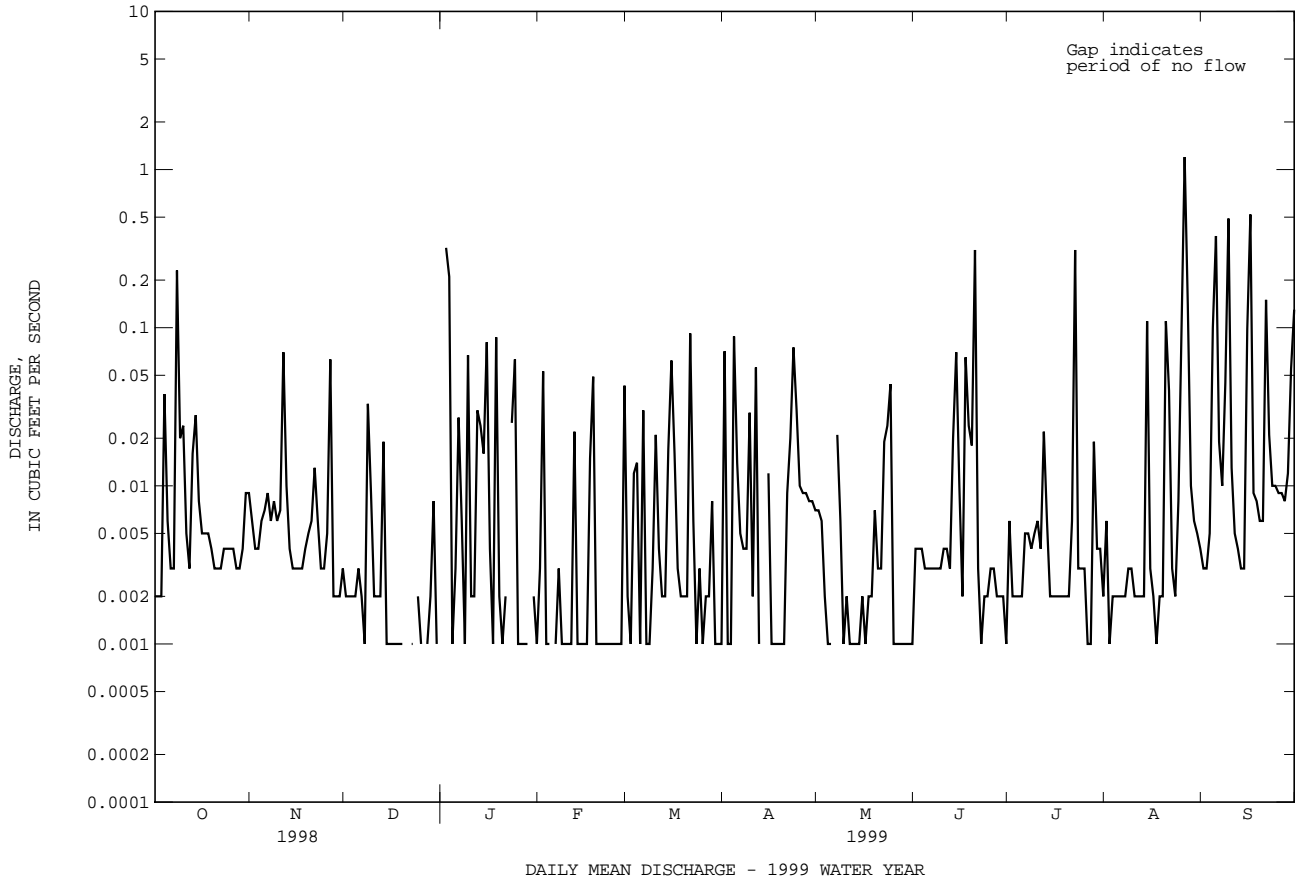
01589340 ROGNET HEIGHTS STORM SEWER OUTFALL AT BALTIMORE, MD--Continued

SUMMARY STATISTICS

FOR 1999 WATER YEAR

ANNUAL TOTAL	7.935	
ANNUAL MEAN	.022	
HIGHEST DAILY MEAN	1.2	Aug 26
LOWEST DAILY MEAN	.000	(a)
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 17
INSTANTANEOUS PEAK FLOW	(b)17	Aug 14
INSTANTANEOUS PEAK STAGE	1.02	Aug 14
INSTANTANEOUS LOW FLOW	.000	(c)
ANNUAL RUNOFF (CFSM)	.72	
ANNUAL RUNOFF (INCHES)	9.84	
10 PERCENT EXCEEDS	.04	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

- a April 20, May 6, 7, June 1.
- b From rating curve extended above 0.8 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights of 0.80 and 0.82 ft.
- c No flow on many days.



## PATAPSCO RIVER BASIN

01589340 ROGNEI HEIGHTS STORM SEWER OUTFALL AT BALTIMORE, MD--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.003	.001	.001	.001	.009	.012	.003	.004	.003	.002	.010	.000
2	.003	.061	.001	.002	.006	.014	.005	.004	.006	.003	.008	.062
3	.003	.002	.001	.002	.007	.013	.034	.004	.004	.034	.000	.036
4	.15	.001	.001	.10	.014	.005	.030	.003	.005	.006	.002	.002
5	.006	.001	.001	.003	.014	.004	.010	.003	.016	.002	.000	.002
6	.003	.001	.067	.003	.014	.003	.009	.005	.052	.002	.051	.001
7	.003	.002	.002	.002	.038	.003	.009	.005	.001	.001	.011	.001
8	.003	.003	.001	.002	.016	.003	.12	.004	.001	.001	.000	.001
9	.004	.003	.010	.002	.037	.003	.027	.004	.002	.001	.000	.000
10	.17	.002	.074	.090	.059	.003	.009	.013	.002	.017	.002	.000
11	.002	.001	.003	.003	.077	.050	.009	.005	.001	.001	.003	.000
12	.002	.004	.002	.002	.020	.030	.010	.007	.002	.001	.001	.000
13	.007	.002	.056	.001	.018	.004	.010	.12	.019	.002	.001	.000
14	.002	.001	.20	e.008	.053	.003	.009	.009	.002	.059	.006	.002
15	.001	.001	.003	e.008	.019	.003	.011	.008	.063	.026	.000	.009
16	.001	.000	.002	e.008	.022	.045	.018	.005	.004	.001	.000	.000
17	.030	.001	.001	e.008	.021	.016	.17	.004	.073	.001	.002	.000
18	.004	.001	.001	e.008	.21	.003	.11	.002	.013	.010	.024	.000
19	.002	.002	.001	e.009	.16	.003	.009	.020	.002	.051	.000	.11
20	.076	.007	.034	e.011	.018	.008	.010	.008	.004	.005	.000	.000
21	.001	.004	.002	e.009	.019	.22	.083	.008	.043	.011	.000	.000
22	.012	.003	.002	e.008	.017	.035	.011	.045	.017	.002	.000	.000
23	.002	.003	.001	e.008	.022	.003	.010	.002	.004	.000	.000	.000
24	.001	.002	.001	e.009	.020	.003	.009	.029	.002	.012	.000	.000
25	.002	.005	.001	e.008	.019	.007	.016	.008	.050	.000	.000	.30
26	.001	.17	.001	e.010	.022	.003	.006	.002	.044	.26	.000	.063
27	.003	.024	.001	e.011	.10	.097	.006	.023	.003	.003	.11	.000
28	.002	.002	.001	e.008	.065	.012	.005	.11	.005	.044	.002	.000
29	.001	.002	.000	e.006	.012	.003	.005	.003	.007	.005	.037	.000
30	.002	.001	.001	e.006	---	.003	.003	.002	.003	.014	.004	.000
31	.001	---	.001	e.010	---	.003	---	.001	---	.008	.008	---
TOTAL	0.503	0.313	0.474	0.366	1.128	0.617	0.776	0.470	0.453	0.585	0.282	0.589
MEAN	.016	.010	.015	.012	.039	.020	.026	.015	.015	.019	.009	.020
MAX	.17	.17	.20	.10	.21	.22	.17	.12	.073	.26	.11	.30
MIN	.001	.000	.000	.001	.006	.003	.003	.001	.001	.000	.000	.000
CFSM	.54	.35	.51	.39	1.30	.66	.86	.51	.50	.63	.30	.65
IN.	.62	.39	.59	.45	1.40	.77	.96	.58	.56	.73	.35	.73

e Estimated

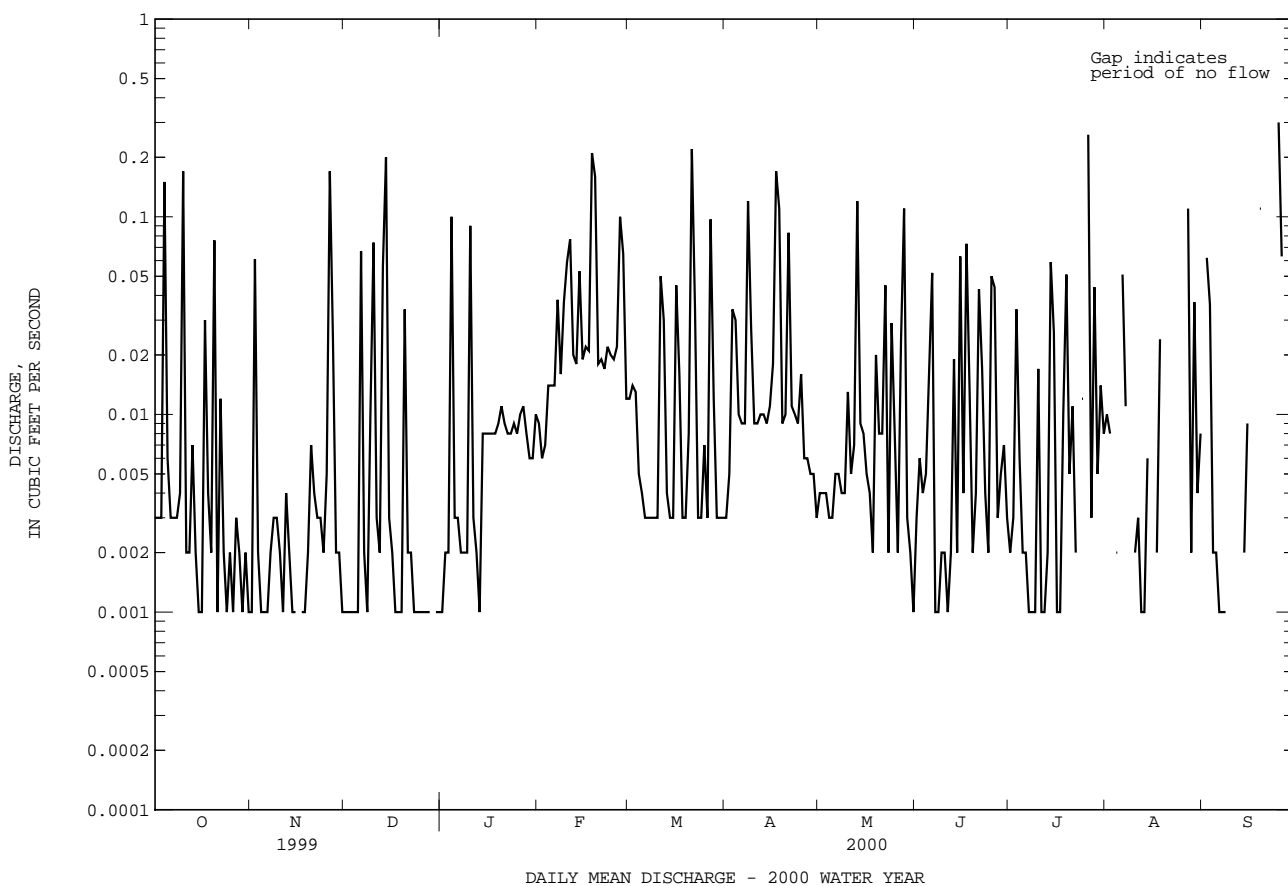
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	.014	.008	.008	.022	.023	.014	.021	.009	.015	.015	.032	.045
MAX	.015	.009	.014	.031	.039	.018	.026	.014	.017	.018	.056	.071
(WY)	2000	2000	2000	1999	2000	2000	2000	2000	1999	2000	1999	1999
MIN	.013	.008	.002	.012	.006	.009	.016	.005	.013	.013	.009	.019
(WY)	1999	1999	1999	2000	1999	1999	1999	1999	2000	1999	2000	2000

01589340 ROGNEI HEIGHTS STORM SEWER OUTFALL AT BALTIMORE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1999 - 2000	
ANNUAL TOTAL	8.384	6.556		
ANNUAL MEAN	.023	.018	.019	
HIGHEST ANNUAL MEAN			.021	1999
LOWEST ANNUAL MEAN			.017	2000
HIGHEST DAILY MEAN	1.2 Aug 26	.30 Sep 25	1.2	Aug 26 1999
LOWEST DAILY MEAN	.000 (a)	.000 (b)	.000	(b)
ANNUAL SEVEN-DAY MINIMUM	.00 Dec 23	.00 Aug 19	.00	Oct 16 1998
INSTANTANEOUS PEAK FLOW		12 May 13	(c)12	May 13 2000
INSTANTANEOUS PEAK STAGE		(d)3.34 Jan 21	(d)3.34	Jan 21 2000
INSTANTANEOUS LOW FLOW		.00 (b)	.00	(f)
ANNUAL RUNOFF (CFSM)	.77	.60	.63	
ANNUAL RUNOFF (INCHES)	10.40	8.13	8.51	
10 PERCENT EXCEEDS	.06	.05	.05	
50 PERCENT EXCEEDS	.00	.00	.00	
90 PERCENT EXCEEDS	.00	.00	.00	

- a April 20, May 6, 7, June 1, Nov. 17, Dec. 29.
- b Many days.
- c From rating curve extended above 0.8 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights of 0.80 and 0.82 ft.
- d Backwater from ice.
- f No flow at times in 1999 and 2000.





PATAPSCO RIVER BASIN

01589340 ROGNEI HEIGHTS STORM SEWER OUTFALL AT BALTIMORE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to September 2000.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
SEP 08...	0915	.00	295	7.9	20.5	16.1	93	27.8	5.65	
		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
		16.3	2.8	15.4	32.4	.9	7.3	1.5	30	3

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PATAPSCO RIVER BASIN

01589352 GWYNNS FALLS AT WASHINGTON BOULEVARD AT BALTIMORE, MD

LOCATION.--Lat 39°16'15", long 76°38'54", Baltimore City, Hydrologic Unit 02060003, on left bank at Carroll Park Municipal Golf Course, 350 ft upstream from bridge on Washington Boulevard, 0.9 mi northwest of Morrell Park, and approximately 1.6 mi upstream from mouth.

DRAINAGE AREA.--65.9 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10 ft above sea level, from topographic map.

REMARKS.--Water-discharge records good except those for estimated daily discharges (missing record), which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 28	0030	2,020	6.49	Jul 30	1315	*5,400	*10.18
Mar 21	1345	2,630	7.30	Sep 25	2215	2,100	6.60

Minimum discharge 19 ft<sup>3</sup>/s, Aug 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	37	41	40	45	75	57	48	40	28	88	e53
2	47	124	40	37	44	67	55	49	38	25	60	e80
3	44	71	39	39	40	57	63	46	33	57	42	e160
4	263	38	38	152	42	51	171	44	30	124	40	e70
5	286	35	36	88	45	49	68	43	32	29	34	e35
6	70	35	173	43	45	49	56	43	144	24	71	e29
7	51	34	64	41	57	46	51	44	43	22	74	e27
8	45	36	43	38	56	46	187	42	32	21	43	26
9	41	34	40	39	56	45	291	42	30	21	34	26
10	488	34	180	203	79	43	83	50	30	37	30	26
11	108	34	88	98	150	136	64	58	28	25	29	23
12	57	33	48	56	125	182	60	41	28	22	27	23
13	50	33	147	47	60	62	52	215	63	27	25	25
14	50	36	858	42	116	50	50	116	34	56	33	24
15	43	32	186	39	116	47	56	44	115	219	26	58
16	40	33	86	38	71	75	77	39	169	90	28	28
17	65	31	61	38	70	142	440	40	76	56	22	24
18	117	32	54	33	242	59	607	36	44	37	44	22
19	44	30	48	38	515	49	174	57	59	70	29	251
20	182	32	93	39	150	48	102	51	34	70	23	116
21	70	33	70	36	82	967	203	45	49	38	22	41
22	55	33	49	36	64	665	137	124	203	33	21	30
23	57	33	45	39	56	142	86	61	48	24	21	26
24	43	34	44	42	53	94	72	123	35	33	22	25
25	39	34	41	37	51	80	70	64	39	34	21	441
26	38	235	42	42	50	70	63	42	397	347	20	467
27	39	346	42	41	81	180	62	57	47	78	141	83
28	36	66	41	37	461	281	60	200	42	161	106	49
29	37	47	41	38	118	92	56	144	39	175	107	39
30	37	45	41	39	---	69	51	53	35	301	56	35
31	36	---	42	46	---	64	---	43	---	70	e45	---
TOTAL	2646	1710	2861	1621	3140	4082	3624	2104	2036	2354	1384	2362
MEAN	85.4	57.0	92.3	52.3	108	132	121	67.9	67.9	75.9	44.6	78.7
MAX	488	346	858	203	515	967	607	215	397	347	141	467
MIN	36	30	36	33	40	43	50	36	28	21	20	22
CFSM	1.30	.86	1.40	.79	1.64	2.00	1.83	1.03	1.03	1.15	.68	1.19
IN.	1.49	.97	1.62	.92	1.77	2.30	2.05	1.19	1.15	1.33	.78	1.33

e Estimated

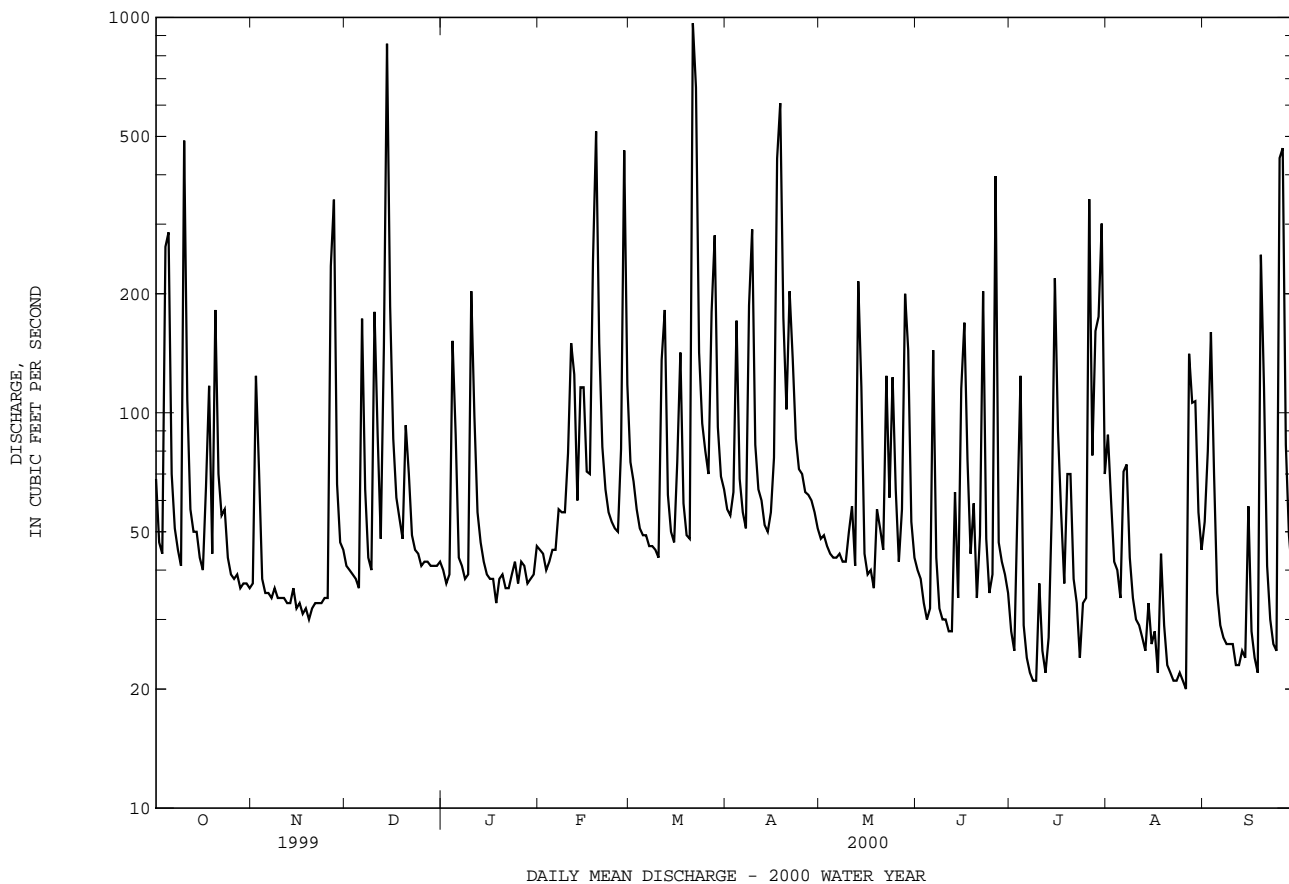
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	1999	1999	2000	1999	1999	1999	1999	1999	2000	2000	2000
MEAN	65.8	46.9	65.5	89.9	91.7	124	112	66.2	66.2	77.8	94.1	179
MAX	85.4	57.0	92.3	127	108	132	121	67.9	67.9	79.7	144	278
(WY)	2000	2000	2000	1999	2000	2000	2000	2000	2000	1999	1999	1999
MIN	46.3	36.8	38.6	52.3	74.5	116	102	64.5	64.4	75.9	44.6	78.7
(WY)	1999	1999	1999	2000	1999	1999	1999	1999	1999	2000	2000	2000

01589352 GWYNNS FALLS AT WASHINGTON BOULEVARD AT BALTIMORE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	39130		29924			
ANNUAL MEAN	107		81.8		89.7	
HIGHEST ANNUAL MEAN					97.7	
LOWEST ANNUAL MEAN					81.8	
HIGHEST DAILY MEAN	3520	Sep 16	967	Mar 21	3520	Sep 16 1999
LOWEST DAILY MEAN	19	Aug 19	20	Aug 26	13	Oct 2 1998
ANNUAL SEVEN-DAY MINIMUM	25	Aug 6	21	Aug 20	20	Oct 14 1998
INSTANTANEOUS PEAK FLOW			5400	Jul 30	(a)23900	Aug 26 1999
INSTANTANEOUS PEAK STAGE			10.18	Jul 30	20.03	Aug 26 1999
INSTANTANEOUS LOW FLOW			19	Aug 26	15	Aug 19 1999
ANNUAL RUNOFF (CFSM)	1.63		1.24		1.36	
ANNUAL RUNOFF (INCHES)	22.09		16.89		18.49	
10 PERCENT EXCEEDS	180		172		168	
50 PERCENT EXCEEDS	54		47		49	
90 PERCENT EXCEEDS	34		28		27	

a From rating curve extended above 6,200 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.



PATAPSCO RIVER BASIN

01589352 GWYNN'S FALLS AT WASHINGTON BLVD AT BALTIMORE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to September 2000.

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
SEP 08...	1030	27	407	7.0	24.0	19.0	130	34.0	11.1	
		SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
		21.5	3.4	18.8	50.2	.3	12.5	18	60	54

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PATAPSCO RIVER BASIN

01589440 JONES FALLS AT SORRENTO, MD

LOCATION.--Lat 39°23'30", long 76°39'42", Baltimore County, Hydrologic Unit 02060003, on right bank 0.3 mi downstream from bridge on State Highway 25 (Falls Road), 0.4 mi downstream from Slaughterhouse Branch and Sorrento, and 12.5 mi upstream from mouth.

DRAINAGE AREA.--25.2 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum, water years 1958-66. April 1966 to September 1988, October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 240 ft above sea level, from topographic map. January 1958 to April 1966, non-recording gage at site 450 ft upstream at same gage datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 14	1415	615	6.53	Jul 16	1400	1,100	7.73
Mar 21	1430	962	7.43	Sep 2	1530	*1,400	*8.32
Mar 22	0245	915	7.32				

Minimum discharge 8.0 ft<sup>3</sup>/s, Jan 26, 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	19	17	17	e14	32	33	30	21	15	21	11
2	23	40	17	17	e14	29	33	30	20	14	20	162
3	22	29	17	17	e14	27	34	29	18	14	16	48
4	54	20	17	25	e14	26	53	28	17	18	16	24
5	75	21	17	27	e14	25	35	27	18	14	15	15
6	27	20	42	18	15	24	32	27	31	12	17	13
7	24	19	24	17	16	23	30	26	20	12	18	13
8	22	18	19	17	16	23	54	25	18	12	15	13
9	22	17	17	16	16	23	84	24	17	11	13	13
10	183	19	42	40	19	22	39	24	16	13	13	12
11	44	19	29	31	30	38	35	25	15	12	12	12
12	31	18	21	21	34	49	34	24	19	11	12	11
13	27	19	44	20	22	28	31	57	21	13	12	11
14	26	19	276	17	40	25	32	38	18	16	12	11
15	24	19	62	17	44	23	32	24	40	47	12	14
16	24	18	37	18	32	25	35	22	39	109	11	10
17	30	17	29	16	30	38	109	23	19	23	10	10
18	40	16	26	e16	50	25	167	21	21	17	11	9.9
19	24	16	24	e15	151	24	58	24	21	19	12	34
20	47	17	31	15	51	23	45	23	17	20	11	22
21	30	19	29	15	35	320	63	23	27	15	10	12
22	26	17	23	15	30	255	54	36	58	15	9.7	11
23	28	17	21	15	28	59	43	27	19	14	9.4	11
24	24	18	20	14	28	48	39	30	16	15	9.6	11
25	22	17	18	13	27	43	37	26	16	15	9.4	84
26	21	65	19	13	27	40	36	20	63	63	9.0	95
27	20	97	19	12	38	54	36	24	19	25	17	24
28	19	27	18	e12	111	82	35	37	19	60	17	16
29	19	21	17	e12	36	41	33	42	18	58	19	14
30	19	19	17	e13	---	37	31	25	16	22	13	13
31	20	---	18	e14	---	35	---	22	---	19	12	---
TOTAL	1043	717	1027	545	996	1566	1412	863	697	743	414.1	759.9
MEAN	33.6	23.9	33.1	17.6	34.3	50.5	47.1	27.8	23.2	24.0	13.4	25.3
MAX	183	97	276	40	151	320	167	57	63	109	21	162
MIN	19	16	17	12	14	22	30	20	15	11	9.0	9.9
CFSM	1.34	.95	1.31	.70	1.36	2.00	1.87	1.10	.92	.95	.53	1.01
IN.	1.54	1.06	1.52	.80	1.47	2.31	2.08	1.27	1.03	1.10	.61	1.12

e Estimated

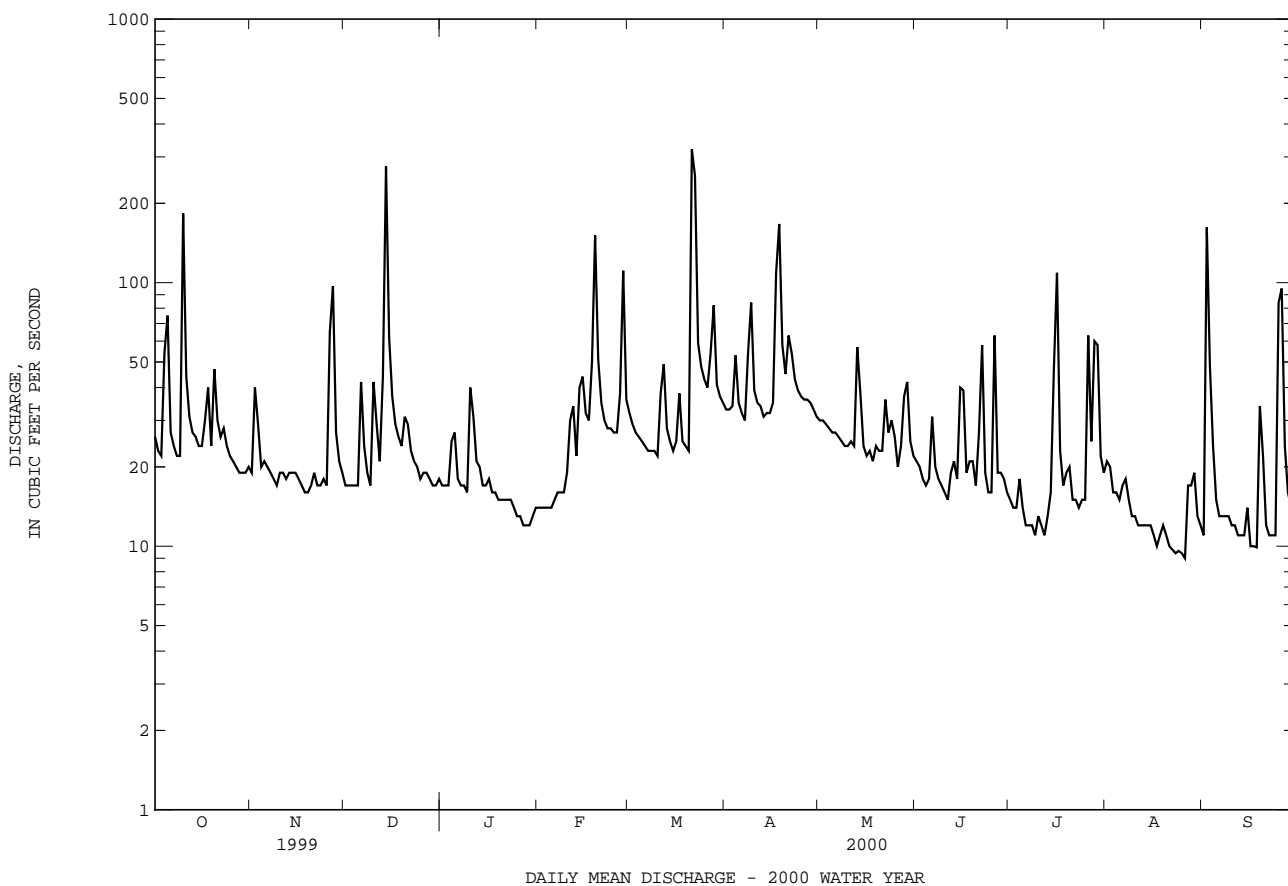
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

MEAN	24.4	27.3	34.1	35.8	40.5	43.4	41.1	34.3	30.4	24.7	23.0	27.7
MAX	100	60.4	94.9	105	97.9	82.6	95.7	66.7	150	73.0	72.3	132
(WY)	1980	1973	1997	1979	1979	1998	1973	1973	1972	1984	1971	1979
MIN	6.47	10.2	11.3	9.92	18.5	17.5	18.7	13.0	7.98	4.74	3.85	6.26
(WY)	1987	1982	1981	1981	1969	1981	1969	1969	1986	1966	1966	1986

01589440 JONES FALLS AT SORRENTO, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	11544.8		10783.0			
ANNUAL MEAN	31.6		29.5		32.5	
HIGHEST ANNUAL MEAN					62.5 1972	
LOWEST ANNUAL MEAN					17.0 1986	
HIGHEST DAILY MEAN	1170	Sep 16	320	Mar 21	2600	Jun 22 1972
LOWEST DAILY MEAN	4.8	Jul 19	9.0	Aug 26	2.1	(a)
ANNUAL SEVEN-DAY MINIMUM	5.1	Jul 15	9.7	Aug 20	2.2	Aug 28 1966
INSTANTANEOUS PEAK FLOW			1400	Sep 2	(b)13800	Jun 22 1972
INSTANTANEOUS PEAK STAGE			8.32	Sep 2	(c)18.11	Jun 22 1972
INSTANTANEOUS LOW FLOW			8.0	(d)	1.8	(f)
ANNUAL RUNOFF (CFSM)	1.26		1.17		1.29	
ANNUAL RUNOFF (INCHES)	17.04		15.92		17.53	
10 PERCENT EXCEEDS	48		48		53	
50 PERCENT EXCEEDS	19		21		22	
90 PERCENT EXCEEDS	7.7		12		9.6	

- a Sept. 2, 3, 7, 1966.
- b From rating curve extended above 1,400 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.
- c From floodmarks.
- d Jan. 26, 27.
- f Sept. 7, 8, 1966.





## PATAPSCO RIVER BASIN

01589478 JONES FALLS AT MARYLAND AVENUE AT BALTIMORE, MD

LOCATION.--Lat 39°18'38", long 76°37'23", Baltimore City, Hydrologic Unit 02060003, on left bank 300 ft downstream from Howard Street bridge.

DRAINAGE AREA.--54.9 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1981 to September 1982, December 1999 to September 2000.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 43.0 ft above sea level from topographic map

REMARKS.--Records good below 300 ft<sup>3</sup>/s. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,110 ft<sup>3</sup>/s, Mar 21, gage height, 4.70 ft; minimum discharge, 15 ft<sup>3</sup>/s, Aug 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	44	52	79	69	61	50	41	96	33
2	---	---	---	44	50	72	67	62	48	39	57	301
3	---	---	---	44	49	65	81	58	45	53	46	369
4	---	---	---	134	51	62	159	57	43	87	42	94
5	---	---	---	89	52	60	73	56	45	40	39	41
6	---	---	---	47	50	57	66	56	142	35	61	33
7	---	---	---	46	57	54	62	53	52	34	54	32
8	---	---	---	44	58	55	177	51	43	33	40	31
9	---	---	---	45	56	55	260	50	42	61	37	31
10	---	---	---	181	73	55	87	67	42	41	36	30
11	---	---	---	89	118	126	72	59	41	34	34	29
12	---	---	---	54	108	175	71	49	56	34	33	28
13	---	---	---	49	66	68	64	272	74	38	57	29
14	---	---	---	44	111	60	63	158	44	66	35	27
15	---	---	---	43	120	57	65	53	128	290	32	63
16	---	---	---	44	83	80	78	49	151	447	31	57
17	---	---	---	42	81	143	390	57	57	79	30	26
18	---	---	---	39	221	61	501	50	48	46	39	25
19	---	---	---	42	458	56	150	70	55	70	30	121
20	---	---	---	49	146	55	106	62	43	70	29	75
21	---	---	---	44	96	1300	151	58	67	48	29	32
22	---	---	---	44	84	942	142	130	210	39	26	28
23	---	---	---	46	75	147	97	68	51	36	23	27
24	---	---	---	45	71	108	83	107	42	44	29	28
25	---	---	---	46	72	93	79	69	47	42	23	470
26	---	---	---	57	69	83	75	49	443	624	22	494
27	---	---	52	47	112	170	74	61	58	96	155	72
28	---	---	48	46	435	248	73	153	59	247	125	44
29	---	---	46	49	95	95	67	135	54	247	102	37
30	---	---	45	49	---	80	64	58	44	117	69	34
31	---	---	45	63	---	73	---	51	---	71	38	---
TOTAL	---	---	---	1749	3169	4834	3566	2389	2324	3249	1499	2741
MEAN	---	---	---	56.4	109	156	119	77.1	77.5	105	48.4	91.4
MAX	---	---	---	181	458	1300	501	272	443	624	155	494
MIN	---	---	---	39	49	54	62	49	41	33	22	25
CFSM	---	---	---	.97	1.87	2.67	2.04	1.32	1.33	1.80	.83	1.57
IN.	---	---	---	1.12	2.02	3.08	2.28	1.52	1.48	2.07	.96	1.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1982, 2000 BY WATER YEAR (WY)

	1981	1982	1982	1982	1982	1982	1982	1982	1982	1982	1981	1981
MEAN	32.2	25.0	39.7	54.0	105	104	96.8	63.0	103	79.1	45.0	55.3
MAX	32.2	25.0	39.7	56.4	109	156	119	77.1	123	105	55.0	91.4
(WY)	1982	1982	1982	2000	2000	2000	2000	2000	1982	2000	1982	2000
MIN	32.2	25.0	39.7	51.7	101	52.8	74.8	54.2	77.5	49.7	31.7	31.9
(WY)	1982	1982	1982	1982	1982	1982	1982	1982	2000	1982	1981	1981

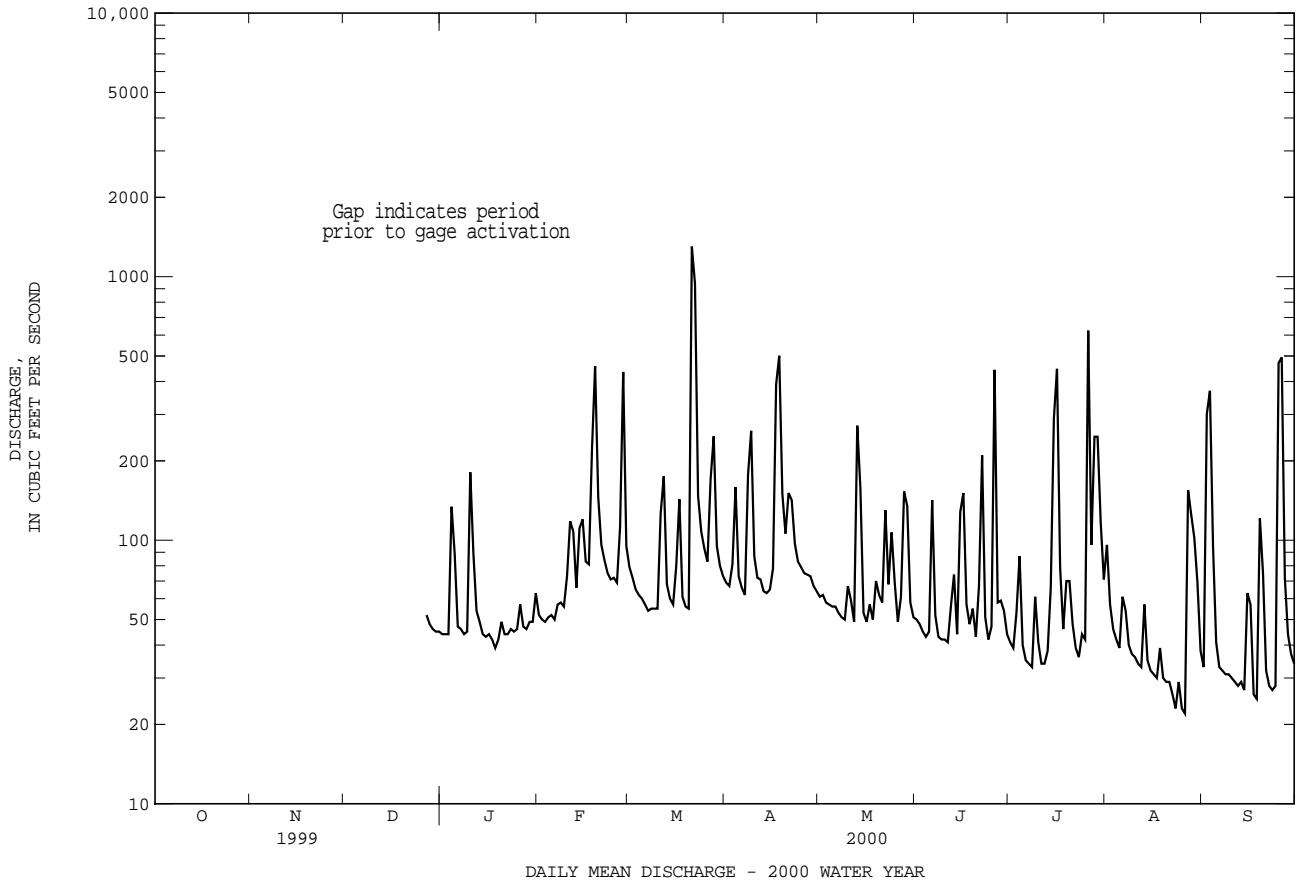
01589478 JONES FALLS AT MARYLAND AVENUE AT BALTIMORE, MD--Continued

SUMMARY STATISTICS	WATER YEARS 1981 - 1982	
	2000	
ANNUAL MEAN	58.0	
HIGHEST ANNUAL MEAN	58.0	1982
LOWEST ANNUAL MEAN	58.0	1982
HIGHEST DAILY MEAN	1300	Mar 21 2000
LOWEST DAILY MEAN	(e)13	(a)
ANNUAL SEVEN-DAY MINIMUM	14	Oct 9 1981
INSTANTANEOUS PEAK FLOW	(b)10600	Jun 25 1981
INSTANTANEOUS PEAK STAGE	6.41	Jun 25 1981
INSTANTANEOUS LOW FLOW	UNKNOWN	
ANNUAL RUNOFF (CFSM)	1.00	
ANNUAL RUNOFF (INCHES)	13.52	
10 PERCENT EXCEEDS	135	
50 PERCENT EXCEEDS	44	
90 PERCENT EXCEEDS	24	

e Estimated.

a Oct. 4, 12-14, 1981.

b From rating curve extended above 300 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow 3,200 ft downstream.

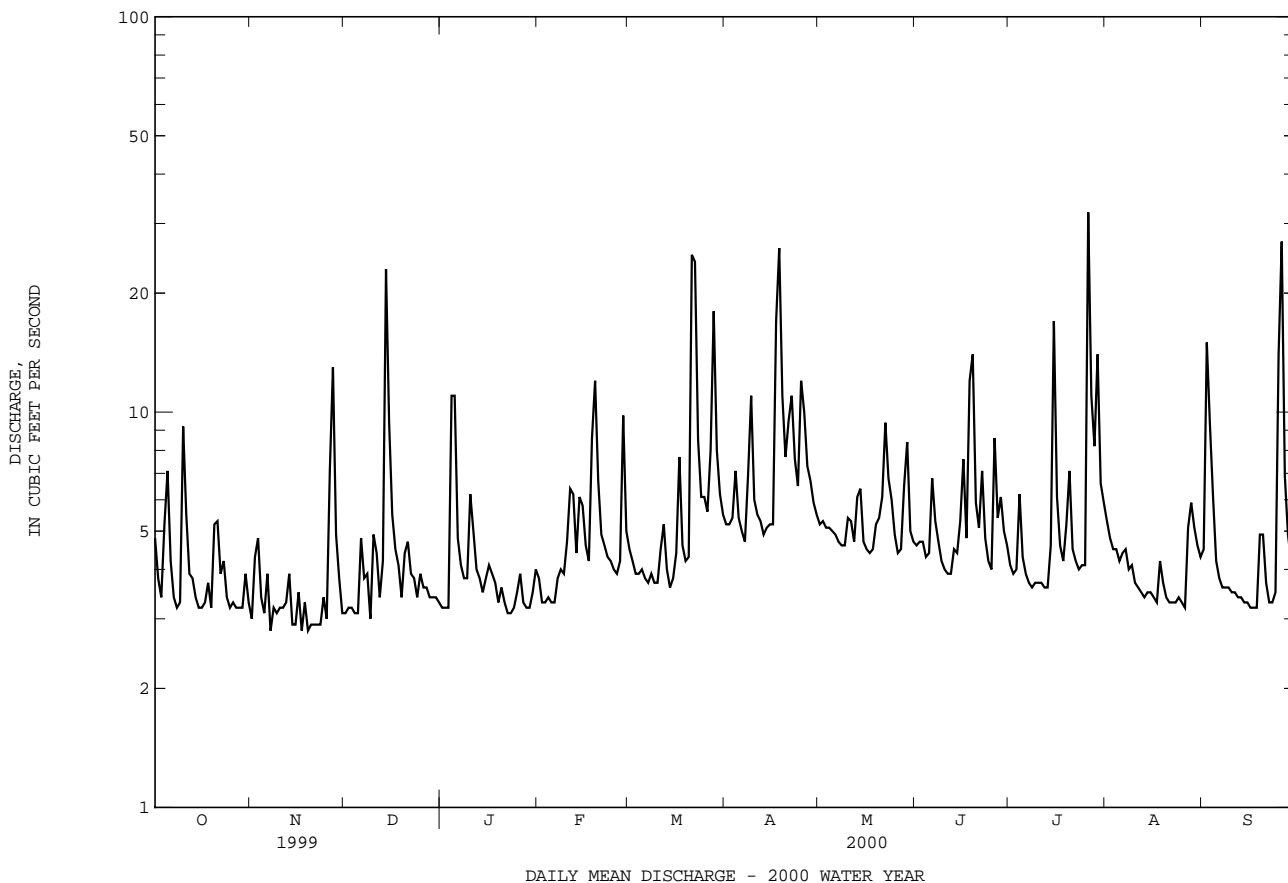




01589500 SAWMILL CREEK AT GLEN BURNIE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	1619.4		1931.3			
ANNUAL MEAN	4.44		5.28		4.92	
HIGHEST ANNUAL MEAN					11.0	1949
LOWEST ANNUAL MEAN					.43	1986
HIGHEST DAILY MEAN	155	Sep 16	32	Jul 26	155	Sep 16 1999
LOWEST DAILY MEAN	1.5	Jul 20	2.8	(a)	.01	(b)
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 2	2.9	Nov 17	.01	Jul 25 1986
INSTANTANEOUS PEAK FLOW			75	Jul 26	(c)294	Sep 16 1999
INSTANTANEOUS PEAK STAGE			2.96	Jul 26	5.74	Sep 16 1999
INSTANTANEOUS LOW FLOW			.68	Oct 18	.00	(d)
ANNUAL RUNOFF (CFSM)	.89		1.06		.99	
ANNUAL RUNOFF (INCHES)	12.12		14.46		13.46	
10 PERCENT EXCEEDS	6.0		8.0		9.4	
50 PERCENT EXCEEDS	3.3		4.2		4.2	
90 PERCENT EXCEEDS	2.1		3.2		.50	

- a Nov. 7, 17, 19.
- b Many days in 1985-1987.
- c From rating curve extended above 40 ft<sup>3</sup>/s on basis of Culvert Type IV measurement of peak flow.
- d Part of each day Sept. 6, 7, 1985, July 29, Aug. 2, 1986.



PATAPSCO RIVER BASIN

01589501 SAWMILL CREEK TRIBUTARY AT BWI AIRPORT NEAR FERNDALE, MD

LOCATION.--Lat 39°10'39", long 76°39'05", Anne Arundel County, Hydrologic Unit 02060003, on right bank 2,000 ft upstream from culvert on Hammond Ferry Road, 1.2 mi southwest of Ferndale.

DRAINAGE AREA.--0.58 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1994 to September 1995. October 1996 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 100 ft above sea level, from topographic map.

REMARKS.--Records good below 30 ft<sup>3</sup>/s and fair above except those for estimated daily values (backwater), which are fair. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Sep 2	1515	*58	*1.73	No other peak greater than base discharge.			

Minimum discharge 0.06 ft<sup>3</sup>/s, Sep 22, 23, 24, 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	e.19	.14	.14	.81	.38	.32	.30	.22	.17	.55	.56
2	.24	4.5	.15	.14	.38	.30	.28	.34	.65	.14	.34	15
3	.24	.60	.17	.15	.21	.23	.63	.30	.30	.69	.29	18
4	3.9	.14	.15	5.5	.26	.21	1.8	.30	.19	2.8	2.1	1.2
5	3.8	.13	.17	7.8	.28	.21	.39	.29	.19	.29	.41	.33
6	.23	.11	3.6	.35	.32	.18	.30	.25	3.4	.15	1.6	.15
7	.19	.14	.19	.18	1.3	.19	.24	.24	.43	.11	3.1	.14
8	.19	.14	.14	.14	1.0	.19	2.8	.24	.22	.13	.71	.14
9	.19	.14	.14	.14	1.4	.19	5.0	.27	.19	.14	1.2	.12
10	7.7	.14	4.2	3.5	2.0	.19	.68	1.2	.17	.16	.33	.09
11	.44	.14	.34	.52	2.8	1.7	.37	.37	.16	.16	.22	.09
12	e.23	.12	.16	.19	.75	1.1	.38	.24	.17	.14	.16	.09
13	e.21	.14	4.4	.19	.25	.26	.22	2.6	1.3	.57	.14	.09
14	e.19	.14	14	.19	2.4	.20	.19	2.9	.24	.98	.33	.09
15	e.19	.14	4.3	.18	.77	.19	.53	.57	2.5	7.9	.14	.09
16	e.19	.14	.25	.19	.75	1.5	.55	.30	3.5	.59	.14	.09
17	.48	.14	.19	.19	.39	3.1	8.7	.24	.52	.28	.14	.09
18	.63	.14	.19	.19	6.9	.30	9.5	.24	6.2	.25	1.3	.09
19	.19	.14	.19	.19	5.8	.26	3.7	1.6	11	3.6	.19	4.1
20	3.7	.14	2.9	.22	.83	.22	1.9	.50	1.1	2.1	.09	.50
21	.27	.14	.55	.21	.39	11	4.0	1.4	1.4	.66	.09	.20
22	1.7	.14	.23	.15	.35	11	3.6	3.9	2.5	.32	.09	.07
23	.76	.20	.19	.14	.32	3.9	.70	1.5	.52	.18	.09	.07
24	.19	.20	.19	.16	.35	1.4	.49	.92	.27	.71	.09	.09
25	e.19	.33	.19	.19	.34	.87	5.0	.31	.23	.23	.09	11
26	e.19	4.7	.19	.19	.31	.47	2.6	.22	8.3	15	.09	16
27	e.19	8.2	.19	.19	.94	3.6	.86	.63	1.3	5.4	3.4	.83
28	e.19	.21	.19	.19	6.9	6.6	.58	3.5	.96	2.7	2.9	.43
29	e.19	.17	.19	.19	.53	1.8	.37	2.9	.89	4.3	3.4	.32
30	e.19	.14	.19	.19	---	.56	.30	.56	.53	2.0	2.9	.15
31	e.20	---	.18	1.1	---	.43	---	.32	---	1.4	.98	---
TOTAL	27.74	22.04	38.45	23.19	40.03	52.73	56.98	29.45	49.55	54.25	27.60	70.21
MEAN	.89	.73	1.24	.75	1.38	1.70	1.90	.95	1.65	1.75	.89	2.34
MAX	7.7	8.2	14	7.8	6.9	11	9.5	3.9	11	15	3.4	18
MIN	.19	.11	.14	.14	.21	.18	.19	.22	.16	.11	.09	.07
CFSM	1.54	1.27	2.14	1.29	2.38	2.93	3.27	1.64	2.85	3.02	1.54	4.04
IN.	1.78	1.41	2.47	1.49	2.57	3.38	3.65	1.89	3.18	3.48	1.77	4.50

e Estimated

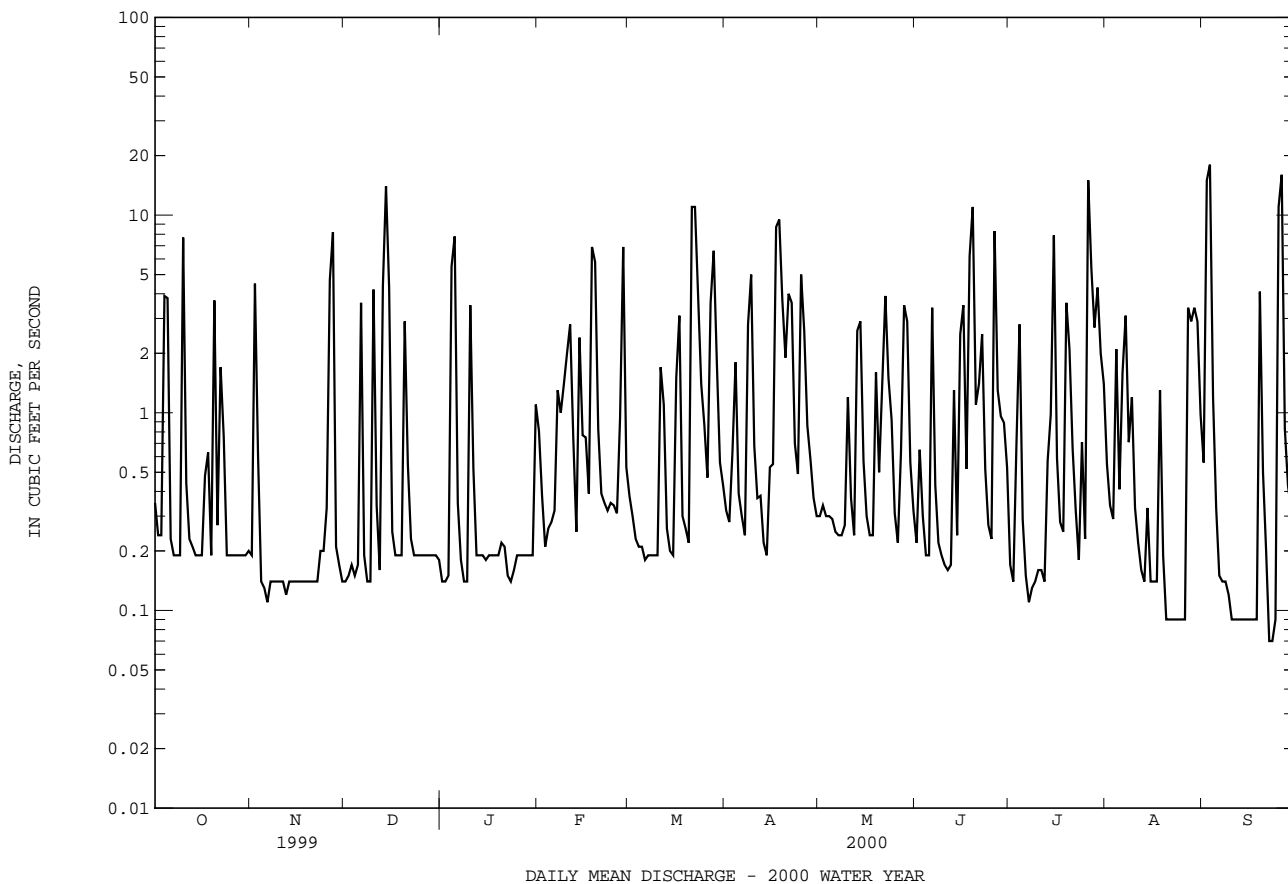
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000
MEAN	.98	1.26	1.29	1.57	1.48	1.83
MAX	1.75	2.45	3.23	2.51	3.41	2.54
(WY)	1997	1998	1997	1998	1998	2000
MIN	.38	.46	.51	.75	.44	1.18
(WY)	1999	1999	1999	2000	1995	1999

01589501 SAWMILL CREEK TRIBUTARY AT BWI AIRPORT NEAR FERNDALE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1995 - 2000	
ANNUAL TOTAL	527.21	492.22		
ANNUAL MEAN	1.44	1.34	1.37	
HIGHEST ANNUAL MEAN			1.43	1997
LOWEST ANNUAL MEAN			1.32	1999
HIGHEST DAILY MEAN	82 Sep 16	18 Sep 3	82	Sep 16 1999
LOWEST DAILY MEAN	.09 (a)	.07 (b)	.06	(c)
ANNUAL SEVEN-DAY MINIMUM	.10 Aug 6	.09 Aug 20	.08	Aug 20 1995
INSTANTANEOUS PEAK FLOW		58 Sep 2	298	Sep 16 1999
INSTANTANEOUS PEAK STAGE		1.73 Sep 2	3.38	Sep 16 1999
INSTANTANEOUS LOW FLOW		.06 (d)	.06	(f)
ANNUAL RUNOFF (CFSM)	2.49	2.32		2.37
ANNUAL RUNOFF (INCHES)	33.81	31.57		32.15
10 PERCENT EXCEEDS	4.0	3.8		3.0
50 PERCENT EXCEEDS	.22	.30		.31
90 PERCENT EXCEEDS	.13	.14		.14

- a June 5, 6, 9, July 15-19, Aug. 6, 7, 10-12.
- b Sept. 22, 23.
- c Mar. 4, 5, 1995.
- d Sept. 22-25.
- f Mar. 4-6, 1995, Sept. 22-25, 2000.



SEVERN RIVER BASIN

01589795 SOUTH FORK JABEZ BRANCH AT MILLERSVILLE, MD

LOCATION.--Lat 39°04'05", long 76°39'07", Anne Arundel County, Hydrologic Unit 02060004, on left bank 300 ft upstream from the confluence with the West Branch Jabez Branch, 0.5 mi northwest of Millersville, 1.0 mi west of Gambrills, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--1.0 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1989 to September 1990, July 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 60 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1250	20	5.02	Jul 26	0945	24	5.12
Jul 14	2305	*94	*6.04				

Minimum discharge 0.14 ft<sup>3</sup>/s, Nov 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	.25	.24	.26	.24	.31	.42	.64	.31	.24	.24	.22
2	.27	.25	.24	.25	.24	.28	.45	.60	.29	.24	.24	.20
3	.24	.23	.24	.24	.24	.27	.44	.52	.27	.24	.24	.20
4	.26	.23	.24	1.2	.24	.27	.52	.37	.27	.26	.24	.20
5	.25	.25	.24	.57	.24	.27	.56	.36	.27	.24	.22	.20
6	.24	.24	.24	.27	.24	.25	.53	.34	.30	.24	.22	.20
7	.24	.23	.24	.25	.24	.25	.43	.33	.25	.24	.21	.20
8	.24	.22	.24	.24	.25	.24	.58	.31	.24	.24	.20	.20
9	.24	.20	.24	.24	.26	.23	1.2	.31	.24	.24	.20	.20
10	.69	.20	.38	.49	.36	.21	.45	.32	.24	.43	.18	.20
11	.27	.20	.26	.40	.74	.24	.45	.36	.24	.24	.17	.20
12	.26	.20	.24	.29	.61	.33	.45	.36	.24	.24	.17	.20
13	.25	.23	.25	.27	.28	.28	.43	.36	.24	.23	.17	.20
14	.25	.21	3.6	.27	1.4	.26	.36	.36	.24	2.5	.17	.20
15	.24	.20	.63	.27	.67	.25	.28	.36	.31	5.8	.17	.20
16	.24	.21	.38	.27	.43	.24	.27	.29	.30	.29	.17	.20
17	.24	.23	.33	.27	.38	.35	1.1	.24	.25	.26	.17	.20
18	.27	.22	.31	.27	1.7	.29	2.4	.24	.42	.25	.17	.20
19	.27	.21	.31	.27	3.8	.27	.94	.24	.30	.25	.17	.25
20	.35	.20	.33	.27	.66	.27	.47	.27	.27	.43	.17	.22
21	.29	.20	.37	.27	.43	5.1	.75	.27	.28	.26	.17	.20
22	.27	.20	.31	.25	.38	2.2	1.2	.48	.60	.25	.17	.20
23	.28	.20	.31	.24	.36	.58	.73	.43	.33	.24	.17	.20
24	.29	.20	.26	.23	.33	.43	.56	.50	.29	.24	.17	.20
25	.29	.20	.27	.30	.33	.40	1.8	.36	.27	.24	.17	1.2
26	.28	.88	.27	.25	.31	.46	1.4	.27	.25	4.5	.17	.68
27	.27	.95	.27	.24	.32	.87	.96	.27	.25	.41	.19	.24
28	.27	.28	.27	.24	1.0	1.9	.90	.30	.24	.25	.22	.22
29	.27	.25	.27	.24	.34	.55	.82	.51	.24	.24	.22	.20
30	.27	.24	.27	.24	---	.46	.71	.34	.25	.24	.20	.20
31	.27	---	.27	.27	---	.41	---	.31	---	.24	.20	---
TOTAL	8.65	8.01	12.32	9.63	17.02	18.72	22.56	11.22	8.49	20.21	5.94	7.63
MEAN	.28	.27	.40	.31	.59	.60	.75	.36	.28	.65	.19	.25
MAX	.69	.95	3.6	1.2	3.8	5.1	2.4	.64	.60	5.8	.24	1.2
MIN	.24	.20	.24	.23	.24	.21	.27	.24	.24	.23	.17	.20
CFSM	.28	.27	.40	.31	.59	.60	.75	.36	.28	.65	.19	.25
IN.	.32	.30	.46	.36	.63	.70	.84	.42	.32	.75	.22	.28

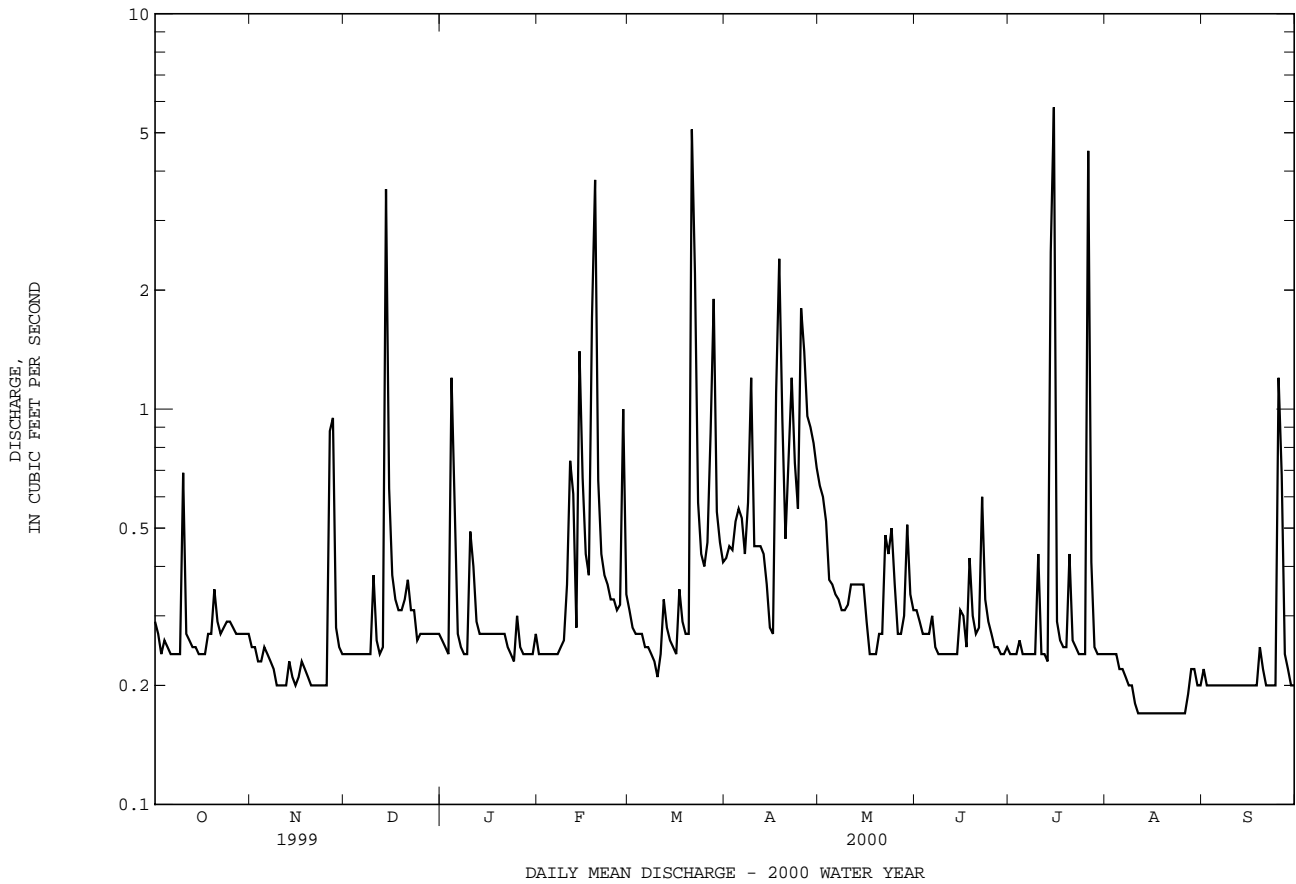
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	1990	1998	1998	1998	1998	2000	1990	1998	2000	1997	1999	
MEAN	.42	.46	.40	.76	.84	.74	.53	.49	.34	.42	.39	.83
MAX	.52	.77	.41	1.60	2.02	1.47	.75	.80	.46	.65	.52	3.22
(WY)	1990	1998	1998	1998	1998	1998	2000	1990	1998	2000	1997	1999
MIN	.28	.27	.38	.31	.35	.37	.32	.27	.25	.22	.19	.25
(WY)	2000	2000	1990	2000	1990	1990	1999	1999	1999	1999	2000	2000

01589795 SOUTH FORK JABEZ BRANCH AT MILLERSVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	216.08		150.40			
ANNUAL MEAN	.59		.41		.56	
HIGHEST ANNUAL MEAN					.78 1998	
LOWEST ANNUAL MEAN					.41 2000	
HIGHEST DAILY MEAN	82	Sep 16	5.8	Jul 15	82	Sep 16 1999
LOWEST DAILY MEAN	.18	Aug 12	.17	(a)	.17	Aug 11 2000
ANNUAL SEVEN-DAY MINIMUM	.19	Aug 7	.17	Aug 11	.17	Aug 11 2000
INSTANTANEOUS PEAK FLOW			94	Jul 14	300	Sep 16 1999
INSTANTANEOUS PEAK STAGE			6.04	Jul 14	6.97	Sep 16 1999
INSTANTANEOUS LOW FLOW			.14	Nov 16	.14	Aug 11 1999
ANNUAL RUNOFF (CFSM)	.59		.41		.56	
ANNUAL RUNOFF (INCHES)	8.04		5.59		7.67	
10 PERCENT EXCEEDS	.47		.62		.55	
50 PERCENT EXCEEDS	.27		.26		.36	
90 PERCENT EXCEEDS	.21		.20		.24	

a. Aug. 11-26



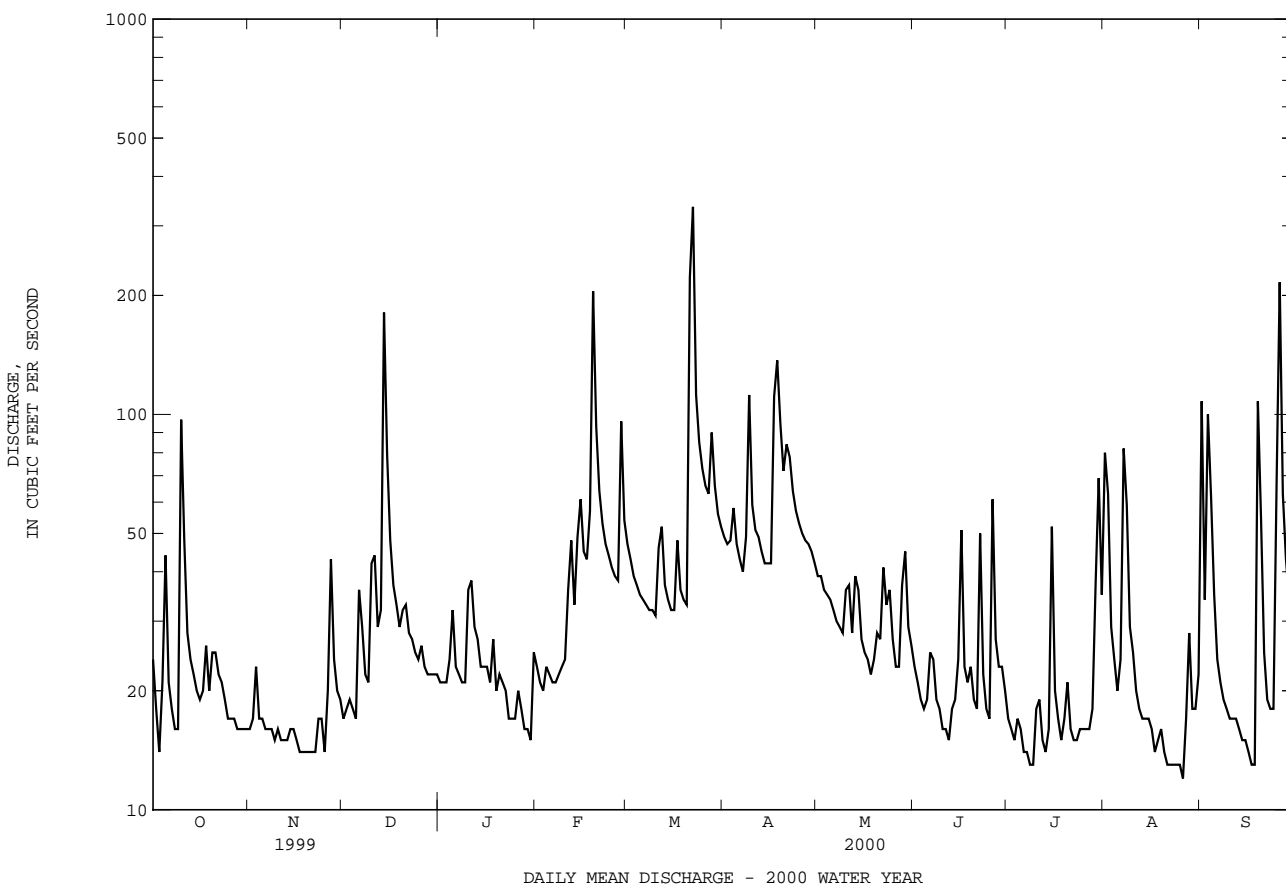




01591000 PATUXENT RIVER NEAR UNITY, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	8219.70		12501			
ANNUAL MEAN	22.5		34.2		39.4	
HIGHEST ANNUAL MEAN					82.3 1972	
LOWEST ANNUAL MEAN					18.6 1999	
HIGHEST DAILY MEAN	385	Sep 16	335	Mar 22	2590	Sep 26 1975
LOWEST DAILY MEAN	(e).22	(a)	12	Aug 26	.20	(b)
ANNUAL SEVEN-DAY MINIMUM	.23	Aug 9	13	Aug 20	.23	Aug 9 1999
INSTANTANEOUS PEAK FLOW			695	Sep 26	(c)21800	Sep 11 1971
INSTANTANEOUS PEAK STAGE			5.22	Sep 26	18.60	Sep 11 1971
INSTANTANEOUS LOW FLOW			12	(d)	.20	(f)
ANNUAL RUNOFF (CFSM)	.65		.98		1.13	
ANNUAL RUNOFF (INCHES)	8.79		13.36		15.40	
10 PERCENT EXCEEDS	42		61		71	
50 PERCENT EXCEEDS	18		24		25	
90 PERCENT EXCEEDS	2.5		15		8.8	

e Estimated.  
 a Aug. 11-15, 1999.  
 b Sept. 10, 11, 1966.  
 c From rating curve extended above 1,500 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 13.00 ft.  
 d Aug. 26, 27, Sept. 19.  
 f Sept. 10-12, 1966.



PATUXENT RIVER BASIN

01591000 PATUXENT RIVER NEAR UNITY, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1985 to current year.

REMARKS.--Chemical analyses were performed at the Maryland Department of Health and Mental Hygiene laboratory (DHMH), Baltimore, MD.

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 28...	1330	ENVIRONMENTAL	16	138	6.9	16.0	8.5	1.6	10.9	95
NOV 18...	1500	ENVIRONMENTAL	14	137	6.9	9.0	5.0	1.5	E12.8	101
DEC 09...	0945	ENVIRONMENTAL	20	131	6.8	6.0	4.0	3.0	12.6	60
JAN 13...	0930	ENVIRONMENTAL	27	128	6.8	7.0	4.0	2.5	12.6	96
FEB 15...	1430	ENVIRONMENTAL	51	--	--	4.5	4.0	14	12.9	100
MAR 29...	1015	ENVIRONMENTAL	66	117	6.7	10.0	9.0	6.3	11.1	96
APR 20...	0759	BLANK	--	--	--	--	--	<.5	--	--
APR 20...	0800	ENVIRONMENTAL	73	113	6.7	13.5	11.5	8.7	8.9	81
MAY 04...	1215	ENVIRONMENTAL	36	118	7.0	23.5	16.0	3.4	8.1	82
JUN 28...	1000	ENVIRONMENTAL	23	124	6.9	23.0	20.0	21	--	--
JUL 13...	1145	ENVIRONMENTAL	13	125	6.6	20.0	19.0	11	--	--
SEP 13...	1030	ENVIRONMENTAL	16	135	6.8	23.0	20.0	5.4	8.7	96

DATE	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	ANC UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	SILICA, DIS-SOLVED (MG/L SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT 28...	<10	<1.2	22	9.3	6	2.7	2.45	.004	2.46	<.007	.21
NOV 18...	5	<.8	20	9.0	2	2.3	2.07	.005	2.07	.016	.25
DEC 09...	<10	<.8	18	9.0	2	2.3	2.13	.005	2.14	.004	.21
JAN 13...	<10	<.1	16	9.1	4	2.8	2.69	.003	2.69	.009	.14
FEB 15...	13	<.1	12	7.3	14	2.7	2.43	.006	2.44	.026	.30
MAR 29...	<10	<.2	17	7.5	9	2.6	2.42	.002	2.42	.008	.13
APR 20...	<10	<1.9	--	<.1	<1	--	--	<.001	.002	<.004	<.01
APR 20...	<10	<1.1	--	7.4	14	2.2	1.92	.005	1.93	.010	.31
MAY 04...	<10	<.2	16	6.4	4	2.6	2.45	.009	2.46	.014	.11
JUN 28...	<10	<1.1	23	9.7	29	2.4	1.94	.007	1.94	.034	.45
JUL 13...	<10	<1.2	22	9.5	E11	2.2	2.07	.006	2.08	.025	.17
SEP 13...	<10	<1.4	27	9.0	6	2.7	2.54	.004	2.54	<.003	.21

E Estimated value.  
 < Actual value is known to be less than the value shown.

01591000 PATUXENT RIVER NEAR UNITY, MD--Continued

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

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SEDI- MENT, DIS- SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT 28...	.19	2.6	--	--	.012	<.005	<.002	2.4	2.4	2	.10
NOV 18...	.14	2.2	.23	.12	.006	.004	<.002	1.8	1.8	1	.03
DEC 09...	.11	2.2	.21	.11	<.008	<.001	<.001	3.3	3.1	2	.11
JAN 13...	.10	2.8	.13	.10	.013	.011	<.002	1.3	1.3	3	.20
FEB 15...	.20	2.6	.27	.17	.027	.016	.007	2.6	2.6	15	2.1
MAR 29...	<.10	--	.12	--	.016	.013	.008	2.3	2.1	9	1.7
APR 20...	<.01	--	--	--	<.006	<.001	<.003	.52	.54	<1	--
APR 20...	.17	2.1	.30	.16	.017	.004	.005	1.6	1.6	16	3.2
MAY 04...	.10	2.6	.10	.10	.012	<.007	.004	1.4	1.4	8	.73
JUN 28...	.27	2.2	.42	.24	.062	.022	.014	2.6	2.5	33	2.0
JUL 13...	.10	2.2	.14	M	.036	.013	.005	2.2	1.9	14	.48
SEP 13...	.11	2.6	--	--	.019	.009	.008	2.7	1.7	4	.19

&lt; Actual value is known to be less than the value shown.

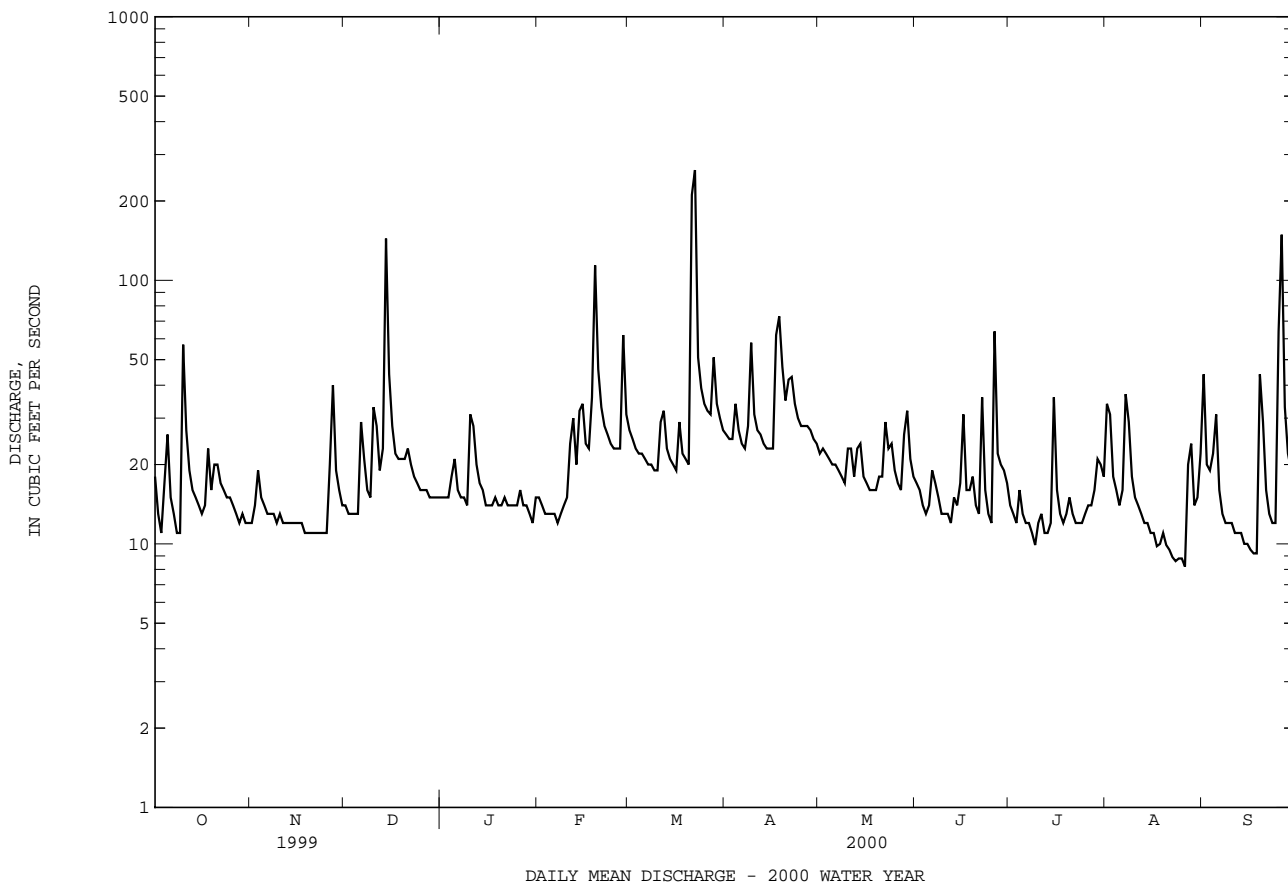
M Presence of material verified but not quantified.



01591400 CATTAIL CREEK NEAR GLENWOOD, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1978 - 2000	
ANNUAL TOTAL	5987.49		8029.3		26.5	
ANNUAL MEAN	16.4		21.9		45.7	
HIGHEST ANNUAL MEAN					13.1	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	504	Sep 16	262	Mar 22	2100	Jan 19 1996
LOWEST DAILY MEAN	.13	Aug 19	8.2	Aug 26	.13	Aug 19 1999
ANNUAL SEVEN-DAY MINIMUM	.37	Aug 8	9.0	Aug 20	.37	Aug 8 1999
INSTANTANEOUS PEAK FLOW			926	Mar 22	(a)5210	Jan 19 1996
INSTANTANEOUS PEAK STAGE			4.77	Mar 22	8.96	Jan 19 1996
INSTANTANEOUS LOW FLOW			7.9	(b)	.07	(c)
ANNUAL RUNOFF (CFSM)	.72		.96		1.16	
ANNUAL RUNOFF (INCHES)	9.73		13.04		15.73	
10 PERCENT EXCEEDS	27		33		41	
50 PERCENT EXCEEDS	13		16		17	
90 PERCENT EXCEEDS	2.6		12		6.4	

- a From rating curve extended above 175 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement at gage height of 8.41 ft.
- b Aug. 26, 27.
- c Aug. 14, 19, 20, 1999.



## PATUXENT RIVER BASIN

01591610 PATUXENT RIVER BELOW BRIGHTON DAM NEAR BRIGHTON, MD

LOCATION.--Lat 39°11'32", long 77°00'17", Montgomery County, Hydrologic Unit 02060006, on right bank at Brighton Dam, 500 ft downstream from Triadelphia Reservoir, 1.3 mi east of Brighton, and 92 mi upstream from mouth.

DRAINAGE AREA.--78.6 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 310 ft above sea level, from topographic map. June 1978 to October 1980, nonrecording gage 300 ft upstream on left bank at different datum.

REMARKS.--Records good except those for estimated discharges (questionable record), which are fair. Flow completely regulated by Triadelphia Reservoir, 500 ft upstream, usable capacity, 6,200,000,000 gal; no dead storage. Several measurements of water temperature were made during the year. Water-quality records for some prior years have been collected at this station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 22, 1972, reached a discharge of 17,800 ft<sup>3</sup>/s. Data provided by Washington Suburban Sanitary Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 303 ft<sup>3</sup>/s, Mar 27, gage height, 2.61 ft; minimum discharge, 6.4 ft<sup>3</sup>/s, Dec 9, 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	52	49	48	47	53	101	e184	107	62	13	41
2	15	52	50	48	47	51	102	e227	107	62	48	41
3	14	53	50	48	47	52	104	e147	107	62	59	21
4	15	52	50	49	47	52	106	e107	107	63	59	12
5	15	52	38	46	47	53	101	e107	107	63	59	12
6	22	52	8.7	46	47	54	100	e107	108	62	57	12
7	52	51	7.4	47	47	54	100	e107	107	63	57	11
8	52	50	8.0	48	48	53	99	e107	107	63	90	11
9	53	53	7.8	48	48	53	103	e107	107	63	100	12
10	53	52	6.8	48	48	52	107	e107	107	72	99	36
11	53	52	8.7	47	48	51	174	e107	108	106	101	60
12	53	52	8.6	47	48	53	214	e107	111	107	100	60
13	53	52	19	47	49	54	228	e103	110	106	99	60
14	53	51	48	47	49	54	135	e43	110	106	96	60
15	52	50	49	47	49	54	107	e60	110	107	96	29
16	52	48	48	47	51	54	107	e55	109	106	99	18
17	52	47	47	47	51	53	e106	e20	107	105	95	18
18	53	46	47	48	51	61	e110	e20	22	105	95	18
19	52	46	47	48	53	69	e132	e20	12	105	96	19
20	52	46	47	48	54	70	e227	e20	12	105	96	32
21	52	47	47	48	55	70	e227	e20	13	104	95	62
22	52	47	48	48	54	71	e227	e20	13	105	93	60
23	54	50	46	48	54	72	e154	48	13	103	93	60
24	55	50	46	47	54	85	e107	59	13	75	93	60
25	54	50	46	47	55	108	e107	60	14	13	69	62
26	54	50	47	47	55	149	e107	59	15	13	61	152
27	53	49	47	47	55	239	e107	74	14	13	63	198
28	52	48	46	47	54	152	e107	105	31	14	58	194
29	52	48	47	47	53	105	e107	105	63	13	50	128
30	52	48	49	47	---	103	e107	107	63	13	41	60
31	52	---	48	47	---	102	---	107	---	13	41	---
TOTAL	1412	1496	1162.0	1469	1465	2356	3920	2626	2134	2172	2371	1619
MEAN	45.5	49.9	37.5	47.4	50.5	76.0	131	84.7	71.1	70.1	76.5	54.0
MAX	55	53	50	49	55	239	228	227	111	107	101	198
MIN	14	46	6.8	46	47	51	99	20	12	13	13	11
(†)	2860	2760	3620	3830	4790	5790	5860	5860	5780	5450	5090	5770

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

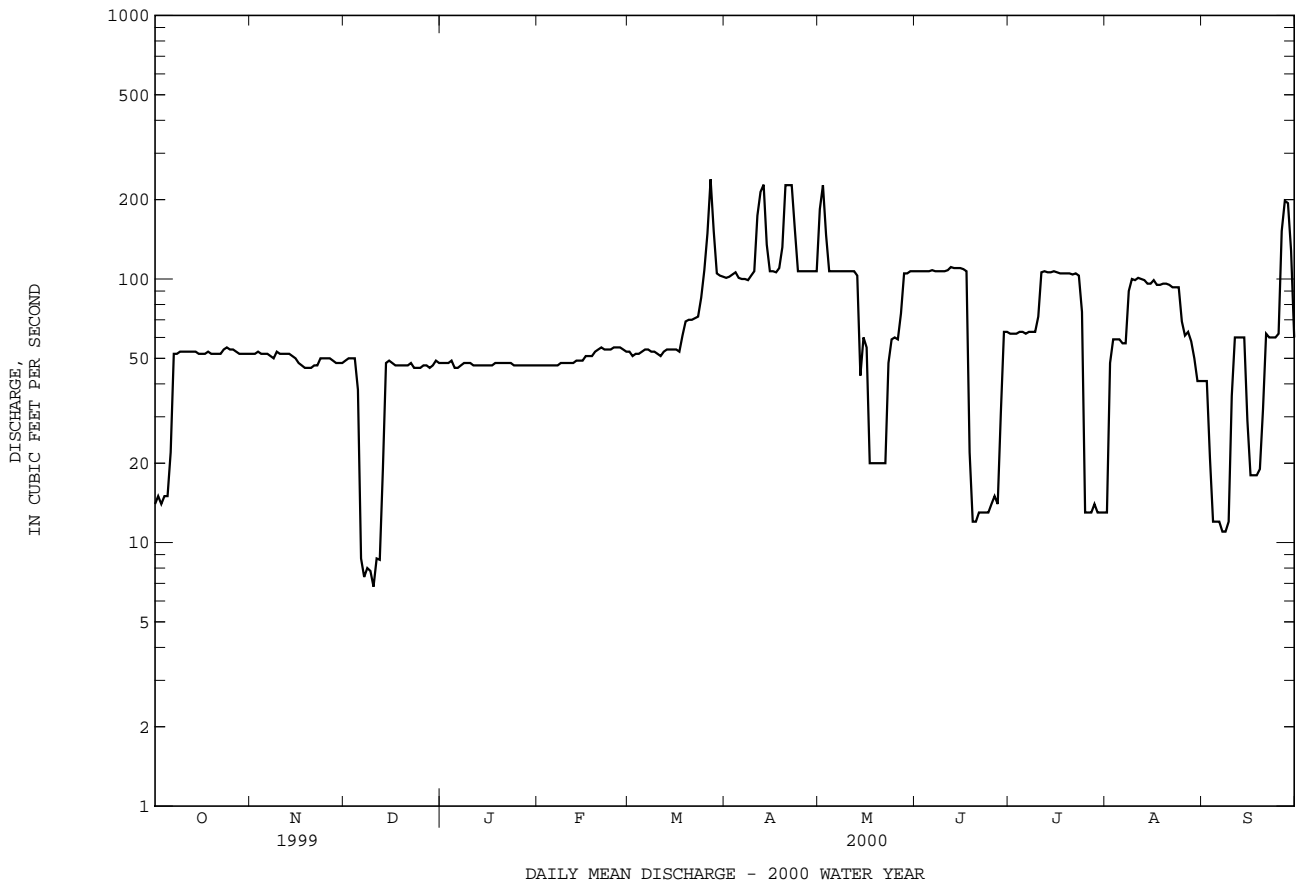
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	64.2	58.6	85.3	75.7	81.2	119	129	95.9	74.5	61.6	67.6	75.7								
MAX	138	166	373	183	256	320	304	229	170	135	143	219								
(WY)	1997	1997	1984	1991	1994	1993	1993	1989	1989	1996	1996	1996								
MIN	7.87	17.1	14.9	9.33	9.57	8.90	8.49	8.63	22.4	30.3	18.1	26.1								
(WY)	1987	1989	1992	1982	1999	1981	1981	1981	1981	1995	1987	1991								

† Monthend contents, in millions of gallons, in Triadelphia Reservoir (contents on Sept. 30, 1999, 3,130,000,000 gal). Records provided by Washington Suburban Sanitary Commission.

01591610 PATUXENT RIVER BELOW BRIGHTON DAM NEAR BRIGHTON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1981 - 2000	
ANNUAL TOTAL	15785.2		24202.0			
ANNUAL MEAN	43.2		66.1		82.4	
ANNUAL MEAN†	48.5		73.3		80.8	
HIGHEST ANNUAL MEAN					134	
LOWEST ANNUAL MEAN					47.5	
HIGHEST DAILY MEAN	283	Apr 8	239	Mar 27	1730	May 6 1989
LOWEST DAILY MEAN	5.4	(a)	6.8	Dec 10	2.1	(b)
ANNUAL SEVEN-DAY MINIMUM	5.5	Feb 19	8.0	Dec 6	4.0	Oct 16 1980
INSTANTANEOUS PEAK FLOW			303	Mar 27	2650	May 6 1989
INSTANTANEOUS PEAK STAGE			2.61	Mar 27	10.26	May 6 1985
INSTANTANEOUS LOW FLOW			6.4	(c)	1.2	Dec 3 1985
ANNUAL RUNOFF (CFSM)	.55		.84		1.05	
ANNUAL RUNOFF (CFSM)†	.62		.93		1.03	
ANNUAL RUNOFF (INCHES)	7.47		11.45		14.24	
ANNUAL RUNOFF (INCHES)†	8.38		12.67		13.96	
10 PERCENT EXCEEDS	53		107		172	
50 PERCENT EXCEEDS	46		53		54	
90 PERCENT EXCEEDS	10		18		9.6	

† Adjusted for change in reservoir contents.  
 a Feb. 22-25.  
 b Jan. 27, 28, 1983.  
 c Dec. 9, 10.



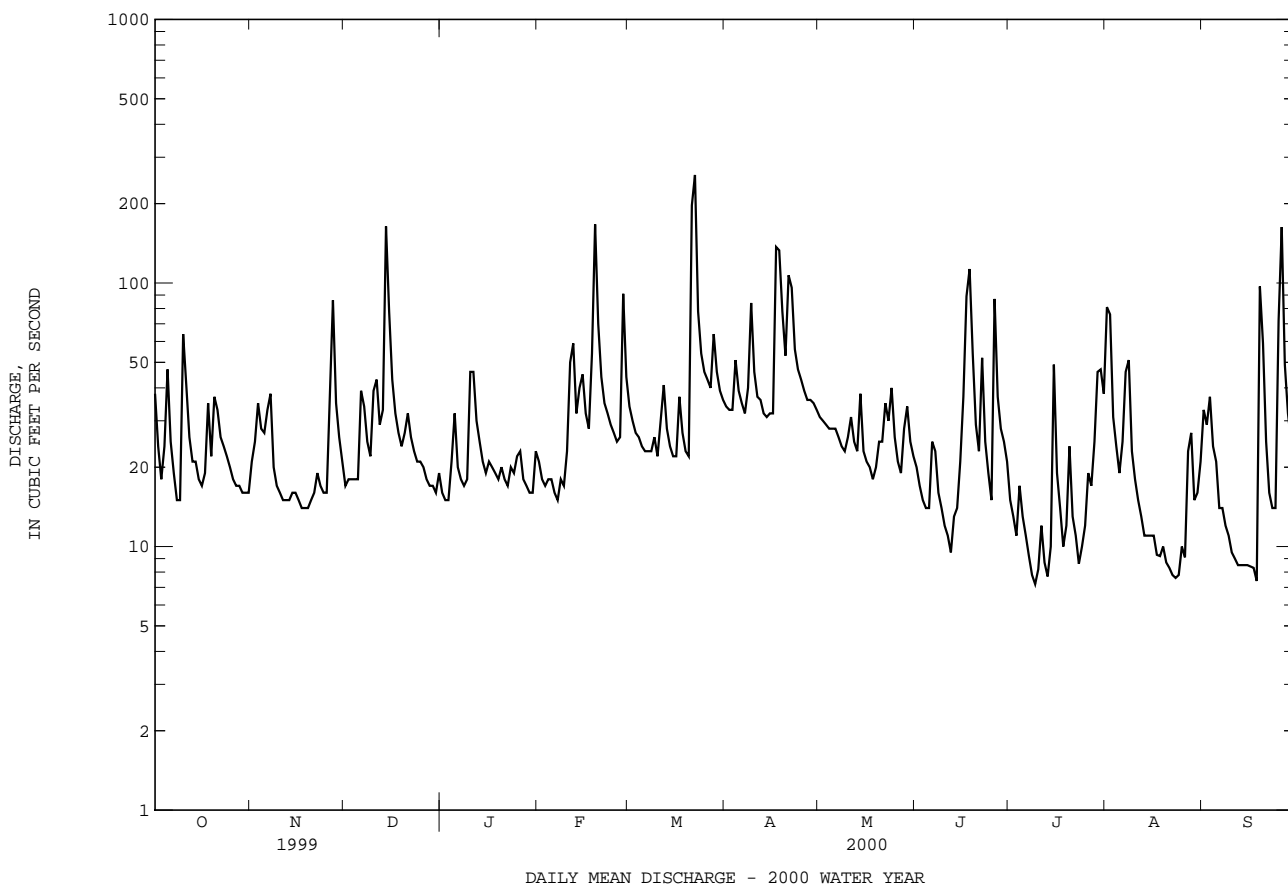




01591700 HAWLINGS RIVER NEAR SANDY SPRING, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1978 - 2000	
ANNUAL TOTAL	8788.65		10968.3		30.7	
ANNUAL MEAN	24.1		30.0		52.9	
HIGHEST ANNUAL MEAN					16.0	
LOWEST ANNUAL MEAN					1986	
HIGHEST DAILY MEAN	597	Sep 16	257	Mar 22	1840	Jan 19 1996
LOWEST DAILY MEAN	.29	Aug 13	7.2	Jul 9	.29	Aug 13 1999
ANNUAL SEVEN-DAY MINIMUM	.34	Aug 7	8.3	Sep 12	.34	Aug 7 1999
INSTANTANEOUS PEAK FLOW			545	Mar 21	(a)5180	Jan 19 1996
INSTANTANEOUS PEAK STAGE			4.00	Mar 21	9.24	Jan 19 1996
INSTANTANEOUS LOW FLOW			(b)5.3	Feb 9	.23	(c)
ANNUAL RUNOFF (CFSM)	.89		1.11		1.14	
ANNUAL RUNOFF (INCHES)	12.11		15.11		15.45	
10 PERCENT EXCEEDS	43		49		52	
50 PERCENT EXCEEDS	19		23		19	
90 PERCENT EXCEEDS	2.0		11		5.5	

- a From rating curve extended above 1,300 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow.
- b Result of freeze up.
- c Aug. 13, 14, 1999.



## PATUXENT RIVER BASIN

01592500 PATUXENT RIVER NEAR LAUREL, MD

LOCATION.--Lat 39°06'56", long 76°52'27", Prince Georges County, Hydrologic Unit 02060006, on right bank at Rocky Gorge pumping station, 600 ft downstream from T. Howard Duckett Reservoir, 0.7 mi upstream from Walker Branch, 1.3 mi northwest of Laurel, and 81 mi upstream from mouth.

DRAINAGE AREA.--132 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WDR MD-DE-78-1: 1976(M). WDR MD-DE-89-1: 1978(M), 1979(M).

GAGE.--Water-stage recorder. Datum of gage is 153.5 ft above sea level (levels by Washington Suburban Sanitary Commission). Prior to Oct. 1, 1955, water-stage recorder and concrete control at site 0.3 mi downstream at different datum. Oct. 1, 1955 to Sept. 30, 1956, nonrecording gage at present site at datum 1.2 ft lower. Oct. 1, 1956 to Jan. 27, 1957, nonrecording gage at present site and datum. Jan. 28, 1957 to May 3, 1972, water-stage recorder and concrete control at present site and datum. May 4, 1972 to Sept. 4, 1973, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Records do not include diversion at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Flow regulated by Triadelphia Reservoir, and since March 1954 by T. Howard Duckett Reservoir, combined usable capacity, 11,800,000,000 gal; dead storage, 80,000,000 gal. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 783 ft<sup>3</sup>/s, Mar 27, gage height, 7.22 ft; minimum discharge, 17 ft<sup>3</sup>/s, Feb 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	21	20	19	20	203	152	81	25	21	21
2	20	20	21	20	19	20	203	141	81	25	22	21
3	20	20	20	20	20	20	207	39	82	24	61	21
4	20	20	20	20	20	20	203	21	53	25	86	21
5	20	19	20	20	20	20	204	21	21	25	86	21
6	20	20	20	20	20	20	203	22	21	24	86	22
7	20	20	20	20	20	20	204	22	21	25	87	22
8	20	20	20	19	20	20	206	22	21	24	87	21
9	20	20	20	19	20	20	205	21	21	25	86	21
10	20	20	20	20	20	20	207	22	21	24	87	21
11	20	20	20	20	20	20	169	22	21	24	88	21
12	20	20	20	20	20	20	67	22	22	24	88	21
13	20	20	21	20	20	20	20	22	22	22	73	21
14	20	20	20	20	20	20	21	22	21	21	22	21
15	21	20	20	20	20	20	21	22	24	55	22	21
16	21	20	20	20	20	20	21	22	20	50	22	21
17	20	20	20	20	20	19	24	23	22	20	22	21
18	20	20	20	20	20	19	40	23	155	20	22	21
19	23	20	20	20	20	19	37	23	154	20	22	21
20	35	20	20	20	19	19	114	22	154	20	22	21
21	19	20	20	20	19	20	145	21	154	20	22	20
22	19	20	20	20	20	20	146	62	153	20	21	21
23	19	20	20	20	20	20	146	82	120	20	21	21
24	19	20	20	20	20	68	150	82	87	20	21	21
25	20	20	20	20	20	139	150	82	86	20	22	24
26	20	21	20	20	20	140	149	84	47	20	22	84
27	20	21	20	20	20	267	148	85	22	20	22	86
28	19	20	20	20	21	138	148	82	24	20	21	88
29	20	20	20	20	19	138	149	82	25	21	21	86
30	20	20	20	20	---	139	150	82	25	22	21	86
31	20	---	23	19	---	182	---	82	---	21	21	---
TOTAL	635	601	626	617	576	1667	4060	1532	1781	746	1347	959
MEAN	20.5	20.0	20.2	19.9	19.9	53.8	135	49.4	59.4	24.1	43.5	32.0
MAX	35	21	23	20	21	267	207	152	155	55	88	88
MIN	19	19	20	19	19	19	20	21	20	20	21	20
(†)	6990	6900	7880	8050	9230	10710	10750	10820	10590	10450	10020	10800
(‡)	82.0	66.8	66.4	73.3	86.8	90.2	85.9	70.8	73.3	72.8	74.3	73.4

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

	MEAN	44.2	49.1	77.2	103	115	136	139	111	85.2	58.6	49.2	63.7
MAX	379	272	457	480	462	557	444	397	822	280	226	587	
(WY)	1980	1953	1997	1978	1979	1993	1952	1989	1972	1945	1971	1979	
MIN	7.76	7.21	8.45	7.84	7.92	7.88	7.47	9.04	7.88	7.81	5.72	4.91	
(WY)	1968	1985	1966	1966	1966	1966	1966	1985	1967	1967	1966	1966	

† Combined month-end total contents, in millions of gallons, in Tridelphia and T. Howard Duckett Reservoirs (contents on Sept. 30, 1999, 8,250,000,000 gal). Records provided by Washington Suburban Sanitary Commission.

‡ Diversions, in cubic feet per second, upstream from station at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Records provided by Washington Suburban Sanitary Commission.

01592500 PATUXENT RIVER NEAR LAUREL, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1945 - 2000	
ANNUAL TOTAL	7338		15147			
ANNUAL MEAN	20.1		41.4		85.9	
ANNUAL MEAN†	76.5		118			
HIGHEST ANNUAL MEAN					241	1972
LOWEST ANNUAL MEAN					9.09	1966
HIGHEST DAILY MEAN	104	Sep 16	267	Mar 27	13000	Jun 22 1972
LOWEST DAILY MEAN	17	Mar 22	19	(a)	1.1	Jun 26 1956
ANNUAL SEVEN-DAY MINIMUM	18	Jan 15	19	Oct 21	3.7	Aug 29 1966
INSTANTANEOUS PEAK FLOW			783	Mar 27	(b)26000	Jun 22 1972
INSTANTANEOUS PEAK STAGE			7.22	Mar 27	(c)25.00	Jun 22 1972
INSTANTANEOUS LOW FLOW			17	Feb 28	(d).05	Jul 18 1985
ANNUAL RUNOFF (CFSM)	.15		.31		.65	
ANNUAL RUNOFF (INCHES)	2.07		4.27		8.84	
10 PERCENT EXCEEDS	21		116		190	
50 PERCENT EXCEEDS	20		21		22	
90 PERCENT EXCEEDS	18		20		12	

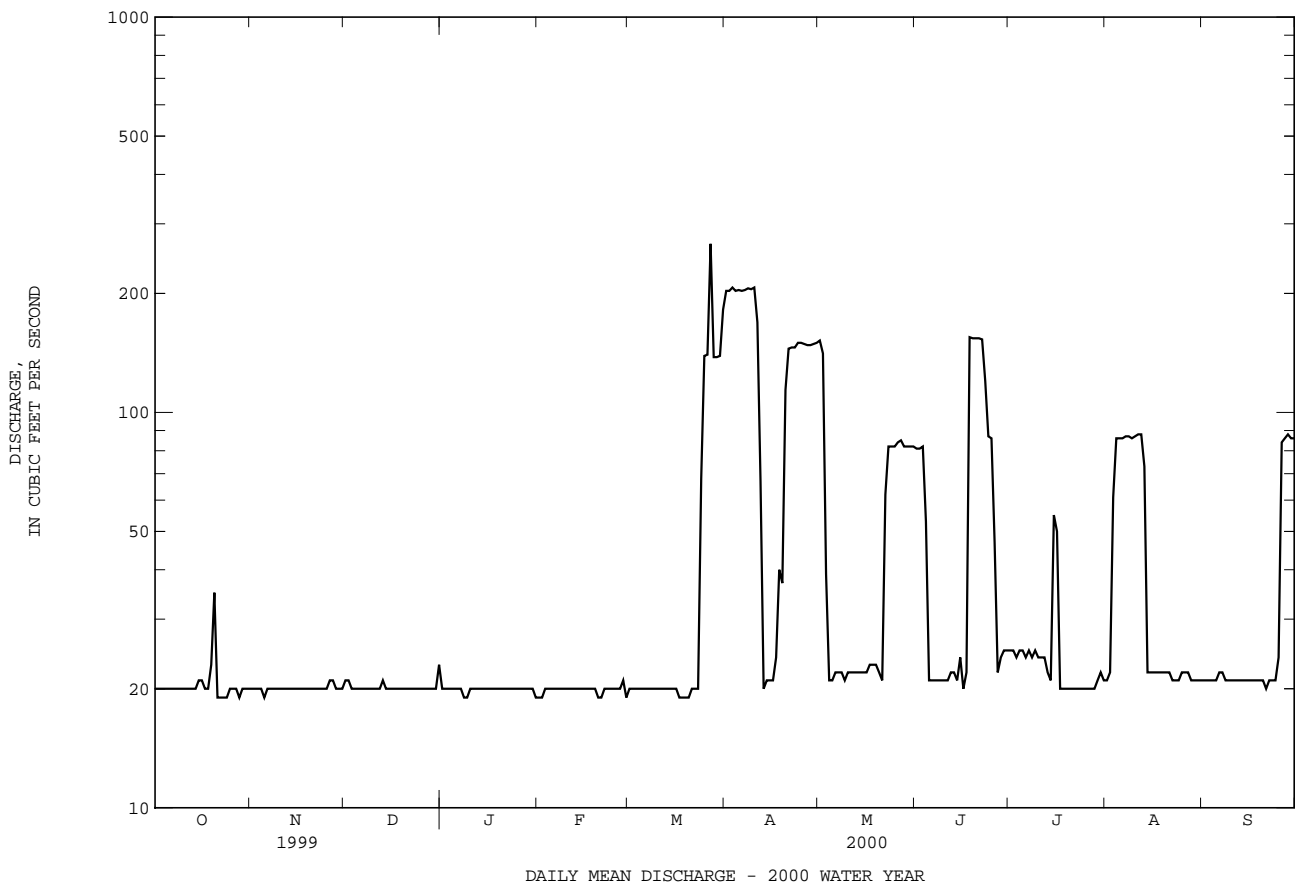
† Adjusted for diversions.

a Oct. 21-24, 26, Nov. 5, Jan. 8, 9, 31, Feb. 1, 2, 20, 21, 29, Mar. 17-20.

b From rating curve extended above 6,600 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.

c From floodmarks.

d Valve closed for repair.





01593500 LITTLE PATUXENT RIVER AT GUILFORD, MD--Continued

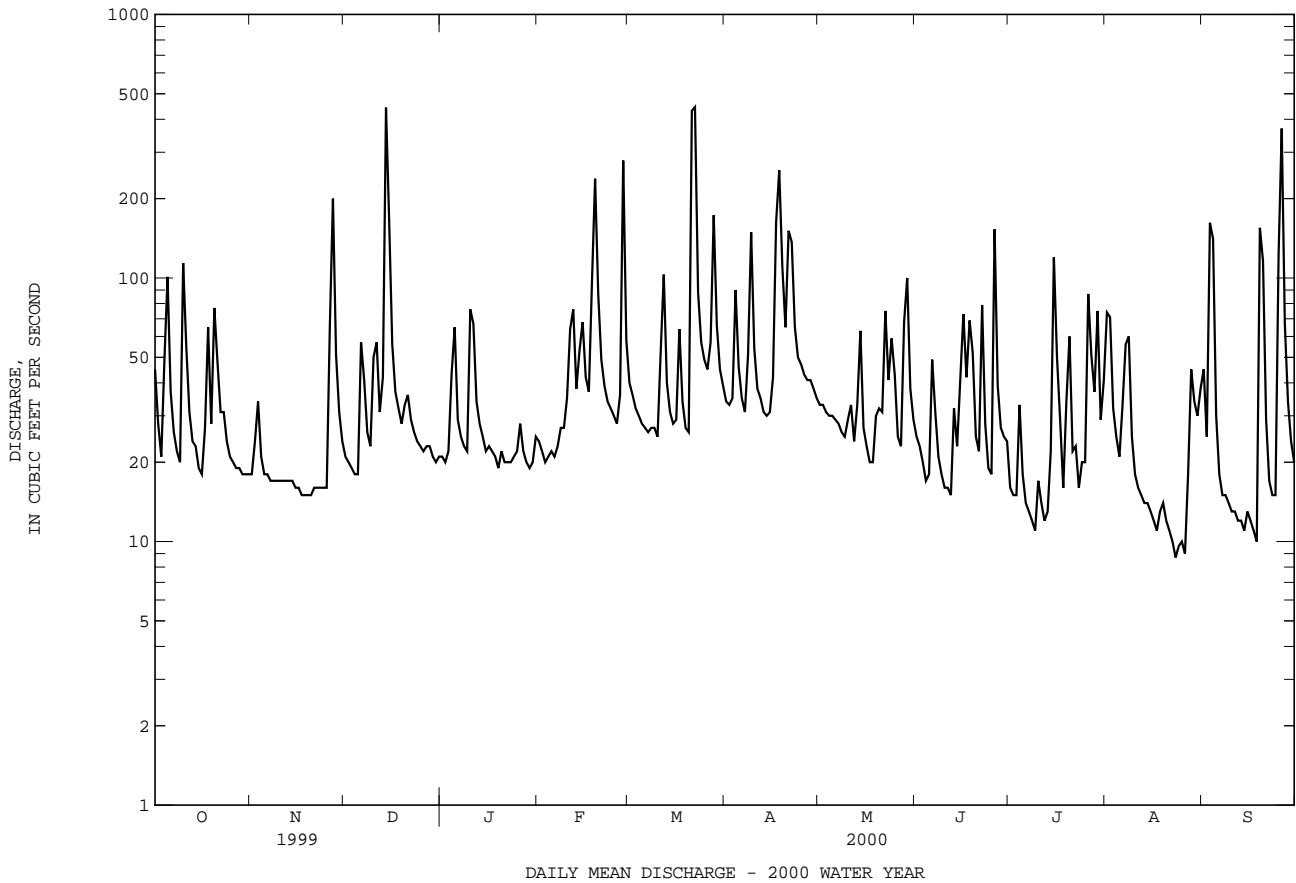
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	13999.8		15596.3			
ANNUAL MEAN	38.4		42.6		43.9	
HIGHEST ANNUAL MEAN					93.7	1972
LOWEST ANNUAL MEAN					23.3	1947
HIGHEST DAILY MEAN	1320	Sep 16	445	Mar 22	4680	Jun 22 1972
LOWEST DAILY MEAN	(e)1.1	Aug 19	8.7	Aug 23	.00	Sep 8 1966
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 13	10	Aug 20	.73	Sep 6 1966
INSTANTANEOUS PEAK FLOW			934	Mar 21	(a)12400	Jun 22 1972
INSTANTANEOUS PEAK STAGE			6.70	Mar 21	(b)18.38	Jun 22 1972
INSTANTANEOUS LOW FLOW			8.4	Aug 26	.00	(c)
ANNUAL RUNOFF (CFSM)	1.01		1.12		1.16	
ANNUAL RUNOFF (INCHES)	13.71		15.27		15.70	
10 PERCENT EXCEEDS	67		75		72	
50 PERCENT EXCEEDS	21		28		26	
90 PERCENT EXCEEDS	4.8		15		10	

e Estimated.

a From rating curve extended above 1,800 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 13.26 ft and contracted-opening and flow-over-embankment measurement at gage height 18.38 ft.

b From high-water mark in well.

c Sept. 6-12, 1966.

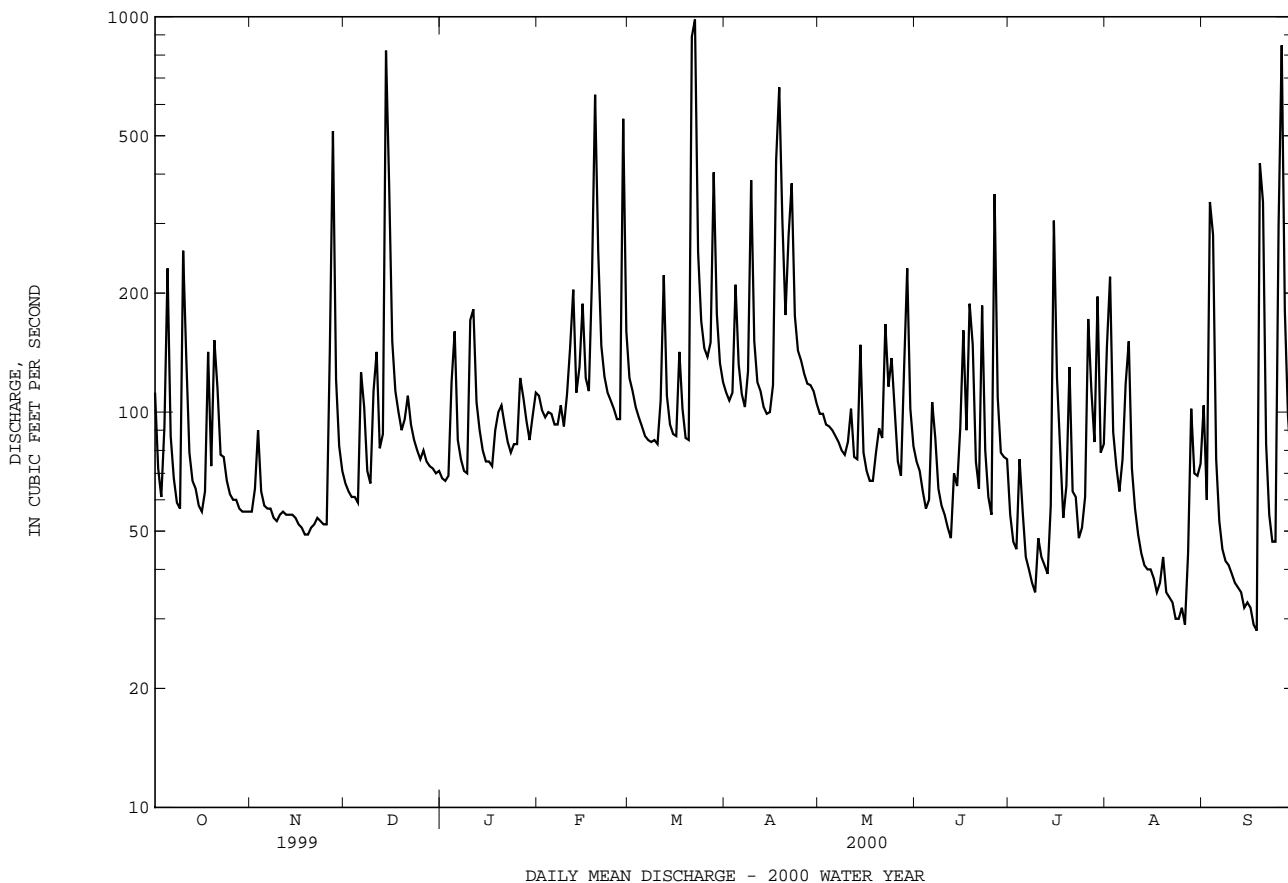




01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS	
					1940 - 1958	
					1976 - 1980	
					1985 - 2000	
ANNUAL TOTAL	33786.4		41704		111	
ANNUAL MEAN	92.6		114		196	
HIGHEST ANNUAL MEAN					59.3	1979
LOWEST ANNUAL MEAN						1942
HIGHEST DAILY MEAN	3230	Sep 16	984	Mar 22	5250	Sep 6 1979
LOWEST DAILY MEAN	2.9	Aug 19	28	Sep 18	2.9	Aug 19 1999
ANNUAL SEVEN-DAY MINIMUM	4.1	Aug 13	32	Aug 20	4.1	Aug 13 1999
INSTANTANEOUS PEAK FLOW			2330	Mar 21	(a)35400	Jun 22 1972
INSTANTANEOUS PEAK STAGE			9.20	Mar 21	(b)25.40	Jun 22 1972
INSTANTANEOUS LOW FLOW			28	(c)	1.6	Aug 26 1944
ANNUAL RUNOFF (CFSM)	.94		1.16		1.12	
ANNUAL RUNOFF (INCHES)	12.77		15.77		15.27	
10 PERCENT EXCEEDS	150		183		188	
50 PERCENT EXCEEDS	62		84		73	
90 PERCENT EXCEEDS	11		46		27	

a From rating curve extended above 11,000 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.  
 b From floodmarks.  
 c Aug. 27, Sept. 18, 19.





## PATUXENT RIVER BASIN

01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969, 1985-92, October 1992 to current year.

REMARKS.--Chemical analyses were performed at the Maryland Department of Health and Mental Hygiene laboratory (DHMH), Baltimore, MD.

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

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT										
04...	2245	ENVIRONMENTAL	182	--	--	--	--	40	--	--
05...	1100	ENVIRONMENTAL	240	--	--	--	--	50	--	--
20...	1815	ENVIRONMENTAL	--	--	--	--	--	23	--	--
28...	1115	ENVIRONMENTAL	49	313	7.6	17.0	9.0	.6	11.9	104
NOV										
18...	1245	ENVIRONMENTAL	49	309	7.9	7.0	5.0	1.2	13.8	109
DEC										
09...	1145	ENVIRONMENTAL	65	288	7.6	10.5	5.5	2.4	13.2	105
JAN										
04...	1800	ENVIRONMENTAL	173	--	--	--	--	40	--	--
05...	1215	ENVIRONMENTAL	144	--	--	--	--	14	--	--
10...	1400	ENVIRONMENTAL	187	--	--	--	--	19	--	--
11...	0300	ENVIRONMENTAL	275	--	--	--	--	53	--	--
13...	1145	ENVIRONMENTAL	91	286	7.6	12.0	5.0	2.8	13.1	102
FEB										
17...	1200	ENVIRONMENTAL	112	--	7.4	2.5	4.5	2.6	14.0	109
MAR										
21...	1115	ENVIRONMENTAL	237	--	--	--	--	94	--	--
21...	1430	ENVIRONMENTAL	1120	--	--	--	--	290	--	--
29...	1200	ENVIRONMENTAL	173	272	7.4	14.0	11.0	9.0	10.8	98
APR										
20...	1215	ENVIRONMENTAL	175	263	7.6	18.0	14.5	5.1	9.8	97
MAY										
04...	1000	ENVIRONMENTAL	91	290	8.0	21.5	16.0	2.3	9.2	93
JUN										
28...	1300	ENVIRONMENTAL	77	268	7.0	24.5	23.0	5.8	--	--
JUL										
12...	1229	BLANK	--	--	--	--	--	<.5	--	--
12...	1230	ENVIRONMENTAL	41	283	8.1	25.0	24.5	2.3	9.0	109
SEP										
28...	1500	ENVIRONMENTAL	93	--	7.0	21.0	16.0	4.6	10.1	102

&lt; Actual value is known to be less than the value shown.

01594000 LITTLE PATUXENT RIVER AT SAVAGE, MD--Continued

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

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	ANC WATER UNPLTRD IT FIELD (MG/L AS CACO3) (00419)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
04...	20	--	--	10.1	79	1.9	1.22	.009	1.23	.65
05...	19	--	--	10.9	66	1.7	1.13	.008	1.14	.61
20...	20	--	--	10.1	28	1.6	1.03	.008	1.03	.54
28...	12	<.7	65	14.5	<1	2.0	1.80	.004	1.81	.24
NOV										
18...	8	<1.4	63	11.6	<1	1.3	1.11	.005	1.12	.18
DEC										
09...	<10	<.8	57	13.7	4	1.9	1.66	.007	1.66	.23
JAN										
04...	<10	--	--	9.3	54	2.0	1.38	.009	1.39	.65
05...	<10	--	--	12.0	20	2.2	1.83	.009	1.84	.39
10...	<10	--	--	11.2	29	2.2	1.71	.007	1.72	.47
11...	13	--	--	10.9	65	2.5	1.78	.008	1.79	.67
13...	<10	<.0	50	14.6	3	1.8	1.57	.005	1.58	.22
FEB										
17...	<10	<.1	50	13.8	3	1.5	1.29	.007	1.30	.23
MAR										
21...	44	--	--	6.5	138	2.4	1.17	.015	1.19	1.2
21...	63	--	--	5.6	577	3.1	.835	.009	.844	2.2
29...	<10	<.8	48	11.9	9	1.7	1.33	.006	1.33	.36
APR										
20...	11	<1.3	--	16.4	6	1.7	1.35	.007	1.35	.37
MAY										
04...	<10	<.3	58	6.9	3	1.8	1.56	.012	1.57	.20
JUN										
28...	<10	<1.0	56	13.1	6	1.7	1.25	.010	1.26	.40
JUL										
12...	<10	<.7	--	<.1	<1	--	--	<.001	<.001	<.01
12...	14	<.7	58	13.1	<1	1.8	1.51	.008	1.51	.25
SEP										
28...	<10	<1.7	58	14.0	8	1.6	1.32	.004	1.32	.31

DATE	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT											
04...	.29	1.5	.64	.28	.132	.027	.018	4.0	3.7	76	37
05...	.34	1.5	.60	.33	.137	.025	.021	4.4	4.2	72	47
20...	.29	1.3	.53	.28	.004	.012	.007	5.4	4.6	35	--
28...	.20	2.0	--	--	.016	.010	<.002	2.7	2.7	2	.24
NOV											
18...	.13	1.2	--	--	.021	.004	<.002	2.2	2.2	1	.08
DEC											
09...	.17	1.8	.22	.16	.016	.010	<.002	4.2	4.1	1	.21
JAN											
04...	.31	1.7	.62	.28	.104	.041	.026	3.7	3.6	62	29
05...	.29	2.1	.37	.27	.042	.016	.009	3.2	3.0	30	12
10...	.28	2.0	.44	.25	.063	.027	.014	5.1	4.8	41	21
11...	.23	2.0	.64	.20	.119	.015	.010	5.3	4.8	73	54
13...	.10	1.7	--	--	.022	.012	<.003	2.5	2.5	4	1.1
FEB											
17...	.23	1.5	--	--	.011	<.004	.004	2.5	2.4	2	.73
MAR											
21...	.33	1.5	1.1	.27	.200	.056	.031	4.8	3.8	138	88
21...	.34	1.2	2.2	.28	.512	.022	.016	5.2	4.0	670	2030
29...	.24	1.6	.35	.23	.040	.015	.009	3.5	3.5	8	3.8
APR											
20...	.28	1.6	.36	.27	.032	.012	.007	3.1	3.0	8	3.9
MAY											
04...	.21	1.8	.19	.20	.020	.015	.005	2.3	2.3	7	1.7
JUN											
28...	.34	1.6	.34	.28	.048	.025	.019	4.0	3.9	10	2.0
JUL											
12...	<.01	--	--	--	<.004	<.000	<.002	.88	.69	M	--
12...	.22	1.7	.24	.21	.031	.023	.011	2.8	2.7	6	.64
SEP											
28...	.28	1.6	.29	.26	.043	.024	.018	3.5	3.3	5	1.2

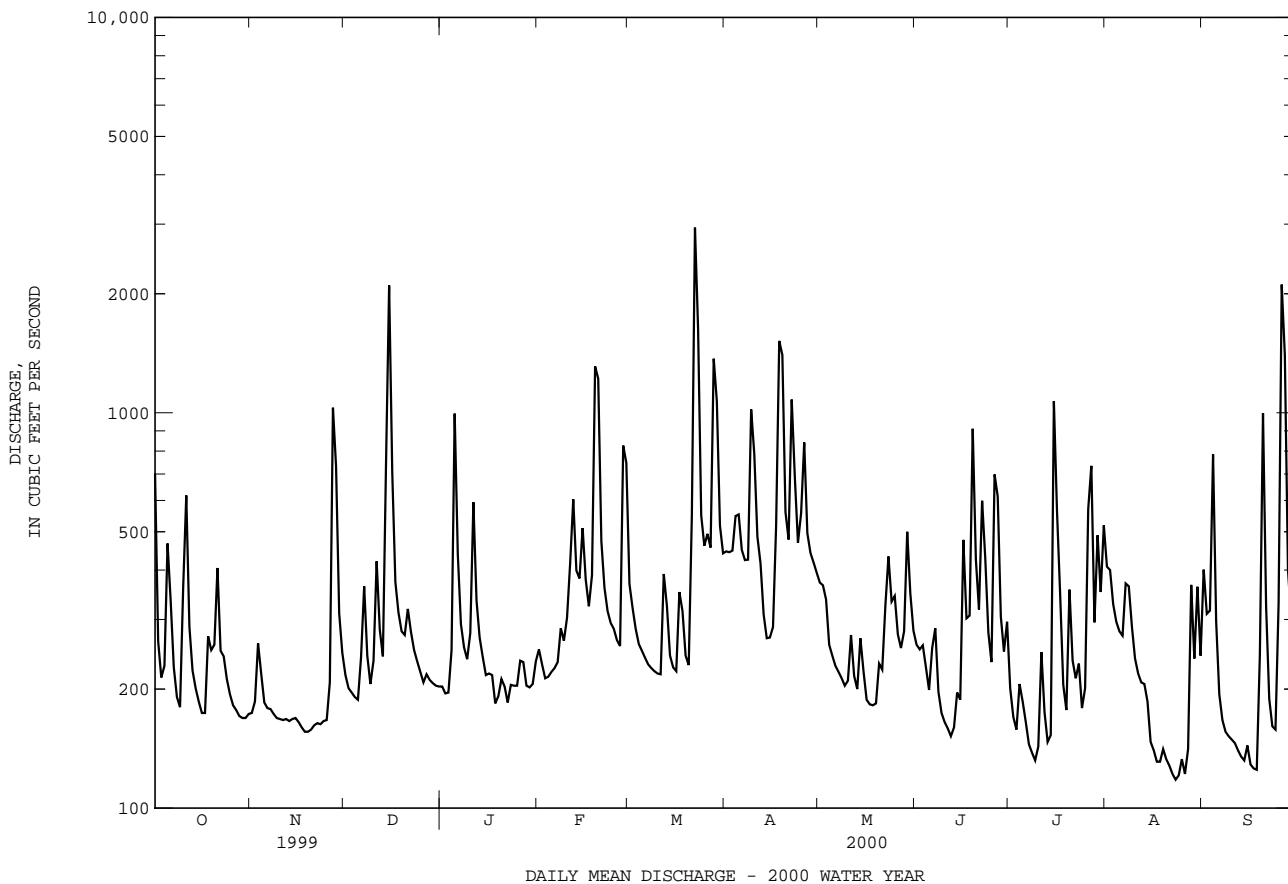
< Actual value is known to be less than the value shown.  
M Presence of material verified but not quantified.



01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1977 - 2000	
ANNUAL TOTAL	103827		124405			
ANNUAL MEAN	284		340		377	
HIGHEST ANNUAL MEAN					637 1979	
LOWEST ANNUAL MEAN					175 1981	
HIGHEST DAILY MEAN	7110	Sep 17	2940	Mar 22	8860	Jan 27 1978
LOWEST DAILY MEAN	(e)70	(a)	118	Aug 23	56	(b)
ANNUAL SEVEN-DAY MINIMUM	72	Aug 7	125	Aug 20	57	Sep 15 1986
INSTANTANEOUS PEAK FLOW			3640	Mar 22	(c)31100	Jun 22 1972
INSTANTANEOUS PEAK STAGE			11.90	Mar 22	(d)27.90	Jun 22 1972
INSTANTANEOUS LOW FLOW			114	(f)	32	Aug 9 1966
ANNUAL RUNOFF (CFSM)	.82		.98		1.08	
ANNUAL RUNOFF (INCHES)	11.10		13.30		14.74	
10 PERCENT EXCEEDS	467		566		779	
50 PERCENT EXCEEDS	191		244		222	
90 PERCENT EXCEEDS	95		159		102	

e Estimated.  
a Aug. 7-9.  
b Sept. 17-19, 1986.  
c On basis of contracted-opening measurement of peak flow.  
d From floodmarks.  
f Aug. 23, 24.



PATUXENT RIVER BASIN

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978-80, 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1977 to September 1980, October 1984 to September 1991.

WATER TEMPERATURE: December 1977 to September 1980, October 1984 to September 1991.

SUSPENDED-SEDIMENT DISCHARGE: October 1985 to September 1991.

REMARKS.--Water-quality samples are collected from bridge on Governor Bridge Road located 0.3 mi downstream from U.S. Highway 50 (John Hanson Highway). On May 6 and Nov. 16, 1994 samples were collected and analyzed using ultraclean methodologies. Data on trace metals for these dates are available from the University of Delaware. Data on organics for these dates are available from George Mason University.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1985-91): Maximum daily, 954 microsiemens, Dec. 15, 1989; minimum daily, 100 microsiemens, May 7, 1989.

WATER TEMPERATURE (water years 1985-91): Maximum daily, 29.0°C, July 25, 1987; minimum daily, 0.0°C, on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 700 mg/L, June 3, 1985; minimum daily mean, 1 mg/L, Jan. 22, 1990.

SEDIMENT LOAD: Maximum daily, 4,050 tons, May 7, 1989; minimum daily, 0.55 ton, Jan. 22, 1990.

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-AITURE AIR (DEG C) (00020)	TEMPER-AITURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)
OCT										
08...	0945	ENVIRONMENTAL	187	295	7.6	15.0	14.0	773	8.8	84
NOV										
03...	1000	ENVIRONMENTAL	266	303	7.5	10.0	14.0	755	6.9	68
30...	1100	ENVIRONMENTAL	244	276	7.5	4.0	7.5	774	10.3	85
JAN										
05...	1415	ENVIRONMENTAL	1240	186	7.3	6.5	9.5	768	9.5	83
FEB										
03...	1530	ENVIRONMENTAL	215	901	7.4	3.8	1.7	756	13.6	99
19...	1045	ENVIRONMENTAL	1360	--	7.3	11.5	3.0	758	12.8	--
MAR										
03...	1115	ENVIRONMENTAL	282	339	7.6	8.5	7.7	760	10.9	92
22...	1330	ENVIRONMENTAL	3450	195	7.2	7.5	6.8	770	11.6	94
APR										
07...	1345	ENVIRONMENTAL	424	--	7.4	27.0	14.5	759	10.1	--
18...	1130	ENVIRONMENTAL	1570	203	7.2	8.5	12.0	760	9.6	89
18...	1131	REPLICATE	--	--	--	--	--	--	--	--
MAY										
03...	1315	ENVIRONMENTAL	343	245	7.2	25.0	16.0	768	9.7	98
JUN										
09...	1029	BLANK	--	--	--	--	--	--	--	--
09...	1030	ENVIRONMENTAL	172	301	7.4	29.0	19.2	764	7.9	85
09...	1031	REPLICATE	--	--	--	--	--	--	--	--
19...	1400	ENVIRONMENTAL	1210	174	7.1	22.0	22.4	763	7.3	84
22...	1200	ENVIRONMENTAL	643	211	7.4	26.5	21.7	757	7.8	90
JUL										
06...	1100	ENVIRONMENTAL	167	272	7.4	26.0	22.4	759	7.6	88
06...	1101	REPLICATE	--	--	--	--	--	--	--	--
27...	0800	ENVIRONMENTAL	949	194	7.2	21.5	20.3	764	7.3	80
AUG										
02...	1029	BLANK	--	--	--	--	--	--	--	--
02...	1030	ENVIRONMENTAL	376	225	7.6	28.0	23.5	762	7.0	83
28...	1215	ENVIRONMENTAL	389	195	7.5	26.5	21.5	762	7.1	81
28...	1216	REPLICATE	--	--	--	--	--	--	--	--
SEP										
06...	1145	ENVIRONMENTAL	194	249	7.6	21.0	18.9	772	7.8	82
20...	1015	ENVIRONMENTAL	1170	170	7.3	25.0	17.8	760	7.9	83
26...	1145	ENVIRONMENTAL	2060	155	7.2	12.0	14.6	759	8.6	85

PATUXENT RIVER BASIN

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

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

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)
OCT											
08...	52	64	11.1	--	1.7	1.29	.010	1.30	.067	.44	.39
NOV											
03...	56	69	10.3	--	1.6	--	<.010	1.12	<.020	.44	.29
30...	--	--	10.8	--	1.6	--	<.010	1.16	.102	.48	.45
JAN											
05...	--	--	6.6	--	1.4	.660	.028	.688	.101	.71	.40
FEB											
03...	42	51	11.1	--	2.5	1.72	.095	1.82	.286	.70	.61
19...	--	--	6.6	--	1.7	.953	.045	.998	.329	.74	.73
MAR											
03...	44	54	10.1	--	1.9	1.44	.028	1.47	.139	.45	.38
22...	--	--	5.0	--	1.5	.610	.010	.620	.085	.91	.41
APR											
07...	--	--	7.0	8	1.6	--	<.010	1.22	.044	.40	.31
18...	34	41	6.1	72	1.6	.696	.010	.706	.074	.91	.49
18...	--	--	--	65	1.5	.693	.010	.703	.076	.80	.50
MAY											
03...	41	50	8.7	9	1.5	1.17	.010	1.18	.079	.34	.34
JUN											
09...	--	--	<.1	<10	--	--	<.010	<.050	<.020	<.10	<.10
09...	50	62	9.8	12	2.0	1.48	.018	1.49	.067	.50	.38
09...	--	--	10.0	10	2.0	1.47	.019	1.49	.068	.50	.40
19...	29	35	6.1	64	1.5	.716	.016	.732	.071	.73	.39
22...	38	46	7.9	91	1.8	--	<.010	1.12	.065	.65	.39
JUL											
06...	49	60	9.3	16	--	--	<.010	1.27	.048	--	.33
06...	--	--	9.5	18	--	--	<.010	1.27	.054	--	.34
27...	36	44	7.3	59	1.2	--	<.010	.635	.055	.60	.41
AUG											
02...	--	--	<.1	<10	--	--	<.010	<.050	<.020	<.10	<.10
02...	44	54	9.7	43	1.5	--	<.010	.901	.065	.59	.38
28...	34	41	5.6	93	1.6	.769	.013	.782	.073	.82	.40
28...	--	--	5.5	97	1.5	.770	.014	.784	.073	.77	.35
SEP											
06...	49	60	10.5	13	1.7	1.08	.013	1.09	.090	.61	.48
20...	--	--	6.2	113	1.9	.898	.010	.908	.046	1.0	.36
26...	--	--	5.4	86	1.4	--	<.010	.598	.046	.76	.39

< Actual value is known to be less than the value shown.

## PATUXENT RIVER BASIN

01594440 PATUXENT RIVER NEAR BOWIE, MD--Continued

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

DATE	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
08...	1.7	.37	.32	.079	.035	.024	5.1	6	2.9	--
NOV										
03...	1.4	--	--	.086	.019	<.010	6.2	14	10	--
30...	1.6	.38	.35	.066	.028	.019	5.2	7	4.7	--
JAN										
05...	1.1	.61	.29	.162	.024	.013	17	78	260	92
FEB										
03...	2.4	.42	.32	.067	.016	<.010	3.4	3	1.6	--
19...	1.7	.41	.40	.199	.020	.015	7.3	114	417	89
MAR										
03...	1.8	.31	.24	.056	.021	.012	4.6	7	5.6	--
22...	1.0	.83	.32	.237	.023	.019	9.3	150	1390	--
APR										
07...	1.5	.36	.27	.052	.020	.012	4.2	11	13	--
18...	1.2	.83	.42	E.004	.028	.014	10	89	378	78
18...	1.2	.73	.42	.038	.025	.014	12	85	--	87
MAY										
03...	1.5	.26	.27	.066	.021	.018	4.5	15	14	--
JUN										
09...	--	--	--	<.008	<.006	<.010	<.27	<1	--	--
09...	1.9	.43	.32	.114	.055	.031	5.4	12	5.7	--
09...	1.9	.43	.33	.114	.055	.037	4.8	12	--	--
19...	1.1	.65	.32	.269	.046	.031	11	143	467	--
22...	1.5	.59	.32	.247	.038	.031	9.6	119	207	--
JUL										
06...	1.6	--	.28	.122	.050	.040	5.0	19	8.6	--
06...	1.6	--	.28	.120	.053	.043	5.3	18	--	--
27...	1.0	.54	.36	.161	.037	.021	9.0	65	166	--
AUG										
02...	--	--	--	<.008	<.006	<.010	<.27	<1	--	--
02...	1.3	.53	.31	.132	.039	.023	7.5	45	45	--
28...	1.2	.75	.32	.254	.054	.042	7.9	97	102	--
28...	1.1	.69	.28	.249	.053	.036	9.0	98	--	--
SEP										
06...	1.6	.52	.39	.204	.096	.088	5.7	18	9.2	--
20...	1.3	.95	.32	.506	.043	.029	14	319	1010	81
26...	.99	.71	.34	.262	.039	.026	10	127	708	72

E Estimated value.

&lt; Actual value is known to be less than the value shown.

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## PATUXENT RIVER BASIN

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD

LOCATION.--Lat 38°48'50", long 76°44'50", Prince Georges County, Hydrologic Unit 02060006, on left bank 1000 ft upstream from bridge on Water Street, 0.2 mi south of Upper Marlboro, and 4.7 mi upstream from mouth.

DRAINAGE AREA.--89.7 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1985 to April 1989, April 1992 to current year.

GAGE.--Water-stage recorder elevation of gage is 5 ft above sea level, from topographic map.

REMARKS.--Water-discharge records good except those for estimated daily discharges (ice effect), which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jul 15	1545	1,010	8.92	Sep 26	1215	*1,280	*10.11

Minimum discharge 16 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	28	46	37	122	95	90	75	34	59	227	108
2	71	43	41	36	89	80	83	71	39	36	108	334
3	47	92	39	36	75	67	81	63	80	76	122	352
4	59	43	37	84	69	61	167	57	30	590	104	340
5	71	33	35	489	68	58	117	55	26	102	100	227
6	47	31	69	146	74	52	86	50	71	56	136	94
7	37	29	77	88	71	52	75	45	53	38	205	63
8	32	28	47	69	113	50	86	41	31	30	225	51
9	30	28	41	62	99	50	410	37	25	25	86	42
10	137	28	89	103	131	48	161	55	21	23	63	36
11	126	28	128	128	202	51	104	111	19	25	59	33
12	65	27	72	78	234	94	88	46	17	22	40	31
13	45	28	55	62	126	64	72	42	18	19	48	27
14	36	28	395	50	171	51	67	81	19	21	45	25
15	31	27	457	44	254	47	71	35	21	695	37	121
16	29	26	147	46	130	47	78	29	201	336	32	39
17	30	24	92	44	99	138	222	26	179	446	27	26
18	56	24	72	38	208	80	440	25	322	105	27	22
19	35	24	60	41	487	59	310	25	148	61	30	125
20	124	24	65	44	240	52	148	48	67	133	25	157
21	111	25	96	e49	126	341	130	44	43	70	22	60
22	62	26	80	e44	99	903	171	173	418	46	19	34
23	71	27	63	37	87	338	113	118	129	54	18	27
24	47	28	54	38	80	159	91	65	63	52	18	27
25	38	32	47	e44	75	133	248	76	41	60	23	225
26	34	80	44	e92	68	178	459	44	86	396	18	1100
27	31	535	45	59	65	148	174	36	47	310	59	404
28	29	172	43	49	244	579	125	47	40	114	306	129
29	28	79	41	48	143	245	103	144	56	183	96	84
30	28	56	39	53	---	132	86	60	225	168	104	64
31	28	---	39	120	---	105	---	41	---	664	80	---
TOTAL	1764	1703	2655	2358	4049	4557	4656	1865	2569	5015	2509	4407
MEAN	56.9	56.8	85.6	76.1	140	147	155	60.2	85.6	162	80.9	147
MAX	149	535	457	489	487	903	459	173	418	695	306	1100
MIN	28	24	35	36	65	47	67	25	17	19	18	22
CFSM	.63	.63	.95	.85	1.56	1.64	1.73	.67	.95	1.80	.90	1.64
IN.	.73	.71	1.10	.98	1.68	1.89	1.93	.77	1.07	2.08	1.04	1.83

e Estimated

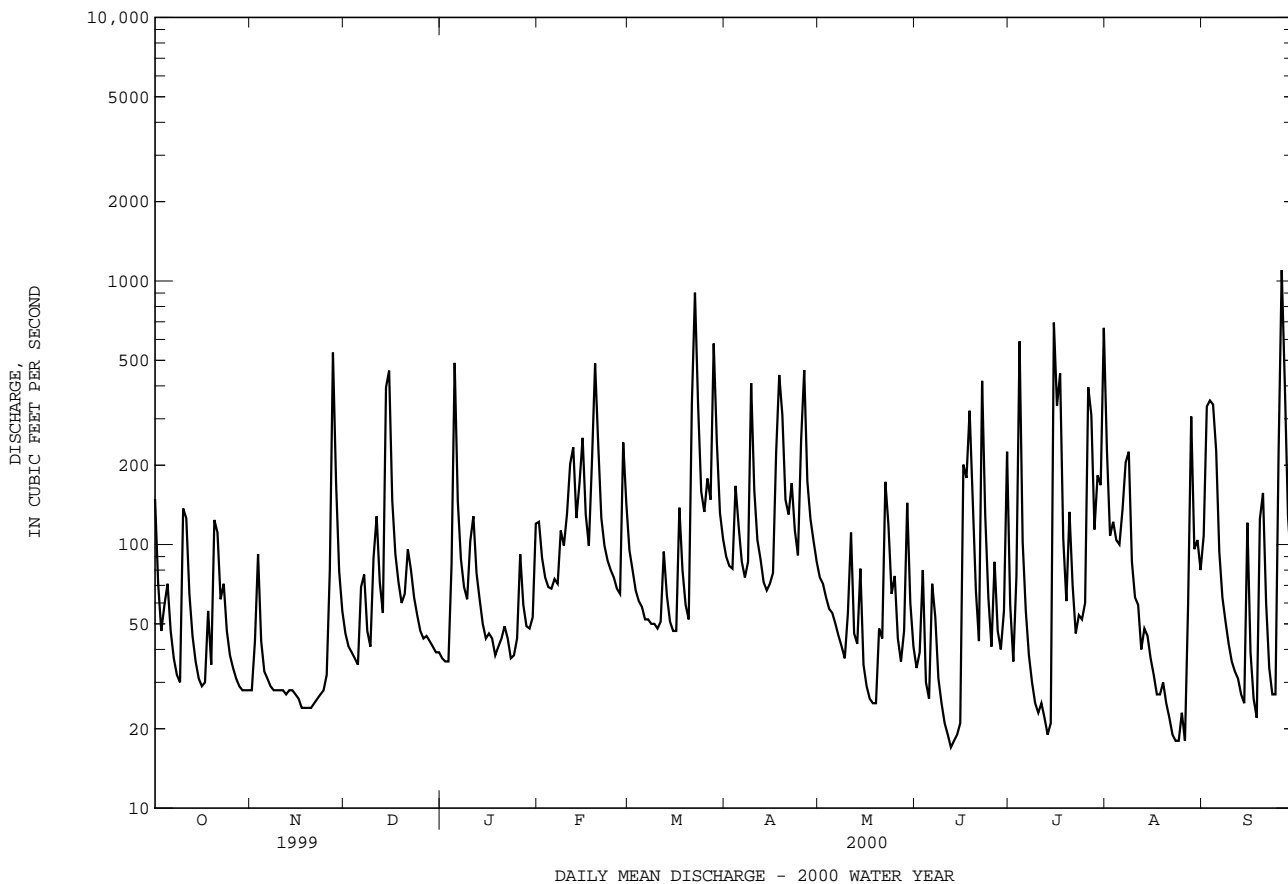
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1989, 1992 - 2000, BY WATER YEAR (WY)

	1986	1987	1988	1989	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	49.3	87.3	95.1	127	141	189	114	85.8	52.3	52.6	45.0	68.7
MAX	145	178	261	260	333	445	191	164	118	162	95.5	322
(WY)	1996	1998	1997	1996	1998	1994	1993	1996	1996	2000	1994	1999
MIN	6.54	11.0	24.5	54.5	59.0	76.8	49.1	21.4	9.42	5.61	9.74	9.35
(WY)	1999	1999	1999	1986	1999	1986	1995	1999	1986	1999	1995	1986

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 1989 1992 - 2000	
ANNUAL TOTAL	29947.9		38107		94.5	
ANNUAL MEAN	82.0		104		133	
HIGHEST ANNUAL MEAN					54.8	
LOWEST ANNUAL MEAN					1996	
HIGHEST DAILY MEAN	4090	Sep 16	1100	Sep 26	4090	Sep 16 1999
LOWEST DAILY MEAN	1.2	Aug 7	17	Jun 12	1.2	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 4	20	Jun 9	1.4	Aug 4 1999
INSTANTANEOUS PEAK FLOW			1280	Sep 26	(a)10400	Sep 16 1999
INSTANTANEOUS PEAK STAGE			10.11	Sep 26	15.39	Sep 16 1999
INSTANTANEOUS LOW FLOW			16	Aug 27	1.1	(b)
ANNUAL RUNOFF (CFSM)	.91		1.16		1.05	
ANNUAL RUNOFF (INCHES)	12.42		15.80		14.32	
10 PERCENT EXCEEDS	129		226		191	
50 PERCENT EXCEEDS	37		62		50	
90 PERCENT EXCEEDS	5.3		27		9.5	

a From rating curve extended above 2,400 ft<sup>3</sup>/s.  
 b Aug. 07, 10, 11, 14, 1999.



## PATUXENT RIVER BASIN

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

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

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT											
14...	0945	ENVIRONMENTAL	38	280	7.6	13.5	15.0	761	--	8.6	85
20...	1415	*ENVIRONMENTAL	150	--	--	--	--	--	32	--	--
26...	1030	ENVIRONMENTAL	34	291	7.6	17.0	11.0	764	--	10.2	92
28...	0829	*BLANK	--	--	--	--	--	--	<.5	--	--
28...	0830	*ENVIRONMENTAL	30	316	6.9	12.5	9.0	--	6.5	9.5	83
NOV											
02...	2330	*ENVIRONMENTAL	148	--	--	--	--	--	30	--	--
10...	1100	ENVIRONMENTAL	28	308	7.4	24.0	11.5	762	--	10.2	94
10...	1101	REPLICATE	--	--	--	--	--	--	--	--	--
18...	0930	*ENVIRONMENTAL	24	345	7.2	7.0	5.0	--	7.2	11.3	88
DEC											
07...	1030	ENVIRONMENTAL	77	264	7.4	8.5	9.0	765	--	10.0	86
09...	1415	*ENVIRONMENTAL	40	300	7.1	12.5	6.5	--	7.1	11.8	96
22...	0915	ENVIRONMENTAL	80	258	7.4	6.0	6.0	768	--	--	--
JAN											
11...	1245	ENVIRONMENTAL	119	222	6.6	10.5	6.5	753	--	11.3	93
13...	1345	*ENVIRONMENTAL	64	277	7.1	14.0	6.0	--	9.8	12.4	99
FEB											
08...	1245	ENVIRONMENTAL	109	1380	7.3	5.0	1.5	776	--	12.3	87
17...	0929	*BLANK	--	--	--	--	--	--	<.5	--	--
17...	0930	*ENVIRONMENTAL	101	--	6.8	1.5	4.5	--	10	12.1	94
MAR											
06...	1200	ENVIRONMENTAL	52	386	7.6	13.0	9.0	765	--	12.2	105
29...	1400	*ENVIRONMENTAL	206	278	6.9	16.5	12.5	--	27	9.5	--
APR											
20...	1045	*ENVIRONMENTAL	146	274	6.6	17.5	13.0	--	16	8.9	84
MAY											
01...	1215	ENVIRONMENTAL	76	279	7.4	24.0	14.0	760	--	12.0	117
04...	0800	*ENVIRONMENTAL	58	297	7.1	20.0	15.0	--	7.6	7.4	74
JUN											
15...	0845	*ENVIRONMENTAL	20	343	7.0	24.5	20.0	--	9.6	--	--
JUL											
13...	1330	*ENVIRONMENTAL	19	338	7.0	23.0	20.5	--	8.4	--	--
SEP											
28...	1229	*BLANK	--	--	--	--	--	--	<.5	--	--
28...	1230	*ENVIRONMENTAL	124	7	6.6	21.5	15.5	--	20	9.1	91

\* Sample analyzed by the Maryland Department of Health and Mental Hygiene laboratory (DHMH), Baltimore, MD.  
 < Actual value is known to be less than the value shown.

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	HARDNESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNESIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	POTASSIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKALINITY WAT DIS TOT IT (MG/L AS CACO3 (39086)	ANC WATER UNFLTRD IT (MG/L AS CACO3 (00419)	BICARBONATE WATER DIS IT (MG/L AS HCO3 (00453)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLORIDE, DIS-SOLVED (MG/L) AS CL (00940)
OCT												
14...	--	--	92	29.4	4.50	15.2	4.3	50	--	60	32.4	29.1
20...	24	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<10	<.4	--	--	--	--	--	--	--	--	--	--
28...	13	<1.1	--	--	--	--	--	--	--	--	--	--
NOV												
02...	25	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	62	--	76	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
18...	14	<1.3	--	--	--	--	--	--	63	--	--	--
DEC												
07...	--	--	82	26.3	4.05	15.0	3.3	42	--	51	30.1	29.8
09...	16	<1.1	--	--	--	--	--	--	--	--	--	--
22...	--	--	79	25.0	4.12	14.6	3.2	37	--	45	29.9	29.1
JAN												
11...	--	--	--	--	--	--	--	--	--	--	--	--
13...	<10	<.3	--	--	--	--	--	--	38	--	--	--
FEB												
08...	--	--	130	40.0	7.06	206	5.9	35	--	43	33.8	371
17...	<10	<.1	--	--	--	--	--	--	--	--	--	--
17...	<10	<.1	--	--	--	--	--	--	33	--	--	--
MAR												
06...	--	--	89	28.0	4.59	34.0	3.2	--	--	--	33.4	67.0
29...	14	<1.2	--	--	--	--	--	--	30	--	--	--
APR												
20...	18	<1.1	--	--	--	--	--	--	--	--	--	--
MAY												
01...	--	--	82	25.6	4.29	18.2	2.8	43	--	52	28.5	36.0
04...	<10	<.3	--	--	--	--	--	--	43	--	--	--
JUN												
15...	11	<.6	--	--	--	--	--	--	62	--	--	--
JUL												
13...	12	<1.0	--	--	--	--	--	--	68	--	--	--
SEP												
28...	<10	<1.1	--	--	--	--	--	--	--	--	--	--
28...	13	<1.1	--	--	--	--	--	--	38	--	--	--

&lt; Actual value is known to be less than the value shown.

## PATUXENT RIVER BASIN

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
OCT												
14...	.1	14.5	--	181	.61	--	<.010	.261	.034	.35	.28	.54
20...	--	12.1	37	--	1.1	.241	.006	.247	.009	.81	.34	.59
26...	--	--	--	--	.72	--	<.010	.236	.035	.49	.21	.44
28...	--	<.1	<1	--	--	--	<.001	<.001	<.008	.02	.01	--
28...	--	15.9	1	--	.58	.273	.002	.275	.023	.31	.24	.51
NOV												
02...	--	13.9	50	--	.82	.159	.004	.163	<.004	.66	.28	.44
10...	--	--	--	--	.40	--	<.010	.053	<.020	.35	.22	.27
10...	--	--	--	--	.44	--	<.010	.057	<.020	.38	.20	.26
18...	--	15.8	2	--	.35	.036	.005	.041	<.007	.31	.21	.25
DEC												
07...	.1	12.5	--	--	.50	--	<.010	.238	.041	.26	.18	.42
09...	--	14.8	8	--	.62	.240	.006	.246	.062	.37	.36	.61
22...	<.1	13.2	--	164	.68	--	<.010	.351	.057	.33	.33	.68
JAN												
11...	--	--	--	--	.79	--	<.010	.359	.089	.43	.31	.67
13...	--	14.5	7	--	.74	.352	.005	.357	.062	.38	.32	.68
FEB												
08...	.2	10.7	--	748	1.4	.493	.012	.505	.338	.85	.68	1.2
17...	--	<.02	1	--	--	--	<.001	.009	<.006	<.01	<.01	--
17...	--	13.9	10	--	.58	.265	.007	.272	.078	.31	.24	.51
MAR												
06...	.2	12.9	--	228	.58	--	<.010	.345	.033	.24	.22	.56
29...	--	10.3	25	--	--	.392	.006	.398	.052	.56	.33	.73
APR												
20...	--	16.5	13	--	.86	.364	.008	.372	.069	.49	.48	.85
MAY												
01...	.2	14.9	--	175	.69	.392	.010	.402	.051	.29	.25	.65
04...	--	15.6	4	--	.79	.421	.011	.432	.048	.36	.28	.71
JUN												
15...	--	16.6	4	--	.79	.413	.012	.425	.046	.36	.29	.71
JUL												
13...	--	16.2	2	--	.66	.334	.008	.342	.022	.32	.20	.54
SEP												
28...	--	<.1	<1	--	--	--	<.001	<.001	<.003	<.01	<.01	--
28...	--	12.4	20	--	.85	.338	.008	.346	.064	.50	.39	.74

< Actual value is known to be less than the value shown.  
M Presence of material verified but not quantified.

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)
OCT												
14...	.31	.25	.067	.009	.010	--	--	40	100	<.003	<.002	<.002
20...	.80	.33	.226	.015	.007	6.3	6.3	--	--	--	--	--
26...	.45	.17	.051	.012	.012	--	--	--	--	<.003	<.002	<.002
28...	--	--	.010	<.007	<.001	.56	.77	--	--	--	--	--
28...	.29	.22	.062	.018	<.003	4.4	4.3	--	--	--	--	--
NOV												
02...	--	--	.274	<.008	.006	5.5	5.0	--	--	--	--	--
10...	--	--	.060	.009	.016	--	--	--	--	<.003	<.002	<.002
10...	--	--	.061	.010	<.010	--	--	--	--	--	--	--
18...	--	--	.060	.016	.008	4.4	4.1	--	--	--	--	--
DEC												
07...	.22	.14	.074	.010	<.010	--	--	120	163	<.003	<.002	<.002
09...	.31	.30	.057	.021	<.003	6.6	5.3	--	--	--	--	--
22...	.27	.27	.056	.014	<.010	--	--	260	147	<.003	<.002	<.002
JAN												
11...	.34	.22	.091	.012	<.010	--	--	--	--	<.003	<.002	<.002
13...	.32	.26	.064	.015	.006	4.1	3.7	--	--	--	--	--
FEB												
08...	.51	.34	.062	E.003	<.010	--	--	150	410	<.003	<.002	<.002
17...	--	--	<.001	<.001	<.002	.60	.53	--	--	--	--	--
17...	.23	.16	.044	<.007	<.003	3.2	3.1	--	--	--	--	--
MAR												
06...	.20	.18	.039	.007	<.010	--	--	200	153	<.003	<.002	<.002
29...	--	.28	.121	.027	.014	5.5	5.0	--	--	--	--	--
APR												
20...	.42	.41	.082	.015	.008	5.5	5.1	--	--	--	--	--
MAY												
01...	.24	.19	.060	.014	.014	--	--	290	102	<.003	<.002	<.002
04...	.31	.23	.059	.012	.011	4.1	3.8	--	--	--	--	--
JUN												
15...	.31	.24	.063	.015	.011	4.6	4.3	--	--	--	--	--
JUL												
13...	.30	.18	.065	.017	.008	4.8	4.6	--	--	--	--	--
SEP												
28...	--	--	<.002	<.002	<.002	.50	.65	--	--	--	--	--
28...	.44	.33	.123	.014	.009	4.8	4.5	--	--	--	--	--

E Estimated value.

&lt; Actual value is known to be less than the value shown.

## PATUXENT RIVER BASIN

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON DIO SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
OCT												
14...	<.002	.011	<.002	<.002	E.010	<.003	<.004	<.004	<.002	E.006	125	.019
20...	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.002	.007	E.001	<.002	E.010	<.003	E.003	<.004	<.002	E.007	108	.011
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
02...	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.002	.006	<.002	<.002	E.002	<.003	<.004	<.004	<.002	E.005	105	.016
10...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
07...	<.002	.006	<.002	<.002	E.088	<.003	.006	<.004	E.002	<.007	125	.054
09...	--	--	--	--	--	--	--	--	--	--	--	--
22...	<.002	.005	<.002	<.002	E.004	<.003	<.004	<.004	<.002	E.005	112	.014
JAN												
11...	<.002	.007	<.002	<.002	E.039	<.003	E.005	<.004	<.002	E.005	112	.015
13...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
08...	<.002	.006	<.002	<.002	E.010	<.003	<.004	<.004	<.002	E.006	112	.083
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
06...	<.002	.005	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.007	99	.006
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
01...	<.002	.009	<.002	<.002	E.027	<.003	<.004	<.004	<.002	E.006	101	.024
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
13...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated value.

&lt; Actual value is known to be less than the value shown.

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)
OCT												
14...	<.001	<.017	<.002	<.004	<.003	<.003	95	<.004	<.002	<.005	<.001	<.006
20...	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.001	<.017	<.002	<.004	<.003	<.003	95	<.004	<.002	<.005	<.001	<.006
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
02...	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.001	<.017	<.002	<.004	<.003	<.003	98	<.004	<.002	<.005	<.001	<.006
10...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
07...	<.001	<.017	<.002	<.004	<.003	<.003	110	<.004	<.002	<.020	<.001	<.006
09...	--	--	--	--	--	--	--	--	--	--	--	--
22...	<.001	<.017	<.002	<.004	<.003	<.003	105	<.004	<.002	<.005	<.001	<.006
JAN												
11...	<.001	<.017	<.002	<.004	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006
13...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
08...	<.001	<.017	<.002	<.004	<.003	<.003	101	<.004	<.002	<.005	<.001	<.006
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
06...	<.001	<.017	<.002	<.004	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
01...	<.001	<.017	<.002	<.004	<.003	<.003	83	<.004	<.002	<.005	<.001	<.006
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
13...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--

&lt; Actual value is known to be less than the value shown.



PATUXENT RIVER BASIN

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
OCT												
14...	.009	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.012	<.003
20...	--	--	--	--	--	--	--	--	--	--	--	--
26...	E.004	<.004	<.004	<.003	E.002	<.004	<.004	<.004	<.005	<.002	E.007	<.003
28...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
02...	--	--	--	--	--	--	--	--	--	--	--	--
10...	.005	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003
18...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
07...	.005	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003
09...	--	--	--	--	--	--	--	--	--	--	--	--
22...	<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003
JAN												
11...	<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003
13...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
08...	.005	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003
17...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
06...	<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.015	<.003
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
01...	.005	<.004	<.004	<.003	<.006	<.004	<.004	E.004	<.005	<.002	.064	<.003
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
13...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated value.  
 < Actual value is known to be less than the value shown.

01594526 WESTERN BRANCH AT UPPER MARLBORO, MD--Continued

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

DATE	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, DIS- CHARGE, SUS- SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- SUS- PENDEDED (T/DAY) (80155)
OCT												
14...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	--	--
20...	--	--	--	--	--	--	--	--	--	--	55	22
26...	<.007	<.004	<.013	E.003	E.005	<.007	<.013	<.002	<.001	<.002	--	--
28...	--	--	--	--	--	--	--	--	--	--	<1	--
28...	--	--	--	--	--	--	--	--	--	--	2	.17
NOV												
02...	--	--	--	--	--	--	--	--	--	--	56	22
10...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	3	.20
DEC												
07...	<.007	<.004	<.013	E.003	E.005	<.007	<.013	<.002	<.001	<.002	--	--
09...	--	--	--	--	--	--	--	--	--	--	3	.30
22...	<.007	<.004	<.013	<.005	E.005	<.007	<.013	<.002	<.001	<.002	--	--
JAN												
11...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	--	--
13...	--	--	--	--	--	--	--	--	--	--	7	1.2
FEB												
08...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.005	--	--
17...	--	--	--	--	--	--	--	--	--	--	<1	--
17...	--	--	--	--	--	--	--	--	--	--	8	2.1
MAR												
06...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	--	--
29...	--	--	--	--	--	--	--	--	--	--	30	17
APR												
20...	--	--	--	--	--	--	--	--	--	--	27	11
MAY												
01...	<.007	<.004	<.013	.014	E.005	<.007	<.013	<.002	<.001	<.002	--	--
04...	--	--	--	--	--	--	--	--	--	--	9	1.4
JUN												
15...	--	--	--	--	--	--	--	--	--	--	14	.73
JUL												
13...	--	--	--	--	--	--	--	--	--	--	8	.42
SEP												
28...	--	--	--	--	--	--	--	--	--	--	<1	--
28...	--	--	--	--	--	--	--	--	--	--	28	9.4

E Estimated value.

&lt; Actual value is known to be less than the value shown.

POTOMAC RIVER BASIN

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD

LOCATION.--Lat 39°14'37", long 79°25'43", Garrett County, Hydrologic Unit 02070002, on left bank at downstream side of bridge (abandoned) on Dobbin Road, 0.6 mi south of intersection of Kempton Road, 1.2 mi from mouth, and 3.0 mi southwest of Wilson.

DRAINAGE AREA.--8.23 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 2,600 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (beaver dams, ice effect), which are poor. Natural flow of stream affected by inflow from deep coal mine dewatering process. Several measurements of water temperature were made during the year. Water-quality records for some prior years have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 170 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 14	1500	265	4.50	Jul 11	0115	384	5.39
Feb 19	0245	*547	*6.78	Jul 19	1915	178	3.83
May 28	2115	180	3.84				

Minimum discharge UNKNOWN

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.0	9.6	10	15	e7.5	24	21	15	26	5.5	e10	34
2	e1.4	21	9.7	15	e7.2	22	21	28	23	4.8	e8.0	28
3	e1.1	27	e11	16	e7.1	19	26	20	25	4.8	14	23
4	e7.6	13	e13	17	e6.9	17	81	17	19	6.0	11	16
5	e4.5	12	e11	19	e6.7	16	63	16	17	5.5	7.8	14
6	e2.6	11	e14	16	e6.5	15	48	15	36	5.1	8.3	9.8
7	e2.1	e9.0	e13	15	e6.3	15	38	14	33	5.5	8.3	8.2
8	e1.4	e7.6	e11	14	6.2	14	42	13	22	7.1	7.8	7.1
9	e4.5	e6.5	e11	14	6.5	13	42	11	17	8.8	6.6	e6.5
10	22	e5.4	49	18	8.0	12	37	11	14	37	e6.0	e5.6
11	e7.5	e5.4	48	20	28	23	37	11	12	130	e6.0	e6.0
12	e4.0	e5.0	38	17	30	53	41	10	10	28	e5.2	e6.0
13	e4.0	e4.8	45	20	20	32	35	9.5	9.2	17	e4.5	e5.0
14	e3.6	e4.4	67	17	177	27	31	9.3	8.6	12	e3.5	e4.0
15	3.1	e3.7	65	20	94	23	29	8.5	9.0	11	e4.5	e4.0
16	2.9	e3.6	48	16	54	22	26	7.8	9.8	12	e4.8	e3.5
17	e2.5	e3.6	40	15	46	29	29	7.3	8.6	15	e8.0	e3.5
18	e1.7	e3.5	35	13	182	23	32	6.7	9.5	12	e14	e3.5
19	e1.4	e3.5	30	e12	320	21	27	35	10	73	e7.6	e3.8
20	e1.8	e4.8	28	e12	95	19	24	30	8.6	73	e5.2	e3.5
21	e1.9	e5.4	25	e11	58	26	27	21	8.3	37	e4.5	e3.0
22	e1.8	e4.2	23	e11	46	31	34	22	13	25	e4.2	e2.7
23	e1.7	e4.0	21	e10	39	32	45	18	7.7	19	e5.5	e2.5
24	e2.7	e4.7	19	e9.8	36	28	37	41	6.9	17	e7.8	20
25	e3.5	17	18	e9.2	33	26	32	26	7.1	15	e5.0	55
26	e2.8	40	17	9.0	28	24	27	19	7.2	14	e4.2	60
27	e2.5	37	17	e8.6	26	21	23	22	7.6	e13	e4.2	22
28	e2.2	21	16	e8.4	35	22	21	69	13	16	e3.8	15
29	e1.9	16	16	e8.2	26	24	19	82	11	e14	e4.2	12
30	e1.7	13	14	e8.0	---	25	17	46	6.7	e12	e3.5	14
31	e1.8	---	15	e7.8	---	23	---	34	---	e11	e5.5	---
TOTAL	106.2	326.7	797.7	422.0	1441.9	721	1012	695.1	415.8	666.1	203.5	401.2
MEAN	3.43	10.9	25.7	13.6	49.7	23.3	33.7	22.4	13.9	21.5	6.56	13.4
MAX	22	40	67	20	320	53	81	82	36	130	14	60
MIN	1.1	3.5	9.7	7.8	6.2	12	17	6.7	6.7	4.8	3.5	2.5
CFSM	.42	1.32	3.13	1.65	6.04	2.83	4.10	2.72	1.68	2.61	.80	1.62
IN.	.48	1.48	3.61	1.91	6.52	3.26	4.57	3.14	1.88	3.01	.92	1.81

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

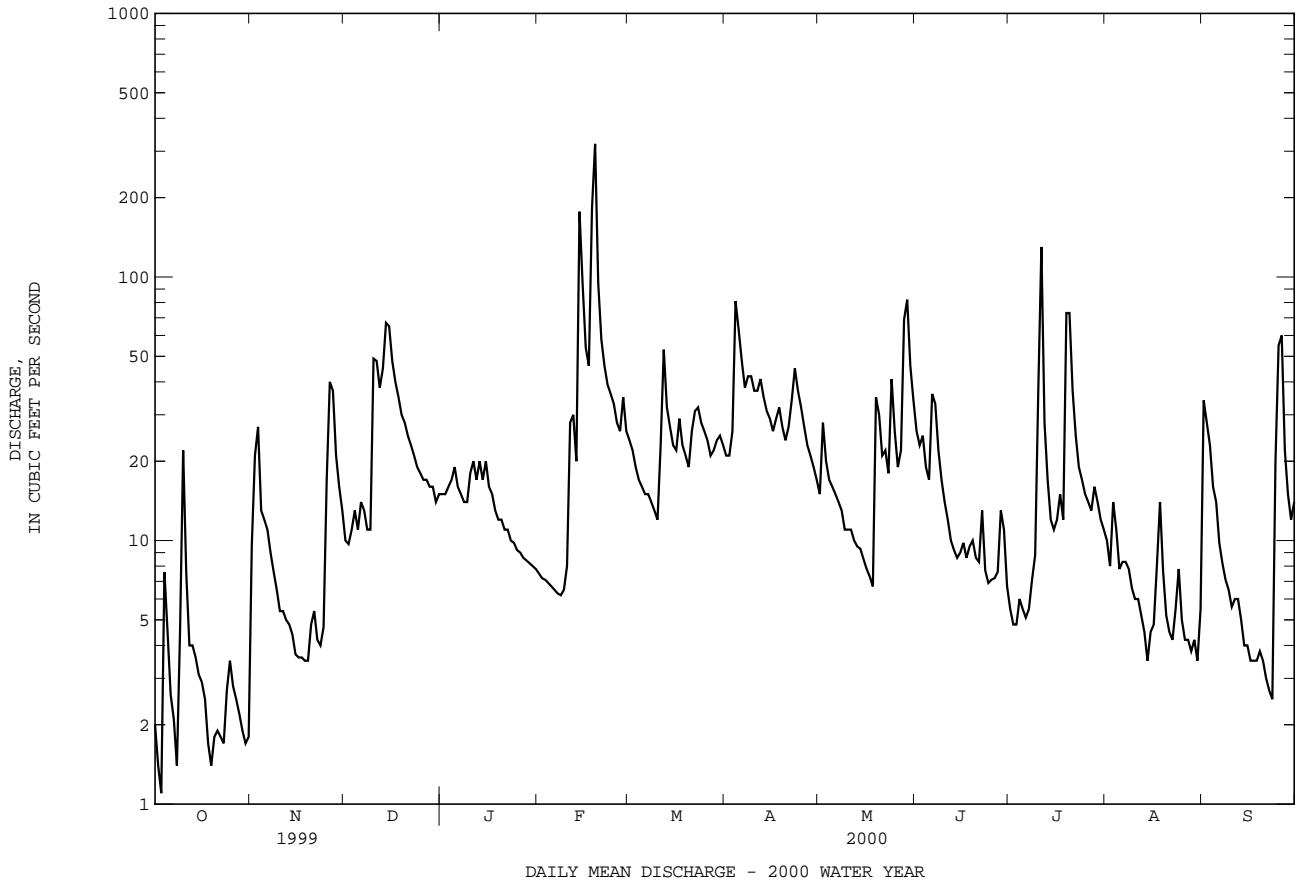
MEAN	9.48	19.5	29.2	27.4	36.8	40.2	32.1	28.5	18.0	17.2	11.7	8.40
MAX	26.2	42.8	51.9	51.2	68.5	71.6	61.0	69.8	62.8	42.8	40.2	41.3
(WY)	1997	1987	1985	1996	1994	1994	1984	1996	1981	1992	1980	1996
MIN	3.27	2.20	5.09	8.85	7.24	13.9	9.60	9.35	2.78	2.84	1.71	2.64
(WY)	1992	1999	1999	1981	1993	1990	1995	1991	1999	1999	1999	1999

01594930 LAUREL RUN AT DOBBIN ROAD NEAR WILSON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	6301.91		7209.2		22.9	
ANNUAL MEAN	17.3		19.7		35.6	
HIGHEST ANNUAL MEAN					14.8	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	128	Jan 24	320	Feb 19	492	Feb 9 1994
LOWEST DAILY MEAN	(e).62	Aug 18	(e)1.1	Oct 3	(e).62	Aug 18 1999
ANNUAL SEVEN-DAY MINIMUM	.93	Aug 30	1.8	Oct 17	.93	Aug 30 1999
INSTANTANEOUS PEAK FLOW			547	Feb 19	(a)863	Nov 5 1985
INSTANTANEOUS PEAK STAGE			6.78	Feb 19	10.10	Nov 5 1985
INSTANTANEOUS LOW FLOW			UNKNOWN		UNKNOWN	
ANNUAL RUNOFF (CFSM)	2.10		2.39		2.78	
ANNUAL RUNOFF (INCHES)	28.48		32.59		37.74	
10 PERCENT EXCEEDS	48		38		48	
50 PERCENT EXCEEDS	7.6		14		15	
90 PERCENT EXCEEDS	1.4		3.6		3.6	

e Estimated.

a From rating curve extended above 450 ft<sup>3</sup>/s on basis of runoff comparisons with nearby stations.



POTOMAC RIVER BASIN

01594936 NORTH FORK SAND RUN NEAR WILSON, MD

LOCATION.--Lat 39°15'36", long 79°24'36", Garrett County, Hydrologic Unit 02070002, on right bank, 0.1 mi northwest of Wilson-Corona Road, 0.1 mi upstream from mouth and 0.8 mi northwest of Wilson.

DRAINAGE AREA.--1.91 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and steel weir plate. Elevation of gage is 2,515 ft above sea level, from topographic map.

REMARKS.--Records good above 0.5 ft<sup>3</sup>/s and fair below except those for estimated daily discharges (ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior years have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 14	1045	53	3.43	Jul 19	1800	49	3.37
Feb 19	0045	*214	*5.14	Sep 25	2030	45	3.31
Jul 11	0030	194	4.96				

Minimum discharge 0.17 ft<sup>3</sup>/s, Oct 3, 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.35	2.2	2.8	1.2	3.9	3.9	2.2	4.0	1.3	1.5	6.4
2	.31	5.4	1.9	2.9	e1.2	3.6	3.7	4.3	3.7	.89	1.3	4.8
3	.25	6.5	1.8	3.0	e1.2	3.2	4.8	3.0	3.5	1.0	2.2	3.4
4	1.3	3.3	2.4	3.2	e1.2	3.1	17	2.7	2.7	1.3	1.7	3.1
5	1.7	3.4	2.0	3.4	e1.1	2.7	11	2.5	2.6	1.1	1.3	3.8
6	.58	3.4	2.4	3.0	e1.1	2.4	7.9	2.1	9.2	.93	1.7	2.5
7	.42	2.2	2.4	3.3	1.1	2.4	5.9	1.8	6.3	.87	1.7	1.9
8	.32	1.4	2.0	2.8	1.5	2.5	6.8	1.7	4.1	.68	1.3	1.6
9	.41	1.2	2.0	3.1	2.1	2.3	6.0	1.8	3.5	.65	1.1	1.5
10	8.4	1.0	8.8	3.9	3.3	2.3	5.5	1.5	2.9	15	1.1	1.3
11	3.2	1.0	7.7	4.1	8.0	4.8	5.5	1.3	2.1	56	1.1	1.4
12	1.4	.94	4.9	3.4	5.5	9.7	6.3	1.4	2.0	12	1.0	1.4
13	.90	.88	7.2	4.4	4.5	4.8	5.1	1.4	2.0	6.8	.84	1.1
14	.89	.80	14	3.9	33	4.4	4.5	1.1	1.7	4.7	.62	.92
15	.73	.68	12	3.5	16	3.9	4.4	.92	1.9	3.9	.82	.92
16	.69	.68	7.7	3.7	11	3.8	3.8	1.2	2.1	3.3	.85	.79
17	.56	.67	5.8	3.3	8.7	4.9	4.3	1.1	1.7	3.6	.78	.77
18	.37	.65	5.0	2.8	55	3.9	4.3	.99	1.6	2.8	2.4	.77
19	.32	.63	4.3	e2.5	74	3.3	3.9	4.8	1.4	19	1.6	.84
20	.38	.88	3.8	e2.3	18	3.2	3.7	3.2	1.3	16	.94	.82
21	.41	1.0	3.6	e2.1	12	5.1	4.4	2.5	1.3	8.1	.80	.71
22	.40	.78	3.2	e2.0	8.5	6.4	4.7	3.6	2.3	5.5	.76	.60
23	.37	.77	e2.7	e1.8	6.6	7.3	5.2	3.7	1.2	4.5	.97	.56
24	.59	.87	e2.3	e1.7	5.3	5.7	4.5	9.3	1.2	4.3	1.3	.67
25	.75	1.3	2.1	e1.6	4.7	5.2	4.3	4.2	1.2	3.7	.97	11
26	.62	9.5	2.0	e1.5	4.2	4.5	3.9	3.3	1.0	3.3	.77	10
27	.56	7.4	1.9	e1.4	4.1	4.3	3.5	3.8	1.5	2.6	.76	4.1
28	.48	4.1	1.8	1.3	5.2	4.5	3.1	11	5.1	2.0	.70	3.1
29	.42	3.2	1.7	e1.2	4.0	4.9	2.9	11	2.1	2.1	.76	2.6
30	.38	2.7	1.8	e1.2	---	4.9	2.3	6.0	1.4	1.9	.65	2.0
31	.40	---	2.7	1.2	---	4.2	---	4.7	---	1.6	.66	---
TOTAL	28.95	67.58	126.1	82.3	303.3	132.1	157.1	104.11	78.6	191.42	34.95	75.37
MEAN	.93	2.25	4.07	2.65	10.5	4.26	5.24	3.36	2.62	6.17	1.13	2.51
MAX	8.4	9.5	14	4.4	74	9.7	17	11	9.2	56	2.4	11
MIN	.25	.35	1.7	1.2	1.1	2.3	2.3	.92	1.0	.65	.62	.56
CFSM	.49	1.18	2.13	1.39	5.48	2.23	2.74	1.76	1.37	3.23	.59	1.32
IN.	.56	1.32	2.46	1.60	5.91	2.57	3.06	2.03	1.53	3.73	.68	1.47

e Estimated

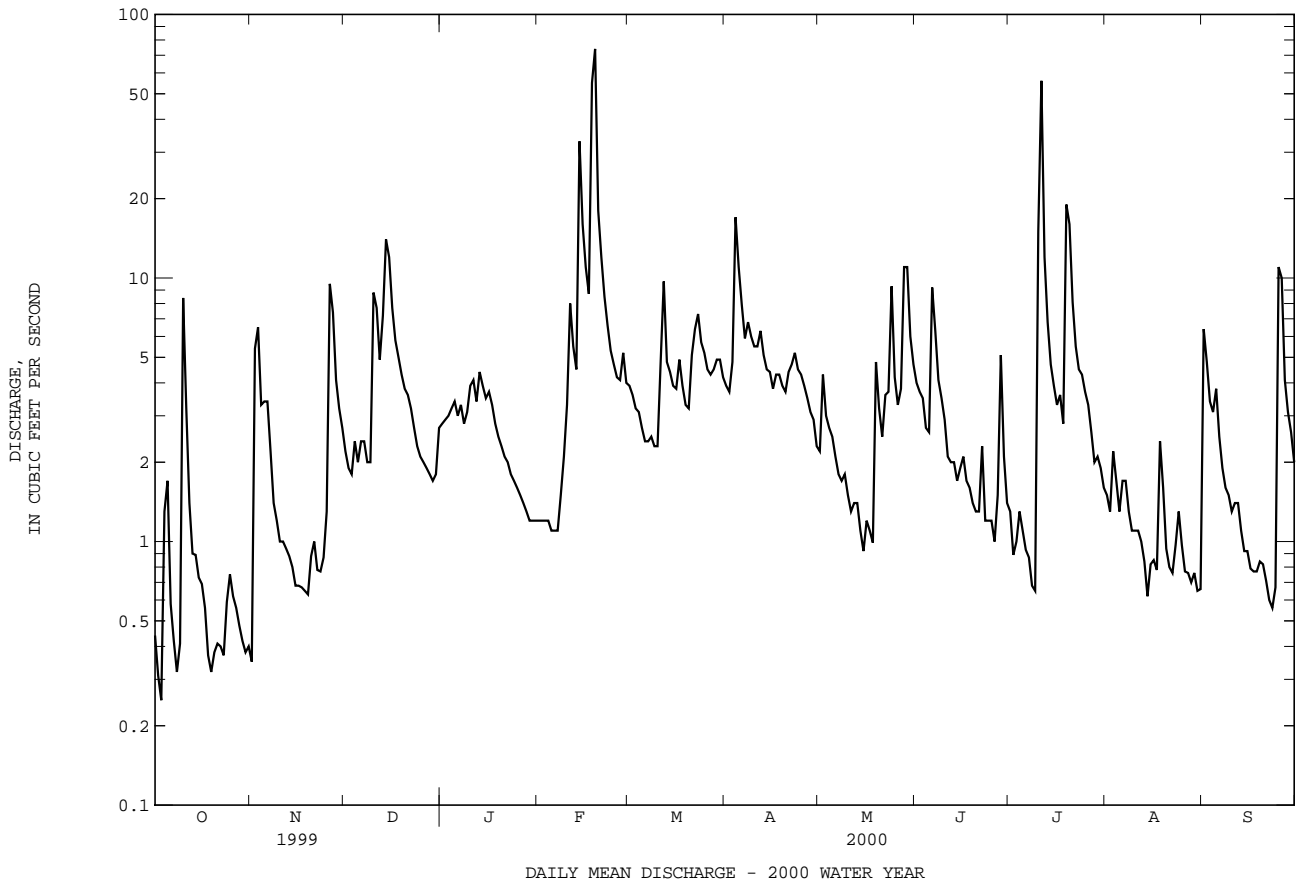
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

MEAN	1.46	4.19	5.45	5.59	7.63	8.50	6.50	5.54	3.25	3.23	2.00	1.55
MAX	4.43	17.5	8.67	12.9	15.9	16.1	13.4	13.5	12.7	8.97	8.09	9.38
(WY)	1997	1986	1991	1996	1986	1994	1984	1996	1981	1996	1996	1996
MIN	.21	.26	.78	1.29	1.37	2.52	2.22	1.32	.43	.28	.30	.19
(WY)	1992	1999	1999	1981	1993	1990	1995	1999	1999	1988	1983	1991

01594936 NORTH FORK SAND RUN NEAR WILSON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	1175.93		1381.88			
ANNUAL MEAN	3.22		3.78		4.52	
HIGHEST ANNUAL MEAN					7.72	
LOWEST ANNUAL MEAN					2.74	
HIGHEST DAILY MEAN	28	Mar 18	74	Feb 19	141	Feb 9 1994
LOWEST DAILY MEAN	.10	Aug 16	.25	Oct 3	.09	(a)
ANNUAL SEVEN-DAY MINIMUM	.20	Jul 7	.40	Oct 17	.12	Aug 12 1988
INSTANTANEOUS PEAK FLOW			214	Feb 19	(b)895	May 31 1985
INSTANTANEOUS PEAK STAGE			5.14	Feb 19	10.47	May 31 1985
INSTANTANEOUS LOW FLOW			.17	(c)	.01	(d)
ANNUAL RUNOFF (CFSM)	1.69		1.98		2.36	
ANNUAL RUNOFF (INCHES)	22.90		26.91		32.12	
10 PERCENT EXCEEDS	9.5		6.9		10	
50 PERCENT EXCEEDS	1.2		2.4		2.8	
90 PERCENT EXCEEDS	.23		.70		.42	

- a Aug. 22, 1985, Aug. 24, 1993.
- b From rating curve extended above 90 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak-flow.
- c Oct. 3, 4.
- d July 18 and Aug. 9, 1988, result of beaver activity upstream.



POTOMAC RIVER BASIN

01594950 MCMILLAN FORK NEAR FORT PENDLETON, MD

LOCATION.--Lat 39°16'36", long 79°23'26", Garrett County, Hydrologic Unit 02070002, on left bank upstream side of culvert on private driveway off Wilson-Corona Road, 1.7 mi southwest of Fort Pendleton, 1.0 mi south of Bayard, WV, and 200 ft upstream from mouth.

DRAINAGE AREA.--2.30 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR MD-DE-95-1: 1988, 1991-93 (M).

GAGE.--Water-stage recorder and concrete bag control. Datum of gage is 2,441.94 ft above sea level (Garrett County bench mark).

REMARKS.--Records good except those for estimated daily discharges (ice effect, backwater), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 14	1345	50	2.47	Jul 11	0030	141	4.10
Feb 19	0045	*258(e)	*6.72(a)				

e Estimated.  
a Affected by backwater.

Minimum discharge 0.02 ft<sup>3</sup>/s, Oct 2-4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.08	1.2	1.0	e.66	3.9	3.8	1.9	3.5	.40	1.3	.77
2	.02	4.0	1.1	1.1	e.62	3.5	3.8	3.3	2.8	.28	1.0	.91
3	.02	4.7	.98	1.3	.60	3.0	4.6	2.2	2.5	.29	2.6	.75
4	.27	2.1	1.1	1.5	.59	2.8	15	1.9	2.0	.47	1.5	1.0
5	.18	1.9	1.0	1.7	e.54	2.5	11	1.8	2.0	.26	.99	1.3
6	.07	1.7	1.2	1.4	e.50	2.2	8.2	1.6	6.0	.18	1.1	.66
7	.04	1.2	1.1	1.3	.47	2.0	6.4	1.4	4.6	.12	.93	.45
8	.04	.93	.87	1.2	.44	1.8	6.6	1.3	3.2	.11	.60	.40
9	.04	.71	.79	1.2	.47	1.7	6.1	1.2	2.4	.11	.48	.32
10	3.8	.58	5.8	2.0	.92	1.5	5.4	1.1	1.9	5.5	.48	.31
11	1.4	.49	5.4	2.5	5.2	4.1	5.2	.93	1.6	41	.46	.41
12	.49	.39	3.6	2.1	4.7	8.4	5.6	.82	1.4	8.5	.39	.45
13	.26	.34	4.4	3.7	3.5	4.8	4.9	.75	1.2	4.5	.33	.30
14	.21	.30	9.9	3.3	32	4.0	4.5	.68	.99	3.0	.29	.22
15	.18	.28	9.1	3.2	23	3.6	4.0	.57	1.2	2.3	.24	.22
16	.13	.27	6.2	2.9	13	3.5	3.7	.50	1.1	2.4	.20	.17
17	.11	.24	4.7	e2.7	11	4.5	3.7	.47	.89	2.4	.19	.14
18	.10	.19	3.7	e2.4	e25	3.6	3.7	.41	.91	1.6	1.2	.09
19	.09	.18	3.0	e2.1	e80	3.3	3.4	2.6	.87	14	.58	.10
20	.10	.19	2.6	e1.9	49	3.1	3.0	1.7	.65	14	.30	.13
21	.09	.26	2.3	e1.7	28	4.4	3.5	1.3	.82	7.8	.23	.08
22	.09	.25	1.8	e1.5	11	5.6	3.9	2.8	1.3	5.5	.18	.06
23	.11	.24	1.5	e1.4	8.7	7.3	4.6	2.6	.62	4.3	.28	.05
24	.21	.23	1.4	e1.2	7.1	6.6	4.1	7.6	.44	3.8	.39	.08
25	.18	.50	1.4	e1.1	5.7	5.9	3.8	3.1	.34	3.2	.26	8.2
26	.12	7.3	1.6	e1.0	4.9	5.2	3.5	2.0	.31	2.7	.18	9.5
27	.10	6.3	1.2	e.94	4.6	4.8	3.1	2.5	.62	2.3	.20	3.9
28	.09	3.3	1.1	e.88	5.4	4.5	2.8	9.1	3.0	2.0	.20	2.5
29	.08	2.1	1.0	e.82	4.3	4.8	2.4	9.8	1.3	2.3	.16	1.9
30	.07	1.6	.92	e.76	---	4.8	2.1	5.9	.62	2.0	.16	1.5
31	.08	---	1.0	e.70	---	4.3	---	4.3	---	1.6	.16	---
TOTAL	8.80	42.85	82.96	52.50	331.91	126.0	146.4	78.13	51.08	138.92	17.56	36.87
MEAN	.28	1.43	2.68	1.69	11.4	4.06	4.88	2.52	1.70	4.48	.57	1.23
MAX	3.8	7.3	9.9	3.7	80	8.4	15	9.8	6.0	41	2.6	9.5
MIN	.02	.08	.79	.70	.44	1.5	2.1	.41	.31	.11	.16	.05
CFSM	.12	.62	1.16	.74	4.98	1.77	2.12	1.10	.74	1.95	.25	.53
IN.	.14	.69	1.34	.85	5.37	2.04	2.37	1.26	.83	2.25	.28	.60

e Estimated

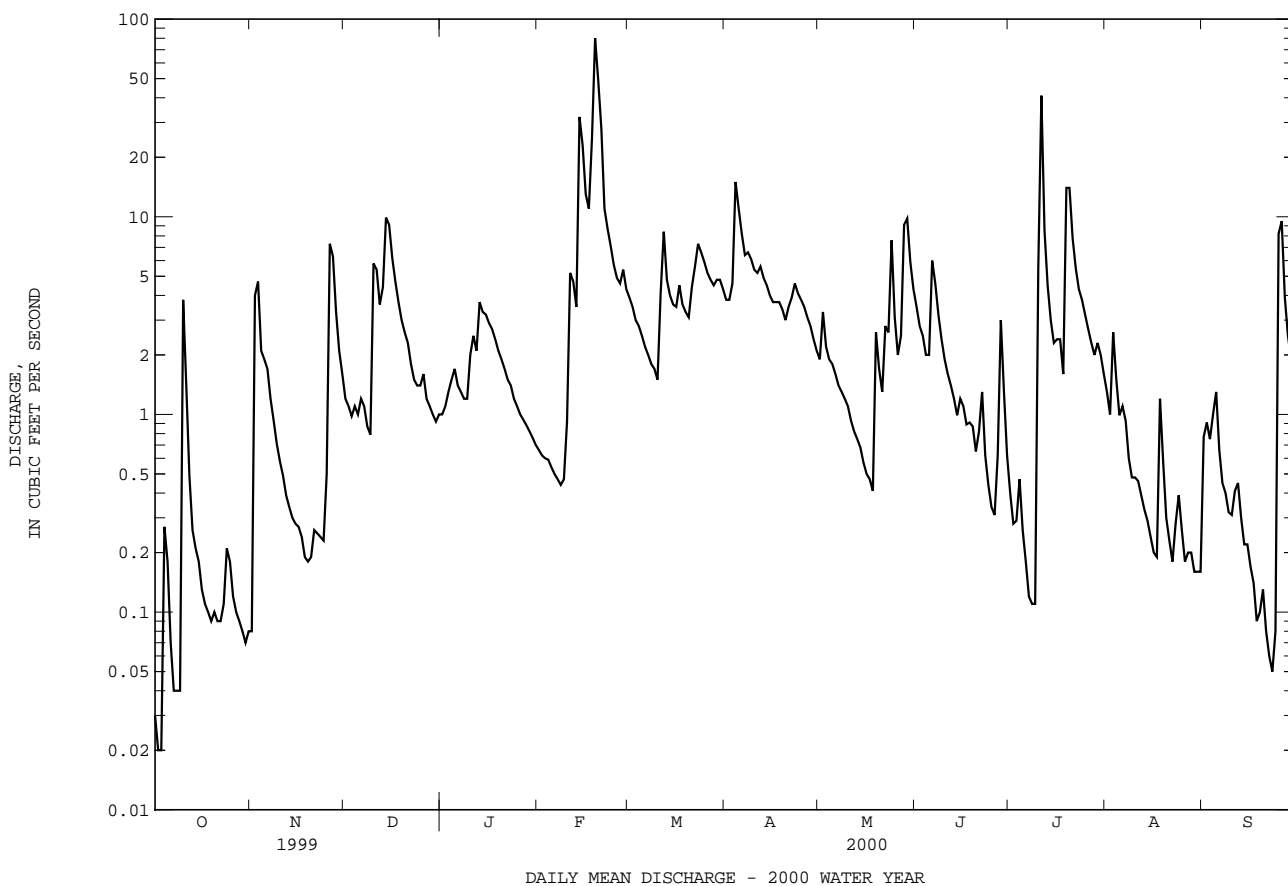
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2000, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	1.23	3.30	5.31	6.91	7.61	9.14	6.33	5.85	2.06	2.61	1.70	1.44		
MAX	4.57	10.2	10.0	11.5	14.7	17.6	11.3	13.9	5.29	8.23	9.26	9.25		
(WY)	1990	1987	1991	1994	1994	1987	1994	1996	1989	1996	1996	1996		
MIN	.060	.035	.20	1.69	1.27	3.34	1.27	1.11	.16	.018	.031	.064		
(WY)	1995	1999	1999	2000	1993	1990	1995	1999	1999	1999	1999	1998		

01594950 MCMILLAN FORK NEAR FORT PENDLETON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1987 - 2000	
ANNUAL TOTAL	1123.24		1113.98			
ANNUAL MEAN	3.08		3.04		4.45	
HIGHEST ANNUAL MEAN					7.49 1996	
LOWEST ANNUAL MEAN					2.73 1999	
HIGHEST DAILY MEAN	34	Jan 24	(e)80	Feb 19	110	May 26 1990
LOWEST DAILY MEAN	.00	(a)	.02	(b)	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 10	.08	Sep 18	.00	Aug 10 1999
INSTANTANEOUS PEAK FLOW			(e)258	Feb 19	340	Feb 9 1994
INSTANTANEOUS PEAK STAGE			(c)6.72	Feb 19	(c)7.23	Feb 9 1994
INSTANTANEOUS LOW FLOW			.02	(d)	.00	(f)
ANNUAL RUNOFF (CFSM)	1.34		1.32		1.93	
ANNUAL RUNOFF (INCHES)	18.17		18.02		26.27	
10 PERCENT EXCEEDS	11		5.9		11	
50 PERCENT EXCEEDS	.71		1.4		2.7	
90 PERCENT EXCEEDS	.00		.17		.11	

- e Estimated.
- a July 7-9, 12-16, 19-24, 26, 27, 31, Aug. 3-7, 10-23, 30, 31, Sep. 1-4, 13-15, 19, 20, 22-28, 1999.
- b Oct. 2, 3.
- c Affected by backwater.
- d Oct. 2-4.
- f July 7-10, 12-28, 31, Aug. 1-24, 30, 31, Sep. 1-4, 13-16, 19-29, 1999.





## POTOMAC RIVER BASIN

01595000 NORTH BRANCH POTOMAC RIVER AT STEYER, MD

LOCATION.--Lat 39°18'07", long 79°18'26", Garrett County, Hydrologic Unit 02070002, on left bank 0.3 mi southeast of Steyer, 0.4 mi downstream from Steyer Run, 2.0 mi northeast of Gorman, and at mile 81.8.

DRAINAGE AREA.--73.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1956 to current year.

REVISED RECORDS.--OFR 95-292: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,276.01 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges (missing & questionable record, ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 15, 1954, reached a stage of 13.0 ft, from floodmarks; discharge, 11,300 ft<sup>3</sup>/s, from rating curve extended above 3,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height of 10.30 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0245	*4,840	*8.63	Jul 11	0200	2,510	6.50

Minimum discharge 7.2 ft<sup>3</sup>/s, Oct 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	25	100	80	e58	159	176	95	162	53	e120	77
2	17	90	94	81	e56	141	174	163	132	49	e100	125
3	13	314	89	100	e56	125	229	124	146	50	e170	91
4	27	132	78	100	e52	119	544	105	112	59	e240	81
5	65	113	80	112	e50	106	457	101	103	53	e130	91
6	42	99	91	107	e45	99	336	88	231	46	e160	66
7	28	80	99	105	e40	95	e250	79	223	40	e120	56
8	20	80	87	92	e45	89	e200	72	139	34	e80	54
9	14	74	84	87	e50	89	e220	70	111	37	65	40
10	288	69	209	112	e60	74	e200	70	98	86	65	44
11	324	66	309	140	196	133	e180	62	86	1020	68	57
12	88	45	192	133	262	394	e200	59	77	210	68	57
13	66	41	197	170	164	218	e180	60	72	115	62	56
14	57	39	405	157	1020	167	e160	62	68	87	57	52
15	42	48	439	143	679	140	e150	57	69	66	50	49
16	44	54	303	118	442	125	e130	59	80	61	49	46
17	33	52	216	e110	390	151	e150	56	65	125	45	45
18	e30	43	170	e130	1300	132	e170	54	70	76	81	44
19	26	43	153	e100	2570	116	154	149	67	460	77	41
20	31	39	145	e95	763	108	134	234	60	555	60	46
21	30	37	135	e90	453	e200	158	139	59	245	52	40
22	33	47	130	e80	341	e350	180	192	91	150	47	36
23	26	51	119	e75	279	e550	232	141	61	108	48	25
24	30	48	94	e70	251	e650	195	331	53	111	61	25
25	30	46	100	e80	220	e550	170	190	50	100	54	252
26	33	231	e95	e70	176	e450	145	130	47	85	47	526
27	29	345	e90	e66	158	e370	130	139	47	78	56	182
28	28	175	e88	e64	235	e300	118	412	95	68	54	118
29	39	135	e94	e62	176	e250	106	513	76	80	47	95
30	23	114	e88	e60	---	e190	104	296	59	84	46	71
31	24	---	e82	e58	---	e180	---	207	---	e90	46	---
TOTAL	1612	2775	4655	3047	10587	6820	5932	4509	2809	4481	2425	2588
MEAN	52.0	92.5	150	98.3	365	220	198	145	93.6	145	78.2	86.3
MAX	324	345	439	170	2570	650	544	513	231	1020	240	526
MIN	13	25	78	58	40	74	104	54	47	34	45	25
CFSM	.71	1.27	2.05	1.34	4.99	3.01	2.70	1.99	1.28	1.98	1.07	1.18
IN.	.82	1.41	2.37	1.55	5.39	3.47	3.02	2.29	1.43	2.28	1.23	1.32

e Estimated

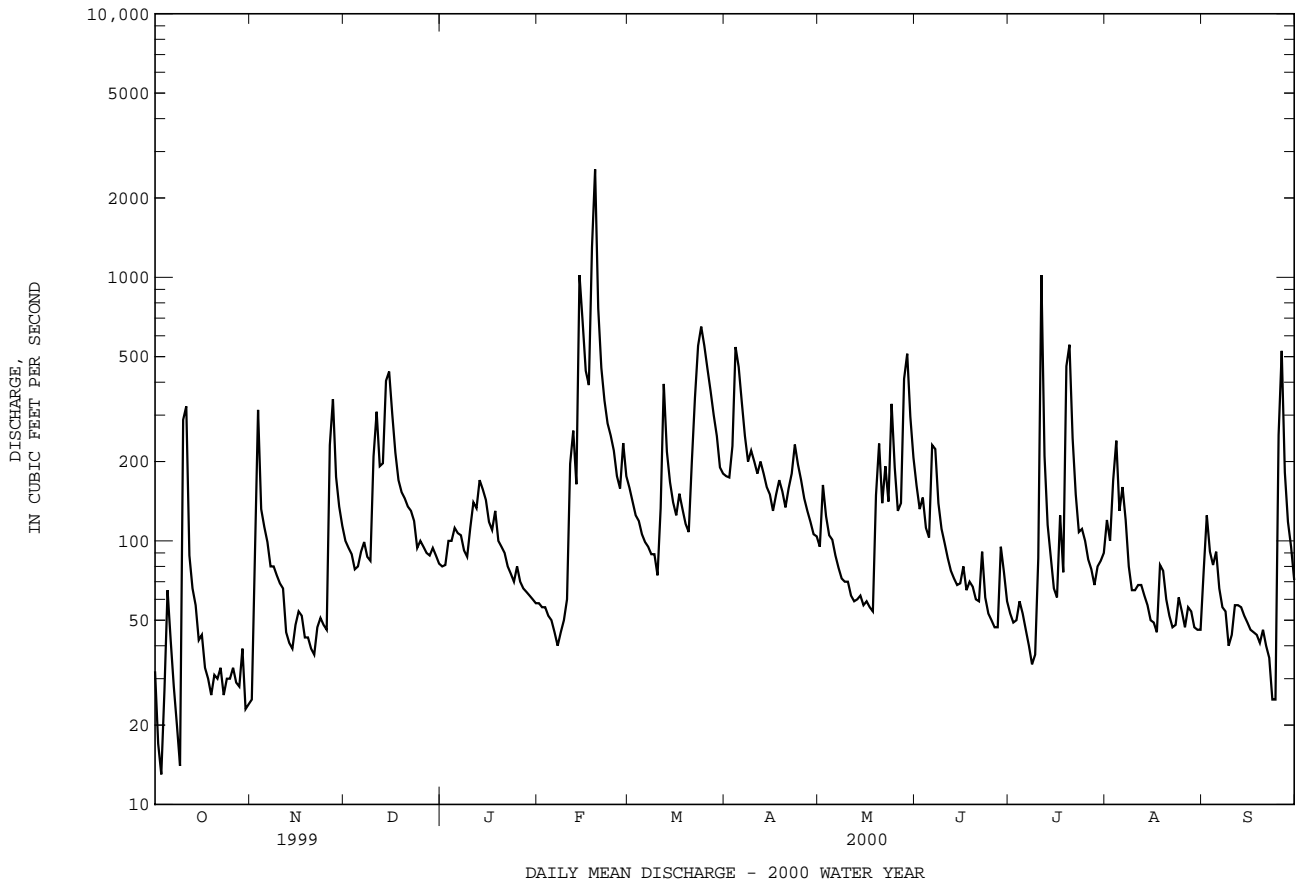
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

	MEAN	71.2	137	224	237	266	343	274	198	117	92.6	77.8	55.5
MAX	316	588	527	569	604	885	573	540	442	340	355	340	
(WY)	1977	1986	1973	1974	1994	1963	1958	1996	1981	1978	1996	1996	
MIN	12.8	26.2	46.1	41.8	65.9	112	78.2	62.5	15.5	14.3	6.72	5.99	
(WY)	1964	1966	1999	1977	1993	1990	1995	1965	1965	1965	1965	1959	

01595000 NORTH BRANCH POTOMAC RIVER AT STEYER, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	48116.7		52240			
ANNUAL MEAN	132		143		173	
HIGHEST ANNUAL MEAN					297	
LOWEST ANNUAL MEAN					115	
HIGHEST DAILY MEAN	929	Jan 24	2570	Feb 19	4530	Feb 9 1994
LOWEST DAILY MEAN	3.2	Aug 18	13	Oct 3	3.1	Sep 9 1965
ANNUAL SEVEN-DAY MINIMUM	5.5	Aug 17	29	Oct 26	3.6	Sep 23 1959
INSTANTANEOUS PEAK FLOW			4840	Feb 19	(a)11500	Nov 5 1985
INSTANTANEOUS PEAK STAGE			8.63	Feb 19	13.14	Nov 5 1985
INSTANTANEOUS LOW FLOW			7.2	Oct 2	2.7	Aug 18 1999
ANNUAL RUNOFF (CFSM)	1.80		1.95		2.37	
ANNUAL RUNOFF (INCHES)	24.49		26.58		32.24	
10 PERCENT EXCEEDS	366		282		384	
50 PERCENT EXCEEDS	69		90		104	
90 PERCENT EXCEEDS	13		41		21	

a From rating curve extended above 3,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height of 10.30 ft.

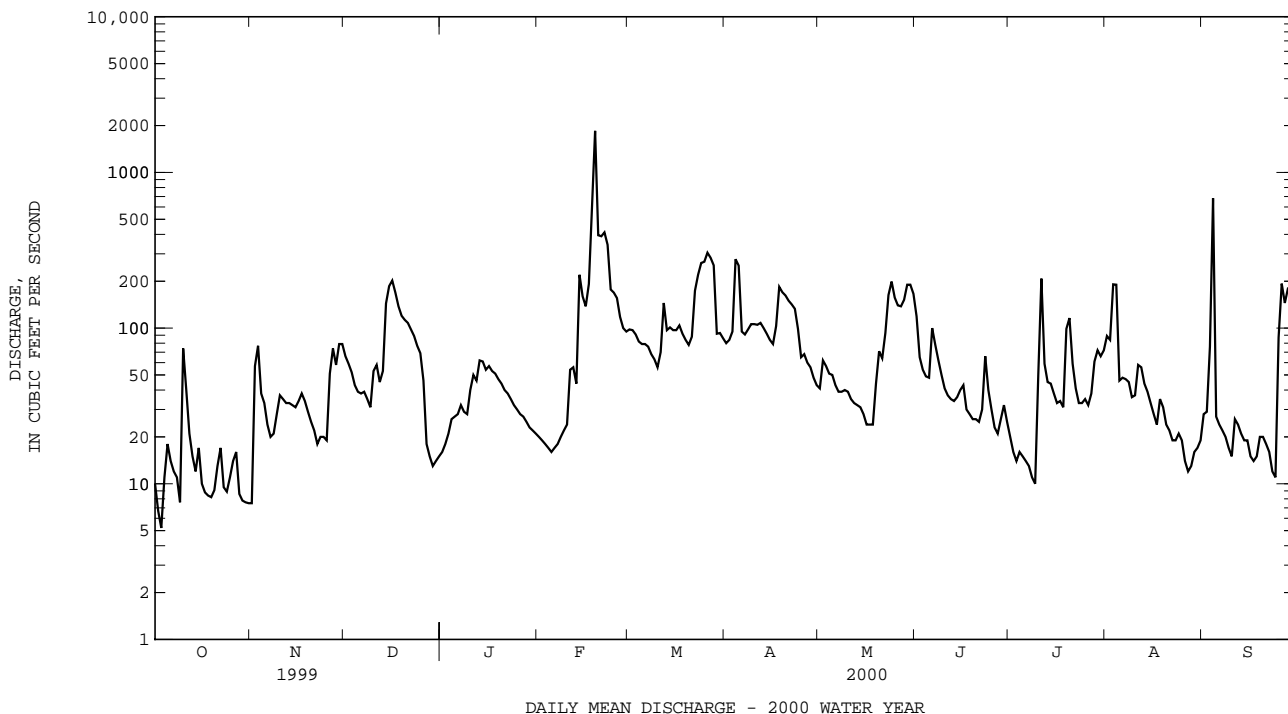




01595200 STONY RIVER NEAR MOUNT STORM, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	20815.3		26677.4		98.2	
ANNUAL MEAN	57.0		72.9		166	
HIGHEST ANNUAL MEAN					42.0	
LOWEST ANNUAL MEAN					1964	
HIGHEST DAILY MEAN	649	Apr 1	1850	Feb 19	9880	Nov 5 1985
LOWEST DAILY MEAN	2.0	(a)	5.2	Oct 3	1.3	Aug 28 1988
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 6	9.9	Oct 26	1.7	Aug 28 1988
INSTANTANEOUS PEAK FLOW			3220	Feb 19	(b)14000	Nov 5 1985
INSTANTANEOUS PEAK STAGE			8.55	Feb 19	(c)16.41	Nov 5 1985
INSTANTANEOUS LOW FLOW			5.1	(d)	1.3	(f)
10 PERCENT EXCEEDS	168		162		230	
50 PERCENT EXCEEDS	30		40		48	
90 PERCENT EXCEEDS	4.6		14		8.3	

a Aug. 23, 24.  
 b From rating curve extended above 7,500 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 c From floodmarks.  
 d Oct. 3, 4.  
 f Aug. 22 ,23 ,28 ,29, 1988.



## POTOMAC RIVER BASIN

01595200 STONY RIVER NEAR MOUNT STORM, WV--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1961 to March 1974, September 1974 to September 1995, October 1996 to current year.

INSTRUMENTATION.--Temperature recorder (continuous ethyl alcohol-actuated thermograph) since December 1961.

REMARKS.--Upstream reservoir regulation defined on the discharge manuscript. No temperature record Aug. 2 to Sept. 5, due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 27.5°C, Aug. 14, 1984, July 19, 1990; minimum, -0.5°C Jan. 16-20, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES.--Maximum 20.5°C, July 9; minimum, 0°C, Jan. 29 to Feb. 3, Feb. 6-8.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	10.0	7.0	4.5	.5	8.0	9.0	13.0	18.5	18.0	20.0	---
2	11.5	10.0	6.0	5.0	1.0	8.0	10.0	14.0	18.5	19.0	---	---
3	12.0	8.5	7.5	6.0	1.5	7.0	11.5	14.0	18.5	17.0	---	---
4	10.0	6.5	9.0	6.0	1.0	6.5	11.5	15.0	17.5	18.0	---	---
5	11.0	6.5	9.0	6.0	1.0	6.5	11.0	15.0	16.5	18.0	---	---
6	9.5	8.0	9.0	5.0	1.0	6.5	10.5	16.0	16.0	18.5	---	15.0
7	9.0	8.0	8.0	3.0	1.0	7.5	10.5	16.5	16.0	18.5	---	15.5
8	9.0	7.5	6.0	3.0	1.0	9.0	10.5	17.0	16.5	19.0	---	15.5
9	9.5	9.0	6.0	3.5	1.0	9.5	10.0	17.5	18.0	20.5	---	17.0
10	11.0	10.0	7.5	5.0	1.0	9.5	9.0	17.5	19.5	18.5	---	18.0
11	14.0	10.0	6.5	4.5	1.0	10.0	9.0	17.0	20.0	18.0	---	17.5
12	12.5	10.0	6.0	3.0	1.5	10.0	9.0	16.5	20.0	18.0	---	18.0
13	12.0	10.5	7.5	4.0	2.5	7.5	9.0	17.0	20.0	18.5	---	18.0
14	12.0	10.5	7.0	2.5	2.5	7.0	11.0	17.0	19.5	20.0	---	16.5
15	10.5	9.0	8.0	2.0	3.0	8.0	12.5	16.0	19.0	19.5	---	16.0
16	12.0	6.5	8.5	3.0	4.5	9.0	13.5	14.5	20.0	19.0	---	11.5
17	12.5	6.0	8.5	2.5	4.5	9.0	13.5	15.5	19.5	19.0	---	12.5
18	12.0	6.5	9.0	1.0	6.0	8.0	12.5	16.0	18.5	19.5	---	13.0
19	10.0	7.0	8.5	1.5	7.0	8.0	13.0	16.0	18.0	19.5	---	13.0
20	9.5	7.5	9.5	1.5	6.5	8.0	14.5	15.0	18.0	16.5	---	15.0
21	9.5	9.0	9.5	1.5	6.5	7.5	14.0	15.0	19.5	16.5	---	15.0
22	8.5	10.0	8.0	1.5	7.0	9.0	13.5	15.5	19.0	17.0	---	14.0
23	7.5	10.0	7.5	1.5	8.0	9.0	12.5	16.5	18.5	16.5	---	17.0
24	6.5	10.0	6.5	3.0	8.0	8.5	12.0	17.5	18.5	16.0	---	16.0
25	8.0	10.0	5.5	2.5	8.5	10.0	11.5	17.5	20.0	16.0	---	14.5
26	7.0	9.5	4.5	1.5	8.5	10.5	11.5	17.5	20.0	16.0	---	14.5
27	8.0	9.0	4.5	1.5	9.0	11.0	11.5	17.5	20.0	17.5	---	14.5
28	8.5	8.0	4.5	1.0	9.0	11.0	12.0	16.5	18.5	17.5	---	14.5
29	9.0	8.0	4.5	1.0	7.0	10.0	12.5	14.5	18.0	17.0	---	14.5
30	10.0	7.5	4.5	.0	---	8.0	13.0	16.5	17.5	18.5	---	14.5
31	10.0	---	5.0	.5	---	8.5	---	18.5	---	18.5	---	---

## POTOMAC RIVER BASIN

293

01595200 STONY RIVER NEAR MOUNT STORM, WV--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	7.5	5.5	4.5	.0	7.0	8.0	12.5	18.0	14.5	18.0	---
2	5.0	8.5	5.5	4.5	.0	7.0	9.0	13.0	17.0	13.5	---	---
3	5.5	6.0	6.0	5.0	.0	6.5	10.0	13.0	16.5	14.0	---	---
4	9.5	5.0	7.0	6.0	.5	6.5	11.0	14.0	16.0	16.0	---	---
5	7.0	5.0	8.5	5.0	.5	6.5	10.5	14.5	16.0	16.5	---	---
6	6.0	6.0	8.0	2.5	.0	6.5	10.0	14.5	15.0	14.5	---	13.5
7	5.5	6.0	6.0	2.5	.0	6.5	10.0	16.0	14.0	16.0	---	12.0
8	5.0	5.5	5.5	2.5	.0	7.5	10.0	16.0	14.5	12.5	---	12.0
9	8.0	6.5	5.5	2.5	.5	9.0	9.0	17.0	15.5	12.5	---	15.0
10	9.0	8.5	6.0	3.5	.5	9.5	8.5	17.0	17.0	18.0	---	14.5
11	11.0	9.5	5.5	3.5	1.0	9.5	9.0	16.0	19.0	16.0	---	16.5
12	8.5	9.0	5.5	3.0	1.0	7.5	9.0	16.0	18.5	16.0	---	17.0
13	8.5	9.5	5.5	2.5	1.0	7.0	9.0	16.0	18.5	17.5	---	15.5
14	8.0	9.0	6.5	1.5	2.0	6.5	9.0	16.0	18.5	18.0	---	14.0
15	8.0	6.5	6.5	1.5	2.0	7.0	11.0	14.5	18.0	18.0	---	11.0
16	7.5	6.0	8.0	2.0	3.0	8.0	12.5	12.0	18.0	18.0	---	9.5
17	7.5	5.5	7.5	1.0	3.5	8.0	12.5	13.0	18.5	18.0	---	8.0
18	8.0	5.5	8.5	1.0	4.5	7.0	12.0	14.5	18.0	18.0	---	9.0
19	7.0	5.5	8.5	1.0	6.0	7.5	12.0	15.0	18.0	16.5	---	12.0
20	7.5	6.0	8.5	1.5	6.0	7.5	13.0	14.0	16.0	16.0	---	12.0
21	6.5	7.5	8.0	1.5	6.0	6.5	13.5	14.5	17.5	15.5	---	11.0
22	7.0	8.0	6.5	1.5	6.5	6.5	12.5	14.5	18.0	15.5	---	9.0
23	6.5	9.0	6.0	1.5	7.0	8.5	12.0	15.5	17.0	15.5	---	13.0
24	6.0	8.5	5.5	1.5	7.5	8.0	11.5	16.0	16.0	15.0	---	14.0
25	5.5	8.5	4.5	1.5	8.0	8.5	11.0	16.5	17.5	14.5	---	14.0
26	6.0	8.5	4.5	1.0	8.0	10.0	11.0	16.0	18.0	15.0	---	14.5
27	5.5	7.5	4.5	.5	8.5	10.5	11.5	16.5	18.5	15.0	---	14.5
28	5.5	7.0	4.5	.5	7.0	10.0	11.0	14.0	17.0	16.5	---	14.5
29	5.5	7.0	4.0	.0	6.5	8.0	11.5	13.5	16.0	16.0	---	14.5
30	6.0	7.0	4.5	.0	---	7.5	12.0	14.5	15.5	17.0	---	14.5
31	7.5	---	4.5	.0	---	7.5	---	15.5	---	18.0	---	---

POTOMAC RIVER BASIN

01596500 SAVAGE RIVER NEAR BARTON, MD

LOCATION.--Lat 39°34'05", long 79°06'10", Garrett County, Hydrologic Unit 02070002, on right bank 0.9 mi upstream from Bear Pen Run, 1.5 mi downstream from Poplar Lick Run, 5.4 mi northwest of Barton, and 10 mi upstream from mouth.

DRAINAGE AREA.--49.1 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,603.88 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect, frozen well, and periods of malfunctioning siphon), which are poor. U.S. Army Corps of Engineers satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0329	*2,610	*5.28	Aug 6	1459	1,410	4.11

Minimum discharge 2.2 ft<sup>3</sup>/s, Oct 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.3	17	14	e12	81	50	44	64	e9.2	15	11
2	2.7	5.2	15	13	e11	74	48	48	51	e10	9.6	9.5
3	3.0	23	13	15	e11	65	50	40	41	e12	7.4	8.6
4	4.5	16	12	18	e10	57	82	35	33	e12	8.4	9.1
5	6.8	12	11	19	e10	51	92	33	31	e10	7.0	6.8
6	5.2	11	9.6	17	e9.7	44	103	31	282	e9.0	544	6.2
7	3.5	9.2	9.0	17	e9.3	39	99	28	366	e8.2	326	4.4
8	2.7	8.1	7.9	19	e9.0	36	90	27	199	e8.0	115	3.8
9	2.5	7.0	7.0	17	e9.0	33	81	26	120	e10	66	3.8
10	26	6.4	12	21	e17	31	71	24	80	15	45	4.0
11	22	5.8	26	37	e40	45	64	22	59	39	32	21
12	11	5.1	21	40	e65	116	68	21	46	17	26	67
13	7.4	4.5	20	43	e40	112	63	23	38	11	22	29
14	7.5	4.2	86	41	e150	99	62	29	30	11	19	20
15	7.6	3.6	135	e33	e180	85	59	20	31	11	15	16
16	6.0	3.3	88	e38	e130	75	55	17	28	11	13	17
17	4.8	3.0	61	e32	e120	76	86	16	23	10	10	15
18	4.0	3.0	46	e28	e250	63	125	15	27	9.2	9.8	11
19	3.8	2.8	37	e25	1550	57	144	28	24	9.0	9.9	9.8
20	3.5	2.7	32	e22	544	55	132	64	19	10	8.6	12
21	3.3	2.8	31	e25	286	75	144	61	17	7.6	7.3	9.5
22	3.0	3.0	26	e25	185	110	231	106	19	6.0	6.8	8.2
23	3.0	3.0	23	e22	149	205	278	113	15	4.7	6.9	7.2
24	3.4	3.0	e20	e18	152	268	201	210	12	4.6	7.6	6.9
25	3.8	4.5	e23	e19	162	198	147	149	11	6.5	7.1	92
26	3.7	49	e21	e19	136	142	110	95	e10	6.1	6.6	290
27	3.3	72	e19	e19	109	108	87	73	11	4.8	7.3	147
28	2.9	41	17	e17	111	90	72	80	13	12	9.3	88
29	2.8	29	15	e15	89	80	61	98	11	18	8.2	61
30	2.6	23	15	e14	---	68	51	84	e10	12	7.9	46
31	2.4	---	16	e13	---	57	---	74	---	11	8.8	---
TOTAL	171.1	368.5	891.5	715	4556.0	2695	3006	1734	1721	334.9	1392.5	1040.8
MEAN	5.52	12.3	28.8	23.1	157	86.9	100	55.9	57.4	10.8	44.9	34.7
MAX	26	72	135	43	1550	268	278	210	366	39	544	290
MIN	2.4	2.3	7.0	13	9.0	31	48	15	10	4.6	6.6	3.8
CFSM	.11	.25	.59	.47	3.20	1.77	2.04	1.14	1.17	.22	.91	.71
IN.	.13	.28	.68	.54	3.45	2.04	2.28	1.31	1.30	.25	1.06	.79

e Estimated

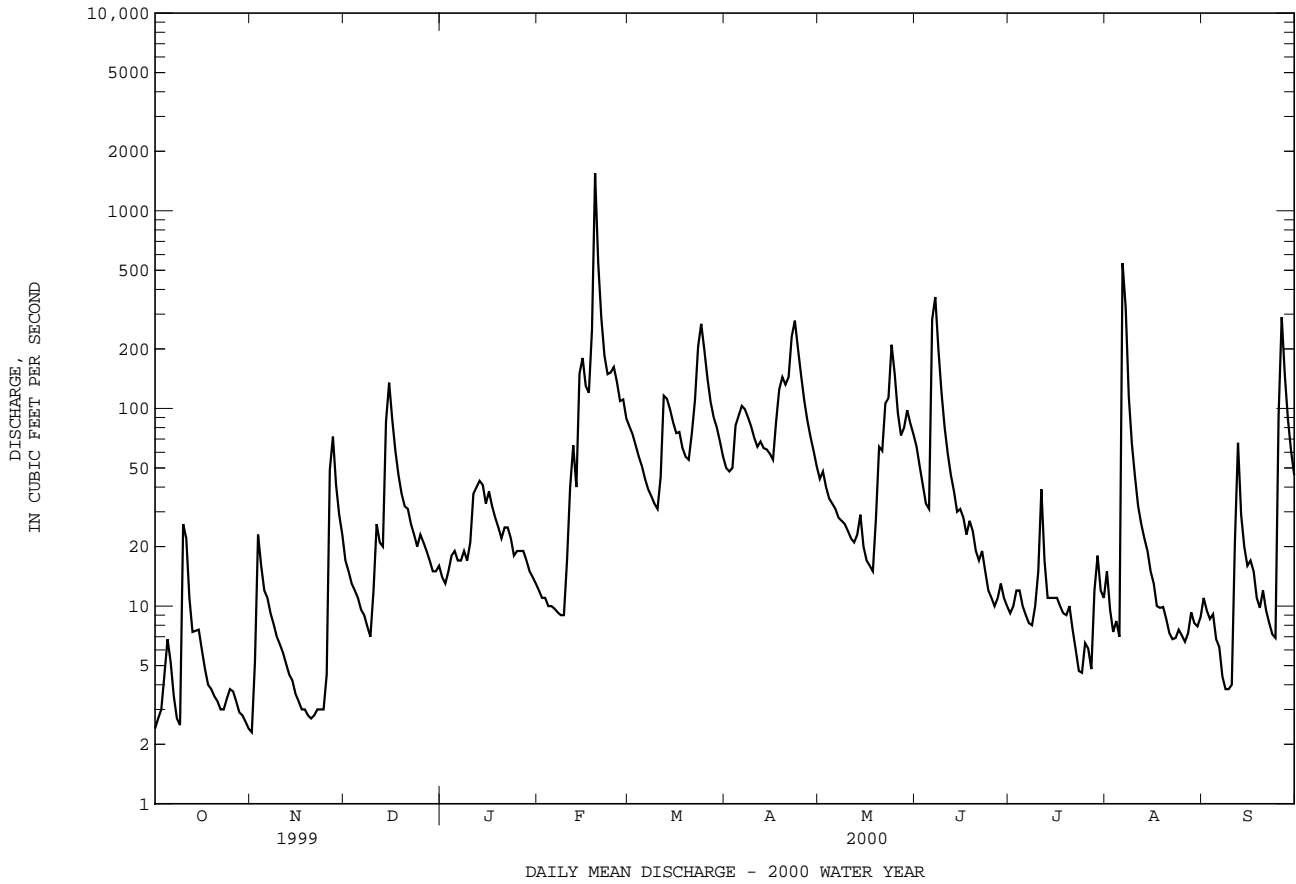
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	26.5	51.6	89.1	95.7	129	181	142	93.4	46.9	20.3	18.0	18.9
MAX	157	336	256	251	307	362	343	235	154	111	116	233
(WY)	1955	1986	1973	1952	1956	1994	1993	1996	1981	1989	1956	1996
MIN	1.52	2.29	2.37	13.7	19.4	30.8	33.0	21.8	5.48	2.60	1.57	1.78
(WY)	1964	1999	1999	1977	1954	1990	1968	1991	1965	1999	1999	1991

01596500 SAVAGE RIVER NEAR BARTON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1948 - 2000	
ANNUAL TOTAL	18660.04	18626.3		
ANNUAL MEAN	51.1	50.9	75.7	
HIGHEST ANNUAL MEAN			138	1996
LOWEST ANNUAL MEAN			34.9	1954
HIGHEST DAILY MEAN	726 Jan 24	1550 Feb 19	2180	Nov 5 1985
LOWEST DAILY MEAN	.94 Sep 4	2.3 Nov 1	.50	(a)
ANNUAL SEVEN-DAY MINIMUM	1.0 Aug 17	2.9 Oct 26	.63	Aug 29 1966
INSTANTANEOUS PEAK FLOW		2610 Feb 19	(b) 7510	Oct 15 1954
INSTANTANEOUS PEAK STAGE		5.28 Feb 19	8.45	Oct 15 1954
INSTANTANEOUS LOW FLOW		2.2 Oct 1	.40	(c)
ANNUAL RUNOFF (CFSM)	1.04	1.04	1.54	
ANNUAL RUNOFF (INCHES)	14.14	14.11	20.96	
10 PERCENT EXCEEDS	144	117	187	
50 PERCENT EXCEEDS	12	20	33	
90 PERCENT EXCEEDS	1.4	4.5	3.8	

a Sept. 2, 3, 12, 1966.  
 b From rating curve extended above 1,600 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 c Sept. 3, 4, 1966.







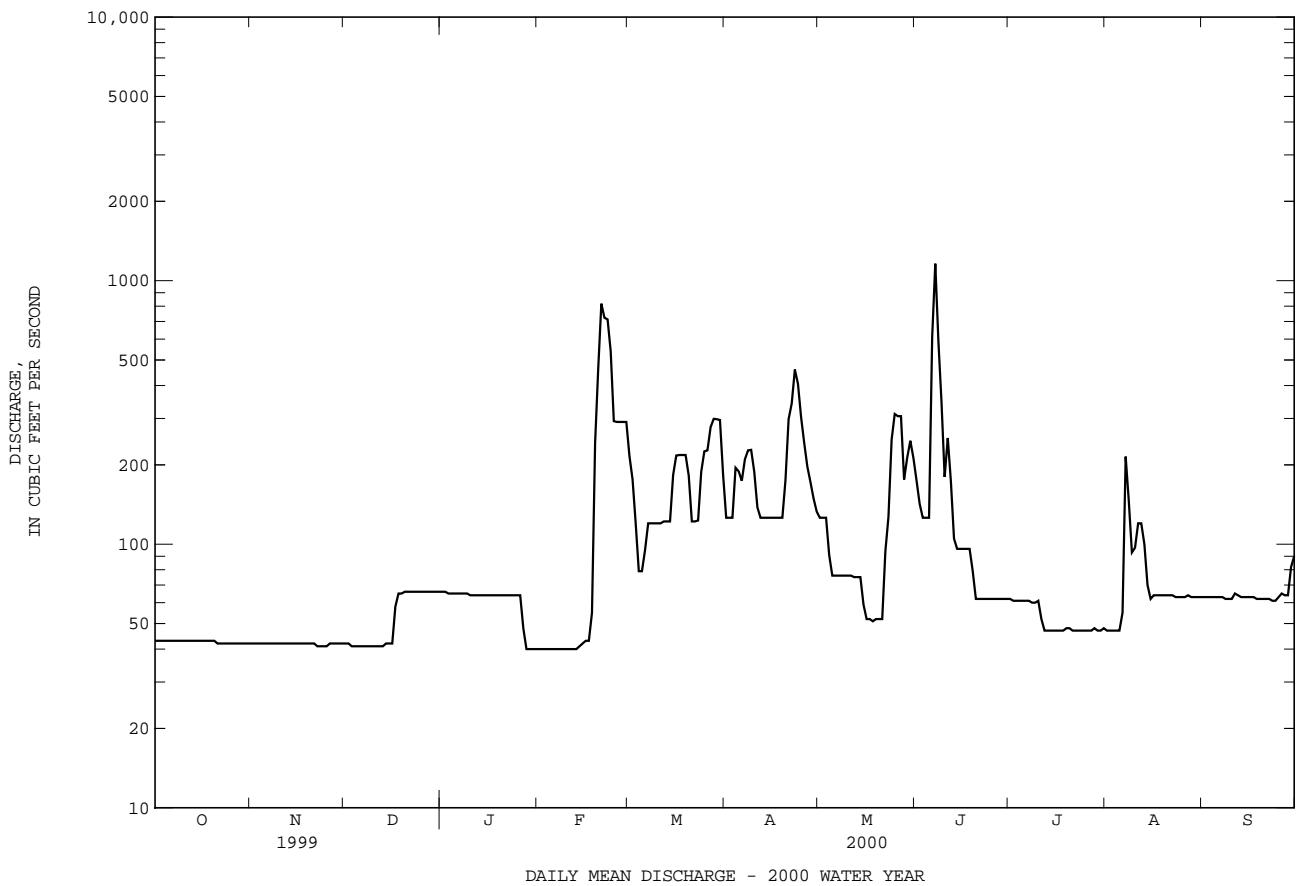
01597500 SAVAGE RIVER, BELOW SAVAGE RIVER DAM, NEAR BLOOMINGTON, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	41188		37994			
ANNUAL MEAN	113		104		169	
ANNUAL MEAN†	116		112		170	
HIGHEST ANNUAL MEAN					300	
LOWEST ANNUAL MEAN					69.7	
HIGHEST DAILY MEAN	1570	Apr 10	1160	Jun 7	4320	Sep 7 1996
LOWEST DAILY MEAN	15	Jan 2	40	(a)	.60	(b)
ANNUAL SEVEN-DAY MINIMUM	15	Jan 1	40	Jan 28	.64	Aug 4 1951
INSTANTANEOUS PEAK FLOW			1460	Jun 6	9190	Sep 7 1996
INSTANTANEOUS PEAK STAGE			3.78	Jun 6	10.09	Sep 7 1996
INSTANTANEOUS LOW FLOW			4.8	Nov 22	.35	Oct 27 1966
ANNUAL RUNOFF (CFSM)	1.06		.98		1.60	
ANNUAL RUNOFF (CFSM)†	1.10		1.06		1.60	
ANNUAL RUNOFF (INCHES)	14.45		13.33		21.70	
ANNUAL RUNOFF (INCHES)†	14.91		14.35		21.78	
10 PERCENT EXCEEDS	276		218		415	
50 PERCENT EXCEEDS	49		63		84	
90 PERCENT EXCEEDS	41		42		24	

† Adjusted for change in reservoir contents since December 1950.

a Jan. 28-31, Feb. 1-13.

b July 27-31, Aug. 5, 6, 9, 10, 1951.



## POTOMAC RIVER BASIN

01598500 NORTH BRANCH POTOMAC RIVER AT LUKE, MD

LOCATION.--Lat 39°28'45", long 79°03'55", Mineral County, W. Va., Hydrologic Unit 02070002, on right bank 0.2 mi downstream from Savage River, 0.5 mi northwest of Luke, and at mile 53.3.

DRAINAGE AREA.--406 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1899 to July 1906 (published as "at Piedmont, W. Va."), October 1949 to current year.

REVISED RECORDS.--WSP 192: 1899-1904. WSP 1432: 1905-6, drainage area at former site. OFR 95-292: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 944.22 ft above sea level. June 27, 1899, to July 15, 1906, nonrecording gage at bridge 1.1 mi downstream at datum about 35 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated prior to July 1981 by Stony River Reservoir 45 mi upstream from station, since December 1950 by Savage River Reservoir, 5 mi upstream from station (see station 01597500), and since July 1981 by Jennings Randolph Lake, 9 mi upstream from station. Some regulation at low flow by West Virginia Pulp and Paper Company at site used 1899-1906. U.S. Army Corps of Engineers satellite collection platform at station. Upper Potomac River Commission gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,420 ft<sup>3</sup>/s, Feb 21, gage height, 7.58 ft; minimum discharge, 140 ft<sup>3</sup>/s, Nov 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	157	165	349	368	783	694	492	825	264	409	307
2	159	174	165	347	366	639	644	496	686	262	351	841
3	157	172	166	345	364	591	645	488	553	263	460	905
4	165	161	168	345	364	520	1080	455	524	259	457	278
5	160	160	168	345	364	480	1320	432	531	257	353	276
6	161	160	168	345	364	491	1010	688	1130	255	923	273
7	162	160	168	344	364	520	912	686	1650	255	860	273
8	160	160	168	342	364	522	1060	431	1150	255	656	273
9	162	159	168	342	364	495	1060	371	797	255	491	273
10	189	157	176	348	364	441	874	318	524	261	476	277
11	168	157	177	352	382	475	784	314	521	302	431	379
12	164	157	174	351	389	654	691	312	456	289	363	357
13	163	157	175	353	380	699	687	312	373	251	344	367
14	161	157	216	371	443	593	682	310	353	250	309	361
15	160	157	204	401	444	706	632	293	365	250	289	360
16	160	157	240	403	426	819	586	278	353	248	288	357
17	160	156	324	400	424	791	782	277	348	248	288	360
18	158	155	730	399	727	696	985	277	345	245	293	359
19	176	155	802	399	2270	693	851	292	332	258	290	360
20	161	155	354	403	3640	663	889	517	293	627	287	358
21	160	155	355	400	4300	649	1050	534	281	604	284	355
22	160	156	353	401	2790	667	1220	315	284	391	286	353
23	160	155	353	403	2180	678	1320	355	277	364	290	353
24	159	155	350	402	1810	954	1170	681	272	328	292	353
25	157	161	349	399	1330	1330	1030	1030	266	267	288	443
26	157	191	349	397	1160	1410	817	824	266	265	288	504
27	157	187	349	380	1160	1650	703	691	268	262	296	519
28	157	172	349	364	1150	1660	643	740	269	308	295	500
29	157	169	349	368	1080	1250	552	1350	266	837	292	502
30	157	167	349	371	---	1050	502	1300	266	888	292	581
31	157	---	349	369	---	882	---	1040	---	616	293	---
TOTAL	5004	4851	8930	11538	30131	24451	25875	16899	14824	10684	11814	12057
MEAN	161	162	288	372	1039	789	862	545	494	345	381	402
MAX	189	191	802	403	4300	1660	1320	1350	1650	888	923	905
MIN	157	155	165	342	364	441	502	277	266	245	284	273
CFSM	.40	.40	.71	.92	2.56	1.94	2.12	1.34	1.22	.85	.94	.99
IN.	.46	.44	.82	1.06	2.76	2.24	2.37	1.55	1.36	.98	1.08	1.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 1906, 1950 - 2000, BY WATER YEAR (WY)

MEAN	332	452	812	911	1093	1548	1199	897	531	342	320	286
MAX	1423	2806	2536	2368	2487	3414	3098	2484	1493	1294	1525	1998
(WY)	1955	1986	1973	1996	1994	1963	1993	1996	1981	1990	1996	1996
MIN	27.6	33.5	123	166	99.8	467	278	165	108	91.4	37.0	17.1
(WY)	1905	1905	1999	1977	1905	1988	1995	1982	1969	1953	1904	1904

01598500 NORTH BRANCH POTOMAC RIVER AT LUKE, MD--Continued

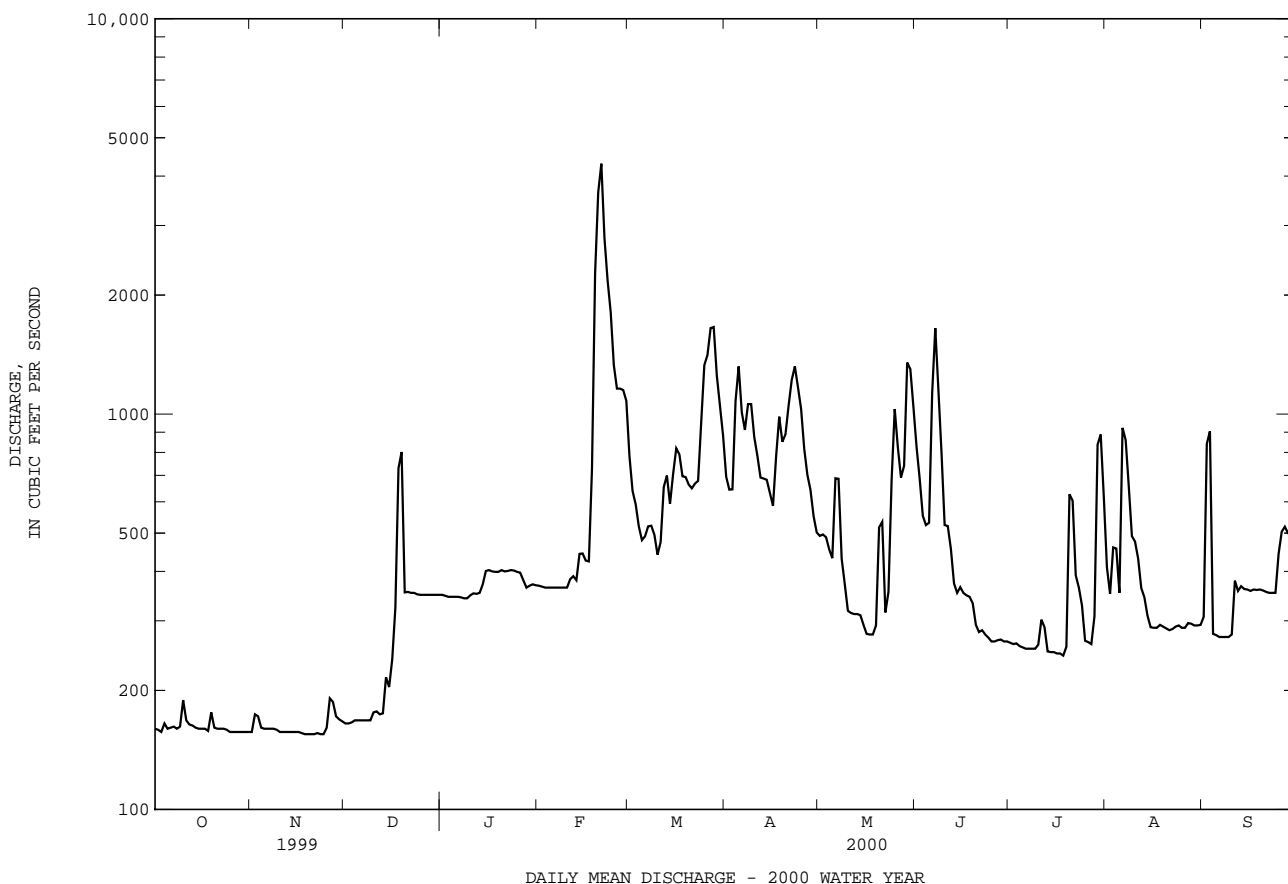
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1899 - 1906 1950 - 2000	
ANNUAL TOTAL	162257		177058			
ANNUAL MEAN	445		484		727	
ANNUAL MEAN†	485		520		729	
HIGHEST ANNUAL MEAN					1342	
LOWEST ANNUAL MEAN					412	
HIGHEST DAILY MEAN	3390	Apr 12	4300	Feb 21	18400	Aug 18 1955
LOWEST DAILY MEAN	113	(a)	155	(b)	6.0	Sep 4 1904
ANNUAL SEVEN-DAY MINIMUM	117	Jan 7	155	Nov 18	11	Aug 29 1904
INSTANTANEOUS PEAK FLOW			5420	Feb 21	(c)39400	Oct 15 1954
INSTANTANEOUS PEAK STAGE			7.58	Feb 21	17.15	Oct 15 1954
INSTANTANEOUS LOW FLOW			140	Nov 22	UNKNOWN	
ANNUAL RUNOFF (CFSM)	1.09		1.19		1.79	
ANNUAL RUNOFF (CFSM)†	1.19		1.28		1.80	
ANNUAL RUNOFF (INCHES)	14.87		16.22		24.34	
ANNUAL RUNOFF (INCHES)†	16.23		17.39		24.38	
10 PERCENT EXCEEDS	984		932		1630	
50 PERCENT EXCEEDS	234		353		407	
90 PERCENT EXCEEDS	157		160		112	

† Adjusted for change in reservoir contents since October 1949.

a Jan. 1, 2, 5.

b Nov. 18-21, 23, 24.

c From rating curve extended above 25,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.



POTOMAC RIVER BASIN

01599000 GEORGES CREEK AT FRANKLIN, MD

LOCATION.--Lat 39°29'38", long 79°02'42", Allegany County, Hydrologic Unit 02070002, on right bank at Franklin, and 1.2 mi upstream from Westernport and mouth.

DRAINAGE AREA.--72.4 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Westernport"), October 1929 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1502: 1940. WDR MD-DE-86-1: 1984(M).

GAGE.--Water-stage recorder. Datum of gage is 958.18 ft above sea level. May 4, 1905, to July 15, 1906, nonrecording gage at bridge 0.8 mi downstream at different datum. Oct. 16, 1929, to Oct. 1, 1937, water-stage recorder at site 95 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Records include about 0.5 ft<sup>3</sup>/s of sewage from city of Frostburg, which obtains its water supply from Big Piney Run (Monongahela River basin) and Savage River. A negligible discharge is diverted upstream from station by Frostburg Water Co. for municipal supplies of Eckhart and Welsh Hill. An undetermined amount of water is diverted from the upper third of basin into the Wills Creek basin by the Hoffman drainage tunnel (see station 01601500). National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1924, reached a stage of about 10 ft, from floodmarks, at site 95 ft downstream.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0215	1,870	7.44	Aug 6	1145	*2,840	*8.78
Jul 31	1700	1,390	6.72				

Minimum discharge 5.3 ft<sup>3</sup>/s, Jan 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	5.7	12	11	9.5	81	71	76	67	15	121	19
2	6.0	12	11	12	9.1	78	69	85	56	14	48	19
3	5.6	20	9.8	12	8.9	74	72	71	47	17	46	19
4	10	12	9.4	12	9.5	68	141	65	40	19	40	18
5	8.1	9.2	8.8	12	9.2	62	113	63	41	15	26	18
6	6.6	7.9	8.7	11	8.8	56	103	56	303	14	785	17
7	6.0	7.4	8.2	9.8	8.6	50	93	51	195	13	348	16
8	5.8	6.9	7.8	9.1	8.7	45	94	46	129	12	154	15
9	6.1	6.8	7.6	9.7	11	41	89	43	98	12	95	15
10	35	6.7	11	13	14	38	80	39	77	19	75	14
11	18	6.6	13	22	45	74	75	35	62	37	60	121
12	11	6.5	11	20	59	196	78	33	51	18	48	117
13	9.0	6.4	12	19	42	117	68	31	47	15	40	72
14	9.8	6.4	94	16	146	100	63	30	38	14	35	50
15	7.8	6.0	85	14	154	89	60	27	55	14	30	33
16	7.1	5.9	46	17	103	83	59	26	49	14	26	25
17	6.7	5.9	32	12	100	98	112	25	32	14	24	21
18	6.3	5.8	25	13	246	74	133	24	32	13	23	19
19	6.4	5.9	22	14	1130	66	136	46	31	29	23	17
20	7.2	5.9	21	14	447	66	124	55	26	28	21	17
21	6.6	6.0	24	15	279	150	187	48	26	17	20	17
22	6.4	6.1	20	15	208	200	314	66	29	14	19	16
23	6.5	6.7	17	13	164	214	263	68	23	13	18	15
24	6.6	6.4	15	12	140	184	214	154	20	17	18	14
25	6.1	9.5	16	11	123	166	179	83	19	17	18	99
26	5.9	42	13	12	107	148	150	60	18	15	18	254
27	5.8	51	13	11	98	131	129	57	18	15	17	106
28	5.6	25	12	12	114	121	112	100	21	15	18	83
29	5.7	17	12	10	88	113	98	137	18	16	18	74
30	5.6	14	12	9.3	---	94	85	94	17	15	18	63
31	5.7	---	12	9.8	---	80	---	77	---	262	18	---
TOTAL	252.7	339.6	621.3	402.7	3890.3	3157	3564	1871	1685	762	2268	1403
MEAN	8.15	11.3	20.0	13.0	134	102	119	60.4	56.2	24.6	73.2	46.8
MAX	35	51	94	22	1130	214	314	154	303	262	785	254
MIN	5.6	5.7	7.6	9.1	8.6	38	59	24	17	12	17	14
CFSM	.11	.16	.28	.18	1.85	1.41	1.64	.83	.78	.34	1.01	.65
IN.	.13	.17	.32	.21	2.00	1.62	1.83	.96	.87	.39	1.17	.72

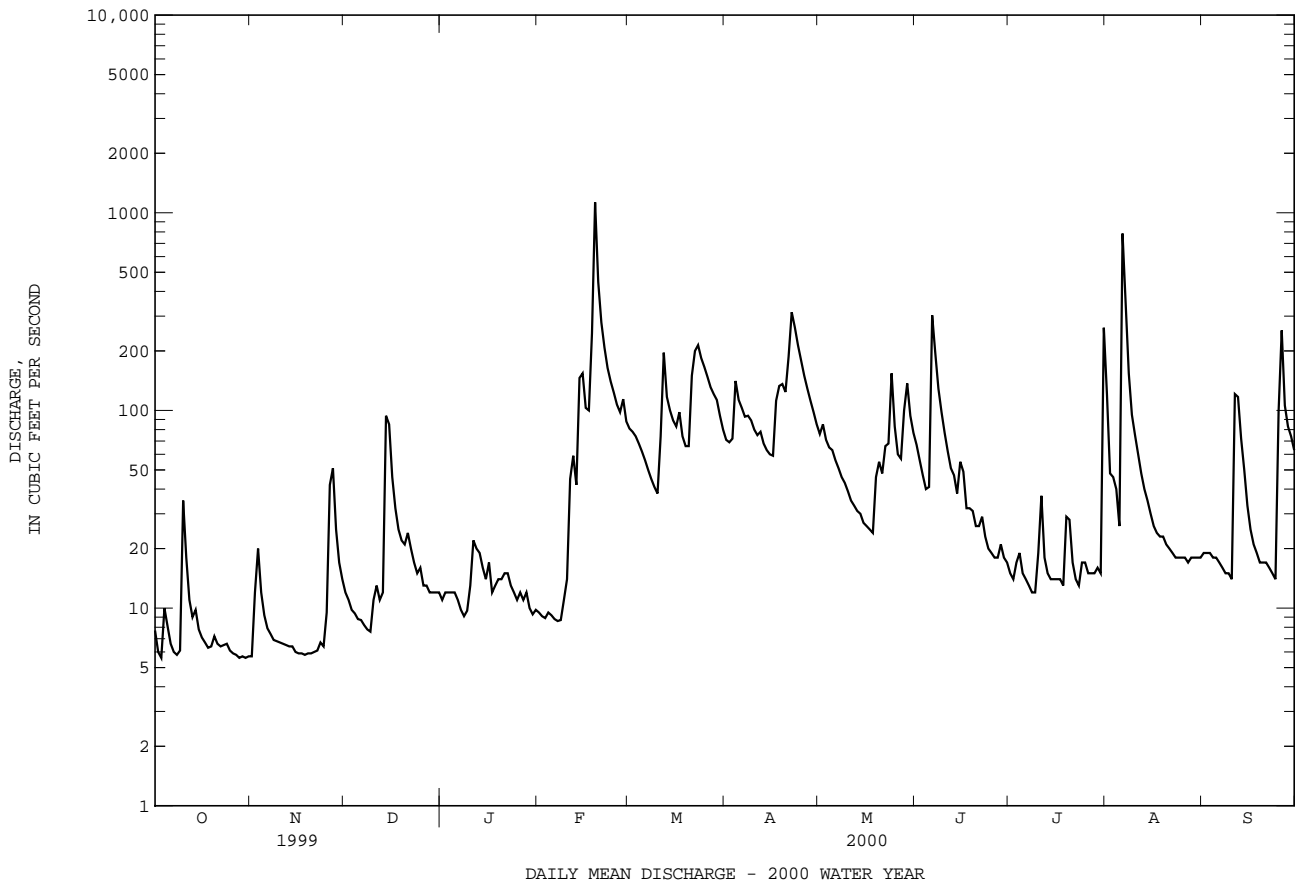
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1906, 1930 - 2000, BY WATER YEAR (WY)

MEAN	32.1	42.7	74.0	93.2	127	206	172	121	58.1	30.5	23.4	22.9
MAX	270	355	314	371	355	682	420	294	171	185	120	277
(WY)	1943	1986	1973	1937	1998	1936	1993	1989	1995	1989	1955	1996
MIN	1.78	3.40	3.42	10.9	8.77	43.2	40.0	27.7	12.5	5.19	3.97	2.65
(WY)	1931	1931	1944	1940	1954	1990	1954	1934	1969	1930	1930	1932

01599000 GEORGES CREEK AT FRANKLIN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1905 - 1906 1930 - 2000	
ANNUAL TOTAL	18051.7		20216.6		82.6	
ANNUAL MEAN	49.5		55.2		136	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					30.7	
HIGHEST DAILY MEAN	663	Apr 11	1130	Feb 19	4130	Mar 17 1936
LOWEST DAILY MEAN	4.2	(a)	5.6	(b)	1.6	(c)
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 17	5.7	Oct 26	1.6	Sep 29 1930
INSTANTANEOUS PEAK FLOW			2840	Aug 6	(d)8500	Mar 17 1936
INSTANTANEOUS PEAK STAGE			8.78	Aug 6	(f)9.60	Mar 17 1936
INSTANTANEOUS LOW FLOW			5.3	Jan 17	1.6	(g)
ANNUAL RUNOFF (CFSM)	.68		.76		1.14	
ANNUAL RUNOFF (INCHES)	9.28		10.39		15.50	
10 PERCENT EXCEEDS	121		129		200	
50 PERCENT EXCEEDS	14		21		38	
90 PERCENT EXCEEDS	5.6		6.8		7.2	

- a Aug. 18, 19.
- b Oct. 3, 28, 30.
- c Sept. 29, 30, 1930.
- d From rating curve extended above 2,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.
- f At site then in use.
- g Sept. 29 to Oct. 13, 1930.



POTOMAC RIVER BASIN

01601500 WILLS CREEK NEAR CUMBERLAND, MD

LOCATION.--Lat 39°40'07", long 78°47'18", Allegany County, Hydrologic Unit 02070002, on right bank at downstream side of railway bridge, 0.15 mi downstream from Braddock Run, 2.0 mi upstream from Cumberland, and mouth.

DRAINAGE AREA.--247 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Cumberland"), October 1929 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1432: 1906, 1930(M), 1933-34(M), 1936-37, 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 640.89 ft above sea level. May 6, 1905, to July 14, 1906, nonrecording gage at highway bridge 700 ft upstream at different datum. Oct. 18, 1929, to Mar. 17, 1936, water-stage recorder, and Apr. 1, 1936, to Mar. 19, 1937, nonrecording gage at site 200 ft upstream at present datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect, missing record), which are fair. Records include drainage from numerous active and abandoned coal mines. An undetermined amount of water is diverted into the basin from Georges Creek basin by Hoffman drainage tunnel. Miscellaneous measurements of discharge from the Hoffman drainage tunnel have been made in the water years 1944, 1964-65, 1967-82, and 1984 by the U.S. Geological Survey, and in the water years 1958 and 1959 by the Maryland Geological Survey. Slight diurnal fluctuation at low flow caused by quarry upstream. U.S. Army Corps of Engineers satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0630	*4,830	*7.30	Apr 22	1130	3,670	6.64

Minimum discharge 23 ft<sup>3</sup>/s, Nov 1, 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	23	106	71	56	435	256	292	417	81	101	42
2	33	45	86	73	54	403	243	306	326	70	77	41
3	27	108	80	71	51	350	252	266	264	69	57	37
4	35	83	71	76	56	312	393	240	221	77	53	36
5	33	57	65	74	54	282	377	223	210	73	47	42
6	32	47	59	64	51	250	385	208	805	59	623	34
7	30	41	55	55	49	224	378	193	733	52	545	30
8	26	39	50	53	49	207	379	181	585	48	277	28
9	28	36	46	58	47	195	370	171	443	44	187	27
10	127	33	57	68	59	188	332	161	340	47	140	30
11	121	32	84	98	137	256	304	147	270	52	105	186
12	70	31	76	107	288	552	331	136	232	53	86	123
13	50	30	73	102	273	481	306	133	222	46	73	72
14	45	29	353	95	584	460	304	123	192	41	66	57
15	40	28	553	80	776	413	305	109	231	43	56	48
16	37	27	391	e88	604	370	294	100	292	60	49	45
17	33	26	292	77	539	372	369	e97	201	49	45	43
18	29	26	232	76	683	303	469	e97	194	43	43	38
19	28	25	191	e86	3680	269	583	e160	174	44	43	37
20	31	25	174	e88	1700	253	617	292	143	50	42	36
21	30	25	180	91	1010	482	808	284	124	51	38	34
22	28	25	151	93	756	710	2610	299	166	42	35	31
23	26	26	127	92	638	863	1940	330	128	38	34	29
24	26	27	103	85	594	872	1160	541	107	59	34	28
25	26	35	93	74	624	725	836	484	93	55	35	112
26	25	259	97	73	569	584	646	378	86	51	33	279
27	24	433	104	e75	490	485	522	332	90	44	32	211
28	24	250	90	e70	550	433	443	546	168	43	33	145
29	24	178	85	e60	457	388	382	990	114	47	34	106
30	24	135	81	54	---	326	330	768	102	60	39	82
31	24	---	82	55	---	285	---	547	---	117	39	---
TOTAL	1177	2184	4287	2382	15478	12728	16924	9134	7673	1708	3101	2089
MEAN	38.0	72.8	138	76.8	534	411	564	295	256	55.1	100	69.6
MAX	127	433	553	107	3680	872	2610	990	805	117	623	279
MIN	24	23	46	53	47	188	243	97	86	38	32	27
CFSM	.15	.29	.56	.31	2.16	1.66	2.28	1.19	1.04	.22	.40	.28
IN.	.18	.33	.65	.36	2.33	1.92	2.55	1.38	1.16	.26	.47	.31

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1906, 1930 - 2000, BY WATER YEAR (WY)

MEAN	135	204	327	392	516	811	677	456	231	113	89.2	85.2
MAX	1130	1520	1113	1481	1255	2410	1910	1109	967	641	674	1083
(WY)	1943	1986	1973	1996	1971	1936	1993	1989	1972	1989	1984	1996
MIN	11.9	15.5	18.4	54.2	65.8	182	184	101	51.1	24.3	16.6	12.1
(WY)	1931	1931	1944	1940	1954	1990	1968	1934	1965	1965	1930	1932

01601500 WILLS CREEK NEAR CUMBERLAND, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1905 - 1906 1930 - 2000	
ANNUAL TOTAL	69812		78865			
ANNUAL MEAN	191		215		336	
HIGHEST ANNUAL MEAN					599 1996	
LOWEST ANNUAL MEAN					122 1954	
HIGHEST DAILY MEAN	2360	Apr 10	3680	Feb 19	19200	Jan 19 1996
LOWEST DAILY MEAN	16	(a)	23	Nov 1	10	(b)
ANNUAL SEVEN-DAY MINIMUM	16	Aug 17	24	Oct 26	10	Oct 8 1930
INSTANTANEOUS PEAK FLOW			4830	Feb 19	(c)45900	Jan 19 1996
INSTANTANEOUS PEAK STAGE			7.30	Feb 19	(d)23.11	Jan 19 1996
INSTANTANEOUS LOW FLOW			23	(f)	9.0	Oct 14 1930
ANNUAL RUNOFF (CFSM)	.77		.87		1.36	
ANNUAL RUNOFF (INCHES)	10.51		11.88		18.47	
10 PERCENT EXCEEDS	460		545		797	
50 PERCENT EXCEEDS	62		92		149	
90 PERCENT EXCEEDS	22		31		29	

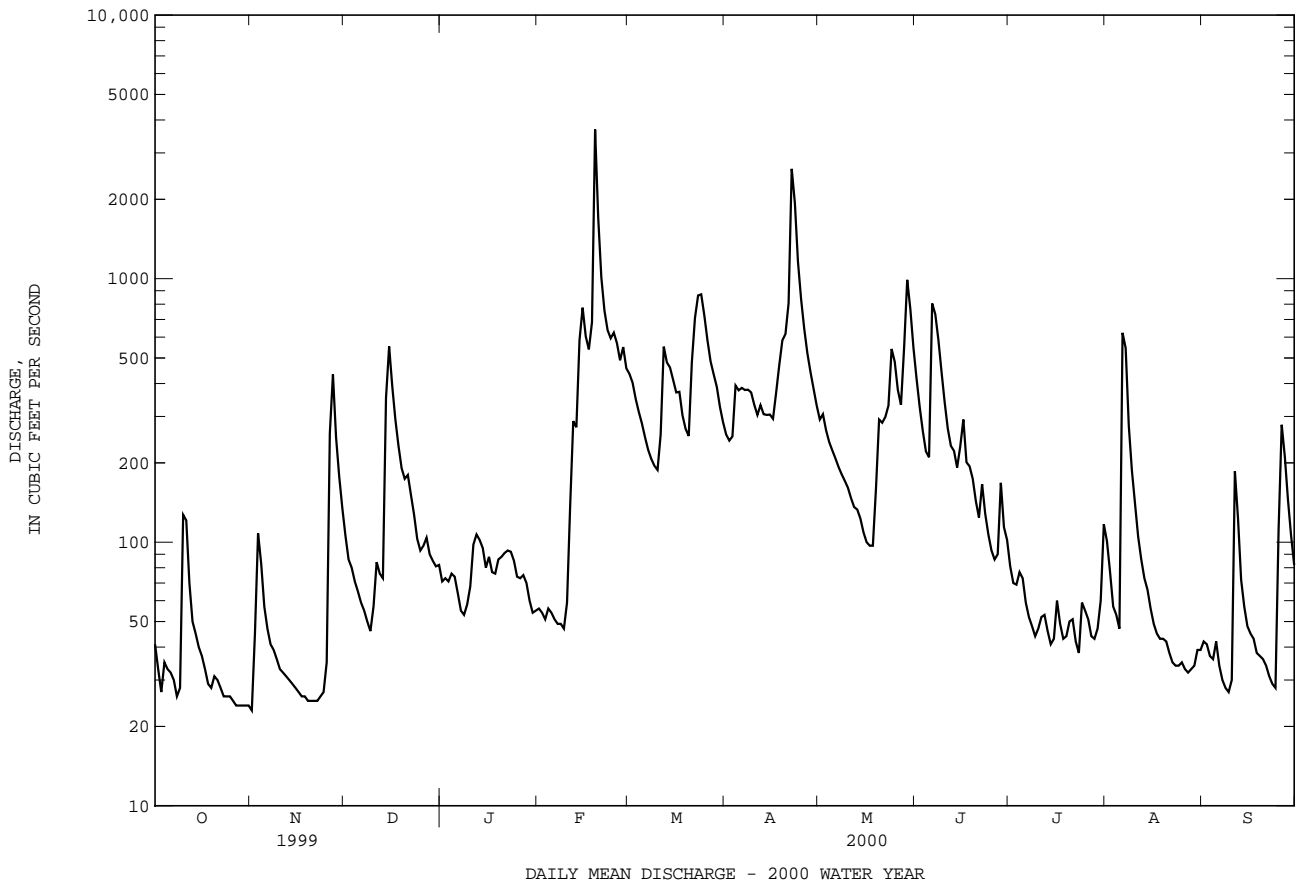
a Aug. 18-23.

b Oct. 8-10, 1930.

c From rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage heights of 13.45 and 20.2 ft.

d From floodmarks at present site.

f Nov. 1, 2.







01603000 NORTH BRANCH POTOMAC RIVER NEAR CUMBERLAND, MD--Continued

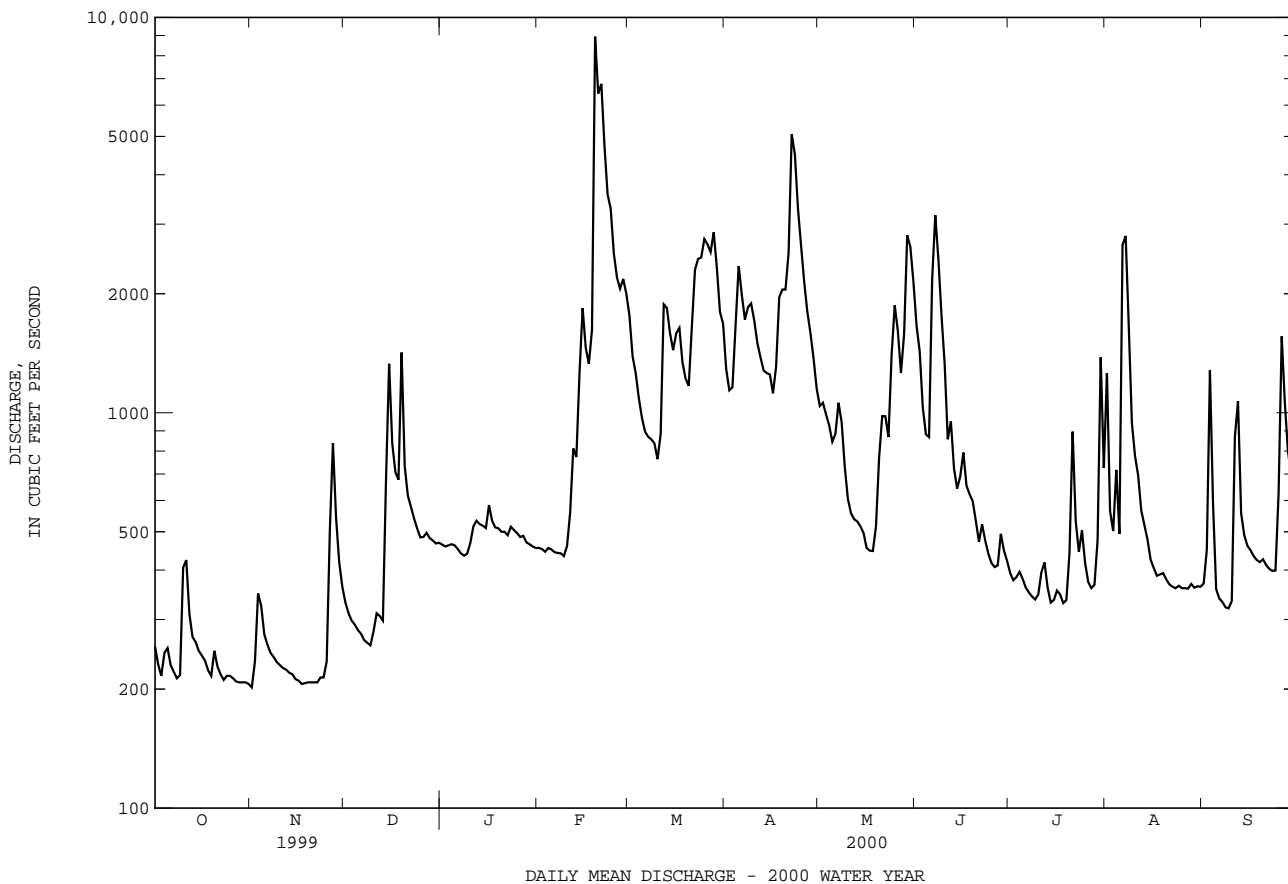
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1929 - 2000	
ANNUAL TOTAL	296311		327429			
ANNUAL MEAN	812		895		1296	
ANNUAL MEAN†	775		867		1296	
HIGHEST ANNUAL MEAN					2390	
LOWEST ANNUAL MEAN					632	
HIGHEST DAILY MEAN	8090	Apr 12	8940	Feb 19	47400	Mar 18 1936
LOWEST DAILY MEAN	158	Jan 2	202	Nov 1	13	(a)
ANNUAL SEVEN-DAY MINIMUM	188	Jan 1	208	Oct 26	16	Sep 20 1932
INSTANTANEOUS PEAK FLOW			12100	Feb 19	(b)88200	Mar 17 1936
INSTANTANEOUS PEAK STAGE			11.31	Feb 19	29.10	Mar 17 1936
INSTANTANEOUS LOW FLOW			202	(c)	12	Sep 22 1932
ANNUAL RUNOFF (CFSM)	.93		1.02		1.48	
ANNUAL RUNOFF (CFSM)†	.88		.99		1.48	
ANNUAL RUNOFF (INCHES)	12.57		13.89		20.07	
ANNUAL RUNOFF (INCHES)†	12.00		13.42		20.07	
10 PERCENT EXCEEDS	2090		1990		2990	
50 PERCENT EXCEEDS	364		498		680	
90 PERCENT EXCEEDS	208		235		173	

† Adjusted for change in reservoir contents since October 1949.

a Sept. 21-24, 1932.

b From rating curve extended above 33,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

c Oct. 31, Nov. 1, 2, 17, 18.



POTOMAC RIVER BASIN

01604500 PATTERSON CREEK NEAR HEADSVILLE, WV

LOCATION.--Lat 39°26'35", long 78°49'20", Mineral County, Hydrologic Unit 02070002, on right bank 100 ft downstream from Hazel Run, 1.0 mi downstream from Cabin Run, 4.0 mi northeast of Headsville, 8.0 mi east of Keyser, and at mile 13.0.

DRAINAGE AREA.--211 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1938 to current year.

REVISED RECORDS.--WSP 951: 1939-40. OFR 95-292: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.90 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 11, 1946, nonrecording gage on bridge 1.0 mi upstream at datum 6.14 ft higher. Oct. 11-23, 1946, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges (doubtful-or-no gage-height record, ice effect), which are poor. The flow from 115 mi<sup>2</sup> upstream from station is partially controlled, but not diverted, by several floodwater detention reservoirs with a total combined detention capacity of 19,887 acre-ft. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

PEXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,620 ft<sup>3</sup>/s, Aug. 6, gage height, 8.93 ft; minimum discharge, Sep 24, 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	59	26	e25	201	177	70	165	34	58	17
2	14	18	49	25	e24	168	154	66	132	30	62	20
3	13	21	43	25	e24	139	146	63	105	29	101	21
4	15	23	36	24	e23	120	243	60	83	30	127	24
5	20	25	31	24	e23	106	241	58	67	27	99	25
6	22	24	29	22	e22	94	209	55	118	23	883	22
7	22	23	27	22	e22	85	174	52	130	20	551	18
8	22	22	25	21	e27	79	155	49	97	17	358	15
9	21	21	23	21	33	73	141	46	84	15	214	13
10	99	20	27	22	38	69	127	43	68	14	145	13
11	197	20	29	27	44	83	112	40	58	23	111	20
12	146	19	31	29	57	455	101	38	52	28	89	31
13	105	19	39	33	67	400	93	38	47	35	75	38
14	79	18	198	36	92	311	85	35	42	29	62	28
15	58	18	375	35	150	256	79	32	43	25	45	23
16	45	17	239	46	155	221	76	30	63	23	32	20
17	35	16	162	40	135	195	78	28	73	24	23	17
18	29	16	116	38	452	156	88	26	56	20	20	14
19	25	15	87	43	1750	130	99	29	50	40	19	13
20	26	15	70	42	901	e110	104	39	44	72	17	13
21	24	e14	59	37	622	e150	114	58	39	72	16	11
22	22	e14	51	e35	519	e220	157	70	39	60	13	10
23	21	e13	45	e33	460	e300	176	92	32	50	12	9.8
24	20	e13	40	e32	415	465	154	151	28	52	13	9.4
25	19	17	33	e31	366	434	134	130	25	50	12	19
26	19	34	32	e30	306	381	118	100	23	44	11	127
27	19	134	33	e29	263	330	105	84	23	43	10	158
28	18	122	30	e28	264	300	95	85	37	49	12	120
29	19	95	28	e27	229	272	86	192	38	55	14	92
30	18	78	27	e27	---	238	77	226	38	47	13	71
31	17	---	27	e26	---	208	---	196	---	49	13	---
TOTAL	1224	920	2100	936	7508	6749	3898	2281	1899	1129	3230	1032.2
MEAN	39.5	30.7	67.7	30.2	259	218	130	73.6	63.3	36.4	104	34.4
MAX	197	134	375	46	1750	465	243	226	165	72	883	158
MIN	13	13	23	21	22	69	76	26	23	14	10	9.4
CFSM	.19	.15	.32	.14	1.23	1.03	.62	.35	.30	.17	.49	.16
IN.	.22	.16	.37	.17	1.32	1.19	.69	.40	.33	.20	.57	.18

e Estimated

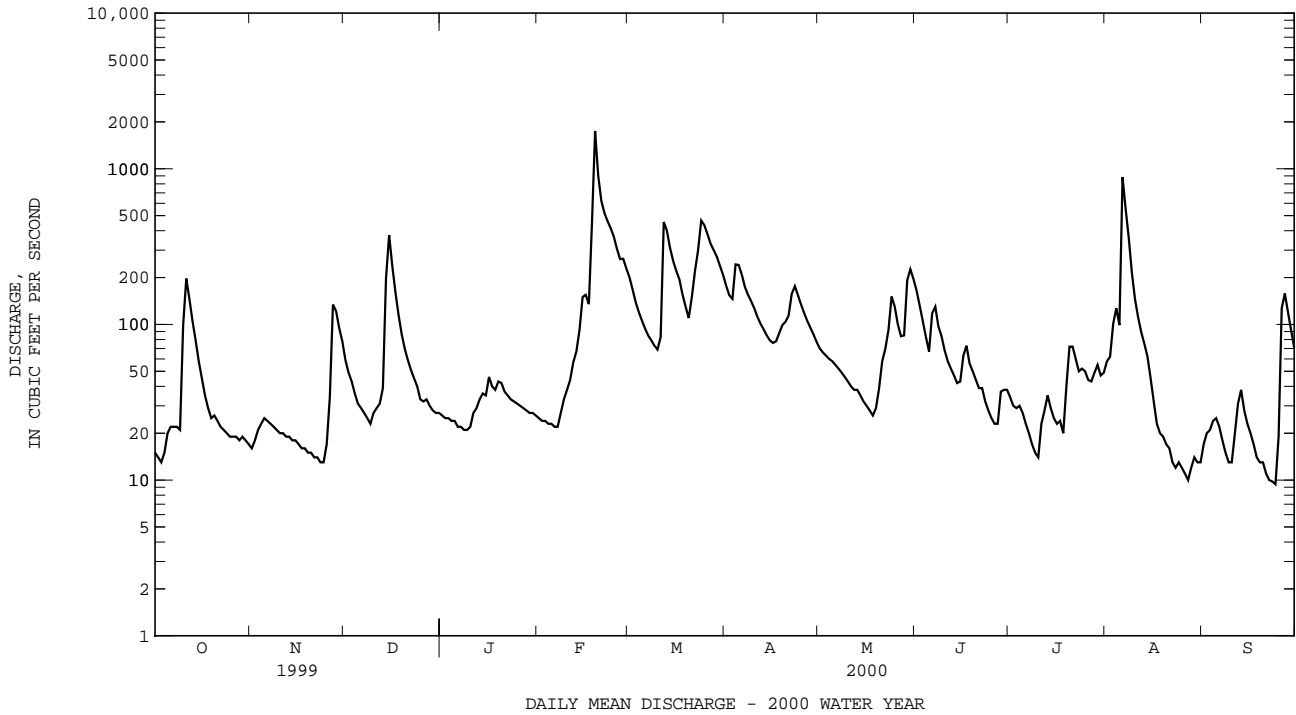
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	73.1	83.7	162	210	311	431	314	222	106	58.7	58.1	49.2
MAX	745	901	825	908	893	1346	1085	763	379	415	586	767
(WY)	1943	1986	1973	1996	1994	1963	1993	1988	1940	1989	1996	1996
MIN	2.24	4.39	9.70	22.0	30.8	58.3	54.1	21.2	8.38	3.14	5.20	2.80
(WY)	1992	1992	1944	1981	1954	1990	1969	1969	1999	1999	1966	1991

01604500 PATTERSON CREEK NEAR HEADSVILLE, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	29419.87		32906.2			
ANNUAL MEAN	80.6		89.9		173	
HIGHEST ANNUAL MEAN					387 1996	
LOWEST ANNUAL MEAN					35.1 1969	
HIGHEST DAILY MEAN	1240	Mar 18	1750	Feb 19	11100	Oct 15 1942
LOWEST DAILY MEAN	.48	Aug 23	9.4	Sep 24	.48	Aug 23 1999
ANNUAL SEVEN-DAY MINIMUM	.87	Aug 17	11	Sep 18	.87	Aug 17 1999
INSTANTANEOUS PEAK FLOW			2620	Aug 6	(a)16000	Aug 19 1955
INSTANTANEOUS PEAK STAGE			8.93	Aug 6	12.20	Aug 19 1955
INSTANTANEOUS LOW FLOW			9.4	(b)	.45	(c)
ANNUAL RUNOFF (CFSM)	.38		.43		.82	
ANNUAL RUNOFF (INCHES)	5.19		5.80		11.11	
10 PERCENT EXCEEDS	205		208		444	
50 PERCENT EXCEEDS	26		40		60	
90 PERCENT EXCEEDS	3.1		17		10	

a From rating curve extended above 4,900 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.  
 b Sept. 24, 25.  
 c Aug. 23, 24, 1999.



## POTOMAC RIVER BASIN

01606500 SOUTH BRANCH POTOMAC RIVER NEAR PETERSBURG, WV

LOCATION.--Lat 38°59'28", long 79°10'34", Grant County, Hydrologic Unit 02070001, on right bank 1.1 mi downstream from North Fork South Branch Potomac River, 2.6 mi west of Petersburg, and at mile 74.7.

DRAINAGE AREA.--676 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1928 to current year.

REVISED RECORDS.--WSP 951: 1939-41. WSP 1141: 1932, 1933(M), 1936-38. OFR 95-292: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 968.34 ft above sea level. Prior to Dec. 4, 1928, nonrecording gage and June 1928 to Nov. 5, 1985, water-stage recorder at site 1,125 ft downstream at datum 6.34 ft lower. Nov. 5, 1985, to June 22, 1994, and October 23, 1996 to current year, water-stage recorder at present site and datum. June 22, 1994, to October 23, 1996, water-stage recorder at site 325 ft downstream at datum 2.34 ft lower.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1877 reached a stage of 21.2 ft, from floodmarks at previous site and datum, about 59,000 ft<sup>3</sup>/s.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0730	*12,900	*8.60	No other peak greater than base discharge.			

Minimum discharge, 96 ft<sup>3</sup>/s, Jul 10, 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	127	477	265	e165	1020	742	530	603	213	599	196
2	160	186	409	253	e160	897	674	535	497	177	518	324
3	130	1030	363	257	e155	769	644	538	415	156	602	675
4	141	743	330	269	e150	668	777	487	352	147	453	531
5	386	550	307	273	e150	596	1130	535	312	149	354	463
6	382	459	291	279	e145	530	1090	508	333	143	280	451
7	273	396	302	260	e140	469	1000	470	441	124	241	333
8	222	343	277	254	e160	427	903	439	328	112	204	270
9	195	304	256	249	189	401	874	422	267	102	179	240
10	332	272	297	271	226	383	814	387	234	99	173	237
11	671	250	800	369	401	399	828	352	209	120	176	292
12	520	233	706	423	753	1640	817	320	191	126	170	285
13	398	217	641	428	668	1820	739	299	181	117	160	251
14	347	202	1440	456	1470	1420	660	299	168	108	156	220
15	312	188	3120	389	2720	1160	610	273	193	106	137	205
16	264	178	1990	431	1760	982	567	242	212	100	121	193
17	234	169	1330	419	1380	945	589	228	199	102	109	176
18	211	162	987	377	1980	837	2150	218	195	106	184	161
19	192	155	785	384	10500	716	2250	222	350	104	430	155
20	184	148	655	389	5440	666	1700	291	345	159	283	168
21	181	145	598	343	3120	846	1380	283	300	210	214	182
22	179	142	536	e320	2050	1220	1160	324	256	149	181	150
23	166	142	477	e290	1500	2190	987	668	320	120	165	138
24	160	148	426	e270	1240	3020	860	657	238	114	174	135
25	155	156	376	e240	1150	2630	821	693	203	123	184	270
26	150	224	324	e220	1070	2040	880	543	184	143	173	3480
27	149	1290	344	e210	963	1560	772	465	163	124	156	1770
28	147	1000	323	200	1250	1310	703	696	171	116	152	1070
29	141	729	297	e190	1150	1150	667	995	284	203	150	761
30	136	573	279	e180	---	959	598	972	293	306	148	590
31	131	---	271	e170	---	841	---	760	---	584	150	---
TOTAL	7412	10861	20014	9328	42205	34511	28386	14651	8437	4762	7376	14372
MEAN	239	362	646	301	1455	1113	946	473	281	154	238	479
MAX	671	1290	3120	456	10500	3020	2250	995	603	584	602	3480
MIN	130	127	256	170	140	383	567	218	163	99	109	135
CFSM	.35	.54	.96	.45	2.15	1.65	1.40	.70	.42	.23	.35	.71
IN.	.41	.60	1.10	.51	2.32	1.90	1.56	.81	.46	.26	.41	.79

e Estimated

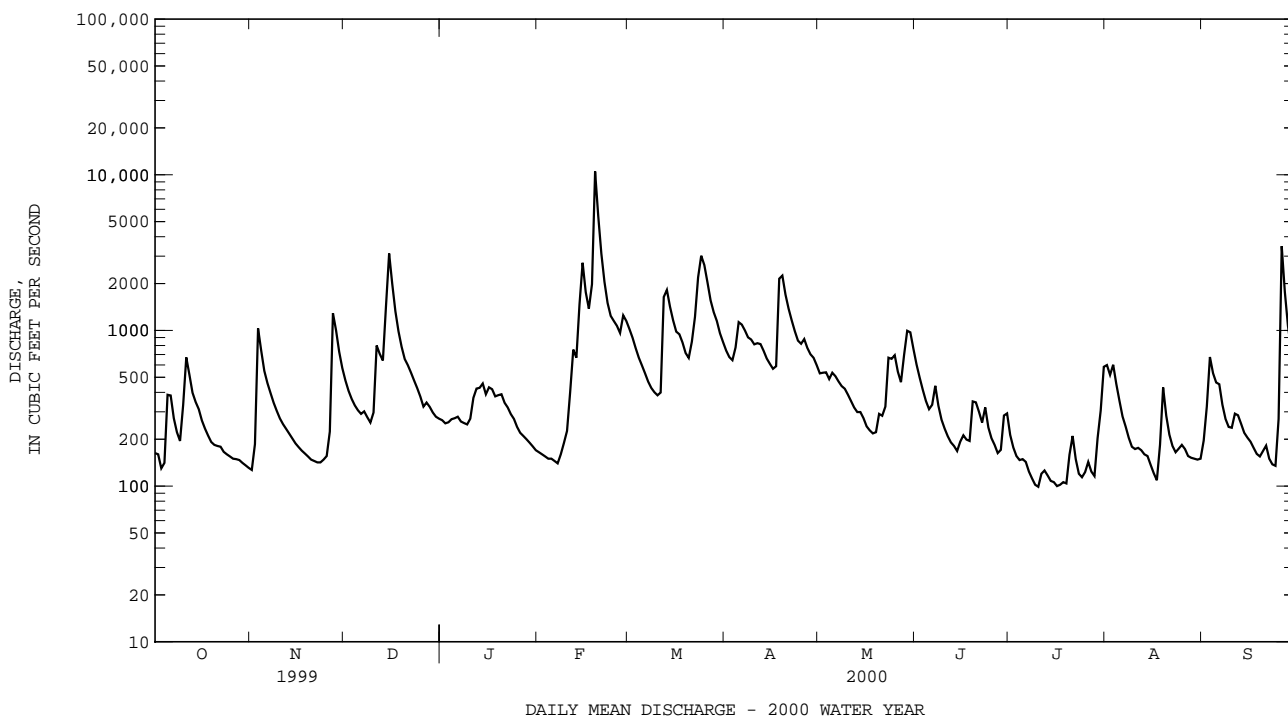
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	323	488	707	940	1171	1648	1257	1000	530	290	287	259
MEAN	323	488	707	940	1171	1648	1257	1000	530	290	287	259
MAX	1863	5569	2511	3386	3519	4090	2888	3546	2175	1479	1601	2968
(WY)	1977	1986	1973	1996	1994	1936	1993	1996	1949	1949	1996	1996
MIN	49.3	62.7	95.1	143	212	543	398	233	125	63.9	54.1	52.3
(WY)	1931	1931	1966	1981	1934	1990	1986	1930	1999	1999	1930	1930

01606500 SOUTH BRANCH POTOMAC RIVER NEAR PETERSBURG, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	179606		202315			
ANNUAL MEAN	492		553		739	
HIGHEST ANNUAL MEAN					1619	
LOWEST ANNUAL MEAN					365	
HIGHEST DAILY MEAN	4780	Mar 18	10500	Feb 19	77000	Nov 5 1985
LOWEST DAILY MEAN	49	(a)	99	Jul 10	43	(b)
ANNUAL SEVEN-DAY MINIMUM	51	Aug 7	106	Jul 13	44	Sep 6 1966
INSTANTANEOUS PEAK FLOW			12900	Feb 19	(c)130000	Nov 5 1985
INSTANTANEOUS PEAK STAGE			8.60	Feb 19	(d)25.40	Nov 5 1985
INSTANTANEOUS LOW FLOW			96	(f)	42	(g)
ANNUAL RUNOFF (CFSM)	.73		.82		1.09	
ANNUAL RUNOFF (INCHES)	9.88		11.13		14.86	
10 PERCENT EXCEEDS	1110		1150		1660	
50 PERCENT EXCEEDS	275		310		377	
90 PERCENT EXCEEDS	61		146		96	

a Aug. 13, 19.  
 b Sept. 27-29, 1959, Sept. 11, 12, 1966.  
 c From rating curve extended above 16,700 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 d From floodmarks at former site at gage datum 962.00 ft.  
 f July 10, 16.  
 g Sept. 28, 29, 1959, Sept. 11,12, 1966.

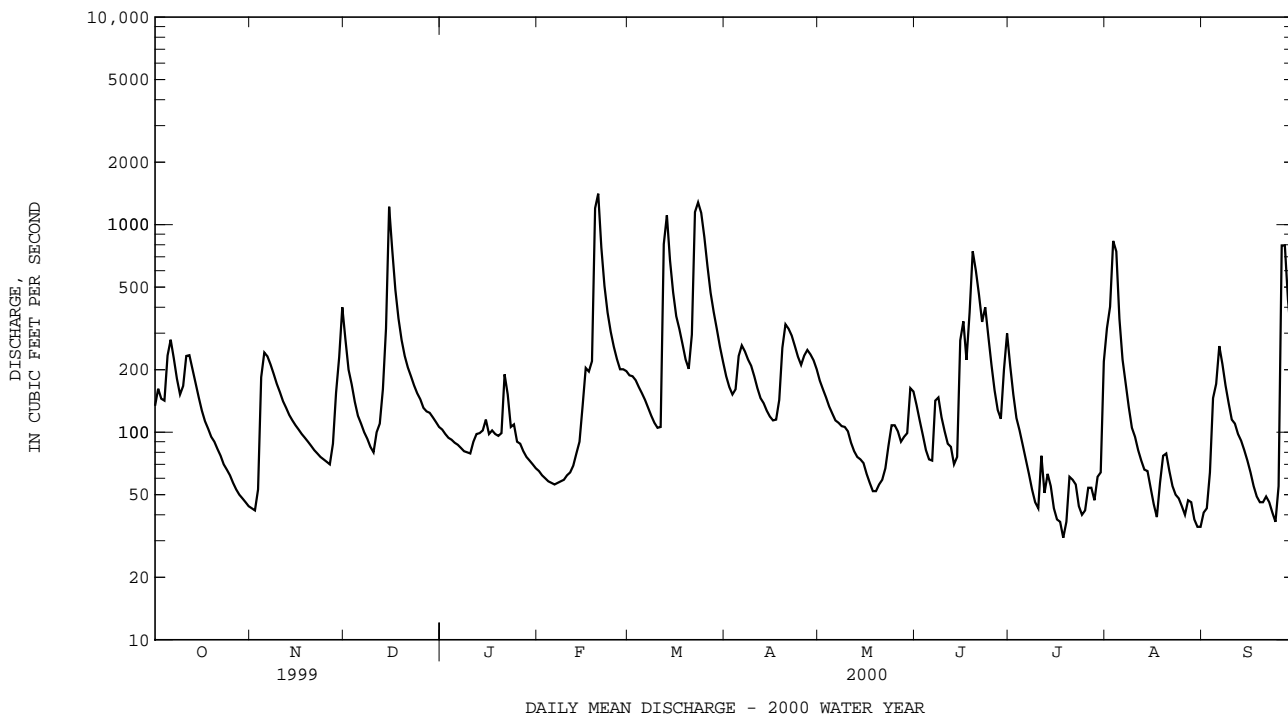




01608000 SOUTH FORK SOUTH BRANCH POTOMAC RIVER NEAR MOOREFIELD, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 1935 1938 - 2000	
ANNUAL TOTAL	47079.7		65525			
ANNUAL MEAN	129		179		232	
HIGHEST ANNUAL MEAN					480	
LOWEST ANNUAL MEAN					85.9	
HIGHEST DAILY MEAN	1630	Sep 7	1410	Feb 20	28000	Nov 5 1985
LOWEST DAILY MEAN	5.0	Aug 7	31	Jul 18	4.4	Sep 10 1966
ANNUAL SEVEN-DAY MINIMUM	6.9	Aug 7	40	Aug 26	5.3	Sep 5 1966
INSTANTANEOUS PEAK FLOW			1850	Feb 19	(a)110000	Nov 5 1985
INSTANTANEOUS PEAK STAGE			4.11	Feb 19	(b)19.99	Nov 5 1985
INSTANTANEOUS LOW FLOW			29	Jul 18	3.1	Aug 13 1999
ANNUAL RUNOFF (CFSM)	.47		.65		.84	
ANNUAL RUNOFF (INCHES)	6.32		8.80		11.38	
10 PERCENT EXCEEDS	233		334		510	
50 PERCENT EXCEEDS	93		112		96	
90 PERCENT EXCEEDS	9.4		50		21	

a From rating curve extended above 39,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 b From floodmarks.







01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1899 - 1906 1928 - 2000	
ANNUAL TOTAL	294852		352864		1342	
ANNUAL MEAN	808		964		2975	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	8430	Mar 19	11700	Feb 20	145000	Nov 5 1985
LOWEST DAILY MEAN	60	Aug 15	166	Jul 11	52	(a)
ANNUAL SEVEN-DAY MINIMUM	63	Aug 12	220	Jul 5	54	Sep 7 1966
INSTANTANEOUS PEAK FLOW			15000	Feb 20	(b)240000	Nov 5 1985
INSTANTANEOUS PEAK STAGE			11.89	Feb 20	(c)44.22	Nov 5 1985
INSTANTANEOUS LOW FLOW			159	(d)	29	(f)
ANNUAL RUNOFF (CFSM)	.54		.65		.90	
ANNUAL RUNOFF (INCHES)	7.38		8.83		12.27	
10 PERCENT EXCEEDS	1600		1950		3020	
50 PERCENT EXCEEDS	552		616		649	
90 PERCENT EXCEEDS	85		267		153	

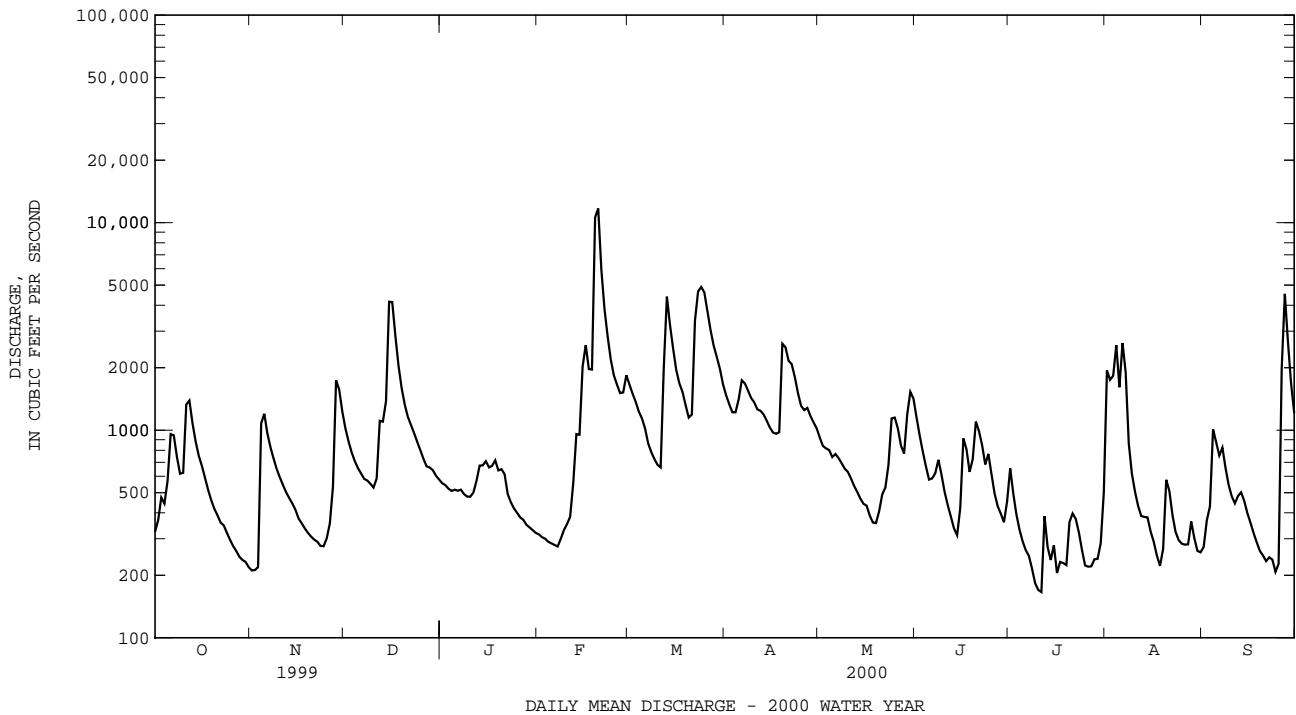
a Sept. 11, 12, 1966.

b From rating curve extended above 145,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

c From floodmarks.

d July 10, 11.

f Jan. 28, 1956 (result of freeze-up), July 30, 1966 (result of temporary dam).

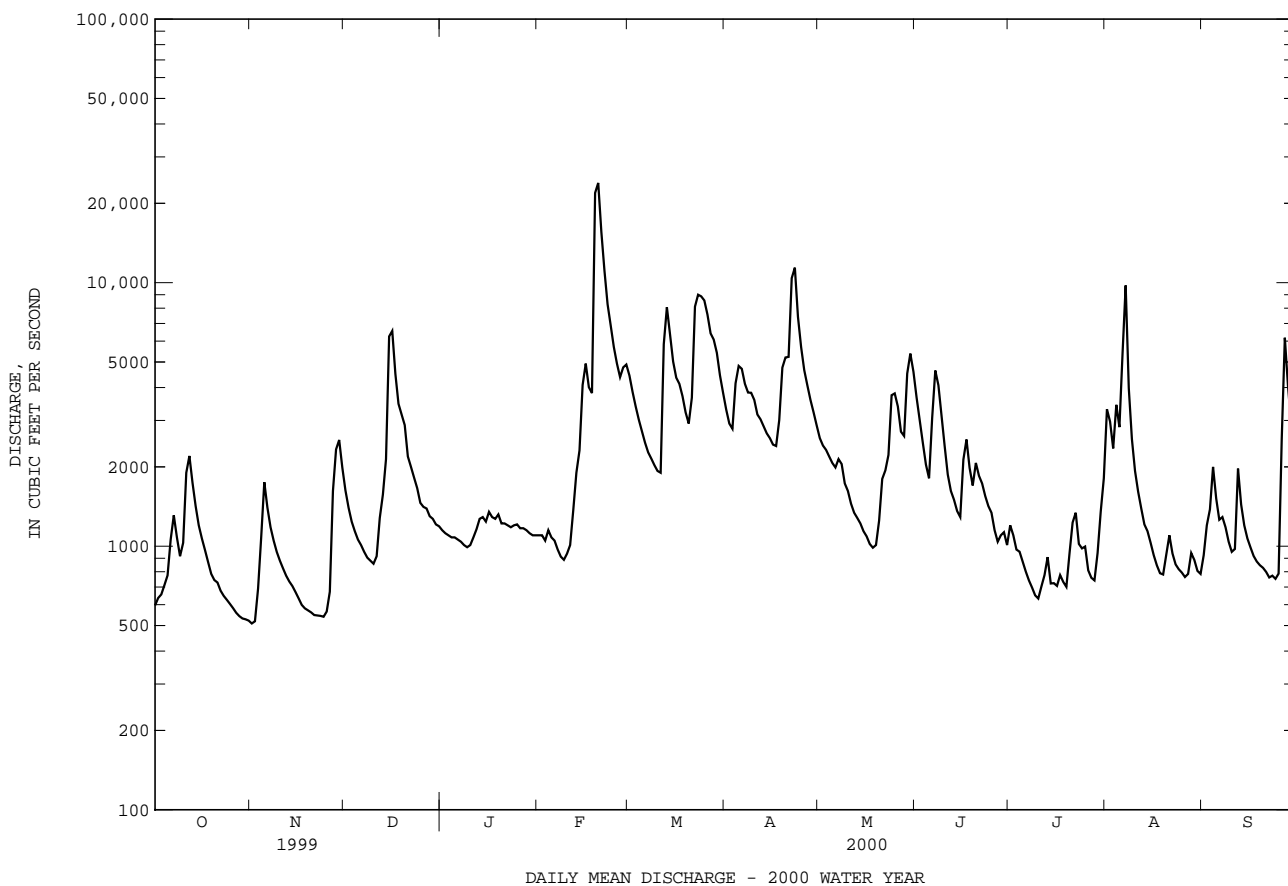




01610000 POTOMAC RIVER AT PAW PAW, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1939 - 2000	
ANNUAL TOTAL	702757		837909		3365	
ANNUAL MEAN	1925		2289		6433	
HIGHEST ANNUAL MEAN					1499	
LOWEST ANNUAL MEAN					125000	
HIGHEST DAILY MEAN	17400	Mar 19	23900	Feb 20	125000	Nov 6 1985
LOWEST DAILY MEAN	261	Aug 12	509	Nov 1	172	(a)
ANNUAL SEVEN-DAY MINIMUM	277	Aug 6	530	Oct 27	179	Sep 7 1966
INSTANTANEOUS PEAK FLOW			32300	Feb 19	(b)235000	Nov 5 1985
INSTANTANEOUS PEAK STAGE			19.78	Feb 19	53.58	Nov 5 1985
INSTANTANEOUS LOW FLOW			504	(c)	164	(d)
ANNUAL RUNOFF (CFSM)	.62		.73		1.08	
ANNUAL RUNOFF (INCHES)	8.35		9.96		14.61	
10 PERCENT EXCEEDS	4490		4760		7650	
50 PERCENT EXCEEDS	1100		1290		1790	
90 PERCENT EXCEEDS	392		719		443	

- a Sept. 10, 12, 13, 1966.
- b From rating curve extended above 85,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at site 5.0 mi upstream at Okonoko, WV.
- c Nov. 1, 2.
- d Sept. 10, 11, 1966.



POTOMAC RIVER BASIN

01610155 SIDELING HILL CREEK NEAR BELLEGROVE, MD

LOCATION.--Lat 39°38'58", long 78°20'40", Washington County, Hydrologic Unit 02070003, on left bank at bridge on Zeigler Road, 1.2 mi upstream from mouth, and 4.0 mi south of Bellegrove.

DRAINAGE AREA.--102 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1967 to September 1977, April 1999 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 440.41 ft above sea level.

REMARKS.--Records good above 1.0 ft<sup>3</sup>/s and poor below except those for estimated daily discharges (missing record, ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0900	1,570	4.67	Apr 22	1600	*4,160	*7.14
Mar 22	0030	1,170	4.11				

Minimum discharge 1.6 ft<sup>3</sup>/s, Sep 24, 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	3.8	43	e23	e21	222	86	79	132	19	126	11
2	18	18	35	e22	e20	182	81	77	92	15	110	9.8
3	12	301	32	e21	e19	136	88	69	66	12	79	9.4
4	10	119	28	e20	e18	111	488	57	50	12	59	8.6
5	11	69	25	e19	e18	95	468	53	42	15	45	6.9
6	25	48	24	e19	e17	81	309	49	285	15	45	5.6
7	18	36	23	e18	e17	68	209	43	271	11	162	4.7
8	14	29	20	e18	e16	61	164	39	154	8.6	100	3.9
9	11	24	18	e17	e16	57	152	35	103	7.2	68	3.4
10	38	21	17	e17	23	54	113	32	73	6.2	51	3.0
11	102	19	27	29	38	65	94	30	54	7.0	39	3.8
12	58	17	34	42	117	681	90	29	40	8.9	30	4.1
13	38	15	31	37	122	469	80	24	49	7.7	24	4.6
14	29	13	249	e34	195	292	72	21	60	6.4	20	3.6
15	23	12	576	e31	429	202	68	19	61	80	17	3.2
16	18	11	264	e32	263	157	66	16	182	55	14	2.9
17	15	9.3	154	e30	178	170	71	14	354	292	10	2.6
18	12	8.8	e108	e29	150	133	90	13	203	121	8.6	2.6
19	9.5	8.3	e85	e28	1040	114	217	19	132	66	7.5	3.0
20	9.5	8.9	e68	e27	680	109	224	49	91	58	6.9	3.0
21	9.2	8.3	e63	e26	456	378	297	66	66	46	6.5	2.4
22	8.7	7.8	e68	25	391	1000	2550	51	63	33	5.9	2.3
23	8.7	7.6	e52	e24	325	599	1320	81	49	25	5.3	2.1
24	8.2	7.4	e43	e23	276	384	545	339	35	24	4.6	1.8
25	7.4	8.3	e37	e22	229	262	340	222	31	32	4.1	3.2
26	6.5	17	e32	e22	176	197	232	128	31	30	3.6	24
27	5.5	164	e30	e21	142	151	174	88	22	22	3.7	42
28	5.1	117	e29	20	259	140	139	163	46	20	8.2	24
29	4.9	77	e27	21	266	144	115	703	39	19	20	15
30	4.6	56	e25	22	---	112	95	368	26	34	18	10
31	4.3	---	e24	22	---	97	---	205	---	223	14	---
TOTAL	561.1	1261.5	2291	761	5917	6923	9037	3181	2902	1331.0	1115.9	226.5
MEAN	18.1	42.0	73.9	24.5	204	223	301	103	96.7	42.9	36.0	7.55
MAX	102	301	576	42	1040	1000	2550	703	354	292	162	42
MIN	4.3	3.8	17	17	16	54	66	13	22	6.2	3.6	1.8
CFSM	.18	.41	.72	.24	2.00	2.19	2.95	1.01	.95	.42	.35	.07
IN.	.20	.46	.84	.28	2.16	2.52	3.30	1.16	1.06	.49	.41	.08

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1977, 1999 - 2000, BY WATER YEAR (WY)

MEAN	100	86.7	173	116	194	206	215	121	120	34.9	23.6	26.8
MAX	569	293	401	230	523	346	518	288	726	87.6	85.1	194
(WY)	1977	1971	1973	1974	1971	1977	1970	1971	1972	1977	1969	1975
MIN	1.17	6.69	39.7	11.3	48.6	107	37.8	22.9	5.10	1.22	.039	1.24
(WY)	1975	1975	1969	1977	1969	1969	1971	1969	1999	1999	1968	1972

01610155 SIDEILING HILL CREEK NEAR BELLEGROVE, MD--Continued

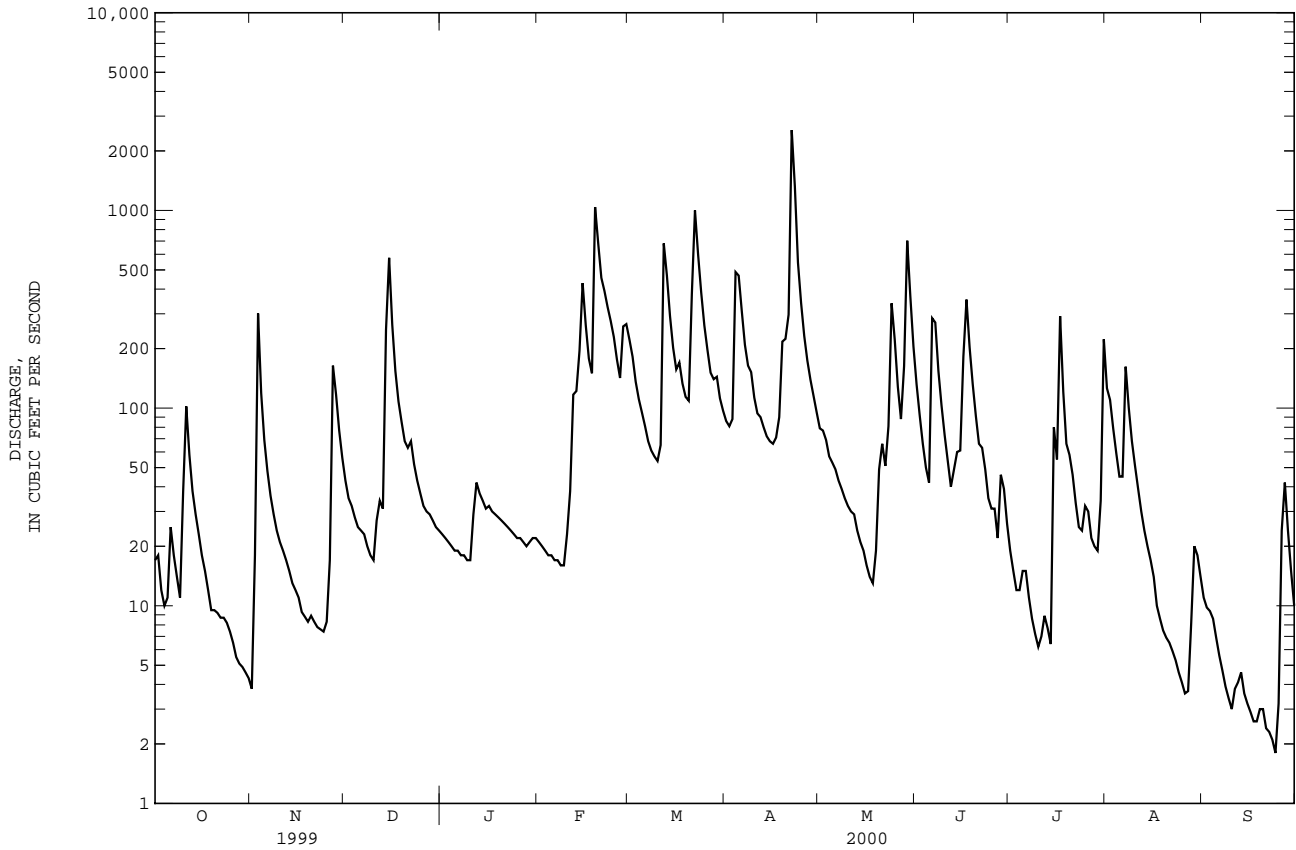
SUMMARY STATISTICS

FOR 2000 WATER YEAR

WATER YEARS 1967 - 1977

	FOR 2000 WATER YEAR	WATER YEARS 1967 - 1977	1999 - 2000
ANNUAL TOTAL	35508.0		
ANNUAL MEAN	97.0	119	
HIGHEST ANNUAL MEAN		177	1972
LOWEST ANNUAL MEAN		42.0	1969
HIGHEST DAILY MEAN	2550 Apr 22	9200	Jun 22 1972
LOWEST DAILY MEAN	1.8 Sep 24	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	2.5 Sep 18	.00	Aug 18 1968
INSTANTANEOUS PEAK FLOW	4160 Apr 22	(b)14200	Jun 22 1972
INSTANTANEOUS PEAK STAGE	7.14 Apr 22	12.44	Jun 22 1972
INSTANTANEOUS LOW FLOW	1.6 (c)	.00	(d)
ANNUAL RUNOFF (CFSM)	.95	1.17	
ANNUAL RUNOFF (INCHES)	12.95	15.88	
10 PERCENT EXCEEDS	252	266	
50 PERCENT EXCEEDS	32	38	
90 PERCENT EXCEEDS	6.8	1.9	

- a Aug. 18-31, Sept. 1-9, 1968, Aug. 6-24, 1999.
- b From rating curve extended above 10,400 ft<sup>3</sup>/s.
- c Sept. 24, 25.
- d Aug. 17-31, Sept. 1-10, 1968, Aug. 6-25, 1999.

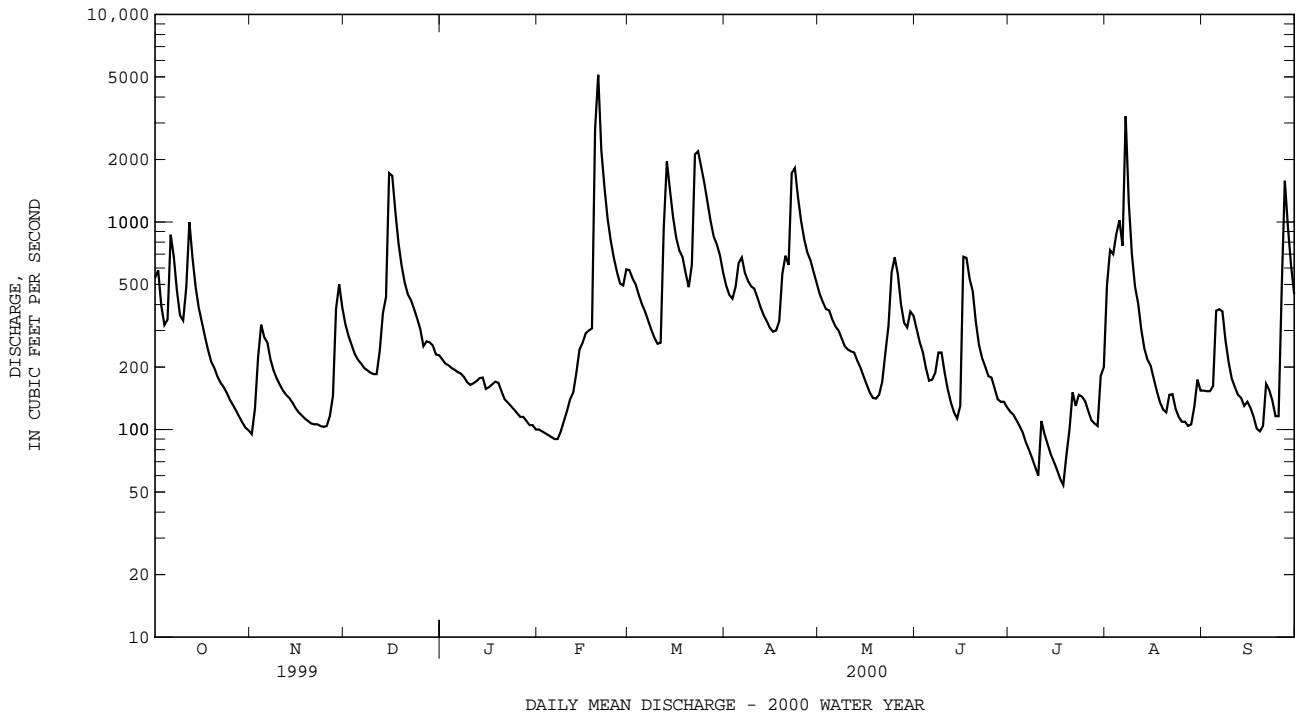




01611500 CACAPON RIVER NEAR GREAT CACAPON, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1923 - 1995 1997 - 2000	
ANNUAL TOTAL	102410		140900			
ANNUAL MEAN	281		385		587	
HIGHEST ANNUAL MEAN					1135	
LOWEST ANNUAL MEAN					180	
HIGHEST DAILY MEAN	3380	Mar 19	5120	Feb 20	67900	Mar 18 1936
LOWEST DAILY MEAN	40	(a)	(e)54	Jul 18	26	Sep 12 1966
ANNUAL SEVEN-DAY MINIMUM	42	Aug 15	69	Jul 13	28	Sep 7 1966
INSTANTANEOUS PEAK FLOW			8560	Feb 19	(b)87600	Mar 18 1936
INSTANTANEOUS PEAK STAGE			9.92	Feb 19	30.10	Mar 18 1936
INSTANTANEOUS LOW FLOW			UNKNOWN		26	(c)
ANNUAL RUNOFF (CFSM)	.42		.57		.87	
ANNUAL RUNOFF (INCHES)	5.64		7.77		11.83	
10 PERCENT EXCEEDS	580		771		1340	
50 PERCENT EXCEEDS	173		218		242	
90 PERCENT EXCEEDS	54		105		67	

a Aug. 19-21.  
 e Estimated.  
 b From rating curve extended above 52,000 ft<sup>3</sup>/s.  
 c Sept. 11-13, 1966.





POTOMAC RIVER BASIN

01613000 POTOMAC RIVER AT HANCOCK, MD

LOCATION.--Lat 39°41'49", long 78°10'39", Washington County, Hydrologic Unit 02070004, on left bank, 0.2 mi downstream from Little Tonoloway Creek, 0.5 mi downstream from bridge on U.S. Highway 522 at Hancock, 1.1 mi upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek), and at mile 239.

DRAINAGE AREA.--4,090 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1932 to current year. Gage-height records collected at same site since June 1925 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 781: 1933(M). OFR 95-292: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 383.68 ft above sea level. Oct. 1, 1932, to Jan. 5, 1935, Mar. 18, 1936, to Jan. 20, 1937, nonrecording gage, on former highway bridge just upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Slight regulation at low flow from power plants upstream. Low flow affected slightly by Stony River Reservoir prior to July 1981, since December 1950 by Savage River Reservoir (see station 01597500), and since July 1981 by Jennings Randolph Lake. National Weather Service gage-height telemeter at station. U.S. Army Corps of Engineers satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1932, about 40 ft in May 1889, discharge, about 220,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 23,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 20	0330	*37,100	*17.05	No other peak greater than base discharge.			

Minimum discharge 660 ft<sup>3</sup>/s, Oct 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	915	697	2390	1470	e1300	5460	4170	3440	4610	1140	2580	943
2	1350	751	2010	1410	e1300	4840	3630	3150	3740	1330	4490	1180
3	1130	1340	1760	1370	e1200	4220	3390	3000	3170	1190	3410	1260
4	1060	1370	1590	1340	e1300	3780	4540	2850	2570	1090	3610	1670
5	1090	1800	1460	1310	e1280	3370	5980	2720	2200	1040	4390	2240
6	1540	2130	1370	1300	e1220	3060	5860	2520	2590	958	3310	1750
7	2000	1720	1290	1270	e1220	2780	5210	2460	4730	860	12900	1630
8	1860	1480	1220	1230	e1220	2580	4640	2520	4990	787	6670	1570
9	1490	1320	1170	1210	e1200	2420	4610	2380	4070	736	4190	1360
10	1430	1210	1150	1200	e1300	2280	4410	2050	3120	702	2870	1190
11	1810	1120	1130	1230	e1500	2210	4060	1900	2490	690	2310	1120
12	3310	1060	1230	1320	2200	5340	3710	1760	1930	743	1920	1180
13	2950	1000	1860	1410	2900	9940	3580	1640	1800	844	1630	2120
14	2300	953	2430	1500	3260	8600	3370	1530	1620	949	1430	1450
15	1870	908	6400	1490	3940	6670	3200	1430	1570	878	1350	1270
16	1600	862	8880	1470	5340	5580	3080	1350	2530	885	1200	1130
17	1420	823	6560	1530	4880	5150	2980	1290	4700	1010	1070	1050
18	1260	786	4940	1420	4280	4800	3280	1220	3440	1020	972	969
19	1120	766	3990	1480	14500	4200	4750	1240	2840	887	900	940
20	1040	755	3920	e1400	31500	3740	6340	1330	2370	891	880	920
21	975	747	3160	e1400	18500	4200	6120	1640	2500	1140	1060	909
22	945	728	2730	e1400	13500	9680	12900	2200	2200	1460	1230	921
23	887	725	2480	e1450	9850	11500	17100	2610	2010	1390	1050	858
24	846	725	2250	e1400	7860	10700	10400	3810	1730	1210	949	844
25	816	736	2010	e1400	6830	9780	7690	5050	1660	1180	899	849
26	788	816	1780	e1400	5790	8800	6290	4510	1570	1120	877	1200
27	761	1170	1800	e1350	5120	7570	5400	3690	1320	925	856	6100
28	730	2420	1720	e1300	5150	6770	4800	3200	1260	872	888	5900
29	716	3450	1630	e1300	5700	6430	4310	4660	1330	882	1040	4130
30	701	2960	1550	e1300	---	5570	3850	6100	1270	1090	1060	3150
31	697	---	1520	e1280	---	4680	---	5560	---	2000	964	---
TOTAL	41407	37328	79380	42340	165140	176700	163650	84810	77930	31899	72955	51803
MEAN	1336	1244	2561	1366	5694	5700	5455	2736	2598	1029	2353	1727
MAX	3310	3450	8880	1530	31500	11500	17100	6100	4990	2000	12900	6100
MIN	697	697	1130	1200	1200	2210	2980	1220	1260	690	856	844
CFSM	.33	.30	.63	.33	1.39	1.39	1.33	.67	.64	.25	.58	.42
IN.	.38	.34	.72	.39	1.50	1.61	1.49	.77	.71	.29	.66	.47

e Estimated

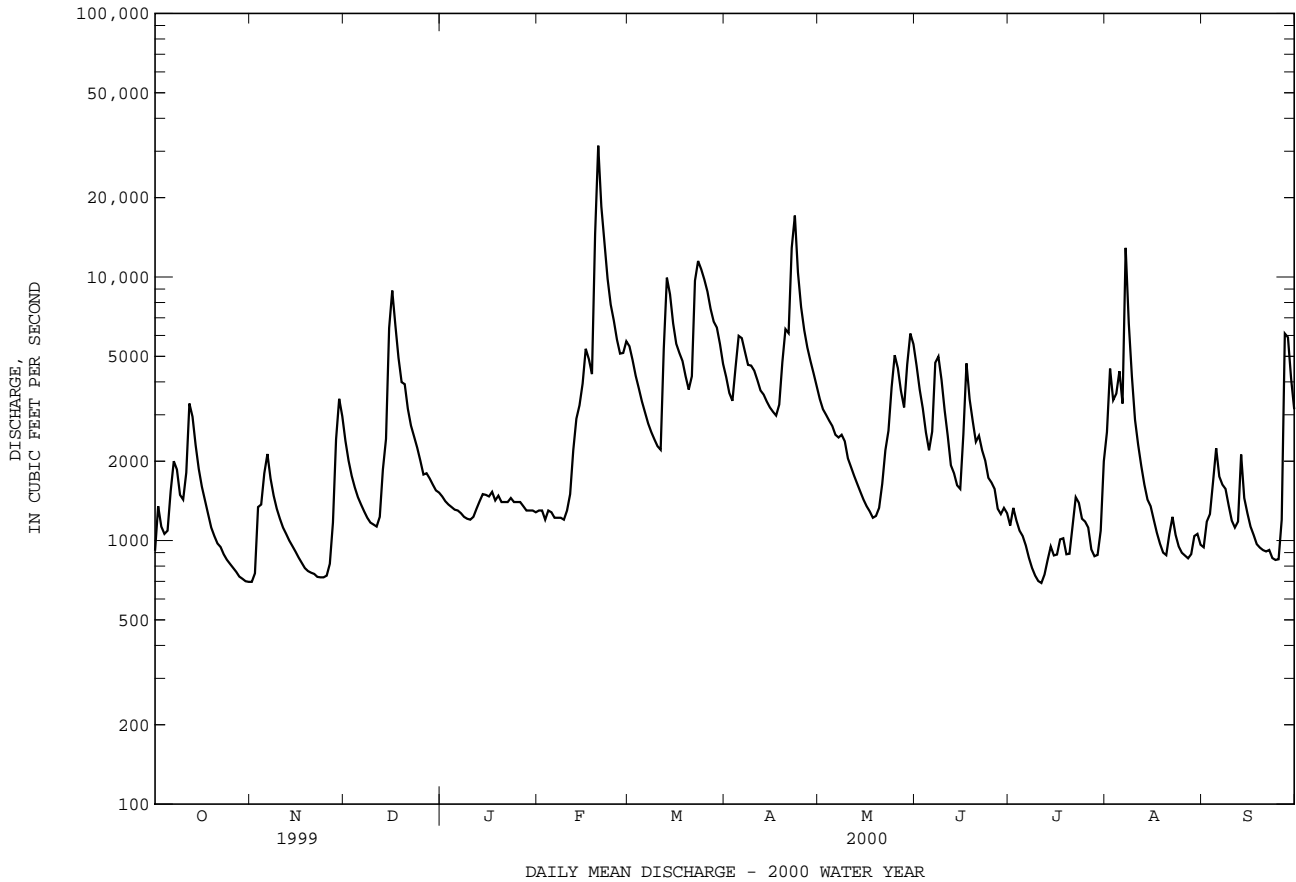
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2000, BY WATER YEAR (WY)

	2005	2505	3993	5158	6615	9408	7608	5507	3079	1572	1592	1440
MEAN	2005	2505	3993	5158	6615	9408	7608	5507	3079	1572	1592	1440
MAX	13270	20090	15160	17180	17560	32280	19170	13260	13390	6677	9479	15100
(WY)	1977	1986	1973	1996	1998	1936	1993	1988	1972	1949	1955	1996
MIN	309	399	463	751	1041	2311	2286	1344	622	357	342	329
(WY)	1942	1966	1966	1956	1934	1990	1995	1941	1969	1966	1944	1946

01613000 POTOMAC RIVER AT HANCOCK, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1933 - 2000	
ANNUAL TOTAL	830637		1025342		4195	
ANNUAL MEAN	2276		2801		7932	
HIGHEST ANNUAL MEAN					1770	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	21600	Mar 19	31500	Feb 20	261000	Mar 18 1936
LOWEST DAILY MEAN	250	Aug 13	690	Jul 11	184	Oct 3 1932
ANNUAL SEVEN-DAY MINIMUM	270	Aug 7	722	Oct 27	215	Sep 7 1966
INSTANTANEOUS PEAK FLOW			37100	Feb 20	(a)340000	Mar 18 1936
INSTANTANEOUS PEAK STAGE			17.05	Feb 20	47.60	Mar 18 1936
INSTANTANEOUS LOW FLOW			660	Oct 1	180	Oct 4 1932
ANNUAL RUNOFF (CFSM)	.56		.68		1.03	
ANNUAL RUNOFF (INCHES)	7.55		9.33		13.94	
10 PERCENT EXCEEDS	4890		5730		9590	
50 PERCENT EXCEEDS	1350		1610		2180	
90 PERCENT EXCEEDS	414		881		541	

a From rating curve extended above 120,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.



## POTOMAC RIVER BASIN

01614500 CONOCOCHIEGUE CREEK AT FAIRVIEW, MD

LOCATION.--Lat 39°42'57", long 77°49'28", Washington County, Hydrologic Unit 02070004, on right bank 0.7 mi upstream from highway bridge in Fairview, 2.0 mi upstream from Rockdale Run, 6.5 mi northwest of Hagerstown, and 19.1 mi upstream from mouth.

DRAINAGE AREA.--494 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1432: 1929(M), 1930, 1931-32(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 391.85 ft above sea level. Prior to Dec. 6, 1932, nonrecording gage at highway bridge 0.7 mi downstream at datum 2.93 ft lower. Dec. 6, 1932, to Oct. 7, 1933, nonrecording gage 150 ft downstream from former site at datum 4.92 ft lower than present datum.

REMARKS.--Water-discharge records good except those for estimated daily discharge (ice effect), which are poor. Diversions for irrigation upstream from station. National Weather Service gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1928, about 16.5 ft, present datum, sometime in 1889, from information by local residents, discharge, about 22,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0830	*5,460	*8.51	No other peak greater than base discharge.			

Minimum discharge 130 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	180	373	286	e146	1210	704	696	651	331	288	156
2	895	185	333	269	e145	1090	654	663	573	302	322	610
3	621	298	308	264	e145	948	631	619	517	284	258	467
4	560	355	288	262	e144	837	959	557	461	297	236	295
5	746	255	269	258	e143	758	1030	527	432	291	218	238
6	657	222	267	240	e143	684	821	501	759	260	222	198
7	492	206	265	225	e142	620	730	481	901	242	372	178
8	406	195	246	218	e142	578	686	444	637	228	289	163
9	355	190	227	214	e140	547	884	415	542	219	239	155
10	969	187	234	227	e140	514	854	401	477	232	212	149
11	1360	184	293	335	e300	529	731	379	427	232	194	153
12	866	179	272	343	e400	2290	689	354	398	215	182	155
13	654	173	251	293	e430	1820	638	337	466	215	171	188
14	606	172	595	262	e450	1280	594	345	439	223	168	172
15	515	166	1730	230	e530	1060	564	348	445	383	164	196
16	433	164	1090	244	e500	925	544	304	511	351	158	187
17	388	159	798	211	e520	938	584	285	998	301	148	160
18	354	155	650	191	852	859	855	274	784	254	145	146
19	318	155	551	e190	1510	730	1560	310	581	234	149	151
20	308	154	502	e180	1650	675	1210	403	491	257	147	205
21	310	157	635	e170	1450	1310	1190	472	438	240	142	205
22	286	156	567	e160	1340	4960	1940	459	612	224	145	162
23	265	155	490	e160	1250	2840	2330	670	552	208	135	148
24	245	153	446	e155	1180	1970	1820	981	423	195	147	143
25	231	159	403	e150	1120	1590	1470	979	378	200	151	150
26	221	212	389	e150	1050	1370	1250	683	465	196	137	514
27	211	1070	377	e150	941	1170	1100	566	461	189	139	488
28	200	782	348	e148	1450	1100	987	656	489	188	231	336
29	193	544	327	e148	1450	1020	871	1360	440	482	181	259
30	190	439	307	e148	---	879	774	1000	379	376	165	223
31	184	---	297	e146	---	777	---	766	---	295	155	---
TOTAL	15929	7761	14128	6627	19803	37878	29654	17235	16127	8144	6010	6950
MEAN	514	259	456	214	683	1222	988	556	538	263	194	232
MAX	1890	1070	1730	343	1650	4960	2330	1360	998	482	372	610
MIN	184	153	227	146	140	514	544	274	378	188	135	143
CFSM	1.04	.52	.92	.43	1.38	2.47	2.00	1.13	1.09	.53	.39	.47
IN.	1.20	.58	1.06	.50	1.49	2.85	2.23	1.30	1.21	.61	.45	.52

e Estimated

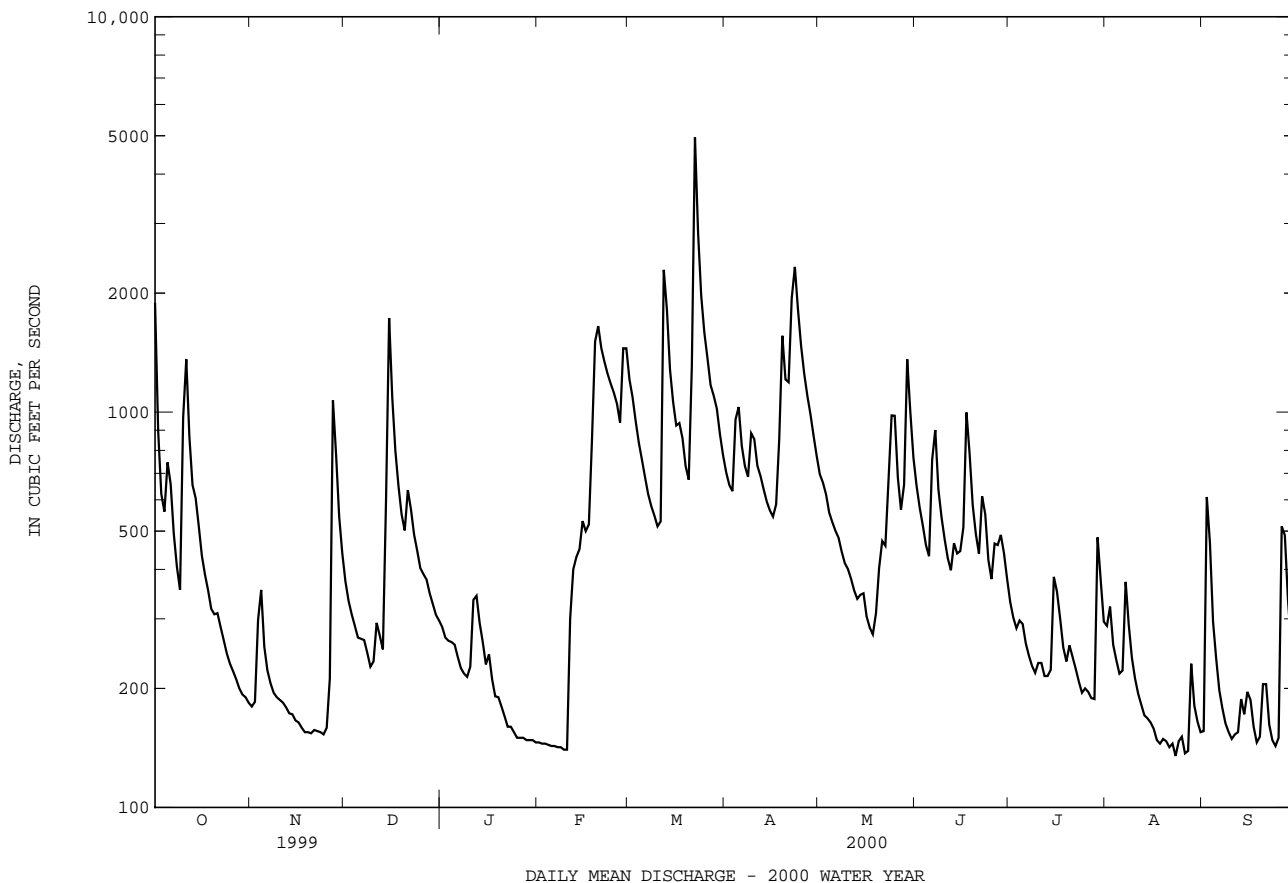
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	334	454	624	688	852	1203	1063	743	508	326	231	262	2177	1571	1926	2404	2473	2991	1736	3278	1358	921	1886	1977	1998	1997	1996	1994	1993	1989	1972	1928	1942	1996	42.3	45.4	61.2	88.8	151	274	304	218	120	62.2	48.0	54.6	1931	1931	1931	1931	1931	1931	1990	1995	1941	1965	1966	1966	1966	1930													

01614500 CONOCOCHIEGUE CREEK AT FAIRVIEW, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	165135		186246		606	
ANNUAL MEAN	452		509		1183	
HIGHEST ANNUAL MEAN					301	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	4000	Jan 24	4960	Mar 22	26700	Jun 23 1972
LOWEST DAILY MEAN	66	Aug 19	135	Aug 23	25	Nov 28 1930
ANNUAL SEVEN-DAY MINIMUM	72	Aug 13	142	Feb 4	28	Sep 7 1966
INSTANTANEOUS PEAK FLOW			5460	Mar 22	(a)32400	Jun 23 1972
INSTANTANEOUS PEAK STAGE			8.51	Mar 22	(b)24.50	Jun 23 1972
INSTANTANEOUS LOW FLOW			130	Aug 27	21	(c)
ANNUAL RUNOFF (CFSM)	.92		1.03		1.23	
ANNUAL RUNOFF (INCHES)	12.44		14.03		16.66	
10 PERCENT EXCEEDS	1050		1080		1330	
50 PERCENT EXCEEDS	267		344		336	
90 PERCENT EXCEEDS	97		154		104	

- a From rating curve extended above 15,000 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow.
- b From floodmarks.
- c Aug. 8, Sept. 12, 1966.



01614500 CONOCOCHAEAGUE CREEK AT FAIRVIEW, MD--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-83, 1992 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1966 to September 1980.

SUSPENDED SEDIMENT DISCHARGE: October 1966 to September 1980.

REMARKS.--Water temperatures were measured in field at time of sampling.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum daily, 30.0°C, July 17, 1969; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily mean, 1,050 mg/L, Oct. 25, 1971; minimum daily mean, 1 mg/L, on many days.

SEDIMENT LOAD: Maximum daily, 73,000 tons, June 23, 1972; minimum daily, 0.17 ton, Nov. 24, 26, 27, 1966.

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

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
OCT								
01...	0023	ENVIRONMENTAL	3600	248	--	--	--	--
01...	0134	ENVIRONMENTAL	3400	--	--	--	--	--
01...	0251	ENVIRONMENTAL	3130	238	--	--	--	--
01...	0416	ENVIRONMENTAL	2740	--	--	--	--	--
01...	0555	ENVIRONMENTAL	2320	233	--	--	--	--
01...	0754	ENVIRONMENTAL	1960	--	--	--	--	--
01...	1010	ENVIRONMENTAL	267	241	--	--	--	--
01...	1145	ENVIRONMENTAL	1610	--	--	--	--	--
14...	1530	ENVIRONMENTAL	629	354	7.7	14.5	14.0	756
NOV								
09...	1530	ENVIRONMENTAL	190	405	8.2	23.5	9.5	755
DEC								
09...	1130	ENVIRONMENTAL	181	328	8.4	5.0	4.0	--
15...	0038	ENVIRONMENTAL	1980	--	--	--	--	--
15...	0608	ENVIRONMENTAL	1920	--	--	--	--	--
JAN								
27...	1530	ENVIRONMENTAL	148	368	8.1	-6.5	.0	759
FEB								
07...	1430	ENVIRONMENTAL	142	361	8.1	7.5	.0	755
15...	0247	ENVIRONMENTAL	1400	--	--	--	--	--
15...	1824	ENVIRONMENTAL	1370	--	--	--	--	--
MAR								
07...	1645	ENVIRONMENTAL	608	313	8.2	21.5	10.5	754
12...	0824	ENVIRONMENTAL	2490	--	--	--	--	--
12...	1221	ENVIRONMENTAL	2940	--	--	--	--	--
13...	0058	ENVIRONMENTAL	2390	--	--	--	--	--
21...	2309	ENVIRONMENTAL	3820	--	--	--	--	--
22...	0142	ENVIRONMENTAL	4730	--	--	--	--	--
22...	0803	ENVIRONMENTAL	5450	--	--	--	--	--
22...	1624	ENVIRONMENTAL	5040	--	--	--	--	--
22...	2106	ENVIRONMENTAL	4340	--	--	--	--	--
24...	0402	ENVIRONMENTAL	2140	--	--	--	--	--
APR								
22...	1443	ENVIRONMENTAL	1980	247	--	--	--	--
22...	2330	ENVIRONMENTAL	2330	230	--	--	--	--
23...	0743	ENVIRONMENTAL	2460	218	--	--	--	--
23...	1555	ENVIRONMENTAL	2320	221	--	--	--	--
24...	0055	ENVIRONMENTAL	2050	222	--	--	--	--
26...	1430	ENVIRONMENTAL	1230	257	7.6	13.5	12.5	753
MAY								
15...	1130	BLANK	--	--	--	--	--	--
15...	1145	ENVIRONMENTAL	346	364	8.8	19.0	18.0	758
JUN								
19...	1400	ENVIRONMENTAL	572	360	7.7	23.5	21.0	759
JUL								
14...	1215	ENVIRONMENTAL	221	440	8.1	27.5	22.5	750
AUG								
08...	1600	ENVIRONMENTAL	277	405	8.0	29.0	25.5	755
SEP								
02...	1430	ENVIRONMENTAL	984	454	7.4	--	--	--
05...	1415	ENVIRONMENTAL	228	413	8.0	20.0	23.0	761

01614500 CONOCOCHAEAGUE CREEK AT FAIRVIEW, MD--Continued

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

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	NITRO- GEN, TOTAL (MG/L) AS N) (00600)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L) AS N) (00623)
OCT									
01...	--	--	--	--	--	--	--	--	--
01...	--	--	5.9	4.28	.021	4.30	.032	1.6	.44
01...	--	--	--	--	--	--	--	--	--
01...	--	--	6.0	4.11	.021	4.13	.033	1.9	.53
01...	--	--	--	--	--	--	--	--	--
01...	--	--	5.6	4.20	.018	4.21	.024	1.4	.49
01...	--	--	--	--	--	--	--	--	--
01...	--	--	6.0	4.38	.017	4.40	.023	1.6	.48
14...	9.1	89	4.8	--	<.010	4.39	<.020	.44	.25
NOV									
09...	12.1	107	3.3	--	<.010	2.91	.037	.37	.26
DEC									
09...	13.8	--	3.1	--	<.010	2.90	<.020	.18	.19
15...	--	--	4.1	2.61	.014	2.62	.085	1.4	.58
15...	--	--	5.3	3.08	.023	3.10	.175	2.2	.76
JAN									
27...	14.5	100	3.9	3.64	.023	3.66	.058	.28	.20
FEB									
07...	15.1	104	3.7	3.46	.017	3.47	.044	.22	.18
15...	--	--	4.5	3.47	.041	3.51	.056	1.0	.39
15...	--	--	4.4	3.60	.050	3.65	.033	.72	.34
MAR									
07...	13.0	118	3.6	--	<.010	3.32	<.020	.26	.14
12...	--	--	4.1	2.43	.026	2.45	.094	1.6	1.5
12...	--	--	4.2	2.39	.024	2.41	.125	1.8	2.3
13...	--	--	3.8	2.72	.014	2.73	.037	1.1	.46
21...	--	--	4.1	2.23	.014	2.25	.086	1.8	.53
22...	--	--	4.6	2.27	.015	2.28	.091	2.3	.56
22...	--	--	4.5	2.53	.013	2.55	.102	1.9	.53
22...	--	--	4.1	--	<.010	2.90	.044	1.2	.41
22...	--	--	4.9	3.03	.010	3.04	.414	1.9	.80
24...	--	--	4.0	--	<.010	3.50	.034	.52	.21
APR									
22...	--	--	3.3	2.29	.013	2.31	.062	.97	.36
22...	--	--	3.1	2.34	.015	2.35	.077	.77	.40
23...	--	--	3.1	2.34	.015	2.36	.048	.70	.38
23...	--	--	3.1	2.49	.012	2.50	.037	.64	.34
24...	--	--	3.1	2.52	.010	2.53	.028	.59	.29
26...	10.2	97	3.2	--	<.010	2.85	<.020	.34	.17
MAY									
15...	--	--	--	--	<.010	<.050	<.020	E.10	<.10
15...	16.6	176	3.5	3.10	.016	3.11	<.020	.38	.22
JUN									
19...	8.2	92	5.1	4.17	.030	4.20	.054	.87	.35
JUL									
14...	9.9	116	4.3	3.91	.013	3.93	.024	.38	.24
AUG									
08...	10.2	126	3.9	3.36	.018	3.37	.022	.54	.51
SEP									
02...	--	--	5.4	3.69	.017	3.71	.032	1.7	.43
05...	9.3	109	4.4	3.96	.016	3.98	.020	.47	.35

E Estimated value.  
 < Actual value is known to be less than the value shown.

## POTOMAC RIVER BASIN

01614500 CONOCOCHAEAGUE CREEK AT FAIRVIEW, MD--Continued

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

DATE	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT									
01...	--	--	--	--	--	--	--	296	2880
01...	4.7	1.6	.41	.336	.072	.050	--	--	--
01...	--	--	--	--	--	--	--	255	2160
01...	4.7	1.9	.50	.319	.061	.045	--	--	--
01...	--	--	--	--	--	--	--	208	1300
01...	4.7	1.4	.47	.242	.058	.043	--	--	--
01...	--	--	--	--	--	--	--	143	103
01...	4.9	1.5	.46	.231	.059	.038	--	--	--
14...	4.6	--	--	.093	.067	.048	4.0	17	29
NOV									
09...	3.2	.33	.22	.094	.080	.062	--	2	1.3
DEC									
09...	3.1	--	--	.071	.066	.043	--	1	.68
15...	3.2	1.3	.49	.477	.103	.077	--	226	1210
15...	3.9	2.0	.59	.540	.158	.122	--	167	866
JAN									
27...	3.9	.22	.14	.086	.079	.061	1.9	1	.32
FEB									
07...	3.7	.18	.14	.081	.074	.062	--	1	.23
15...	3.9	.98	.34	.250	.082	.061	--	110	416
15...	4.0	.69	.31	.146	.057	.044	--	46	170
MAR									
07...	3.5	--	--	.047	.031	.021	--	8	13
12...	4.0	1.5	1.4	.421	.062	.040	--	250	1680
12...	4.7	1.7	2.1	.487	.085	.047	--	292	2320
13...	3.2	1.0	.42	.192	.043	.018	--	103	665
21...	2.8	1.7	.45	.543	.090	.041	--	408	4210
22...	2.8	2.2	.47	.592	.096	.078	--	360	4600
22...	3.1	1.8	.43	.520	.090	.073	--	297	4370
22...	3.3	1.2	.37	.296	.056	.047	--	164	2230
22...	3.8	1.5	.38	.445	.207	.193	--	120	1410
24...	3.7	.48	.18	.111	.032	.016	--	45	262
APR									
22...	2.7	.91	.30	.197	.046	.035	--	74	394
22...	2.7	.69	.32	.205	.053	.039	--	82	519
23...	2.7	.66	.34	.173	.044	.033	--	82	541
23...	2.8	.60	.31	.135	.037	.031	--	62	386
24...	2.8	.56	.26	.118	.033	.025	--	48	264
26...	3.0	--	--	.069	.032	.025	--	22	74
MAY									
15...	--	--	--	<.008	<.006	<.010	--	M	--
15...	3.3	--	--	.074	.029	.033	2.9	6	5.9
JUN									
19...	4.5	.82	.30	.160	.076	.057	--	55	85
JUL									
14...	4.2	.35	.21	.108	.089	.074	--	10	6.0
AUG									
08...	3.9	.52	.49	.141	.119	.089	--	16	12
SEP									
02...	4.1	1.7	.40	.530	.115	.082	--	315	837
05...	4.3	.45	.33	.151	.133	.092	3.9	11	6.6

&lt; Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

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POTOMAC RIVER BASIN

01617800 MARSH RUN AT GRIMES, MD

LOCATION.--Lat 39°30'53", long 77°46'38", Washington County, Hydrologic Unit 02070004, on right bank 220 ft up- stream from bridge on Sprecher Road, 0.1 mi downstream from unnamed tributary, 0.5 mi southwest of Grimes, 1.5 mi upstream from mouth, and 2.2 mi southwest of Fairplay.

DRAINAGE AREA.--18.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 354.72 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug 2	2000	*87	*2.22	No other peak greater than base discharge.			

Minimum discharge 1.0 ft<sup>3</sup>/s, Feb. 7, result of freezeup.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	2.5	2.3	3.3	e2.1	11	14	11	7.8	8.5	12	9.4
2	4.0	3.7	2.5	3.3	e2.1	10	14	11	7.2	7.6	28	9.2
3	1.4	4.8	2.5	3.3	e2.0	10	15	10	6.7	7.2	26	9.0
4	3.3	3.9	2.6	3.4	e2.0	8.7	16	9.9	6.6	7.6	18	8.5
5	9.4	3.9	2.5	3.4	e1.9	8.7	15	9.7	6.7	7.4	16	7.6
6	5.8	4.4	2.9	3.2	e1.9	9.0	14	9.3	13	6.8	19	7.5
7	5.5	4.3	2.7	3.2	1.8	8.8	13	9.1	10	6.5	19	7.5
8	4.7	4.2	2.5	3.2	1.8	8.6	15	8.9	8.7	6.3	16	7.3
9	3.4	3.5	2.4	3.2	1.9	8.4	18	8.7	7.7	6.3	15	7.2
10	8.3	2.8	3.4	3.9	2.1	8.1	14	10	6.9	6.8	14	6.9
11	7.5	2.5	3.8	4.5	2.7	9.8	13	10	6.4	8.0	12	7.0
12	5.8	2.5	2.7	3.7	3.9	20	13	9.3	6.5	6.7	12	10
13	4.8	2.4	2.8	3.5	3.4	12	12	9.0	7.1	6.7	13	12
14	4.3	2.3	8.5	e3.4	4.6	10	12	9.8	6.8	9.9	12	8.2
15	4.1	2.7	9.4	e3.4	6.4	9.5	12	8.2	7.4	16	12	8.1
16	4.2	3.2	6.7	e3.3	6.5	9.6	12	7.7	11	14	11	7.4
17	4.1	3.0	6.0	e3.2	6.5	11	13	7.3	11	11	11	7.1
18	3.8	3.1	5.6	e3.2	8.0	9.6	16	7.0	9.7	9.2	11	6.9
19	3.6	3.1	4.8	e3.1	18	9.9	16	7.5	8.6	16	11	14
20	4.1	3.1	4.3	e3.1	16	10	14	8.5	7.7	19	10	13
21	3.8	2.6	4.8	e3.0	14	21	15	8.3	7.6	13	9.9	9.4
22	3.8	2.0	4.2	e2.8	12	41	16	9.8	12	12	9.6	8.0
23	3.7	2.0	3.9	2.3	11	27	15	9.8	8.8	11	9.5	7.8
24	3.5	2.0	3.8	2.1	11	23	14	11	7.5	12	9.5	7.5
25	3.5	2.2	e3.7	2.7	10	20	14	10	7.5	12	8.7	10
26	3.4	2.9	3.6	e2.6	10	20	13	7.9	8.4	11	7.3	19
27	3.8	3.1	3.6	2.3	9.9	20	13	7.9	8.1	11	9.3	13
28	3.3	2.7	3.6	e2.3	15	20	12	11	9.2	12	11	11
29	3.3	2.6	3.6	e2.3	11	19	11	11	11	15	9.8	10
30	3.3	2.5	3.6	e2.2	---	17	11	9.1	10	12	9.6	9.7
31	3.0	---	3.4	e2.2	---	15	---	8.3	---	12	9.4	---
TOTAL	136.6	90.5	122.7	94.6	199.5	445.7	415	286.0	253.6	320.5	401.6	279.2
MEAN	4.41	3.02	3.96	3.05	6.88	14.4	13.8	9.23	8.45	10.3	13.0	9.31
MAX	9.4	4.8	9.4	4.5	18	41	18	11	13	19	28	19
MIN	1.4	2.0	2.3	2.1	1.8	8.1	11	7.0	6.4	6.3	7.3	6.9
CFSM	.23	.16	.21	.16	.36	.76	.73	.49	.45	.55	.69	.49
IN.	.27	.18	.24	.19	.39	.88	.82	.56	.50	.63	.79	.55

e Estimated

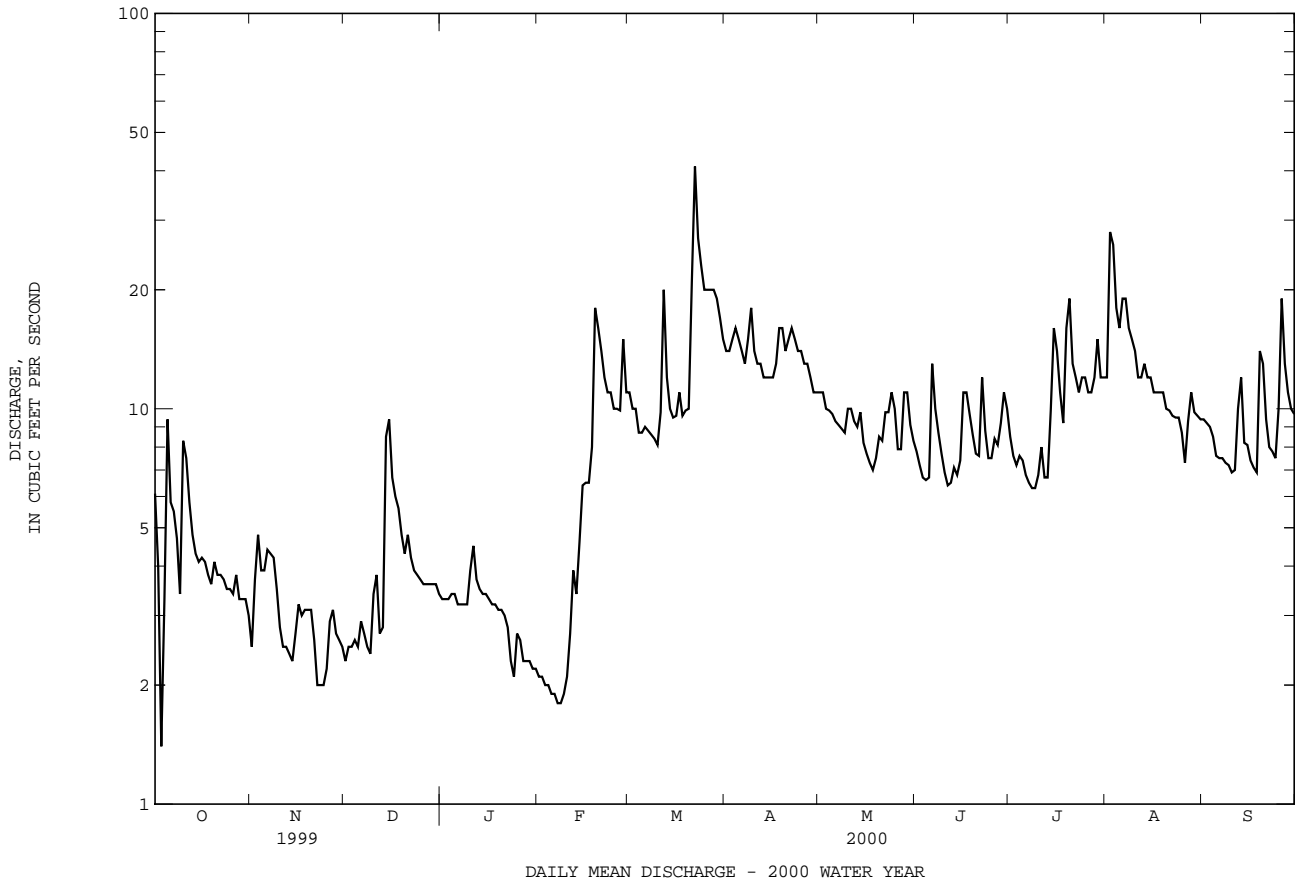
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	7.85	7.89	10.8	12.7	15.1	19.4	19.2	15.9	13.2	9.76	7.60	6.58
MEAN	7.85	7.89	10.8	12.7	15.1	19.4	19.2	15.9	13.2	9.76	7.60	6.58
MAX	39.5	29.3	39.9	30.1	33.3	48.6	49.8	36.2	48.2	32.4	24.2	31.8
(WY)	1977	1997	1997	1979	1998	1994	1984	1972	1972	1972	1996	1975
MIN	.83	1.71	1.56	2.24	4.14	5.08	4.45	3.65	2.44	1.08	.43	1.05
(WY)	1987	1992	1999	1981	1989	1990	1969	1969	1999	1999	1999	1995

01617800 MARSH RUN AT GRIMES, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1964 - 2000	
ANNUAL TOTAL	1627.10	3045.5	12.3	
ANNUAL MEAN	4.46	8.32	23.9	1972
HIGHEST ANNUAL MEAN			4.04	1999
LOWEST ANNUAL MEAN			223	Jun 23 1972
HIGHEST DAILY MEAN	46 Jan 18	41 Mar 22	(a).00	Oct 1 1977
LOWEST DAILY MEAN	.19 Sep 26	1.4 Oct 3	.28	Aug 15 1999
ANNUAL SEVEN-DAY MINIMUM	.28 Aug 15	1.9 Feb 3	(b)459	Feb 12 1985
INSTANTANEOUS PEAK FLOW		87 Aug 2	4.45	Feb 12 1985
INSTANTANEOUS PEAK STAGE		2.22 Aug 2	(a).00	Oct 1 1977
INSTANTANEOUS LOW FLOW		(c)1.0 Feb 7		
ANNUAL RUNOFF (CFSM)	.24	.44	.65	
ANNUAL RUNOFF (INCHES)	3.20	5.99	8.84	
10 PERCENT EXCEEDS	8.9	15	25	
50 PERCENT EXCEEDS	3.6	8.0	9.0	
90 PERCENT EXCEEDS	.64	2.6	2.8	

- a Result of regulation caused by construction work upstream from station.
- b From rating curve extended above 220 ft<sup>3</sup>/s.
- c Result of freezeup.





01619500 ANTIETAM CREEK NEAR SHARPSBURG, MD--Continued

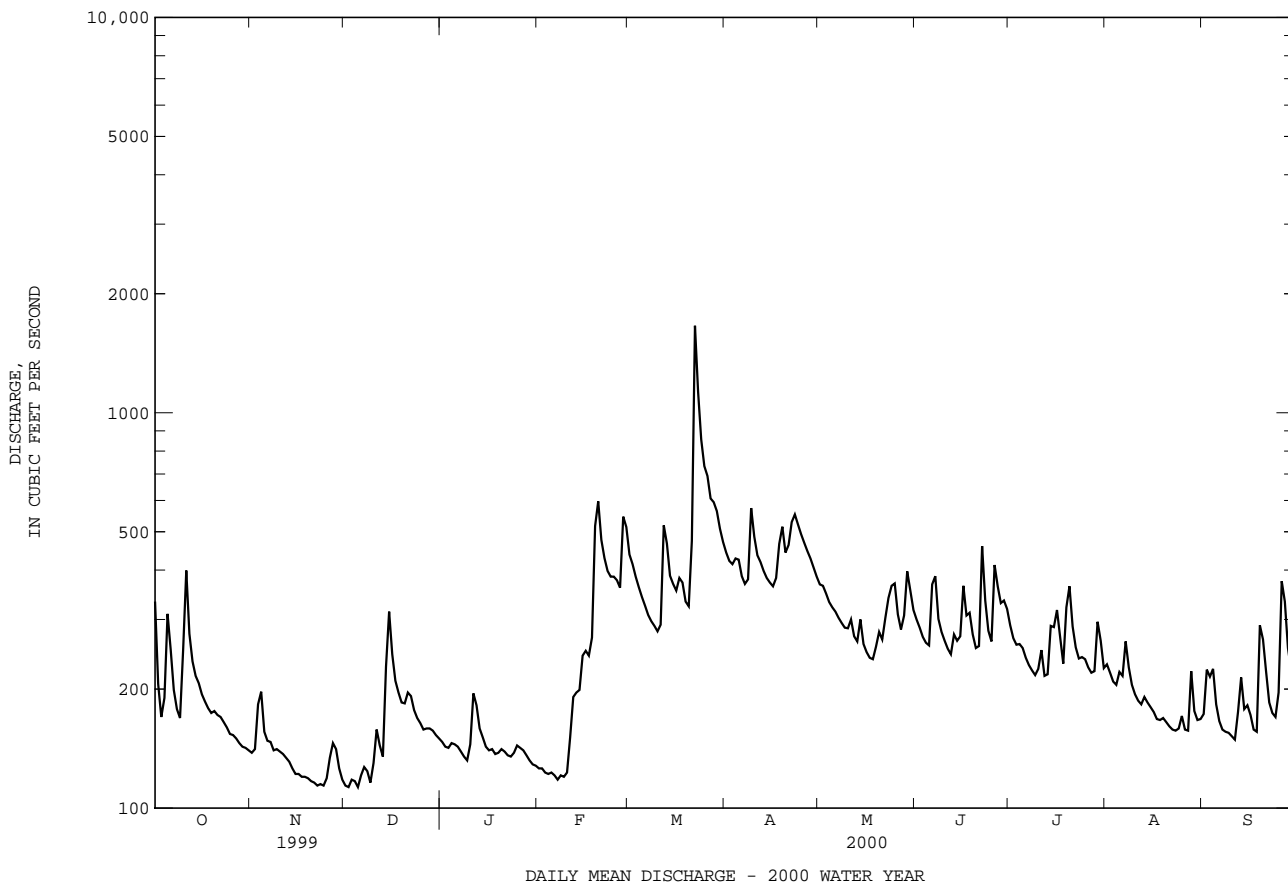
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	66386		94863			
ANNUAL MEAN	182		259		288	
ANNUAL MEAN†	166		243		279	
HIGHEST ANNUAL MEAN					554	
LOWEST ANNUAL MEAN					124	
HIGHEST DAILY MEAN	917	Jan 19	1660	Mar 22	8970	Sep 26 1975
LOWEST DAILY MEAN	67	Aug 20	113	(a)	37	Jan 30 1966
ANNUAL SEVEN-DAY MINIMUM	75	Aug 29	116	Nov 19	49	Jan 26 1966
INSTANTANEOUS PEAK FLOW			1930		(b)12600	Jul 20 1956
INSTANTANEOUS PEAK STAGE			5.70		16.73	Jul 20 1956
INSTANTANEOUS LOW FLOW			85		(c)9.4	Nov 22 1957
ANNUAL RUNOFF (CFSM)	.65		.92		1.03	
ANNUAL RUNOFF (CFSM)†	.59		.86		0.99	
ANNUAL RUNOFF (INCHES)	8.79		12.56		13.94	
ANNUAL RUNOFF (INCHES)†	8.02		11.74		13.48	
10 PERCENT EXCEEDS	309		428		555	
50 PERCENT EXCEEDS	157		223		208	
90 PERCENT EXCEEDS	86		131		99	

† Adjusted for inflow since January 1930.

a Dec. 2, 5.

b From rating curve extended above 7,300 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.

c Result of regulation caused by construction work upstream from station.



## POTOMAC RIVER BASIN

01636500 SHENANDOAH RIVER AT MILLVILLE, WV

LOCATION.--Lat 39°16'55", long 77°47'22", Jefferson County, Hydrologic Unit 02070007, on left bank 0.4 mi downstream from Cattail Run, 1.0 mi upstream from Millville, 5.0 mi upstream from Harpers Ferry, and at mile 4.7.

DRAINAGE AREA.--3,022 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1895 to March 1909, August 1928 to current year.

REVISED RECORDS.--WSP 951: 1936(M). WSP 1432: Drainage area at former site, 1895-99, 1901-02, 1905, 1907-08, 1932(M), 1935(M). OFR 95-292: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 293.00 ft above sea level. Apr. 15, 1895, to Mar. 31, 1909, nonrecording gage at site 0.8 mi downstream at datum 0.32 ft higher.

REMARKS.--No estimated daily discharges. Records good. Some regulation by upstream hydroelectric plants, including that of Potomac Light and Power Company, 0.5 mi upstream from station. National Weather Service gage-height telemeter and U.S. Army Corps of Engineers satellite telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft, discharge, 151,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 1	2100	*15,000	*8.22	No peak greater than base discharge.			

Minimum discharge, 473 ft<sup>3</sup>/s, Jul 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12000	1220	3100	1870	1560	2520	2880	2970	1520	2190	2220	868
2	11500	1250	2610	1840	1600	2370	2550	2750	1480	2340	2590	957
3	7620	1930	2280	1780	1570	2250	2450	2540	1340	1870	2500	1180
4	5800	2210	2050	1720	1550	2120	2370	2230	1210	1600	2290	1490
5	5670	2450	1890	1700	1480	2000	2320	2080	1130	1430	2040	4440
6	5540	2910	1790	1580	1390	1960	2230	1950	1140	1380	2320	3550
7	4890	2690	1750	1540	1320	1870	2260	1710	1120	1300	2710	2800
8	4380	2400	1700	1470	1320	1800	2290	1760	1110	1070	1950	2630
9	3880	2160	1580	1470	1300	1640	2940	1660	1060	1040	1520	2280
10	3520	1980	1580	1430	1220	1660	2940	1600	1250	1090	1320	1930
11	3820	1830	1600	1470	1390	1660	2910	1450	1210	988	1130	1670
12	4090	1720	1640	1480	1680	1750	2710	1440	1140	983	1050	1560
13	3710	1630	1660	1470	1770	2680	2400	1360	1050	846	926	1460
14	3290	1560	2080	1480	1830	3140	2210	1240	991	868	867	1250
15	2910	1510	4380	1440	1850	3170	2120	1280	1160	976	849	1220
16	2660	1450	4950	1370	1870	3080	2000	1220	1540	1090	824	1060
17	2360	1410	5820	1350	2010	2940	2020	1150	2660	971	767	1010
18	2240	1300	4930	1340	2180	2730	2430	1080	2950	851	741	888
19	2070	1260	4120	1280	3840	2450	3150	1030	3050	813	758	1170
20	1990	1260	3640	1300	6150	2390	4560	1060	3660	779	777	3410
21	1910	1240	3290	1680	6080	2560	5280	1040	3370	789	797	2970
22	1850	1180	3030	1350	5790	5170	4760	1120	3670	836	1040	2890
23	1790	1180	2950	1320	4870	8860	4220	1260	3780	812	914	2000
24	1730	1190	2770	1520	4180	8720	3710	1700	3050	887	813	1610
25	1600	1140	2540	1560	3600	6900	3200	3150	2480	819	789	1480
26	1530	1180	2400	1370	3180	5930	2890	2560	2120	786	762	2840
27	1500	1250	2370	1740	2840	5160	3100	2080	1840	775	740	4390
28	1410	1340	2250	1830	2810	4590	3860	1730	1640	764	814	5440
29	1390	2750	2130	1490	2720	4090	3620	1620	1530	804	1120	4380
30	1310	3700	2110	1490	---	3630	3210	1500	1750	780	802	3570
31	1270	---	2000	1670	---	3220	---	1430	---	817	809	---
TOTAL	111230	52280	82990	47400	74950	105010	89590	52750	57001	33344	39549	68393
MEAN	3588	1743	2677	1529	2584	3387	2986	1702	1900	1076	1276	2280
MAX	12000	3700	5820	1870	6150	8860	5280	3150	3780	2340	2710	5440
MIN	1270	1140	1580	1280	1220	1640	2000	1030	991	764	740	868
CFSM	1.19	.58	.89	.51	.86	1.12	.99	.56	.63	.36	.42	.75
IN.	1.37	.64	1.02	.58	.92	1.29	1.10	.65	.70	.41	.49	.84

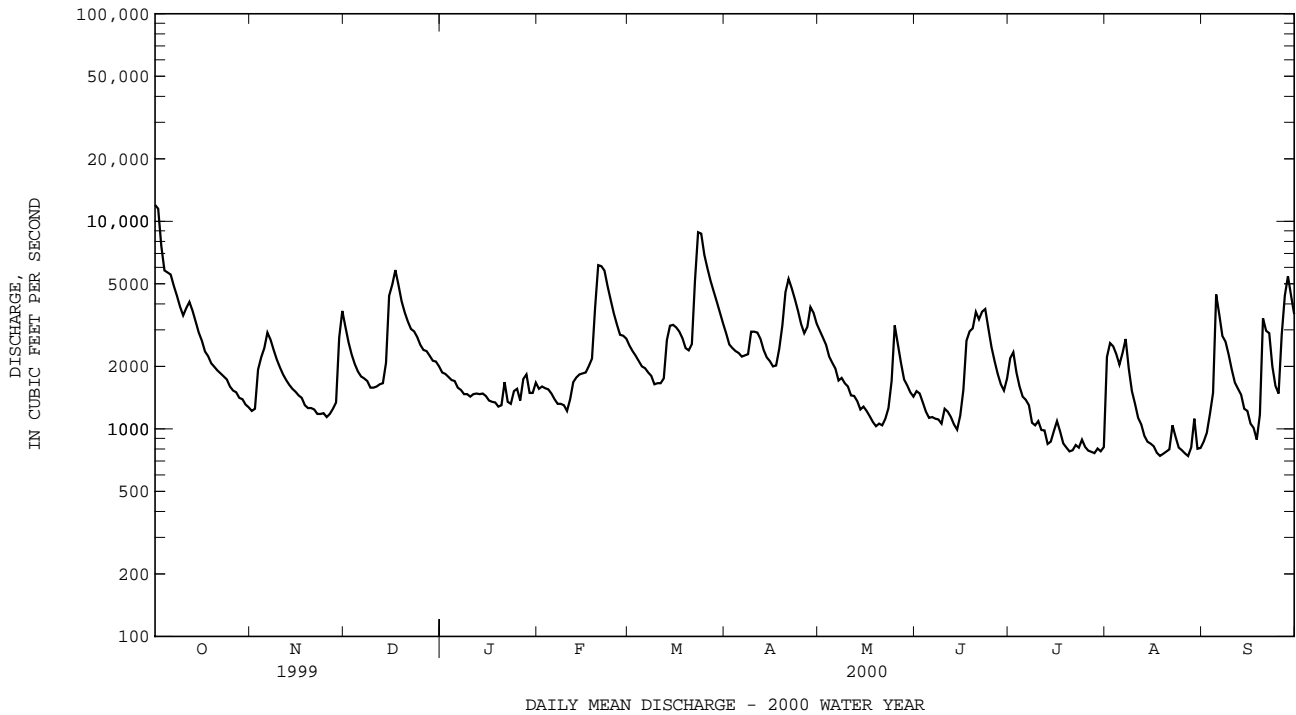
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 1909, 1928 - 2000, BY WATER YEAR (WY)

	1895	1866	2492	3257	3943	5060	4362	3344	2392	1443	1628	1480
MEAN	1958	1866	2492	3257	3943	5060	4362	3344	2392	1443	1628	1480
MAX	16250	13350	8164	13470	18100	17540	12840	8701	10380	4809	10390	14780
(WY)	1943	1986	1973	1996	1998	1936	1901	1901	1972	1972	1955	1996
MIN	343	388	410	503	542	929	992	1001	643	402	388	411
(WY)	1931	1932	1966	1966	1931	1931	1981	1969	1999	1966	1930	1963

01636500 SHENANDOAH RIVER AT MILLVILLE, WV--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1895 - 1909 1928 - 2000	
ANNUAL TOTAL	667161		814487		2762	
ANNUAL MEAN	1828		2225		5618	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					1111	
HIGHEST DAILY MEAN	12000	Oct 1	12000	Oct 1	192000	Oct 16 1942
LOWEST DAILY MEAN	248	Aug 11	740	Aug 27	194	Jul 24 1930
ANNUAL SEVEN-DAY MINIMUM	275	Aug 9	788	Aug 15	240	Sep 7 1966
INSTANTANEOUS PEAK FLOW			15000	Oct 1	230000	Oct 16 1942
INSTANTANEOUS PEAK STAGE			8.22	Oct 1	(a)32.40	Oct 16 1942
INSTANTANEOUS LOW FLOW			473	Jul 13	59	Oct 4 1930
ANNUAL RUNOFF (CFSM)	.60		.74		.91	
ANNUAL RUNOFF (INCHES)	8.21		10.03		12.42	
10 PERCENT EXCEEDS	3750		3870		5570	
50 PERCENT EXCEEDS	1510		1760		1620	
90 PERCENT EXCEEDS	400		967		613	

a From floodmarks.



POTOMAC RIVER BASIN

01637500 CATOCTIN CREEK NEAR MIDDLETOWN, MD

LOCATION.--Lat 39°25'35", long 77°33'25", Frederick County, Hydrologic Unit 02070008, on right bank 300 ft downstream from bridge on State Highway 17, 1.3 mi south of Middletown, 2.2 mi downstream from Little Catoctin Creek, and 14.8 mi upstream from mouth.

DRAINAGE AREA.--66.9 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1947 to current year.

REVISED RECORDS.--WSP 1432: 1947-48. WDR MD-DE-77-1: 1960(M), 1965(M), 1970(M), 1972(P), 1975(P).

GAGE.--Water-stage recorder and concrete control . Elevation of gage is 385 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges (plugged intake, ice effect and recorder malfunction), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0145	*1,210	*4.32	No other peak greater than base discharge.			

Minimum discharge 12 ft<sup>3</sup>/s, Aug 26, 27, Sep 10-12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	e22	18	e33	e32	e150	108	98	39	48	37	39
2	84	e30	18	e31	e31	e130	100	100	35	41	35	34
3	63	e48	17	e31	e27	e120	99	87	30	37	32	35
4	79	36	17	e31	e30	e110	127	78	28	38	34	34
5	137	28	17	e35	e29	e100	105	73	29	35	40	22
6	77	26	24	e45	e28	e90	89	68	85	30	50	17
7	59	24	32	e32	e29	e84	81	61	66	26	76	14
8	50	22	24	e31	e37	e80	186	56	41	23	45	13
9	45	e21	20	e29	e35	e78	420	53	33	21	41	13
10	298	e20	49	e31	e34	72	233	52	29	29	34	12
11	186	e19	72	e56	e60	92	189	61	26	39	30	12
12	121	19	46	e40	e120	274	165	48	23	25	27	16
13	97	19	44	e38	e90	150	143	46	29	23	35	67
14	81	19	151	e32	e100	130	128	57	28	39	32	26
15	67	18	145	e31	e120	117	115	42	71	60	26	81
16	58	17	101	e30	e100	111	110	37	76	65	22	32
17	53	17	84	e28	e95	151	156	36	52	45	19	25
18	47	16	72	e29	e230	112	193	34	43	34	19	20
19	40	16	63	e30	e450	99	184	36	40	163	19	72
20	42	16	61	e32	e250	95	154	43	33	178	18	95
21	41	16	68	e27	e200	302	224	42	133	96	15	48
22	36	16	57	e26	e160	760	240	58	252	73	14	36
23	34	16	51	e30	e140	403	249	58	78	59	13	32
24	31	16	46	e31	e130	304	210	89	56	62	14	31
25	28	16	38	e27	e120	252	189	77	48	59	14	69
26	26	22	e35	e39	e110	216	168	46	159	47	12	198
27	25	42	e35	e28	e160	184	152	41	110	44	12	113
28	24	30	e35	e26	e240	205	139	59	71	47	20	82
29	22	23	e34	e26	e450	169	124	87	87	59	21	66
30	22	20	34	e25	---	137	108	53	62	43	25	57
31	e22	---	e34	e32	---	120	---	44	---	39	24	---
TOTAL	2130	670	1542	992	3637	5397	4888	1820	1892	1627	855	1411
MEAN	68.7	22.3	49.7	32.0	125	174	163	58.7	63.1	52.5	27.6	47.0
MAX	298	48	151	56	450	760	420	100	252	178	76	198
MIN	22	16	17	25	27	72	81	34	23	21	12	12
CFSM	1.03	.33	.74	.48	1.87	2.60	2.44	.88	.94	.78	.41	.70
IN.	1.18	.37	.86	.55	2.02	3.00	2.72	1.01	1.05	.90	.48	.78

e Estimated

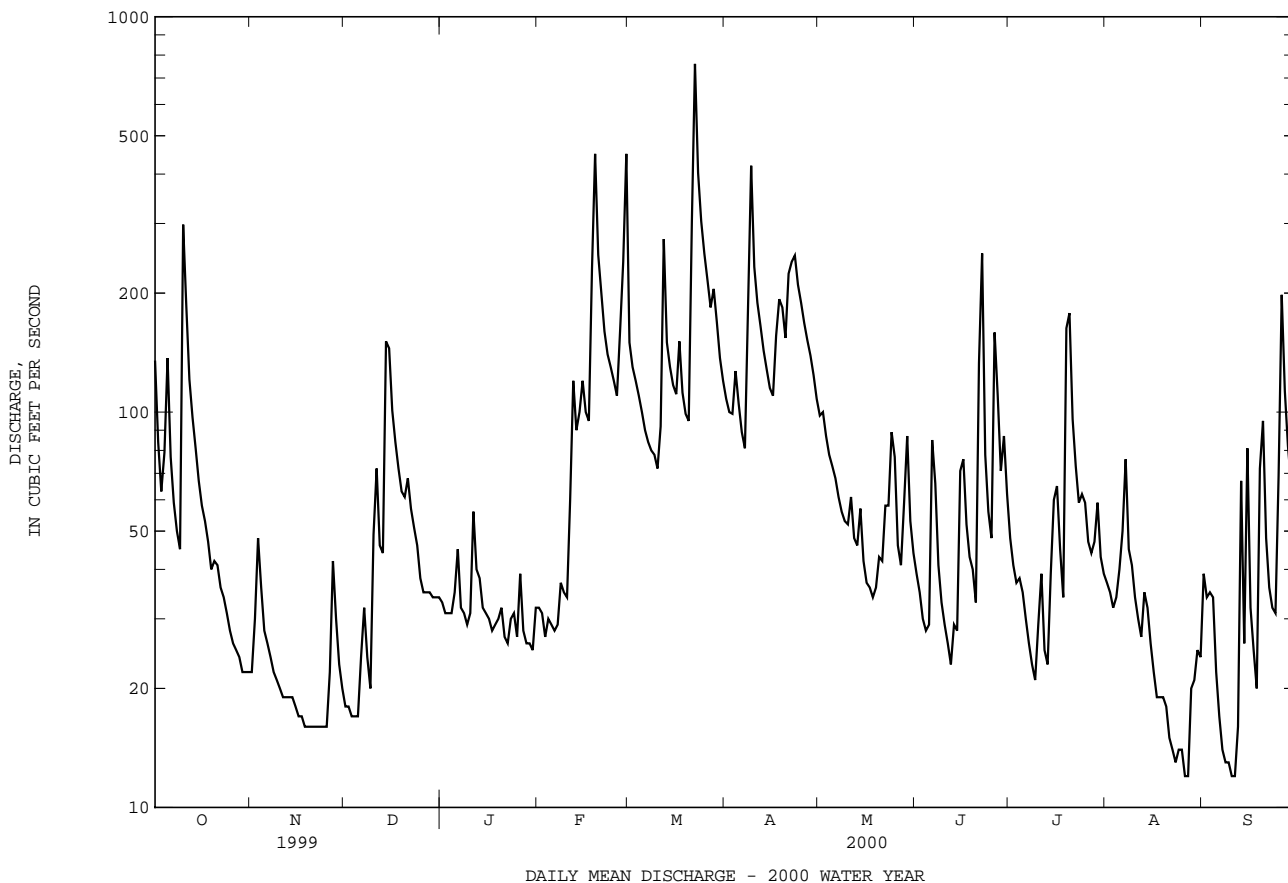
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	36.4	49.1	85.2	104	124	156	139	100	59.5	34.0	22.5	27.8
MAX	399	162	318	333	373	407	360	391	439	214	208	284
(WY)	1977	1986	1993	1998	1998	1994	1993	1988	1972	1949	1955	1975
MIN	2.62	3.61	3.80	4.25	27.4	46.3	40.1	29.2	11.5	4.86	2.04	1.68
(WY)	1964	1966	1966	1966	1999	1969	1995	1963	1999	1966	1966	1965

01637500 CATOCTIN CREEK NEAR MIDDLETOWN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	14783.3		26861		77.9	
ANNUAL MEAN	40.5		73.4		164	
HIGHEST ANNUAL MEAN					1954	
LOWEST ANNUAL MEAN					29.7	
HIGHEST DAILY MEAN	798	Sep 30	760	Mar 22	4880	Oct 9 1976
LOWEST DAILY MEAN	1.4	Aug 12	12	(a)	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 7	13	Aug 21	.00	Aug 27 1966
INSTANTANEOUS PEAK FLOW			1210	Mar 22	(c)12000	Oct 9 1976
INSTANTANEOUS PEAK STAGE			4.32	Mar 22	14.13	Oct 9 1976
INSTANTANEOUS LOW FLOW			12	(d)	.00	(b)
ANNUAL RUNOFF (CFSM)	.61		1.10		1.16	
ANNUAL RUNOFF (INCHES)	8.22		14.94		15.82	
10 PERCENT EXCEEDS	84		160		177	
50 PERCENT EXCEEDS	25		44		39	
90 PERCENT EXCEEDS	3.6		19		5.5	

- a Aug. 26, 27, Sept. 10, 11.
- b Aug. 27 to Sept. 12, 1966.
- c From rating curve extended above 2,600 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.
- d Aug. 26, 27, Sept. 10-12.





## POTOMAC RIVER BASIN

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD

LOCATION.--Lat 39°16'25", long 77°32'35", Frederick County, Hydrologic Unit 02070008, on left bank at downstream side of bridge on U.S. Highway 15 at Point of Rocks, 0.3 mi downstream from Catoctin Creek (Virginia), 6 mi upstream from Monocacy River, and at mile 159.5.

DRAINAGE AREA.--9,651 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1895 to current year.

REVISED RECORDS.--WSP 192: 1895-1905. WSP 1432: 1899, 1901-2, 1904-5, 1912, 1914(M), 1915, 1917(M), 1918, 1919(M), 1920, 1921-23(M), 1924, 1925-28(M), 1930(M).

GAGE.--Water-stage recorder. Datum of gage is 200.63 ft above sea level. Prior to Oct. 28, 1929, nonrecording gage at same site. Prior to Sept. 2, 1902, at datum about 0.45 ft higher.

REMARKS.--Records fair except those for estimated daily discharges (ice effect), which are poor. Low flow affected slightly from 1913 to July 1981 by Stony River Reservoir; since December 1950 by Savage River Reservoir (see station 01597500); and since July 1981 by Jennings Randolph Lake. Low flow affected extensively at times by run-of-the-river hydroelectric plants. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889, reached a stage of 40.2 ft, from floodmarks, discharge, about 460,000 ft<sup>3</sup>/s from rating curve extended as explained in footnotes.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 20	1930	*61,600	*12.54	Apr 23	1830	38,700	9.12
Mar 23	1430	39,400	9.23				

Minimum discharge 1,860 ft<sup>3</sup>/s, Nov 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17700	2170	8430	4070	e2600	13600	10700	9430	10500	5010	5290	2880
2	18400	2280	6770	3910	e2800	12400	9340	8440	9040	5180	7090	2950
3	11900	2720	5650	3640	e2900	10900	8390	7800	7560	4700	8880	3290
4	8880	4780	4890	3690	e2900	9420	8100	7050	6410	4450	6750	4680
5	8270	6020	4330	3530	e2900	8470	10800	6500	5710	3870	6310	6660
6	9200	5680	3970	3310	e2800	7550	12700	6140	5670	3930	7310	7840
7	8220	6450	3600	3120	e2800	6840	11700	5650	6300	3500	8230	6260
8	7720	5630	3740	3030	e2800	6230	10800	5420	9400	3170	25300	5550
9	6870	5110	3270	2810	e2800	5610	12100	5540	9550	2370	14100	4960
10	6550	4270	3300	2890	e2900	5250	11200	5280	8470	2680	9590	4430
11	7570	3640	3490	3260	e3700	5230	10500	4900	7100	2850	7210	3800
12	9710	3410	3420	3420	e4200	6450	9380	4650	6160	2850	5820	3420
13	9640	3210	3700	3400	e5000	20300	8320	4480	5550	2370	4860	3660
14	8640	2950	5640	3330	e6000	22100	7660	4220	4910	2620	4180	4110
15	6940	2670	11500	3170	6860	18200	7130	4080	5280	3830	3920	4360
16	6120	2630	21800	3170	10500	14600	6720	4050	7030	3810	3360	3250
17	5150	2470	22800	3110	11600	12800	6580	3770	10800	4270	3170	2850
18	4490	2410	17600	e3000	11300	11700	7470	3600	15600	3450	2810	2620
19	4090	2050	13400	e3000	14200	10600	9830	3570	12100	3330	2620	3010
20	3760	2100	10900	2880	47600	9290	16000	3750	10700	4290	2510	5380
21	3590	2080	10000	e2700	49200	9890	18300	3820	9420	3550	2260	7490
22	3330	1980	9100	e2600	34600	23600	18600	4180	10100	3490	2580	5550
23	3200	2020	7890	e2700	26700	38900	33400	5070	9510	3580	2930	4420
24	2910	1950	7160	e2900	21200	33700	31300	6180	8160	4020	2820	3480
25	2860	1970	6290	e3100	17500	27900	21900	9680	6870	3840	2510	3070
26	2960	2030	5690	e2400	15100	24300	17000	11300	5820	3490	2420	4640
27	2360	2380	5280	e2500	12900	21400	14300	9410	6190	3330	2280	10800
28	2560	3670	5190	e2700	12700	18400	13400	7830	5340	3140	2340	17100
29	2420	6650	4830	e2900	13500	16300	12200	7340	4890	3400	2780	16600
30	2460	9240	4630	e2900	---	14700	10600	10800	4970	3960	2850	12600
31	2370	---	4360	e2700	---	12500	---	11800	---	4090	2930	---
TOTAL	200840	106620	232620	95840	352560	459130	386420	195730	235110	112420	168010	171710
MEAN	6479	3554	7504	3092	12160	14810	12880	6314	7837	3626	5420	5724
MAX	18400	9240	22800	4070	49200	38900	33400	11800	15600	5180	25300	17100
MIN	2360	1950	3270	2400	2600	5230	6580	3570	4890	2370	2260	2620
CFSM	.67	.37	.78	.32	1.26	1.53	1.33	.65	.81	.38	.56	.59
IN.	.77	.41	.90	.37	1.36	1.77	1.49	.75	.91	.43	.65	.66

e Estimated

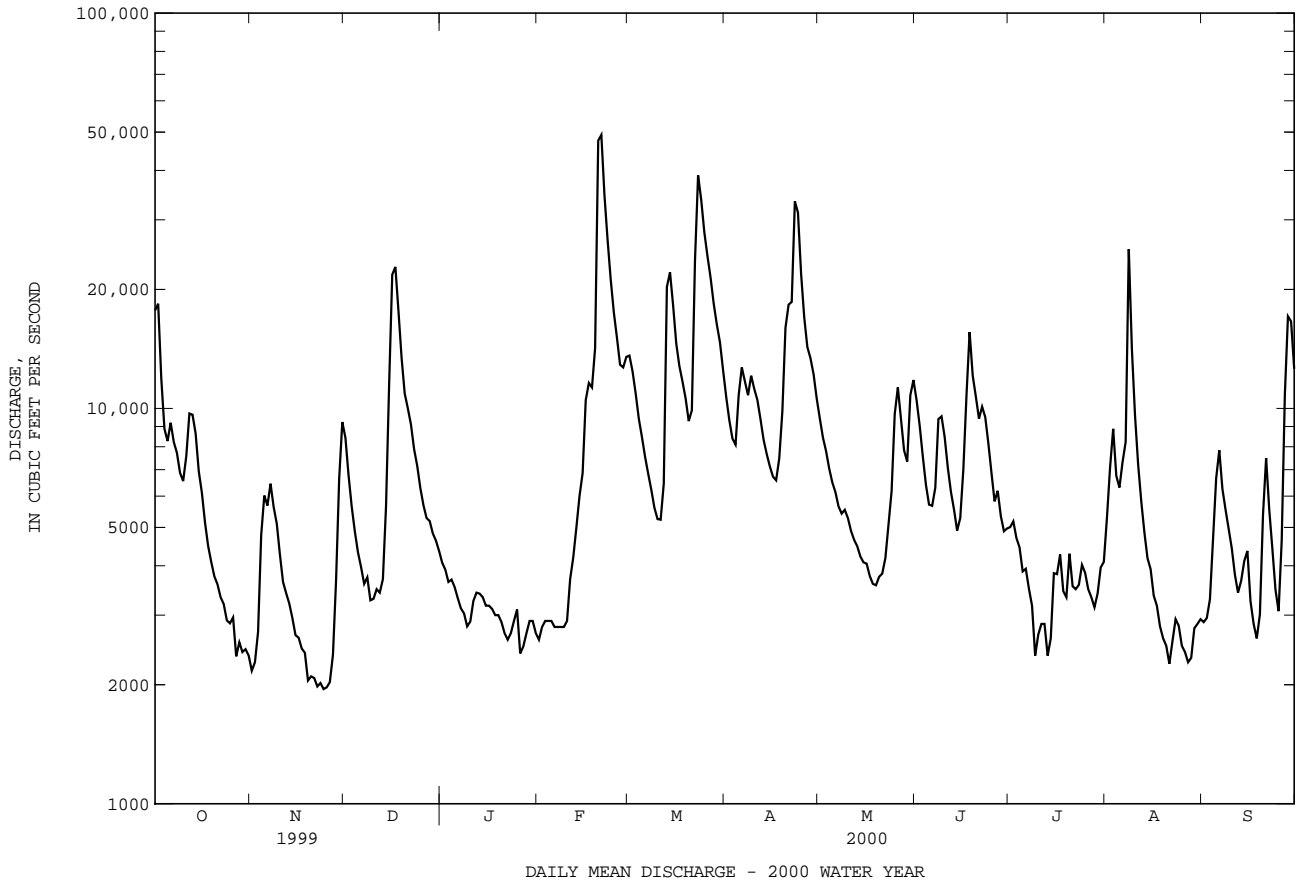
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 2000, BY WATER YEAR (WY)

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	5039	5663	8575	11520	14480	19790	16450	12280	7964	4505	4280	3804																																																																																														
MAX	37030	39000	32610	42160	47870	68360	43840	41970	40400	16000	23580	38300																																																																																														
(WY)	1943	1986	1973	1996	1998	1936	1993	1924	1972	1949	1955	1996																																																																																														
MIN	706	840	1253	1703	2661	5400	4368	3276	1932	1056	771	834																																																																																														
(WY)	1931	1931	1966	1981	1934	1931	1915	1930	1969	1966	1930	1930																																																																																														

01638500 POTOMAC RIVER AT POINT OF ROCKS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1895 - 2000	
ANNUAL TOTAL	2058823		2717010		9514	
ANNUAL MEAN	5641		7424		18750	
HIGHEST ANNUAL MEAN					4366	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	37300	Mar 20	49200	Feb 21	434000	Mar 19 1936
LOWEST DAILY MEAN	721	Aug 14	1950	Nov 24	540	Sep 10 1914
ANNUAL SEVEN-DAY MINIMUM	899	Aug 10	2020	Nov 20	593	Sep 6 1966
INSTANTANEOUS PEAK FLOW			61600	Feb 20	(a)480000	Mar 19 1936
INSTANTANEOUS PEAK STAGE			12.54	Feb 20	41.03	Mar 19 1936
INSTANTANEOUS LOW FLOW			1860	Nov 25	530	(b)
ANNUAL RUNOFF (CFSM)	.58		.77		.99	
ANNUAL RUNOFF (INCHES)	7.94		10.47		13.39	
10 PERCENT EXCEEDS	11100		14400		20700	
50 PERCENT EXCEEDS	4170		5240		5380	
90 PERCENT EXCEEDS	1150		2680		1680	

a From rating curve extended above 300,000 ft<sup>3</sup>/s, on the basis of adjustment of figure of peak flow at station near Washington for inflow and storage, and slope-area measurement of peak flow.  
 b Sept. 11, 12, 1966.



POTOMAC RIVER BASIN

01639000 MONOCACY RIVER AT BRIDGEPORT, MD

LOCATION.--Lat 39°40'43", long 77°14'06", Frederick County, Hydrologic Unit 02070009, on right bank 60 ft downstream from bridge on State Highway 140 at Bridgeport, 0.9 mi upstream from Cattail Branch, 3.4 mi northwest of Taneytown, 4.8 mi downstream from confluence of Rock and Marsh Creeks at Pennsylvania-Maryland State line, and 52 mi upstream from mouth.

DRAINAGE AREA.--173 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1382: 1944(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 15, 1947. Datum of gage is 340.83 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 3, 1946, nonrecording gage and crest-stage gages at site 0.3 mi downstream at datum 0.98 ft lower.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Occasional regulation at low flow from Lake Hertridge and other unknown sources upstream from station. U.S. Geological Survey gage-height telemeter and satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 24, 1933, reached a stage of about 25 ft, present site and datum, from floodmarks, discharge, 23,000 ft<sup>3</sup>/s. Stage exceeded that of June 1889, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0230	*7,790	*13.53	No other peak greater than base discharge.			

Minimum discharge 11 ft<sup>3</sup>/s, Aug 23-26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	48	37	56	44	326	141	107	107	60	119	21
2	214	50	32	56	47	270	126	102	90	41	74	538
3	127	118	30	58	44	210	121	94	86	31	51	146
4	141	87	28	59	44	174	192	82	74	32	42	59
5	777	65	28	59	46	152	187	76	63	35	34	39
6	268	46	35	50	45	126	122	96	101	24	32	24
7	152	29	99	44	44	110	104	85	133	20	54	18
8	105	27	73	42	47	102	115	69	76	18	48	15
9	85	26	45	41	46	96	1100	60	60	16	30	14
10	1780	25	56	118	48	90	330	57	51	18	22	15
11	721	29	208	583	66	151	218	79	45	17	19	14
12	288	45	102	254	228	1480	182	61	41	18	17	15
13	179	38	78	165	237	453	147	53	43	20	15	23
14	138	24	1630	121	417	285	128	56	47	26	16	29
15	113	23	1110	73	1200	222	118	54	52	339	17	104
16	83	22	414	84	908	185	119	40	123	260	16	72
17	74	21	263	e65	885	410	417	37	85	134	13	40
18	65	20	198	e48	463	269	1720	36	60	73	12	26
19	57	21	159	e47	1690	186	983	41	51	76	14	218
20	50	20	151	e45	1290	160	422	66	44	133	14	1070
21	57	19	275	e42	915	2020	631	93	38	78	15	172
22	50	20	166	e40	771	4240	1080	94	194	51	13	84
23	42	20	119	e45	604	867	608	212	94	39	11	55
24	39	21	98	49	496	533	367	374	55	30	11	49
25	35	23	68	48	436	388	267	348	47	28	11	50
26	65	31	72	47	354	323	214	135	586	30	12	1060
27	55	190	75	e44	287	251	189	93	132	149	13	459
28	52	107	61	e40	1520	390	173	126	90	82	105	185
29	49	62	62	38	480	287	148	689	87	329	66	115
30	50	46	53	36	---	206	125	226	87	117	27	82
31	48	---	60	38	---	166	---	137	---	81	19	---
TOTAL	6434	1323	5885	2535	13702	15128	10794	3878	2842	2405	962	4811
MEAN	208	44.1	190	81.8	472	488	360	125	94.7	77.6	31.0	160
MAX	1780	190	1630	583	1690	4240	1720	689	586	339	119	1070
MIN	35	19	28	36	44	90	104	36	38	16	11	14
CFSM	1.20	.25	1.10	.47	2.73	2.82	2.08	.72	.55	.45	.18	.93
IN.	1.38	.28	1.27	.55	2.95	3.25	2.32	.83	.61	.52	.21	1.03

e Estimated

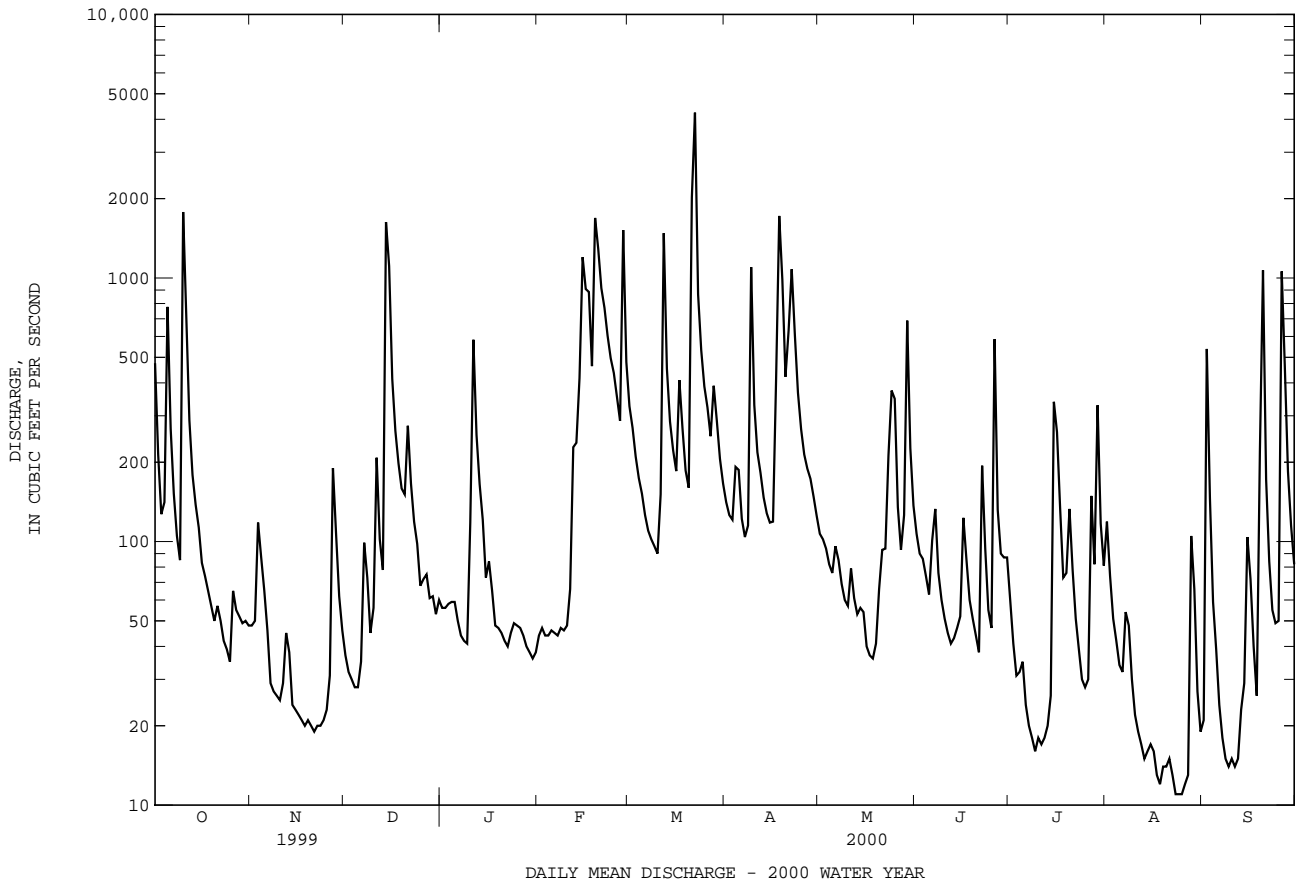
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

MEAN	95.5	179	267	304	382	457	299	211	132	81.3	58.8	86.6
MAX	906	513	780	1214	1029	1606	1029	964	1065	598	613	1027
(WY)	1977	1986	1997	1996	1961	1994	1983	1989	1972	1949	1942	1975
MIN	3.24	10.4	12.3	13.8	51.0	94.7	58.1	41.2	10.5	2.68	2.40	2.34
(WY)	1964	1954	1999	1981	1980	1949	1995	1969	1966	1966	1944	1943

01639000 MONOCACY RIVER AT BRIDGEPORT, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1942 - 2000	
ANNUAL TOTAL	54945.48	70699	211	
ANNUAL MEAN	151	193	447	1996
HIGHEST ANNUAL MEAN			76.8	1954
LOWEST ANNUAL MEAN			16700	Jun 22 1972
HIGHEST DAILY MEAN	3220 Sep 30	4240 Mar 22	.00	(b)
LOWEST DAILY MEAN	.43 Aug 14	11 (a)	.04	Jul 22 1966
ANNUAL SEVEN-DAY MINIMUM	.76 Aug 9	12 Aug 21	(c)24400	Jun 19 1996
INSTANTANEOUS PEAK FLOW		7790 Mar 22	25.42	Jun 19 1996
INSTANTANEOUS PEAK STAGE		13.53 Mar 22	.00	(f)
INSTANTANEOUS LOW FLOW		11 (d)	1.22	
ANNUAL RUNOFF (CFSM)	.87	1.12	15.20	16.60
ANNUAL RUNOFF (INCHES)	11.81	15.20	450	65
10 PERCENT EXCEEDS	337	455	74	21
50 PERCENT EXCEEDS	57	74	8.1	
90 PERCENT EXCEEDS	4.5	21		

- a Aug. 23-25.
- b July 25-28, 1966.
- c From rating curve extended above 14,000 ft<sup>3</sup>/s on basis of slope-conveyance study.
- d Aug. 23-26.
- f July 24-29, 1966.



POTOMAC RIVER BASIN

01639140 PINEY CREEK NEAR TANEYTOWN, MD

LOCATION.--Lat 39°39'38", long 77°13'16", Carroll County, Hydrologic Unit 02070009, on left bank at downstream side of bridge on Roop Road, 2.4 mi west of Taneytown, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--31.3 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 383.22 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (backwater and ice effect), which are poor. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	2015	*1,500	*6.20	No other peak greater than base discharge.			

Minimum discharge 1.9 ft<sup>3</sup>/s, Aug 27, Sep 10-12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	7.2	3.7	10	e8.6	60	30	24	17	10	40	13
2	e16	9.3	3.8	10	e8.8	49	27	24	14	6.9	21	7.9
3	e12	23	3.9	10	e8.8	39	27	20	12	5.6	16	4.8
4	33	13	4.3	10	e8.4	34	50	18	10	6.6	15	4.3
5	70	9.4	4.6	10	e8.8	31	35	17	9.8	6.3	12	4.0
6	e19	8.0	9.4	8.7	e8.8	26	26	18	16	4.6	14	3.1
7	e15	7.4	15	8.2	e8.8	23	22	15	14	3.9	20	2.7
8	e12	7.2	8.8	8.1	e8.8	22	53	13	9.2	3.5	11	2.4
9	e11	7.0	7.7	7.9	e9.4	21	175	12	7.8	2.9	10	2.3
10	237	6.8	43	39	e12	20	57	27	6.5	6.1	8.0	2.5
11	80	6.6	41	48	17	50	43	34	5.5	4.5	6.3	2.2
12	e25	6.4	19	23	52	101	37	14	5.4	3.3	5.3	2.5
13	e19	6.0	16	18	52	42	30	14	11	13	4.8	11
14	e16	6.5	302	13	97	33	27	18	8.3	21	4.7	5.1
15	e15	6.0	104	14	154	28	25	11	8.0	88	4.7	46
16	e13	5.7	58	11	131	25	26	9.4	20	32	4.1	9.8
17	e13	5.0	39	e9.6	92	80	132	8.8	11	15	3.4	5.3
18	e12	4.7	31	e9.0	68	38	293	8.4	7.6	11	3.1	4.3
19	11	4.4	25	e8.8	349	31	136	12	7.3	70	3.3	91
20	12	4.2	31	e8.0	156	28	81	15	5.6	58	3.3	68
21	14	4.5	44	e7.6	103	562	121	12	17	23	2.9	22
22	10	4.6	26	e7.4	78	451	154	17	57	16	2.5	13
23	10	4.4	20	e7.8	67	122	101	18	14	12	2.4	11
24	9.3	4.2	17	e9.0	60	87	72	58	9.1	11	2.6	10
25	7.8	4.1	17	e9.0	52	70	57	40	8.3	11	2.7	27
26	7.6	5.0	19	e8.8	43	60	47	18	23	10	2.6	129
27	7.3	19	12	e8.4	44	50	43	14	9.8	15	2.4	48
28	6.7	7.0	12	e7.6	326	82	39	32	26	18	6.3	27
29	6.6	4.4	11	e7.3	80	51	33	78	24	66	4.9	19
30	6.8	3.8	11	e7.0	---	40	28	28	19	20	4.0	14
31	6.7	---	11	e7.6	---	34	---	20	---	62	3.4	---
TOTAL	786.8	214.8	970.2	371.8	2112.2	2390	2027	667.6	413.2	636.2	246.7	612.2
MEAN	25.4	7.16	31.3	12.0	72.8	77.1	67.6	21.5	13.8	20.5	7.96	20.4
MAX	237	23	302	48	349	562	293	78	57	88	40	129
MIN	6.6	3.8	3.7	7.0	8.4	20	22	8.4	5.4	2.9	2.4	2.2
CFSM	.81	.23	1.00	.38	2.33	2.46	2.16	.69	.44	.66	.25	.65
IN.	.94	.26	1.15	.44	2.51	2.84	2.41	.79	.49	.76	.29	.73

e Estimated

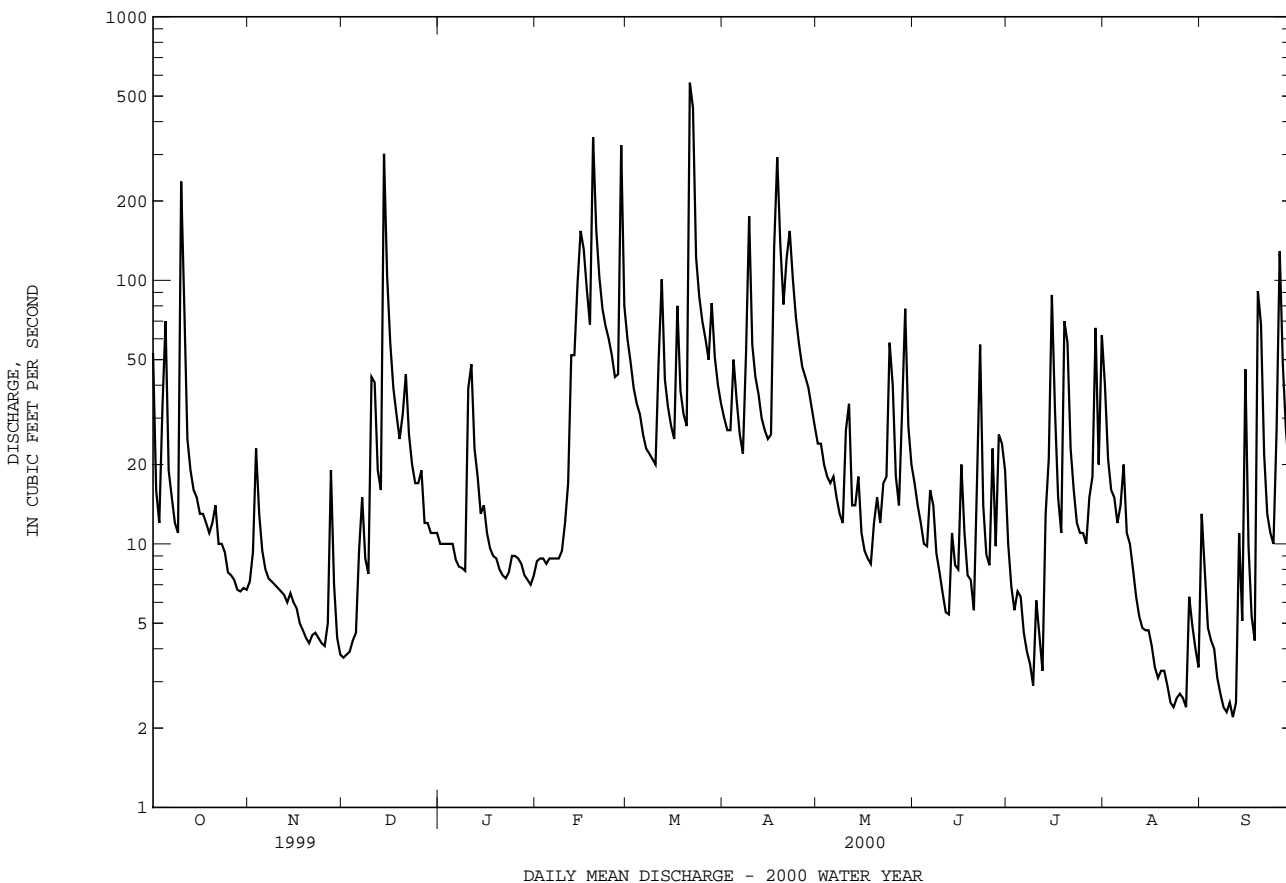
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
MEAN	20.5	35.7	58.6	76.2	53.2	101	55.8	25.3	15.4	19.6	9.89	16.0
MAX	73.2	73.3	134	200	123	237	183	63.8	62.0	101	43.5	77.3
(WY)	1997	1997	1997	1996	1998	1993	1993	1998	1996	1996	1996	1996
MIN	.94	1.49	1.39	12.0	24.5	31.1	10.7	6.49	1.99	.57	.74	.67
(WY)	1998	1999	1999	2000	1999	1995	1995	1999	1991	1991	1997	1997

01639140 PINEY CREEK NEAR TANEYTOWN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	9194.52		11448.7		40.4	
ANNUAL MEAN	25.2		31.3		68.5	
HIGHEST ANNUAL MEAN					20.2	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	720	Jan 18	562	Mar 21	2770	Jan 19 1996
LOWEST DAILY MEAN	.35	Jul 17	2.2	Sep 11	.00	(a)
ANNUAL SEVEN-DAY MINIMUM	.41	Jul 13	2.5	Sep 6	.03	Aug 2 1991
INSTANTANEOUS PEAK FLOW			1500	Mar 21	7520	Jan 19 1996
INSTANTANEOUS PEAK STAGE			6.20	Mar 21	(b)11.41	Jan 19 1996
INSTANTANEOUS LOW FLOW			1.9	(c)	.00	(d)
ANNUAL RUNOFF (CFSM)	.80		1.00		1.29	
ANNUAL RUNOFF (INCHES)	10.93		13.61		17.53	
10 PERCENT EXCEEDS	56		70		83	
50 PERCENT EXCEEDS	9.3		13		14	
90 PERCENT EXCEEDS	.71		4.4		1.4	

- a Aug. 4, 5, Sept. 2, 3, 1991.
- b From floodmarks.
- c Aug. 27, Sept. 10-12.
- d Aug. 3-9, 17, Sept. 1-4, 1991.



POTOMAC RIVER BASIN

01639500 BIG PIPE CREEK AT BRUCEVILLE, MD

LOCATION.--Lat 39°36'45", long 77°14'10", Carroll County, Hydrologic Unit 02070009, on left bank 300 ft downstream from bridge on State Highway 194, 800 ft downstream from Bruceville, 3.5 mi upstream from Detour and confluence with Little Pipe Creek.

DRAINAGE AREA.--102 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1947 to current year. Prior to December 1947, monthly discharge only, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 336.88 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Occasional diversion for irrigation upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	1630	1,650	5.21	Mar 21	2230	*2,780	*7.43

Minimum discharge 29 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	42	39	53	e42	168	132	131	87	89	133	70
2	84	43	38	52	e45	148	126	133	81	70	84	64
3	65	62	37	54	e44	128	124	120	72	64	73	77
4	90	49	38	54	e44	117	173	112	67	64	73	131
5	226	43	38	54	e44	110	137	109	70	60	63	51
6	99	42	57	47	e45	100	118	113	79	52	63	41
7	75	41	79	46	e43	93	109	102	76	48	80	39
8	64	40	50	46	e45	91	157	95	63	44	61	36
9	59	40	44	45	48	88	501	90	59	42	62	36
10	565	40	98	82	56	84	201	160	56	52	56	36
11	224	40	147	132	83	137	164	186	52	52	50	34
12	123	39	74	78	168	236	151	102	51	45	47	37
13	97	38	65	68	107	131	133	96	62	46	48	71
14	83	38	629	59	263	110	126	115	60	90	48	49
15	74	38	387	55	384	101	122	85	59	115	46	352
16	68	37	155	56	288	98	124	79	75	89	42	78
17	66	36	115	e52	251	276	254	77	60	63	39	58
18	65	35	98	e46	180	148	622	75	53	54	39	49
19	57	35	86	e44	1000	126	389	80	51	147	43	303
20	61	35	92	e42	475	118	246	89	48	161	39	481
21	67	37	112	e40	261	1060	371	84	60	82	37	105
22	57	38	86	37	207	1260	615	86	253	66	35	76
23	55	38	75	39	185	398	348	90	78	59	34	68
24	51	38	70	45	174	283	259	148	61	58	36	66
25	48	38	63	46	161	231	219	111	57	62	37	94
26	47	41	72	46	145	201	195	84	131	57	34	475
27	45	84	61	e42	138	177	181	78	75	90	33	180
28	43	59	63	e40	571	296	170	106	188	72	87	120
29	42	45	59	e37	208	190	155	245	196	127	47	99
30	42	41	64	e35	---	158	141	118	173	83	44	87
31	42	---	53	e38	---	143	---	96	---	196	43	---
TOTAL	2917	1272	3144	1610	5705	7005	6763	3395	2553	2399	1656	3463
MEAN	94.1	42.4	101	51.9	197	226	225	110	85.1	77.4	53.4	115
MAX	565	84	629	132	1000	1260	622	245	253	196	133	481
MIN	42	35	37	35	42	84	109	75	48	42	33	34
CFSM	.92	.42	.99	.51	1.93	2.22	2.21	1.07	.83	.76	.52	1.13
IN.	1.06	.46	1.15	.59	2.08	2.55	2.47	1.24	.93	.87	.60	1.26

e Estimated

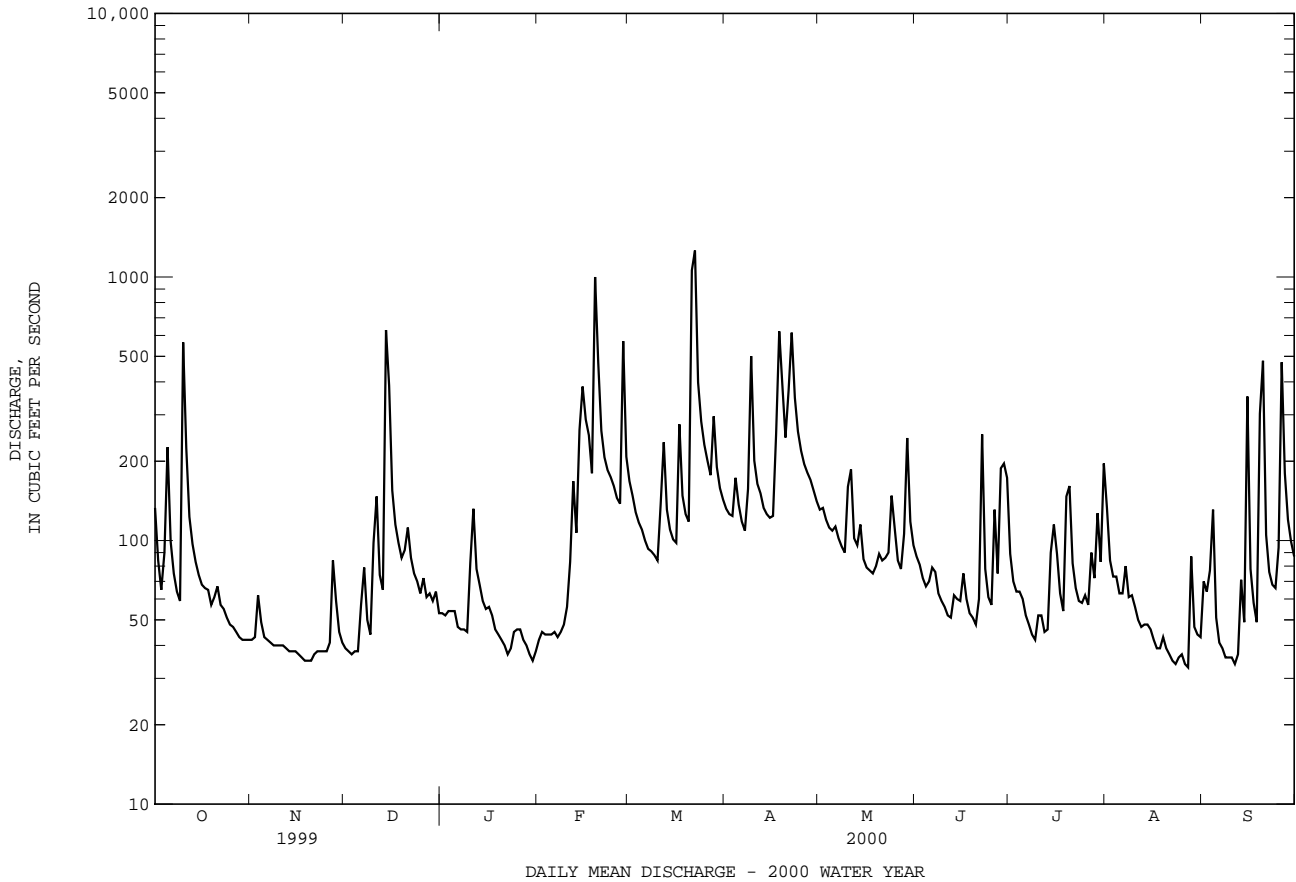
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	61.9	86.6	125	152	177	199	166	122	98.6	72.0	54.5	66.5
MAX	390	289	453	492	387	613	514	383	891	295	212	730
(WY)	1980	1948	1997	1996	1979	1994	1993	1989	1972	1949	1955	1975
MIN	14.9	16.7	18.9	22.5	58.1	71.4	61.3	38.6	19.8	10.4	4.39	13.0
(WY)	1964	1966	1966	1966	1954	1981	1965	1965	1966	1966	1966	1963

01639500 BIG PIPE CREEK AT BRUCEVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	29653.5		41882		115	
ANNUAL MEAN	81.2		114		227	
HIGHEST ANNUAL MEAN					1972	
LOWEST ANNUAL MEAN					50.8	
HIGHEST DAILY MEAN	1010	Jan 18	1260	Mar 22	14400	Jun 22 1972
LOWEST DAILY MEAN	8.0	Aug 19	33	Aug 27	1.0	Sep 12 1966
ANNUAL SEVEN-DAY MINIMUM	8.8	Aug 14	35	Aug 21	1.4	Sep 7 1966
INSTANTANEOUS PEAK FLOW			2780	Mar 21	(a)28000	Sep 26 1975
INSTANTANEOUS PEAK STAGE			7.43	Mar 21	18.98	Sep 26 1975
INSTANTANEOUS LOW FLOW			29	Aug 27	1.0	Sep 12 1966
ANNUAL RUNOFF (CFSM)	.80		1.12		1.13	
ANNUAL RUNOFF (INCHES)	10.81		15.27		15.29	
10 PERCENT EXCEEDS	159		220		217	
50 PERCENT EXCEEDS	54		73		67	
90 PERCENT EXCEEDS	15		39		24	

a From rating curve extended above 3,900 ft<sup>3</sup>/s on the basis of contracted-opening measurement at gage height of 17.86 ft.





POTOMAC RIVER BASIN

01643000 MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD

LOCATION.--Lat 39°24'13", long 77°21'58", Frederick County, Hydrologic Unit 02070009, on right bank 500 ft downstream from Interstate 70 highway bridge, 0.4 mi downstream from Linganore Creek, 2.0 mi east of Frederick, and 16.9 mi upstream from mouth.

DRAINAGE AREA.--817 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for October, November 1929, published in WSP 1302.

REVISED RECORDS.--WSP 711: 1930.

GAGE.--Water-stage recorder. Nonrecording gage at site 0.2 mile downstream. Datum of gage is 231.92 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect and missing record) which are poor. Occasional regulation at low and medium flows since September 1972 by Linganore Reservoir, total capacity, 883,200,000 gal, 2.8 mi upstream from station. National Weather Service gage-height telemeter at station. U.S. Geological Survey satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1889 reached a stage of 30 ft, from floodmarks, discharge, 56,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 1	0030	9,040	10.98	Mar 22	1700	*18,700	*16.43

Minimum discharge 146 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3400	300	298	425	e360	1710	1090	972	675	545	848	776
2	1220	357	274	408	351	1490	1010	932	592	391	645	721
3	819	565	265	410	340	1280	970	883	515	331	498	1050
4	724	590	261	423	330	1130	1090	792	464	319	419	646
5	1950	432	262	422	326	1030	1220	712	444	309	375	438
6	1460	370	311	391	319	921	964	600	524	289	384	306
7	883	339	426	357	343	826	846	656	687	255	538	257
8	662	308	443	336	331	784	865	616	550	232	449	232
9	556	296	354	334	328	766	3260	567	431	216	353	214
10	3100	288	465	406	358	747	2100	547	378	241	310	203
11	4350	285	1010	1350	450	790	1460	849	342	259	273	192
12	1570	280	791	1040	873	2780	1280	664	313	235	242	189
13	1090	286	584	731	1040	2180	1140	544	347	217	260	360
14	881	285	2240	600	1090	1320	1030	572	375	278	290	334
15	734	269	5930	461	2980	1130	969	532	402	837	242	778
16	633	256	1950	442	2520	1020	935	464	557	1180	222	683
17	568	249	1340	414	2650	1300	1130	429	588	1080	202	355
18	528	241	1060	290	1810	1490	3320	415	436	507	185	276
19	475	237	901	e290	4820	1050	4780	411	387	639	187	539
20	469	235	816	e300	6010	959	2250	485	338	1680	183	3000
21	482	241	1030	338	3160	2100	2280	523	370	800	174	1110
22	449	240	969	387	2470	15700	4380	583	1540	514	164	586
23	417	240	744	376	2060	5510	3080	729	910	399	157	437
24	383	244	643	372	1820	2880	2200	986	505	365	154	383
25	357	249	538	354	1700	2240	1780	1300	416	363	158	467
26	336	280	462	329	1520	1960	1560	906	926	345	155	2470
27	348	452	547	e310	1350	1640	1410	629	901	355	176	2320
28	336	673	484	e300	3880	1950	1310	663	514	567	285	1100
29	316	436	460	e290	2650	1800	1200	1510	878	871	395	762
30	312	341	435	283	---	1410	1080	1280	617	818	312	601
31	306	---	441	e370	---	1210	---	818	---	1240	274	---
TOTAL	30114	9864	26734	13539	48239	63103	51989	22569	16922	16677	9509	21785
MEAN	971	329	862	437	1663	2036	1733	728	564	538	307	726
MAX	4350	673	5930	1350	6010	15700	4780	1510	1540	1680	848	3000
MIN	306	235	261	283	319	747	846	411	313	216	154	189
CFSM	1.19	.40	1.06	.53	2.04	2.49	2.12	.89	.69	.66	.38	.89
IN.	1.37	.45	1.22	.62	2.20	2.87	2.37	1.03	.77	.76	.43	.99

e Estimated

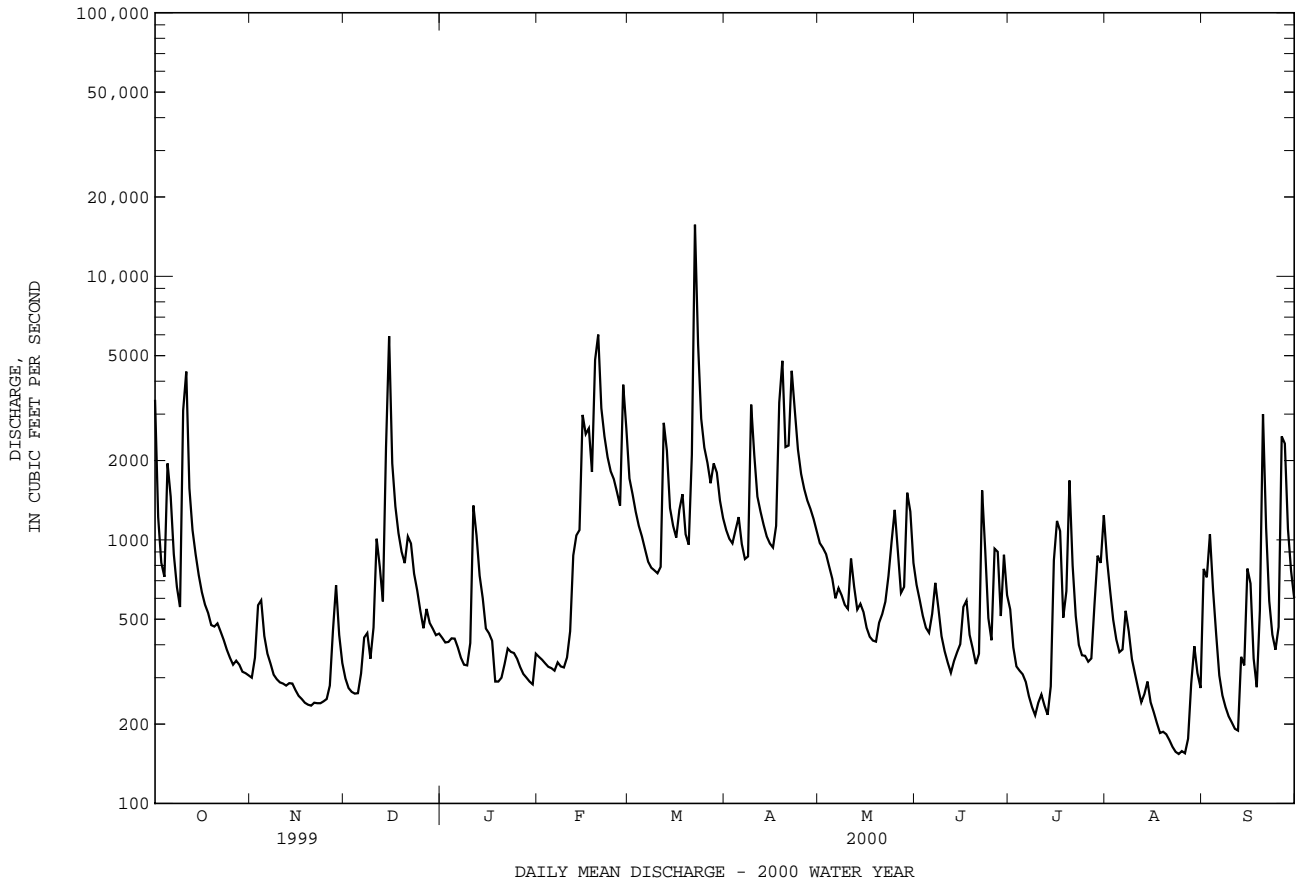
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

MEAN	517	721	1038	1230	1476	1836	1531	1018	713	459	408	492
MAX	3943	2504	3606	4159	4062	5851	4533	3773	6826	2571	3233	5165
(WY)	1977	1933	1997	1996	1984	1993	1983	1989	1972	1949	1933	1975
MIN	46.8	65.1	108	123	175	589	432	296	152	64.5	36.4	59.9
(WY)	1931	1931	1966	1981	1931	1981	1995	1963	1999	1966	1966	1963

01643000 MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	233901		331044		950	
ANNUAL MEAN	641		904		1834	
HIGHEST ANNUAL MEAN					1972	
LOWEST ANNUAL MEAN					345	
HIGHEST DAILY MEAN	7970	Sep 30	15700	Mar 22	74000	Jun 23 1972
LOWEST DAILY MEAN	38	Aug 13	154	Aug 24	19	(a)
ANNUAL SEVEN-DAY MINIMUM	45	Aug 7	163	Aug 21	19	Sep 7 1966
INSTANTANEOUS PEAK FLOW			18700		81600	
INSTANTANEOUS PEAK STAGE			16.43		(b)35.90	
INSTANTANEOUS LOW FLOW			146		17	
ANNUAL RUNOFF (CFSM)	.78		1.11		1.16	
ANNUAL RUNOFF (INCHES)	10.65		15.07		15.80	
10 PERCENT EXCEEDS	1360		1950		2000	
50 PERCENT EXCEEDS	381		538		478	
90 PERCENT EXCEEDS	85		258		123	

a Sept. 7-13, 1966.  
 b From floodmarks.  
 c Sept. 11 and 13, 1966.

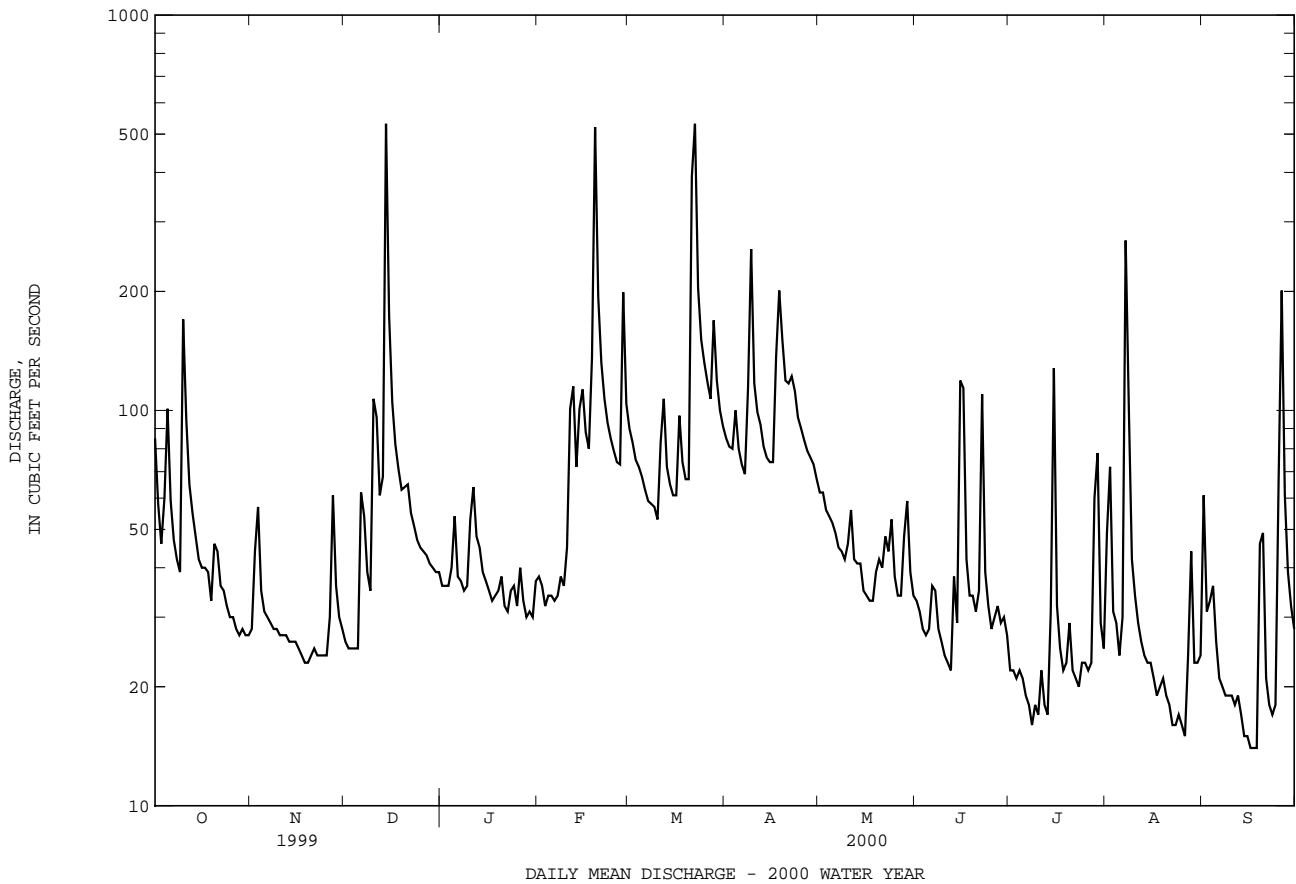




01643500 BENNETT CREEK AT PARK MILLS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 1958 1966 - 2000	
ANNUAL TOTAL	15302.9		20910		70.7	
ANNUAL MEAN	41.9		57.1		141	
HIGHEST ANNUAL MEAN					32.0	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	566	Sep 16	531	Dec 14	5500	Jun 22 1972
LOWEST DAILY MEAN	1.0	(a)	14	(b)	.40	Sep 8 1966
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 8	15	Sep 12	.91	Sep 3 1966
INSTANTANEOUS PEAK FLOW			1750	Dec 14	(c)32200	Jun 21 1972
INSTANTANEOUS PEAK STAGE			5.16	Dec 14	(d)22.10	Jun 21 1972
INSTANTANEOUS LOW FLOW			14	(f)	.30	Sep 8 1966
ANNUAL RUNOFF (CFSM)	.67		.91		1.13	
ANNUAL RUNOFF (INCHES)	9.06		12.39		15.29	
10 PERCENT EXCEEDS	77		107		133	
50 PERCENT EXCEEDS	30		38		42	
90 PERCENT EXCEEDS	3.7		21		14	

- a Aug. 12, 13.
- b Sept. 16-18.
- c From rating curve extended above 2,700 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage heights of 11.15, 14.33, and 22.1 ft.
- d From floodmarks.
- f Sept. 15-19.



POTOMAC RIVER BASIN

01644600 GREAT SENECA CREEK NEAR QUINCE ORCHARD, MD

LOCATION.--Lat 39°07'57", long 77°16'21", Montgomery County, Hydrologic Unit 02060008, on left bank 10 ft downstream from bridge on Riffle Ford Road, 1.35 mi northwest of Quince Orchard, 1.75 mi southeast of the intersection of Maryland Route 118 and Riffle Ford Road, and 4.5 mi upstream from the confluence with Little Seneca Creek.

DRAINAGE AREA.--50.7 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 265 ft above sea level, from topographic maps.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Records include pumpage from a Washington Suburban Sanitary Commission wastewater facility located immediately upstream from station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	2145	1,450	8.52	Aug 27	2315	1,450	8.52
Mar 22	0800	*1,660	*8.94	Sep 1	0830	1,220	8.04
Apr 17	1845	1,100	7.78	Sep 26	0200	1,140	7.86
Aug 1	2345	1,490	8.61				

Minimum discharge 24 ft<sup>3</sup>/s, Jan 18 (ice effect).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	41	42	47	45	71	67	66	49	44	410	514
2	57	85	40	46	44	65	68	65	47	41	329	94
3	50	88	41	47	42	61	70	61	43	41	82	264
4	75	50	41	66	42	58	110	59	42	57	64	178
5	96	47	40	85	43	57	76	58	43	44	53	86
6	57	44	112	54	43	54	66	57	64	39	98	61
7	50	43	74	51	44	53	63	55	54	37	125	53
8	49	42	52	48	49	52	127	54	43	34	155	49
9	48	42	47	49	47	52	283	52	41	34	65	46
10	195	40	99	92	55	51	104	78	39	40	68	43
11	90	42	94	88	88	95	84	84	37	52	50	41
12	66	44	58	60	100	103	78	57	37	39	45	42
13	56	41	79	55	64	66	70	63	45	37	47	42
14	48	40	431	51	75	59	67	98	42	50	44	40
15	45	39	160	48	86	55	67	55	67	223	49	39
16	42	39	89	49	65	55	67	51	122	59	47	39
17	50	38	71	46	61	98	452	50	169	50	40	38
18	90	37	64	43	152	65	317	49	135	46	39	37
19	48	38	59	45	391	57	155	58	88	57	39	164
20	79	39	69	47	135	55	108	61	55	73	36	118
21	62	39	71	45	90	520	313	56	51	45	34	52
22	50	39	59	41	76	901	216	174	148	40	33	44
23	49	41	55	45	68	172	118	86	59	38	32	41
24	46	40	52	44	64	115	97	107	48	43	34	41
25	43	39	50	46	61	98	87	65	45	43	33	212
26	43	68	49	48	58	90	81	54	234	46	32	485
27	40	147	50	44	58	87	78	54	97	44	259	102
28	42	59	49	41	209	142	75	73	62	76	227	66
29	42	46	49	41	87	89	71	81	56	151	65	55
30	41	41	48	42	---	79	68	57	51	56	54	51
31	41	---	48	48	---	72	---	51	---	75	57	---
TOTAL	1875	1478	2342	1602	2442	3647	3703	2089	2113	1754	2745	3137
MEAN	60.5	49.3	75.5	51.7	84.2	118	123	67.4	70.4	56.6	88.5	105
MAX	195	147	431	92	391	901	452	174	234	223	410	514
MIN	40	37	40	41	42	51	63	49	37	34	32	37
(†)	-9.0	-10.0	-9.7	-9.4	-9.5	-10.8	-10.7	-10.1	-10.2	-9.8	-10.1	-9.4
MEAN‡	51.7	39.8	66.1	42.5	74.9	107	113	57.7	61.1	46.7	78.5	95.1
CFSM‡	1.02	0.79	1.30	0.84	1.48	2.11	2.23	1.14	1.20	0.92	1.55	1.88
IN‡	1.18	0.88	1.50	0.97	1.59	2.43	2.49	1.31	1.34	1.06	1.79	2.09

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

	MEAN	MAX	MIN	(WY)
MEAN	40.4	56.4	48.6	86.2
MAX	60.5	91.2	75.5	116
MIN	30.4	28.8	28.2	51.7
(WY)	2000	1998	2000	1998
MEAN	40.4	56.4	48.6	86.2
MAX	60.5	91.2	75.5	116
MIN	30.4	28.8	28.2	51.7
(WY)	1998	1999	1999	2000

† Pumpage in cubic feet per second, Washington Suburban Sanitary Commission.  
‡ Adjusted for pumpage.

01644600 GREAT SENECA CREEK NEAR QUINCE ORCHARD, MD--Continued

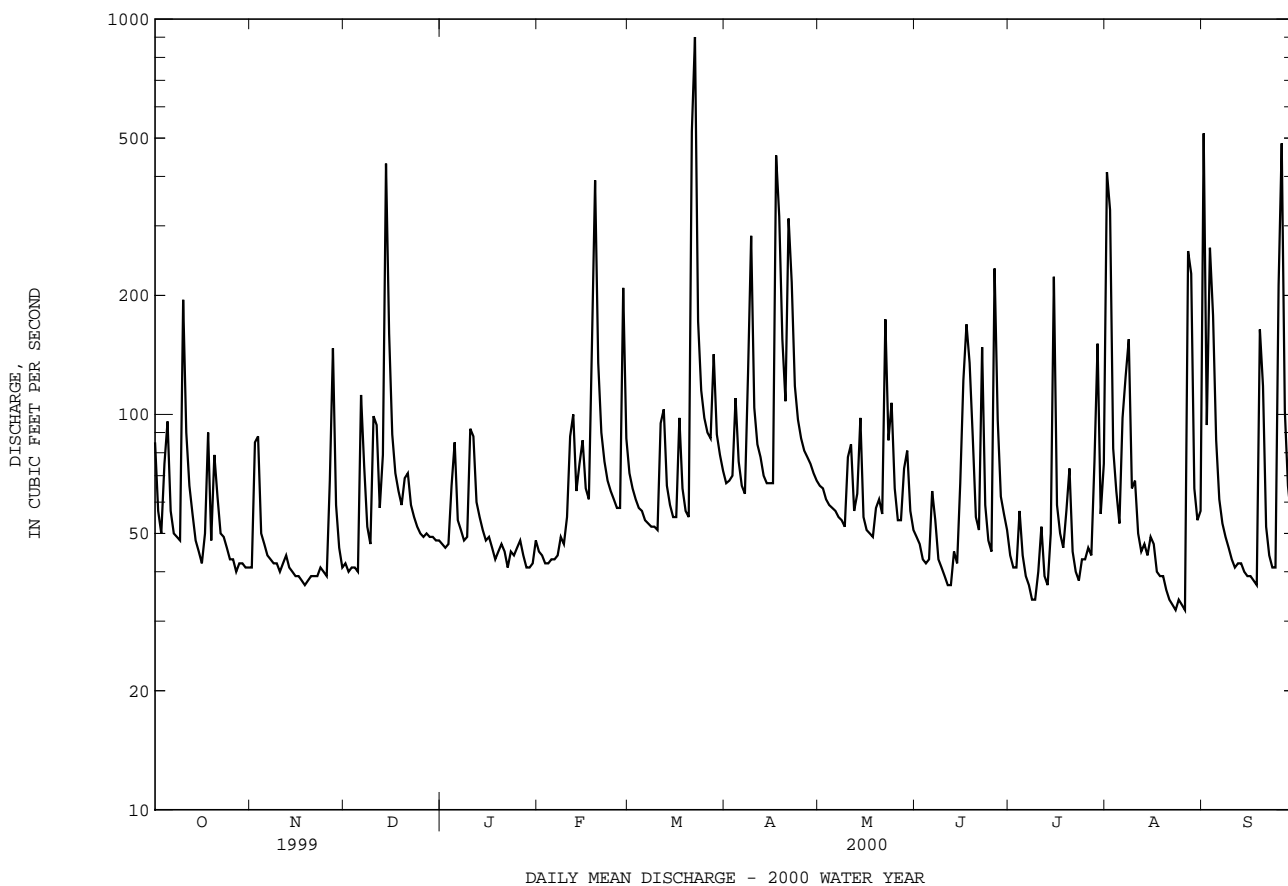
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1997 - 2000	
ANNUAL TOTAL	22036		28927			
ANNUAL MEAN	60.4		79.0		71.4	
ANNUAL MEAN†	51.4		69.4		63.0	
HIGHEST ANNUAL MEAN					83.0	
LOWEST ANNUAL MEAN					52.1	
HIGHEST DAILY MEAN	1110	Sep 16	901	Mar 22	1480	Mar 21 1998
LOWEST DAILY MEAN	12	Aug 19	32	(a)	12	Aug 19 1999
ANNUAL SEVEN-DAY MINIMUM	14	Aug 2	33	Aug 20	14	Aug 2 1999
INSTANTANEOUS PEAK FLOW			1660	Mar 22	(b)2440	Mar 21 1998
INSTANTANEOUS PEAK STAGE			8.94	Mar 22	10.26	Mar 21 1998
INSTANTANEOUS LOW FLOW			(c)24	Jan 18	9.3	Aug 13 1999
ANNUAL RUNOFF (CFSM)	1.19		1.56		1.41	
ANNUAL RUNOFF (CFSM)†	1.01		1.37		1.24	
ANNUAL RUNOFF (INCHES)	16.17		21.22		19.13	
ANNUAL RUNOFF (INCHES)†	13.77		18.64		16.88	
10 PERCENT EXCEEDS	96		129		117	
50 PERCENT EXCEEDS	43		55		46	
90 PERCENT EXCEEDS	18		40		22	

† Adjusted for inflow.

a Aug. 23, 26.

b From rating curve extended above 500 ft<sup>3</sup>/s.

c Result of freeze-up.



POTOMAC RIVER BASIN

01645000 SENECA CREEK AT DAWSONVILLE, MD

LOCATION.--Lat 39°07'41", long 77°20'13", Montgomery County, Hydrologic Unit 02070008, on right bank 60 ft downstream from bridge on State Highway 28, 150 ft downstream from mouth of Great Seneca Creek, 0.5 mi east of Dawsonville, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--101 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1232: 1930. WSP 1272: 1933. WSP 1432: 1934-35(M), 1941(M). WDR MD-DE-74-1: 1970(M).

GAGE.--Water-stage recorder. Concrete control since Mar. 3, 1934. Datum of gage is 214.02 ft above sea level. Sept. 26 to Nov. 9, 1930, chain gage, and Nov. 10, 1930 to Apr. 6, 1934, water-stage recorder, at highway bridge 60 ft upstream at same datum.

REMARKS.--Records good. Small diversion at times for irrigation upstream from station. National Weather Service gage-height telemeter at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 14	1400	1,410	5.83	Mar 22	0545	*1,910	*6.79

Minimum discharge 37 ft<sup>3</sup>/s, Aug 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	57	60	69	72	134	164	105	71	76	369	485
2	152	94	59	68	69	122	138	99	70	60	513	175
3	133	133	59	68	65	109	105	89	66	58	178	247
4	158	92	59	87	67	100	153	86	64	78	149	316
5	178	86	58	133	67	97	122	87	65	63	92	171
6	86	83	142	86	67	92	109	86	86	56	132	100
7	73	72	112	79	68	89	106	85	81	53	132	69
8	70	60	77	75	73	87	203	83	67	50	275	66
9	67	60	70	74	71	86	515	78	64	49	142	63
10	267	59	127	116	81	85	251	98	61	51	137	60
11	170	59	160	140	142	144	220	143	59	73	84	57
12	125	62	100	96	183	194	145	119	58	57	66	58
13	156	60	116	87	123	122	104	110	64	53	66	57
14	104	60	729	84	139	105	99	161	66	57	62	54
15	90	58	372	75	161	97	98	100	80	336	62	51
16	81	57	205	76	126	93	101	77	196	154	61	50
17	68	56	152	74	115	156	509	76	209	98	56	49
18	123	54	125	62	227	116	615	74	191	70	54	48
19	71	55	110	67	742	100	375	81	139	75	54	147
20	102	56	113	69	327	95	269	92	85	121	51	193
21	112	56	118	70	202	533	364	84	71	82	48	83
22	94	55	100	e64	160	1330	367	226	204	73	47	63
23	82	56	91	67	135	402	221	166	107	70	46	55
24	66	57	85	66	122	256	172	183	82	71	47	55
25	63	56	78	69	114	199	168	110	76	69	45	177
26	62	68	76	78	107	178	168	82	294	60	44	633
27	60	205	75	70	103	167	153	78	177	58	119	223
28	59	87	74	e64	327	315	120	97	149	156	389	126
29	59	69	73	64	169	223	114	120	129	273	155	82
30	58	60	71	61	---	183	110	92	106	149	123	68
31	58	---	70	e70	---	171	---	79	---	139	79	---
TOTAL	3262	2142	3916	2428	4424	6180	6358	3246	3237	2888	3877	4081
MEAN	105	71.4	126	78.3	153	199	212	105	108	93.2	125	136
MAX	267	205	729	140	742	1330	615	226	294	336	513	633
MIN	58	54	58	61	65	85	98	74	58	49	44	48
CFSM	1.04	.71	1.25	.78	1.51	1.97	2.10	1.04	1.07	.92	1.24	1.35
IN.	1.20	.79	1.44	.89	1.63	2.28	2.34	1.20	1.19	1.06	1.43	1.50

e Estimated

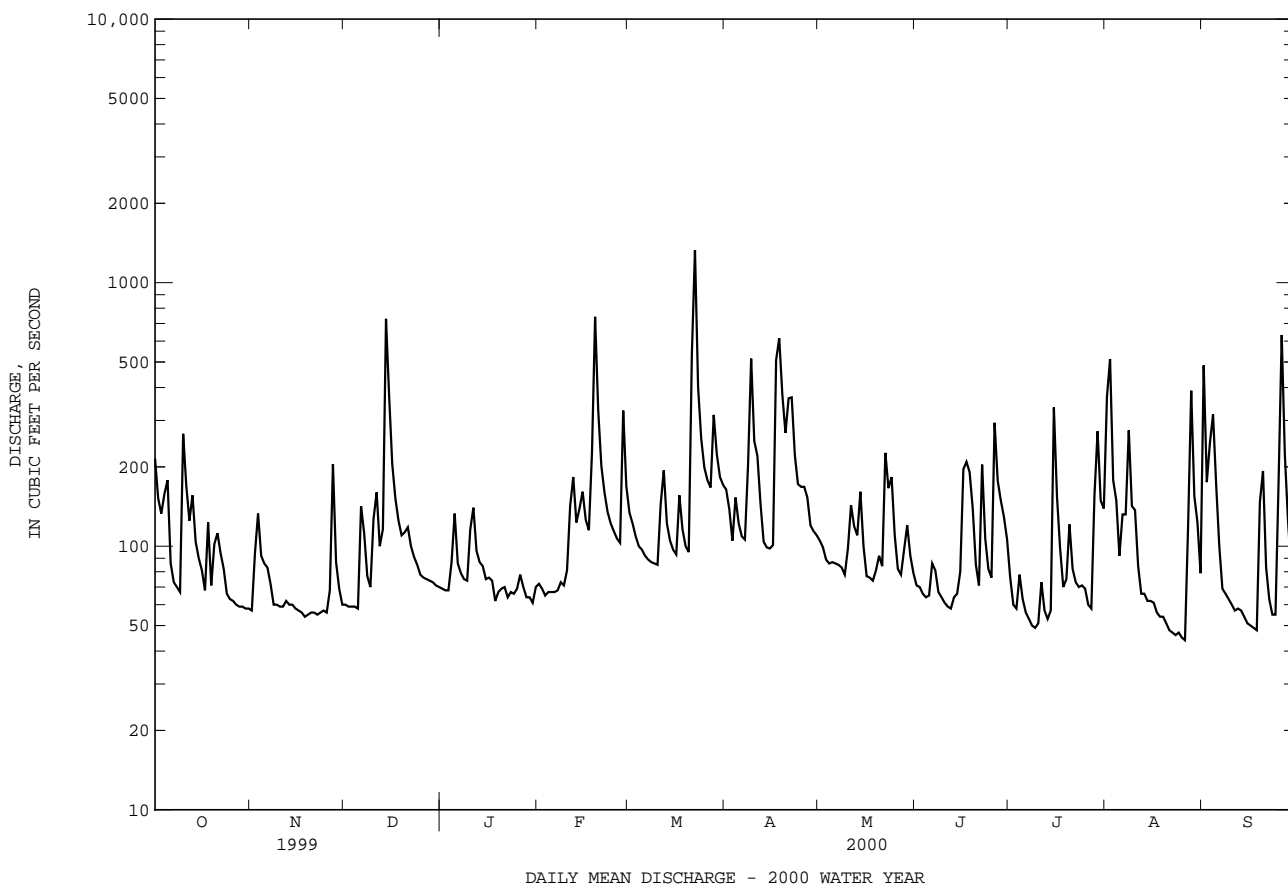
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

MEAN	68.6	84.8	110	130	148	163	149	127	105	75.9	68.0	79.0
MAX	479	290	452	440	484	511	457	510	747	273	248	566
(WY)	1980	1994	1997	1996	1979	1993	1993	1989	1972	1956	1971	1971
MIN	7.10	12.6	20.6	30.2	26.7	44.3	55.9	30.3	35.3	13.4	8.35	10.1
(WY)	1931	1932	1932	1966	1931	1931	1969	1931	1986	1955	1932	1931

01645000 SENECA CREEK AT DAWSONVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	34120		46039			
ANNUAL MEAN	93.5		126		109	
HIGHEST ANNUAL MEAN					251	
LOWEST ANNUAL MEAN					32.8	
HIGHEST DAILY MEAN	1500	Sep 16	1330	Mar 22	9900	Jun 22 1972
LOWEST DAILY MEAN	13	Aug 19	44	Aug 26	1.8	(a)
ANNUAL SEVEN-DAY MINIMUM	15	Aug 2	47	Aug 20	2.2	Sep 27 1930
INSTANTANEOUS PEAK FLOW			1910	Mar 22	(b)26100	Jun 22 1972
INSTANTANEOUS PEAK STAGE			6.79	Mar 22	(c)16.40	Jun 22 1972
INSTANTANEOUS LOW FLOW			37	Aug 27	1.7	(d)
ANNUAL RUNOFF (CFSM)	.93		1.25		1.08	
ANNUAL RUNOFF (INCHES)	12.57		16.96		14.63	
10 PERCENT EXCEEDS	157		216		190	
50 PERCENT EXCEEDS	67		86		69	
90 PERCENT EXCEEDS	20		57		26	

- a Sept. 29, 1930, Sept. 12, 1966.
- b From rating curve extended above 3,000 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement at gage height 12.17 ft at gage; and contracted-opening and flow-over-road measurement at gage height 16.32 ft at site 5.0 mi downstream, adjusted for flow from intervening area.
- c From high-water mark in gage house.
- d Sept. 28, 29, 1930.





POTOMAC RIVER BASIN

01646500 POTOMAC RIVER NEAR WASHINGTON, DC

LOCATION.--Lat 38°56'58", long 77°07'40", Montgomery County, Hydrologic Unit 02070008, on left bank just upstream from Little Falls Dam, 1 mi upstream from District of Columbia boundary line, 1.2 mi upstream from Chain Bridge, 1.8 mi east of Langley, Fairfax County, and at mile 117.4.

DRAINAGE AREA.--11,560 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1930 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WDR MD-DE-75-1: 1973-74(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 37.95 ft above sea level. Prior to June 7, 1930, nonrecording gage, and June 7, 1930, to Jan. 22, 1965, water-stage recorder at site 1 mi upstream on right bank at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Diversions at Great Falls through aqueducts, and since June 1959, from gage pool at Little Falls Dam, for municipal supply of Washington, D.C.; since October 1958, at Rockville Filtration Plant, for municipal supply of city of Rockville; since April 1961, at Potomac Filtration Plant for water supply of Washington Suburban Sanitary District; since October 1961, at Fairfax Water Treatment Plant for water supply of city of Fairfax (from Goose Creek); since April 1964, at Violets Lock to Chesapeake and Ohio Canal; and since October 1985, at Fairfax County Water Authority Treatment Plant for water supply of the county. Low flow affected slightly prior to July 1981 by Stony River Reservoir, since December 1950, by Savage River Reservoir (see station 01597500), and since July 1981, by Jennings Randolph Lake. National Weather Service gage-height telemeter at station. U.S. Geological Survey satellite collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 2, 1889, was of approximately the same magnitude as that of March 19, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 45,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 21	0515	*63,500	*7.36	Mar 23	0915	56,400	7.02

Minimum discharge 1,630 ft<sup>3</sup>/s, Jan 21 (ice effect).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23100	2680	8120	5250	3020	16200	13400	11600	10900	4920	4520	3890
2	19700	2650	7280	5030	3250	14800	11900	10600	9570	4860	6790	3760
3	14600	3350	6070	4850	3360	13200	10800	9610	8200	4740	7880	4030
4	10900	3450	5260	4900	3360	11700	10400	8900	6740	4570	9610	4590
5	10600	4520	4670	5260	3400	10400	10500	8240	5870	4090	7740	4650
6	10600	5430	4640	4810	3190	9470	13500	7630	5520	3560	8230	6140
7	9720	5230	4630	4470	3260	8640	13300	7090	5530	3430	10200	6320
8	8100	5620	4160	4240	3360	7930	12600	6450	6520	3060	19600	5190
9	7360	5090	4120	4140	3330	7360	17200	6290	8390	2820	17100	4670
10	7500	4550	3900	4210	3450	6810	17300	6190	7790	2310	10200	4230
11	11600	3970	4510	4720	4130	6650	14200	6100	6740	2420	7260	3800
12	12000	3530	4810	5540	5180	7640	12500	5830	5560	2580	5610	3370
13	10400	3390	4660	5380	5670	14200	11200	5420	4860	2500	4720	3030
14	9860	3240	7840	4910	6470	23200	10300	5040	4580	2310	4040	3110
15	8440	3030	16200	4670	7720	20700	9640	4620	4270	3650	3630	3510
16	7060	2810	20700	4390	10900	16800	9150	4400	5830	4520	3330	3830
17	6290	2680	22600	4270	13200	14800	11500	4200	6620	4660	2880	3440
18	5650	2630	20200	3890	14400	13700	14300	3880	12300	4550	2770	2840
19	4910	2570	15600	3760	18600	12700	17400	3730	12000	3410	2570	3160
20	4830	2440	12800	3670	35400	11100	18400	3800	9430	3470	2320	4110
21	4600	2350	11400	2870	58400	12900	21000	3960	8660	4750	2210	8410
22	4290	2370	10900	2840	40800	29300	23500	4640	9700	3700	2120	7060
23	4070	2370	9670	2940	31300	51400	30300	5230	10200	3300	2160	5400
24	3760	2320	8540	3290	24300	41900	39400	6080	8550	3270	2400	4410
25	3420	2300	7790	3440	20000	33500	27800	7470	6920	3510	2410	4760
26	3290	2560	6970	2580	17300	28500	21100	11300	7960	3430	2140	7470
27	3290	3410	6410	2840	15200	24700	17400	10600	6810	3160	2050	9890
28	2950	3420	6180	3100	16100	22700	15500	8970	6430	3160	2490	12900
29	2880	4070	6060	3300	18200	20100	14600	7940	5350	4300	2480	15300
30	2880	6400	5720	3440	---	17800	13000	9030	5100	3640	2710	12000
31	2760	---	5460	2990	---	15600	---	11500	---	4100	2890	---
TOTAL	241410	104430	267870	125990	396250	546400	483090	216340	222900	112750	167060	169270
MEAN	7787	3481	8641	4064	13660	17630	16100	6979	7430	3637	5389	5642
MAX	23100	6400	22600	5540	58400	51400	39400	11600	12300	4920	19600	15300
MIN	2760	2300	3900	2580	3020	6650	9150	3730	4270	2310	2050	2840
(†)	563	556	553	549	541	523	537	619	643	654	642	619
MEAN †	8348	4036	9188	4613	14200	18140	16630	7600	8071	4290	6029	6262
CFSM †	0.72	0.35	0.79	0.40	1.23	1.57	1.44	0.66	0.70	0.37	0.52	0.54
IN †	0.83	0.39	0.92	0.46	1.33	1.81	1.61	0.76	0.78	0.43	0.60	0.60

† Diversions, in cubic feet per second, for municipal supply of Washington, D.C., Washington Suburban Sanitary District, city of Rockville, city of Fairfax (from Goose Creek), Fairfax County, and the Chesapeake and Ohio Canal (insignificant diversion to canal during current water year). Records provided by U.S. Army Corps of Engineers, Washington Suburban Sanitary Commission, city of Rockville, city of Fairfax, and Fairfax County Water Authority.

‡ Adjusted for diversion.a Oct. 1-7, 1930.

01646500 POTOMAC RIVER NEAR WASHINGTON, DC--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1958, BY WATER YEAR (WY) (UNREGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6120	6496	9843	13570	16660	21060	19120	13610	7960	5135	5804	4419
MAX	44100	21040	30900	37190	36790	76510	36430	27780	19090	21040	28210	19940
(WY)	1943	1933	1951	1937	1939	1936	1933	1932	1951	1949	1955	1945
MIN	583	700	1536	2527	2982	6505	7202	3953	2867	1284	569	679
(WY)	1931	1931	1944	1956	1934	1931	1947	1930	1930	1930	1930	1930

SUMMARY STATISTICS

WATER YEARS 1930 - 1958

ANNUAL MEAN	10790
HIGHEST ANNUAL MEAN	16100
LOWEST ANNUAL MEAN	4525
HIGHEST DAILY MEAN	426000
LOWEST DAILY MEAN	448
ANNUAL SEVEN-DAY MINIMUM	499
INSTANTANEOUS PEAK FLOW	484000
INSTANTANEOUS PEAK STAGE	(a)28.10
INSTANTANEOUS LOW FLOW	430
ANNUAL RUNOFF (CFSM)	.93
ANNUAL RUNOFF (INCHES)	12.68
10 PERCENT EXCEEDS	23600
50 PERCENT EXCEEDS	6440
90 PERCENT EXCEEDS	1810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2000, BY WATER YEAR (WY) (REGULATED, UNADJUSTED)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6051	7744	11430	14190	17770	25340	20680	15170	9267	4708	4095	4789
MAX	36790	42030	37630	52890	61040	67370	57850	40410	46630	17160	21720	44620
(WY)	1977	1986	1997	1996	1998	1994	1993	1989	1972	1972	1996	1996
MIN	908	1097	1038	1682	5605	7403	5810	3921	1536	599	538	791
(WY)	1964	1966	1966	1981	1999	1990	1995	1969	1999	1999	1966	1964

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1959 - 2000

ANNUAL TOTAL	2334487	3053760	
ANNUAL MEAN	6396	8344	11740
ANNUAL MEAN†	7030	8924	12229
HIGHEST ANNUAL MEAN			23760
HIGHEST ANNUAL MEAN†			23760
LOWEST ANNUAL MEAN			4900
LOWEST ANNUAL MEAN†			5306
HIGHEST DAILY MEAN	44700	Mar 20	58400
LOWEST DAILY MEAN	174	Aug 13	2050
LOWEST DAILY MEAN†	958	Aug 13	2740
ANNUAL SEVEN-DAY MINIMUM	303	Aug 13	2210
INSTANTANEOUS PEAK FLOW			63500
INSTANTANEOUS PEAK STAGE			7.36
INSTANTANEOUS LOW FLOW			(d)1630
ANNUAL RUNOFF (CFSM)	.55	.72	1.02
ANNUAL RUNOFF (CFSM)†	.61	.77	1.06
ANNUAL RUNOFF (INCHES)	7.51	9.83	13.79
ANNUAL RUNOFF (INCHES)†	8.26	10.51	14.37
10 PERCENT EXCEEDS	13100	17200	26700
50 PERCENT EXCEEDS	4630	5520	6450
90 PERCENT EXCEEDS	506	2840	1570

a At previous site, 1 mi upstream at same datum.

† Adjusted for diversion.

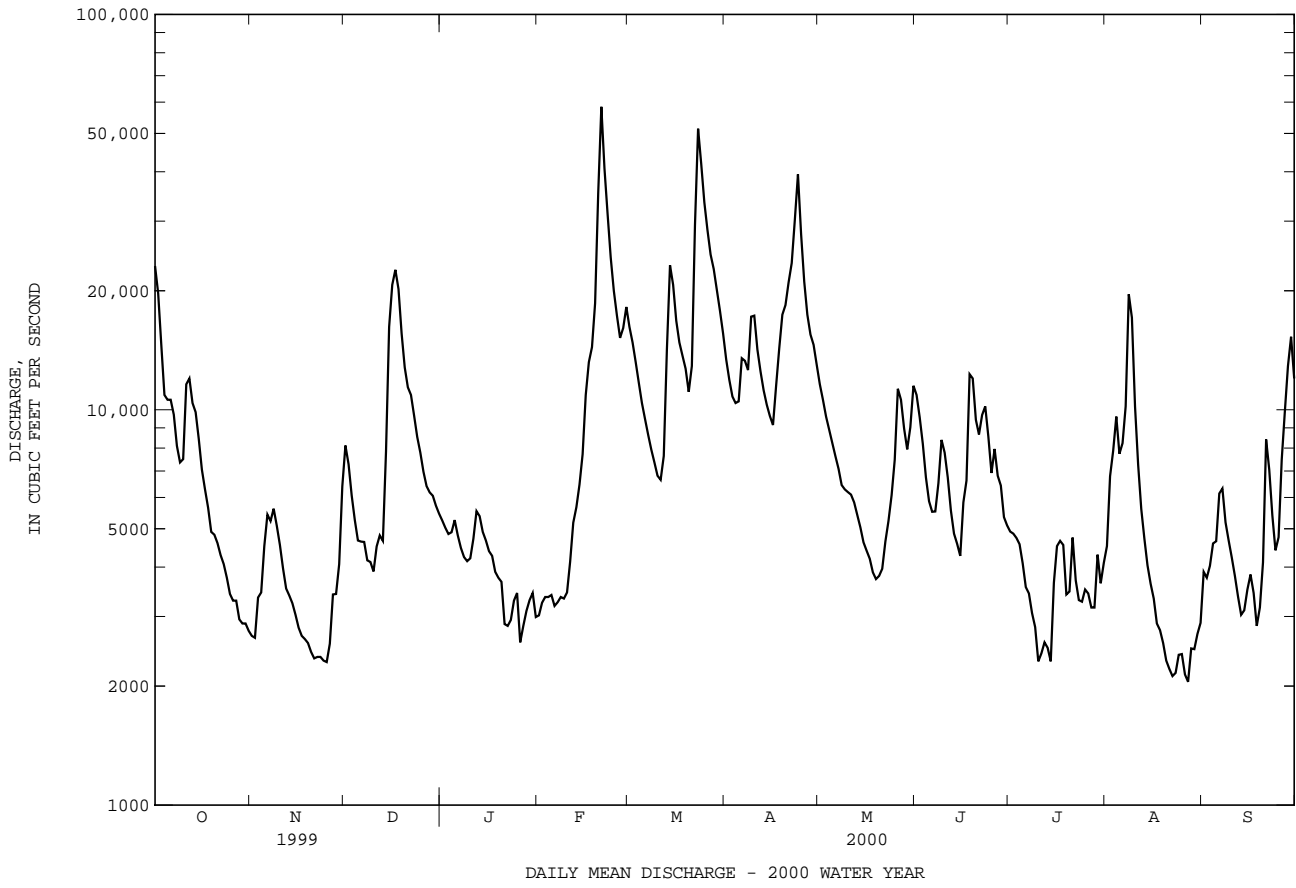
b Minimum daily discharge observed at gaging station, does not include diversion of 489 ft<sup>3</sup>/s.

c Includes diversion of 449 ft<sup>3</sup>/s for municipal use.

d Ice effect.

POTOMAC RIVER BASIN

01646500 POTOMAC RIVER NEAR WASHINGTON, DC--Continued





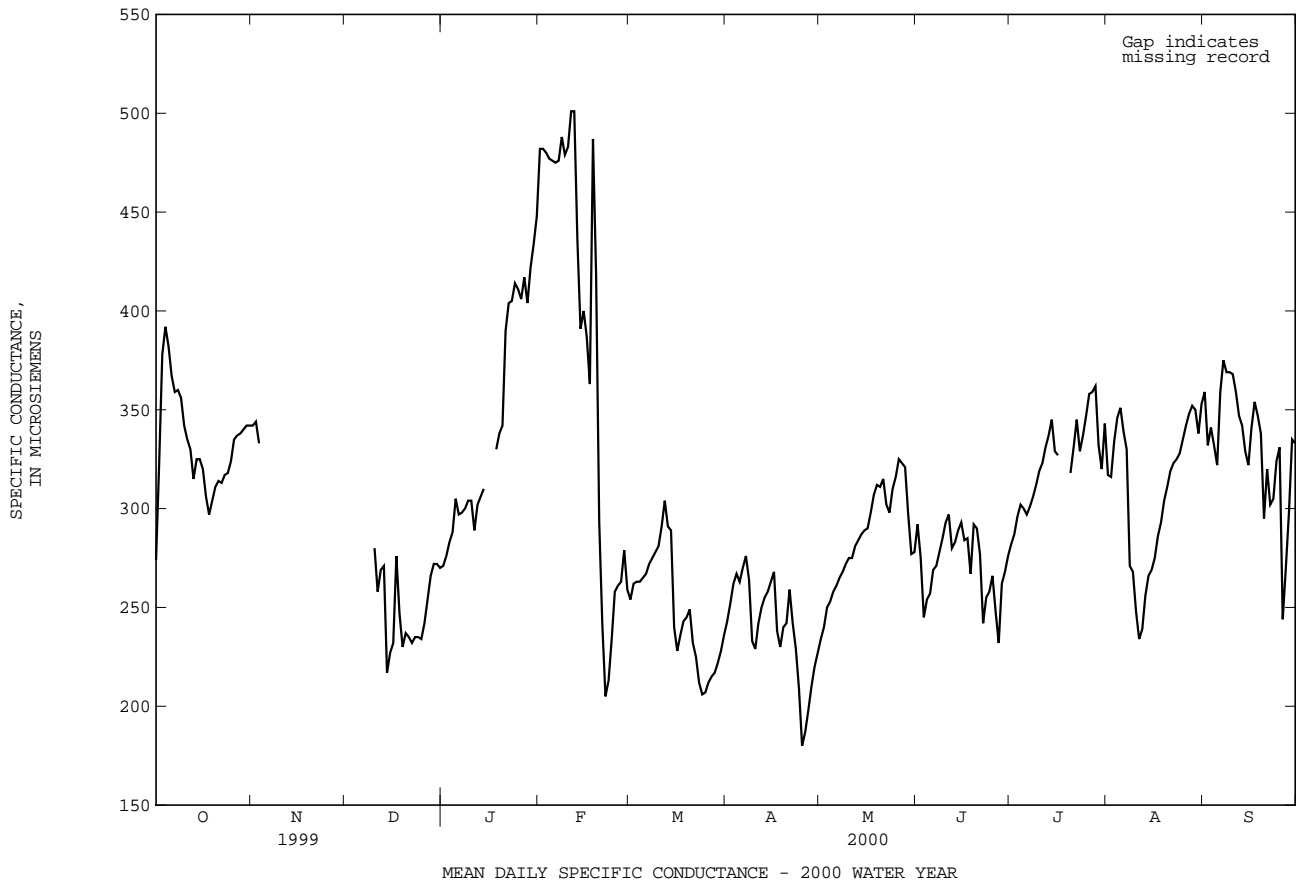
## POTOMAC RIVER BASIN

01646500 POTOMAC RIVER NEAR WASHINGTON, DC--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	509	454	482	258	250	254	246	238	243	238	230	234
2	503	462	482	267	257	262	258	246	252	244	237	240
3	492	461	480	266	260	263	264	258	262	260	242	250
4	488	467	477	266	260	263	280	258	267	258	248	253
5	488	465	476	267	264	265	266	261	263	262	253	258
6	481	461	475	271	265	267	276	264	270	264	260	261
7	490	453	476	276	269	272	278	269	276	271	259	265
8	510	456	488	276	272	275	271	254	264	272	262	268
9	494	456	479	281	275	278	257	223	233	276	262	272
10	510	448	483	283	278	281	233	214	229	278	273	275
11	521	463	501	315	282	291	248	233	242	282	268	275
12	553	464	501	317	296	304	253	246	250	292	272	281
13	465	398	436	296	284	291	259	240	255	292	274	284
14	407	384	391	296	278	289	263	255	258	297	274	287
15	416	388	400	286	218	240	276	260	263	296	283	289
16	393	380	387	231	224	228	269	266	268	295	288	290
17	380	353	363	241	230	236	289	148	238	304	292	298
18	851	334	487	247	228	243	237	212	230	315	300	307
19	567	313	418	248	228	245	247	231	240	322	309	312
20	313	276	293	252	246	249	248	235	242	322	307	311
21	277	215	241	275	177	232	271	241	259	329	307	315
22	215	199	205	236	204	225	266	226	242	313	282	302
23	219	203	213	226	203	212	236	223	229	305	286	298
24	249	217	234	227	198	206	232	177	209	325	300	310
25	262	249	258	216	199	207	188	174	180	330	311	316
26	263	259	261	217	208	212	193	184	187	328	320	325
27	266	261	263	218	212	215	205	193	198	326	311	323
28	303	263	279	225	211	217	215	204	210	326	300	321
29	264	256	259	229	215	222	225	215	220	313	281	297
30	---	---	---	232	222	228	231	223	227	281	274	277
31	---	---	---	239	231	236	---	---	---	287	275	278
MONTH	851	199	386	317	177	249	289	148	240	330	230	286
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	296	287	292	284	278	282	335	287	317	365	330	359
2	293	253	275	290	284	287	331	300	316	340	323	332
3	255	235	245	300	290	296	350	318	334	361	320	341
4	256	250	254	305	299	302	363	319	346	361	304	332
5	265	253	257	306	296	300	355	342	351	344	295	322
6	273	264	269	299	296	297	352	311	339	378	344	359
7	274	269	271	307	291	301	346	291	330	385	365	375
8	282	273	278	308	302	306	291	251	271	378	358	369
9	293	279	285	315	307	312	272	261	268	378	362	369
10	297	288	293	327	315	319	261	241	248	382	360	368
11	307	290	297	328	317	323	241	231	234	376	350	359
12	290	273	280	335	324	331	246	233	239	352	343	347
13	289	279	283	349	325	337	277	246	256	346	336	342
14	290	288	289	353	338	345	270	259	266	337	321	329
15	304	284	293	344	314	329	271	267	269	326	309	322
16	296	275	284	---	---	327	279	269	275	361	323	341
17	289	282	285	---	---	---	296	279	286	359	350	354
18	286	257	267	---	---	---	299	288	293	352	341	347
19	303	261	292	---	---	---	308	299	304	347	299	338
20	299	284	290	---	---	318	316	297	311	312	287	295
21	286	259	277	343	318	331	323	312	319	328	312	320
22	259	223	242	350	336	345	326	320	323	320	291	302
23	262	250	255	336	326	329	333	322	325	317	302	305
24	263	252	258	341	329	337	331	325	328	343	306	324
25	273	259	266	354	340	347	339	329	335	347	258	331
26	259	231	248	365	351	358	346	337	342	264	220	244
27	244	225	232	364	349	359	360	344	348	284	260	270
28	271	243	262	371	352	362	355	348	352	323	282	298
29	271	258	268	358	295	332	354	343	350	352	319	335
30	279	268	276	331	317	320	343	333	338	348	324	333
31	---	---	---	352	331	343	360	343	353	---	---	---
MONTH	307	223	272	---	---	---	363	231	309	385	220	332

01646500 POTOMAC RIVER NEAR WASHINGTON, DC--Continued



## POTOMAC RIVER BASIN

01646500 POTOMAC RIVER NEAR WASHINGTON, DC--Continued

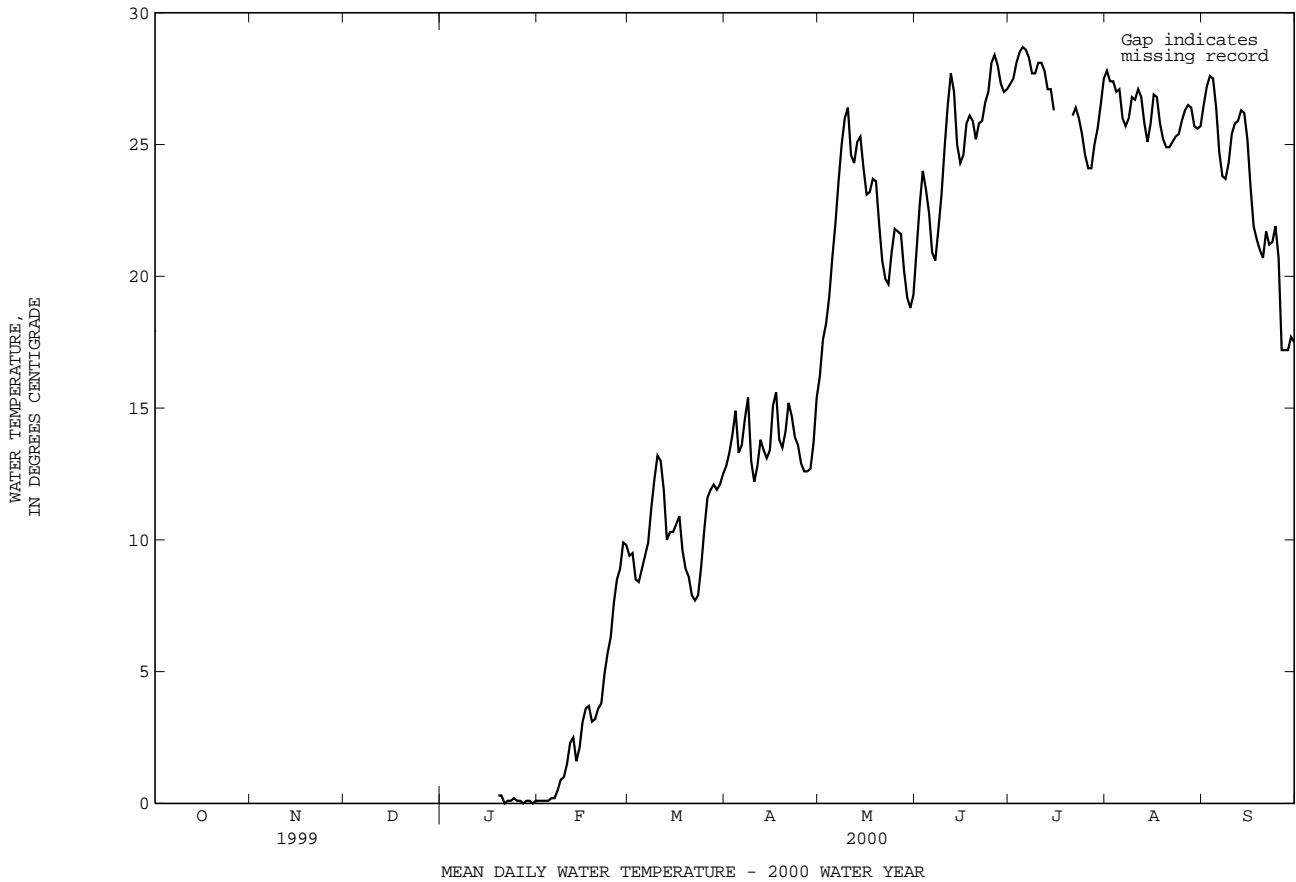
TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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	---	---	---	---	---	---	---	---	---	.7	.1	.3
20	---	---	---	---	---	---	---	---	---	.6	.1	.3
21	---	---	---	---	---	---	---	---	---	.2	.0	.0
22	---	---	---	---	---	---	---	---	---	.3	.0	.1
23	---	---	---	---	---	---	---	---	---	.2	.0	.1
24	---	---	---	---	---	---	---	---	---	.3	.0	.2
25	---	---	---	---	---	---	---	---	---	.2	.0	.1
26	---	---	---	---	---	---	---	---	---	.1	.0	.1
27	---	---	---	---	---	---	---	---	---	.1	.0	.0
28	---	---	---	---	---	---	---	---	---	.1	.0	.1
29	---	---	---	---	---	---	---	---	---	.3	.0	.1
30	---	---	---	---	---	---	---	---	---	.1	.0	.0
31	---	---	---	---	---	---	---	---	---	.1	.0	.1
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.1	.0	.1	9.9	9.0	9.4	13.5	12.0	12.8	16.7	15.6	16.2
2	.2	.0	.1	9.9	9.1	9.5	13.5	13.1	13.3	18.5	16.6	17.6
3	.2	.0	.1	9.1	7.9	8.5	14.7	13.3	14.0	19.6	17.3	18.2
4	.2	.1	.1	9.0	8.0	8.4	15.3	13.8	14.9	20.6	18.2	19.2
5	.4	.1	.2	9.9	8.4	8.9	14.1	12.6	13.3	22.0	19.4	20.7
6	.6	.1	.2	10.4	8.8	9.4	14.4	12.8	13.6	23.4	20.8	22.0
7	.9	.3	.5	11.3	9.0	9.9	15.2	14.0	14.6	25.2	22.1	23.6
8	1.4	.7	.9	12.9	9.9	11.2	16.1	14.6	15.4	26.6	23.6	25.0
9	1.6	.7	1.0	13.1	11.5	12.3	14.6	12.5	13.0	27.3	24.8	26.0
10	2.3	1.2	1.5	14.4	12.4	13.2	12.9	11.3	12.2	27.5	25.4	26.4
11	3.1	1.9	2.3	13.5	12.6	13.0	13.3	12.3	12.8	25.5	24.0	24.6
12	3.1	2.1	2.5	12.6	10.8	11.9	14.5	13.3	13.8	25.4	23.1	24.3
13	2.1	1.5	1.6	10.8	9.2	10.0	13.8	12.8	13.4	26.4	23.8	25.1
14	3.1	1.4	2.1	11.1	9.2	10.3	13.5	12.8	13.1	26.6	24.3	25.3
15	4.0	2.5	3.1	11.1	9.6	10.3	13.9	12.8	13.4	24.9	23.2	24.1
16	4.3	2.9	3.6	11.0	10.2	10.6	16.8	13.7	15.1	24.2	21.7	23.1
17	4.1	3.3	3.7	11.3	10.0	10.9	16.5	14.1	15.6	24.5	21.6	23.2
18	3.7	2.6	3.1	10.1	8.7	9.6	14.6	13.1	13.8	25.0	22.3	23.7
19	3.6	2.7	3.2	9.6	8.5	8.9	14.2	12.8	13.5	24.2	23.3	23.6
20	4.2	3.0	3.6	8.7	8.2	8.6	15.0	13.4	14.1	23.4	21.2	22.0
21	4.2	3.4	3.8	8.4	7.3	7.9	15.5	14.8	15.2	21.2	20.3	20.6
22	5.7	4.1	4.9	7.8	7.6	7.7	15.4	14.2	14.7	20.5	19.7	19.9
23	6.3	5.1	5.7	8.5	7.2	7.9	14.3	13.5	13.9	20.0	19.4	19.7
24	7.2	5.7	6.3	10.0	8.1	9.0	13.9	13.2	13.6	22.6	19.4	20.9
25	8.7	6.8	7.6	11.3	9.4	10.4	13.3	12.7	12.9	22.2	21.2	21.8
26	8.8	8.4	8.5	12.5	10.6	11.6	13.2	12.2	12.6	22.6	20.8	21.7
27	9.3	8.4	8.9	12.6	11.2	11.9	13.2	12.3	12.6	22.3	20.4	21.6
28	10.3	9.3	9.9	12.5	11.7	12.1	12.9	12.6	12.7	20.4	19.6	20.2
29	10.3	9.1	9.8	12.3	11.3	11.9	14.9	12.8	13.7	19.6	18.8	19.2
30	---	---	---	12.8	11.3	12.1	16.2	14.6	15.4	19.3	18.4	18.8
31	---	---	---	13.1	11.7	12.5	---	---	---	20.1	18.5	19.3
MONTH	10.3	.0	3.4	14.4	7.2	10.3	16.8	11.3	13.8	27.5	15.6	21.9

01646500 POTOMAC RIVER NEAR WASHINGTON, DC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.9	20.0	21.0	28.6	25.9	27.3	29.1	26.2	27.8	27.5	25.7	26.5
2	23.9	21.5	22.7	28.8	26.0	27.5	28.0	26.7	27.4	28.0	26.3	27.2
3	25.2	23.0	24.0	29.4	26.7	28.1	27.9	26.5	27.4	28.2	26.7	27.6
4	23.7	22.9	23.3	29.7	27.2	28.5	27.5	26.5	27.0	28.3	26.6	27.5
5	22.9	21.5	22.4	29.6	27.7	28.7	28.2	26.4	27.1	27.0	25.8	26.4
6	21.5	20.3	20.9	29.5	27.3	28.6	26.7	25.0	26.0	26.0	23.6	24.7
7	22.1	19.2	20.6	29.3	27.0	28.3	26.5	25.0	25.7	24.9	23.1	23.8
8	23.3	20.2	21.8	28.7	26.2	27.7	26.8	25.4	26.0	24.8	22.7	23.7
9	24.3	21.9	23.1	29.0	26.3	27.7	27.1	26.4	26.8	25.6	23.1	24.3
10	26.5	23.5	24.9	28.7	27.3	28.1	27.4	26.1	26.7	26.7	24.0	25.4
11	28.0	25.1	26.5	28.5	27.6	28.1	28.0	26.5	27.1	26.5	24.7	25.8
12	28.8	26.6	27.7	28.7	26.9	27.8	27.7	26.1	26.8	26.7	24.9	25.9
13	27.4	26.0	27.0	28.0	26.6	27.1	26.5	25.4	25.8	27.3	25.3	26.3
14	26.0	24.6	25.0	28.4	26.3	27.1	25.9	24.2	25.1	26.7	25.2	26.2
15	25.0	23.7	24.3	26.8	25.5	26.3	27.0	24.4	25.8	26.2	24.2	25.2
16	25.7	23.4	24.6	---	---	---	28.0	25.7	26.9	24.2	22.6	23.4
17	26.8	24.9	25.8	---	---	---	27.5	25.6	26.8	22.6	20.7	21.9
18	26.8	25.4	26.1	---	---	---	26.7	25.2	25.8	22.2	20.4	21.4
19	26.6	25.0	25.9	---	---	---	26.0	24.2	25.2	21.8	20.2	21.0
20	26.3	24.4	25.2	---	---	---	25.5	24.1	24.9	21.8	19.8	20.7
21	26.4	25.3	25.8	27.4	24.5	26.1	26.4	23.9	24.9	22.8	20.7	21.7
22	26.8	24.9	25.9	27.3	25.4	26.4	26.0	24.4	25.1	21.8	20.5	21.2
23	27.5	25.9	26.6	26.7	25.0	26.0	25.7	24.9	25.3	21.9	20.5	21.3
24	27.9	26.4	27.0	26.4	24.9	25.4	25.9	25.0	25.4	22.7	21.2	21.9
25	29.4	27.0	28.1	24.9	23.9	24.6	26.9	24.9	25.9	22.2	18.3	20.7
26	29.4	27.5	28.4	24.5	23.6	24.1	27.6	25.4	26.3	18.3	16.8	17.2
27	28.5	27.3	28.0	24.6	23.6	24.1	26.7	26.2	26.5	18.2	16.4	17.2
28	27.5	26.8	27.3	26.3	23.9	25.0	26.7	26.0	26.4	17.7	16.7	17.2
29	27.9	26.1	27.0	26.9	23.7	25.6	26.3	25.3	25.7	18.4	17.1	17.7
30	28.4	25.8	27.1	27.6	25.0	26.5	26.0	25.1	25.6	18.0	16.9	17.5
31	---	---	---	28.7	26.1	27.5	26.0	25.3	25.7	---	---	---
MONTH	29.4	19.2	25.1	---	---	---	29.1	23.9	26.2	28.3	16.4	23.0





01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC

LOCATION.--Lat 38°55'46", long 77°07'02", Arlington County, Va., Hydrologic Unit 02070010, under right downstream side of bridge on Virginia State Highway 123, and at river mile 115.9.

DRAINAGE AREA.--11,570 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1973 to current year. Prior to October 1977, published as "at Great Falls."

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1978 to September 1981.

pH: June 1978 to September 1981.

WATER TEMPERATURE: June 1978 to September 1981.

DISSOLVED OXYGEN: June 1978 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: October 1978 to September 1981.

INSTRUMENTATION.--Water-quality monitor June 1978 to September 1981.

REMARKS--Extreme high flows are sampled from the George Mason Memorial Bridge (14th Street) located 6 mi downstream from Chain Bridge. On May 3 and Nov. 17, 1994 samples were collected and analyzed using ultraclean methodologies. Data on trace metals for these dates are available from the University of Delaware. Data on organics for these dates are available from George Mason University.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE (water years 1979, 1981): Maximum, 598 microsiemens, Sept. 12, 1981; minimum, 116 microsiemens, Jan. 25, 1979.

pH (water years 1979, 1981): Maximum, 9.3 units, Mar. 29, 1981; minimum, 6.7 units, June 2, 1981.

WATER TEMPERATURE (water years 1979, 1981): Maximum, 31.0°C, July 23, 24, 1978; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN (water years 1979, 1981): Maximum, 16.4 mg/L, on many days in 1979; minimum, 5.6 mg/L, June 2, 1981.

SEDIMENT CONCENTRATION: Maximum daily mean, 812 mg/L, Sept. 6, 1979; minimum daily mean, 1 mg/L on many days during winter periods.

SEDIMENT LOAD: Maximum daily, 281,000 tons, Feb. 27, 1979; minimum daily, 3.2 tons, Jan. 5, 1981.

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	HARD-NESS TOTAL AS CACO3 (MG/L) (00900)
OCT										
01...	0935	*ENVIRONMENTAL	24100	--	--	--	--	--	--	--
02...	0735	*ENVIRONMENTAL	20100	--	--	--	--	--	--	--
04...	1202	*ENVIRONMENTAL	10900	--	--	--	--	--	--	--
06...	1045	*ENVIRONMENTAL	10600	--	--	--	--	--	--	--
11...	1048	*ENVIRONMENTAL	11600	--	--	--	--	--	--	--
12...	1006	*ENVIRONMENTAL	11900	--	--	--	--	--	--	--
12...	1130	ENVIRONMENTAL	11700	274	8.0	18.5	18.0	770	9.6	101
13...	1018	*ENVIRONMENTAL	10300	--	--	--	--	--	--	--
14...	1134	*ENVIRONMENTAL	10100	--	--	--	--	--	--	--
20...	0950	*ENVIRONMENTAL	4940	--	--	--	--	--	--	--
27...	1030	*ENVIRONMENTAL	3340	--	--	--	--	--	--	--
NOV										
03...	1245	*ENVIRONMENTAL	3280	--	--	--	--	--	--	--
09...	1054	*ENVIRONMENTAL	5090	--	--	--	--	--	--	--
09...	1100	ENVIRONMENTAL	5090	375	8.5	20.0	12.0	765	11.1	103
17...	1125	*ENVIRONMENTAL	2710	--	--	--	--	--	--	--
23...	1110	*ENVIRONMENTAL	2400	--	--	--	--	--	--	--
DEC										
01...	1145	*ENVIRONMENTAL	8150	--	--	--	--	--	--	--
01...	1246	*ENVIRONMENTAL	8150	--	--	--	--	--	--	--
03...	0308	*ENVIRONMENTAL	6520	--	--	--	--	--	--	--
09...	1045	ENVIRONMENTAL	4300	287	8.3	7.0	7.0	770	12.4	101
15...	1100	*ENVIRONMENTAL	1650	--	--	--	--	--	--	--
16...	1300	*ENVIRONMENTAL	2100	--	--	--	--	--	--	--
17...	1353	*ENVIRONMENTAL	22800	--	--	--	--	--	--	--
18...	1500	*ENVIRONMENTAL	19500	--	--	--	--	--	--	--
19...	1135	*ENVIRONMENTAL	15600	--	--	--	--	--	--	--
28...	1101	*ENVIRONMENTAL	6230	--	--	--	--	--	--	--
JAN										
13...	1130	ENVIRONMENTAL	5640	297	8.3	13.0	5.0	761	12.7	100
FEB										
09...	1115	ENVIRONMENTAL	3450	388	8.5	6.0	1.5	765	14.1	100
MAR										
09...	1215	ENVIRONMENTAL	7280	261	8.5	25.0	12.5	753	11.9	113
24...	1015	ENVIRONMENTAL	42500	195	7.9	16.0	8.5	765	13.3	113
APR										
19...	1114	BLANK	--	--	--	--	--	--	--	--
19...	1115	ENVIRONMENTAL	17400	230	8.1	16.0	13.0	761	11.2	106
19...	1116	REPLICATE	--	--	--	--	--	--	--	--
MAY										
11...	1115	ENVIRONMENTAL	6080	267	8.4	24.5	25.0	760	8.3	101
15...	0700	*ENVIRONMENTAL	4680	--	--	--	--	--	--	--
JUN										
14...	1030	ENVIRONMENTAL	4610	280	8.0	20.1	25.0	764	8.1	97
JUL										
11...	1200	ENVIRONMENTAL	2450	329	8.5	22.0	27.5	759	6.9	88
11...	1201	REPLICATE	--	--	--	--	--	--	--	130
AUG										
17...	1129	BLANK	--	--	--	--	--	--	--	--
17...	1130	ENVIRONMENTAL	2900	288	8.3	26.5	26.5	763	8.1	101
SEP										
14...	1145	ENVIRONMENTAL	3170	336	8.3	28.0	26.0	760	8.4	103

\* Samples collected and analyzed by Occquan Watershed Monitoring Laboratory.

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
OCT												
01...	--	--	--	--	--	--	--	--	--	--	--	199
02...	--	--	--	--	--	--	--	--	--	--	--	119
04...	--	--	--	--	--	--	--	--	--	--	--	45
06...	--	--	--	--	--	--	--	--	--	--	8.9	23
11...	--	--	--	--	--	--	--	--	--	--	--	126
12...	--	--	--	--	--	--	--	--	--	--	--	49
12...	--	--	--	--	73	89	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	8.3	25
14...	--	--	--	--	--	--	--	--	--	--	--	28
20...	--	--	--	--	--	--	--	--	--	--	6.4	32
27...	--	--	--	--	--	--	--	--	--	--	4.1	2
NOV												
03...	--	--	--	--	--	--	--	--	--	--	1.5	32
09...	--	--	--	--	--	--	--	--	--	--	.7	9
09...	45.2	11.2	13.2	3.1	122	149	--	32.3	18.9	.1	.7	--
17...	--	--	--	--	--	--	--	--	--	--	.6	5
23...	--	--	--	--	--	--	--	--	--	--	.2	14
DEC												
01...	--	--	--	--	--	--	--	--	--	--	1.0	17
01...	--	--	--	--	--	--	--	--	--	--	--	8
03...	--	--	--	--	--	--	--	--	--	--	--	4
09...	--	--	--	--	86	106	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	60
16...	--	--	--	--	--	--	--	--	--	--	--	91
17...	--	--	--	--	--	--	--	--	--	--	--	62
18...	--	--	--	--	--	--	--	--	--	--	--	86
19...	--	--	--	--	--	--	--	--	--	--	--	47
28...	--	--	--	--	--	--	--	--	--	--	--	2
JAN												
13...	35.9	8.28	10.1	2.2	--	--	--	29.6	15.8	.1	2.4	--
FEB												
09...	--	--	--	--	103	126	--	--	--	--	--	--
MAR												
09...	--	--	--	--	71	87	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	6.6	--
APR												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	25.5	6.18	7.7	2.0	74	90	--	20.2	13.1	<.1	4.3	27
19...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	--	--	--	--	82	100	--	--	--	--	--	<10
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	--	--	--	--	78	95	--	--	--	--	--	<10
JUL												
11...	--	--	--	--	107	130	2	--	--	--	--	<10
11...	35.6	9.08	10.3	2.9	--	--	--	25.3	15.8	<.1	5.9	<10
AUG												
17...	.04	<.01	E.1	<.2	--	--	--	<.3	<.3	<.1	<.1	<10
17...	35.0	7.94	8.4	3.2	81	99	--	25.3	11.9	.1	8.0	<10
SEP												
14...	37.1	8.93	11.2	3.1	98	120	<2	32.9	14.9	.1	5.3	<10

E Estimated value.

< Actual value is known to be less than the value shown.

POTOMAC RIVER BASIN

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, TOTAL (MG/L) AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, NO2+NO3 SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L) AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L) AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L) AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L) AS N) (00607)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)
OCT												
01...	--	2.9	--	--	1.30	.100	1.6	.54	1.8	1.5	.44	.430
02...	--	3.3	--	--	1.83	.110	1.5	.79	2.6	1.4	.68	.380
04...	--	2.2	--	--	1.52	.070	.67	.43	2.0	.60	.36	.170
06...	--	2.4	--	--	1.84	.040	.57	.48	2.3	.53	.44	.140
11...	--	2.7	--	--	1.82	.020	.84	.40	2.2	.82	.38	.240
12...	--	2.2	--	--	1.61	.010	.60	.31	1.9	.59	.30	.180
12...	--	2.6	1.99	.017	2.00	.029	.57	.33	2.3	.54	.30	.179
13...	--	2.1	--	--	1.54	.040	.59	.51	2.0	.55	.47	.170
14...	--	2.1	--	--	1.58	.020	.48	.37	2.0	.46	.35	.170
20...	--	1.9	--	--	1.47	.010	.38	.32	1.8	.37	.31	.100
27...	--	1.5	--	--	1.30	--	.23	--	--	--	--	.050
NOV												
03...	--	1.4	--	--	1.05	--	.35	.32	1.4	--	--	.040
09...	--	1.2	--	--	.840	.020	.39	.26	1.1	.37	.24	.050
09...	220	1.3	--	<.010	1.07	<.020	.25	.25	1.3	--	--	.040
17...	--	1.0	--	--	.720	.010	.31	.23	.95	.30	.22	.050
23...	--	.80	--	--	.450	.020	.35	.31	.76	.33	.29	.060
DEC												
01...	--	1.5	--	--	.950	.010	.52	.34	1.3	.51	.33	.090
01...	--	1.2	--	--	.850	.010	.37	.26	1.1	.36	.25	.080
03...	--	1.2	--	--	.880	.010	.30	.27	1.1	.29	.26	.080
09...	--	1.3	--	<.010	1.01	<.020	.31	.21	1.2	--	--	.054
15...	--	1.8	--	--	.990	.040	.79	.47	1.5	.75	.43	.110
16...	--	3.0	--	--	1.47	.130	1.5	.81	2.3	1.4	.68	.270
17...	--	1.9	--	--	1.08	.050	.77	.35	1.4	.72	.30	.190
18...	--	2.0	--	--	1.08	.050	.87	.39	1.5	.82	.34	.150
19...	--	1.7	--	--	1.12	.040	.61	.36	1.5	.57	.32	.130
28...	--	1.5	--	--	1.24	.010	.23	.22	1.5	.22	.21	.060
JAN												
13...	177	1.6	--	<.010	1.40	<.020	.19	.12	1.5	--	--	.031
FEB												
09...	--	1.7	--	<.010	1.40	<.020	.28	.19	1.6	--	--	.022
MAR												
09...	--	1.6	--	<.010	1.41	<.020	.22	.14	1.6	--	--	.043
24...	--	2.0	--	<.010	1.21	.060	.80	.31	1.5	.74	.25	.212
APR												
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	136	1.6	1.04	.010	1.05	.047	.52	.29	1.3	.47	.24	.170
19...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	--	.96	.589	.011	.600	<.020	.36	.22	.82	--	--	.039
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	--	1.4	1.06	.010	1.07	.035	.36	.27	1.3	.32	.23	.093
JUL												
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	192	1.4	--	<.010	1.04	.028	.34	.29	1.3	.31	.26	.087
AUG												
17...	<10	--	--	<.010	<.050	<.020	<.10	<.10	--	--	--	<.008
17...	176	1.7	--	<.010	1.26	<.020	.39	.31	1.6	--	--	.092
SEP												
14...	190	1.3	--	<.010	.966	.022	.33	.30	1.3	.31	.27	.097

< Actual value is known to be less than the value shown.

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)
OCT												
01...	.080	.060	8.4	--	--	--	--	--	--	--	--	--
02...	.180	.140	10	--	--	--	--	--	--	--	--	--
04...	.100	.080	5.2	--	--	--	--	--	--	--	--	--
06...	.100	.090	5.0	--	--	--	--	--	--	--	--	--
11...	.240	.210	5.3	--	--	--	--	--	--	--	--	--
12...	.090	.060	5.4	--	--	--	--	--	--	--	--	--
12...	.106	.078	--	--	--	<.003	<.002	<.002	<.002	.035	<.002	<.002
13...	.130	.100	6.7	--	--	--	--	--	--	--	--	--
14...	.120	.070	4.6	--	--	--	--	--	--	--	--	--
20...	.080	.060	--	--	--	--	--	--	--	--	--	--
27...	.050	.040	4.5	--	--	--	--	--	--	--	--	--
NOV												
03...	.040	--	--	--	--	--	--	--	--	--	--	--
09...	.050	.010	3.1	--	--	--	--	--	--	--	--	--
09...	.030	.014	--	30	5	<.003	<.002	.006	<.002	.204	<.002	<.002
17...	.030	.020	--	--	--	--	--	--	--	--	--	--
23...	.040	.010	--	--	--	--	--	--	--	--	--	--
DEC												
01...	.050	.030	2.9	--	--	--	--	--	--	--	--	--
01...	.050	.020	3.5	--	--	--	--	--	--	--	--	--
03...	.060	.030	3.2	--	--	--	--	--	--	--	--	--
09...	.049	.021	--	--	--	<.003	<.002	<.002	<.002	.021	<.002	<.002
15...	--	.040	9.3	--	--	--	--	--	--	--	--	--
16...	.200	.130	10	--	--	--	--	--	--	--	--	--
17...	.090	.040	9.5	--	--	--	--	--	--	--	--	--
18...	.060	.050	16	--	--	--	--	--	--	--	--	--
19...	.050	.050	5.4	--	--	--	--	--	--	--	--	--
28...	--	--	3.3	--	--	--	--	--	--	--	--	--
JAN												
13...	.021	.018	--	30	7	<.003	<.002	<.002	<.002	.023	<.002	<.002
FEB												
09...	.014	<.010	--	--	--	<.003	<.002	<.002	<.002	.027	<.002	<.002
MAR												
09...	.029	.010	--	--	--	<.003	<.002	<.002	<.002	.024	<.002	<.002
24...	.051	.040	--	--	--	--	--	--	--	--	--	--
APR												
19...	--	--	--	--	--	<.003	<.002	<.002	<.002	<.001	<.002	<.002
19...	.041	.027	--	50	9	<.003	<.002	<.002	<.002	.213	<.002	<.002
19...	--	--	--	--	--	<.003	<.002	<.002	<.002	.216	<.002	<.002
MAY												
11...	.036	.018	--	--	--	<.003	<.002	<.002	<.002	.093	<.002	<.002
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	.079	.063	--	--	--	<.003	<.002	<.002	<.002	.181	<.002	<.002
JUL												
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	.082	.062	--	E10	15	--	--	--	--	--	--	--
AUG												
17...	<.006	<.010	--	<10	<2	--	--	--	--	--	--	--
17...	.080	.062	--	20	16	<.003	<.002	<.002	<.002	.050	<.002	<.002
SEP												
14...	.086	.066	--	20	15	<.003	<.002	<.002	<.002	.031	<.002	<.002

E Estimated value.

< Actual value is known to be less than the value shown.

## POTOMAC RIVER BASIN

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DIS-REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL- ATRA-ZINE, WATER, DIS-REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS- (UG/L) (39572)	DI-ELDRIN DIS- (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT												
01...	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
12...	E.004	<.003	<.004	<.004	<.002	E.057	107	.005	<.001	<.017	<.002	<.004
13...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
NOV												
03...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.003	<.004	<.004	<.002	E.057	112	<.002	<.001	<.017	<.002	<.004
17...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.003	<.004	<.004	<.002	E.029	102	<.002	<.001	<.017	<.002	<.004
15...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
13...	<.003	<.003	<.004	<.004	<.002	E.045	78	<.002	<.001	<.017	<.002	<.004
FEB												
09...	<.003	<.003	<.004	<.004	<.002	E.058	103	<.002	<.001	<.017	<.002	<.004
MAR												
09...	<.003	<.003	<.004	<.004	<.002	E.054	108	<.002	<.001	<.017	<.002	<.004
24...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
19...	<.003	<.003	<.004	<.004	<.002	<.002	95	<.002	<.001	<.017	<.002	<.004
19...	E.029	<.003	<.004	<.004	<.002	E.054	103	.015	<.001	<.017	<.002	<.004
19...	E.033	<.003	<.004	<.004	<.002	E.056	103	.015	<.001	<.017	<.002	<.004
MAY												
11...	E.005	<.003	<.004	.016	<.002	E.055	92	.005	<.001	<.017	<.002	<.004
15...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	<.003	<.003	<.004	.021	<.002	E.053	103	<.002	<.001	<.017	<.002	<.004
JUL												
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.003	<.003	<.004	<.004	<.002	E.048	98	<.002	<.001	<.017	<.002	<.004
SEP												
14...	<.003	<.003	<.004	<.004	<.002	E.039	118	<.002	<.001	<.017	<.002	<.004

E Estimated value.

&lt; Actual value is known to be less than the value shown.

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS- SOLVED (UG/L) (39532)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
OCT											
01...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<.003	<.003	98	<.004	<.002	<.005	<.001	<.006	.033	<.004	<.004
13...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.003	106	<.004	<.002	<.005	<.001	<.006	.025	<.004	<.004
17...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
DEC											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.003	98	<.004	<.002	<.005	<.001	<.006	.012	<.004	<.004
15...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<.003	<.003	82	<.004	<.002	<.005	<.001	<.006	.013	<.004	<.004
FEB											
09...	<.003	<.003	96	<.004	<.002	<.005	<.001	<.006	.011	<.004	<.004
MAR											
09...	<.003	<.003	102	<.004	<.002	<.005	<.001	<.006	.011	<.004	<.004
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
19...	<.003	<.003	87	<.004	<.002	<.005	<.001	<.006	<.002	<.004	<.004
19...	<.003	<.003	90	<.004	<.002	<.005	<.001	<.006	.062	<.004	<.004
19...	<.003	<.003	88	<.004	<.002	<.005	<.001	<.006	.056	<.004	<.004
MAY											
11...	<.003	<.003	83	<.004	<.002	<.005	<.010	<.006	.032	<.004	<.004
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
14...	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006	.052	<.004	<.004
JUL											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<.003	<.003	92	<.004	<.002	<.005	<.001	<.006	.016	<.004	<.004
SEP											
14...	<.003	<.003	112	<.004	<.002	<.005	<.001	<.006	.012	<.004	<.004

E Estimated value.

< Actual value is known to be less than the value shown.

## POTOMAC RIVER BASIN

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
OCT											
01...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004
13...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.013	<.003	<.007	<.004
17...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
DEC											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.007	<.060	<.007	<.004
15...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.007	<.003	<.007	<.004
FEB											
09...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003	<.007	<.004
MAR											
09...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.004	<.003	<.007	<.004
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
19...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007	<.004
19...	<.003	<.006	<.004	<.004	<.006	<.005	<.002	E.010	<.003	<.007	<.004
19...	<.003	<.006	<.004	<.004	<.007	<.005	<.002	E.010	<.003	<.007	<.004
MAY											
11...	<.003	<.006	<.004	<.004	<.005	<.005	<.002	E.010	<.003	<.007	<.004
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
14...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.012	<.003	<.007	<.004
JUL											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.011	<.003	<.007	<.004
SEP											
14...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.016	<.003	<.007	<.004

E Estimated value.

&lt; Actual value is known to be less than the value shown.

01646580 POTOMAC RIVER AT CHAIN BRIDGE AT WASHINGTON, DC--Continued

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

DATE	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (UG/L) (82661)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
01...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<.013	.023	E.008	<.007	<.013	<.002	<.001	<.002	32	1010	95
13...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
NOV											
03...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
09...	<.013	.164	E.006	<.007	<.013	<.002	<.001	<.002	2	26	--
17...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
DEC											
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--
09...	<.013	.013	E.004	<.007	<.013	<.002	<.001	<.002	2	21	--
15...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
JAN											
13...	<.013	.009	E.004	<.007	<.013	<.002	<.001	<.002	6	91	--
FEB											
09...	<.013	.010	<.010	<.007	<.013	<.002	<.001	<.002	--	--	--
MAR											
09...	<.013	.009	<.010	<.007	<.013	<.002	<.001	<.002	5	92	--
24...	--	--	--	--	--	--	--	--	110	12600	94
APR											
19...	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	--	--	--
19...	<.013	.081	<.010	<.007	<.013	<.002	<.001	<.002	29	1360	98
19...	<.013	.081	<.010	<.007	<.013	<.002	<.001	<.002	--	--	--
MAY											
11...	<.013	.039	E.007	<.007	<.013	<.002	<.001	<.002	4	74	--
15...	--	--	--	--	--	--	--	--	--	--	--
JUN											
14...	<.013	.056	.027	<.007	<.013	<.002	<.001	<.002	4	51	--
JUL											
11...	--	--	--	--	--	--	--	--	1	9.3	--
11...	--	--	--	--	--	--	--	--	1	--	--
AUG											
17...	--	--	--	--	--	--	--	--	<1	--	--
17...	<.013	.022	<.020	<.007	<.013	<.002	<.001	<.002	3	26	--
SEP											
14...	<.013	.015	<.010	<.007	<.013	<.002	<.001	<.002	6	50	--

E Estimated value.

< Actual value is known to be less than the value shown.



POTOMAC RIVER BASIN

01648000 ROCK CREEK AT SHERRILL DRIVE, WASHINGTON, DC

LOCATION.--Lat 38°58'21", long 77°02'25", District of Columbia, Hydrologic Unit 02070010, on left bank 125 ft downstream from Sherrill Drive Bridge in Rock Creek Park in Washington, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--62.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 1432: 1933(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 148.87 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect, missing record), which are fair. Flow affected by two upstream reservoirs which control flow from about 25 mi<sup>2</sup>, Needwood Lake on Rock Creek since Sept. 1966 and Bernard Frank Lake on North Branch Rock Creek since February 1968. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1845	*1,280	*5.95	No other peak greater than base discharge.			

Minimum discharge 7.8 ft<sup>3</sup>/s, Sep 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	19	29	26	32	67	47	35	27	26	220	24
2	45	52	25	26	28	54	46	34	37	23	232	20
3	32	54	23	25	26	45	50	32	53	28	133	22
4	110	26	22	149	27	40	137	30	24	86	75	150
5	156	21	22	73	29	37	65	30	22	32	44	121
6	56	20	110	36	29	35	53	29	87	24	145	43
7	39	20	48	30	34	34	46	28	32	20	97	27
8	30	18	34	27	41	34	118	27	26	17	103	19
9	25	18	28	26	37	34	222	26	23	17	37	17
10	172	17	102	136	50	33	93	70	20	30	26	14
11	68	18	61	71	79	69	72	79	20	34	21	12
12	45	19	41	46	82	93	60	34	20	18	18	12
13	35	18	70	37	58	46	51	30	18	16	19	11
14	33	18	357	31	62	39	49	28	25	33	18	10
15	26	17	140	28	59	35	47	25	89	231	22	9.7
16	24	16	99	27	48	38	57	24	101	87	17	9.1
17	23	16	71	26	42	86	484	23	57	37	16	9.1
18	56	15	52	e25	197	44	304	e23	219	24	18	8.5
19	27	16	42	25	258	37	173	e48	119	49	15	155
20	100	16	49	e27	130	35	134	e40	73	91	13	63
21	44	16	49	e27	99	561	174	e50	68	29	12	28
22	34	16	40	25	75	350	171	e183	229	26	12	18
23	39	17	34	27	58	176	115	52	56	20	11	13
24	24	17	31	26	48	140	89	66	38	31	11	11
25	22	17	29	26	43	138	97	50	30	28	11	373
26	21	179	28	32	39	107	60	33	315	83	11	392
27	21	239	27	28	58	105	51	52	90	33	35	109
28	20	67	29	26	307	150	46	40	87	78	42	71
29	20	45	26	e26	91	93	42	47	43	161	35	47
30	20	35	26	e25	---	64	39	31	33	42	23	33
31	18	---	26	34	---	53	---	28	---	61	25	---
TOTAL	1456	1082	1770	1199	2166	2872	3192	1327	2081	1515	1517	1851.4
MEAN	47.0	36.1	57.1	38.7	74.7	92.6	106	42.8	69.4	48.9	48.9	61.7
MAX	172	239	357	149	307	561	484	183	315	231	232	392
MIN	18	15	22	25	26	33	39	23	18	16	11	8.5
CFSM	.76	.58	.92	.62	1.20	1.49	1.71	.69	1.12	.79	.79	.99
IN.	.87	.65	1.06	.72	1.30	1.72	1.91	.79	1.24	.91	.91	1.11

e Estimated

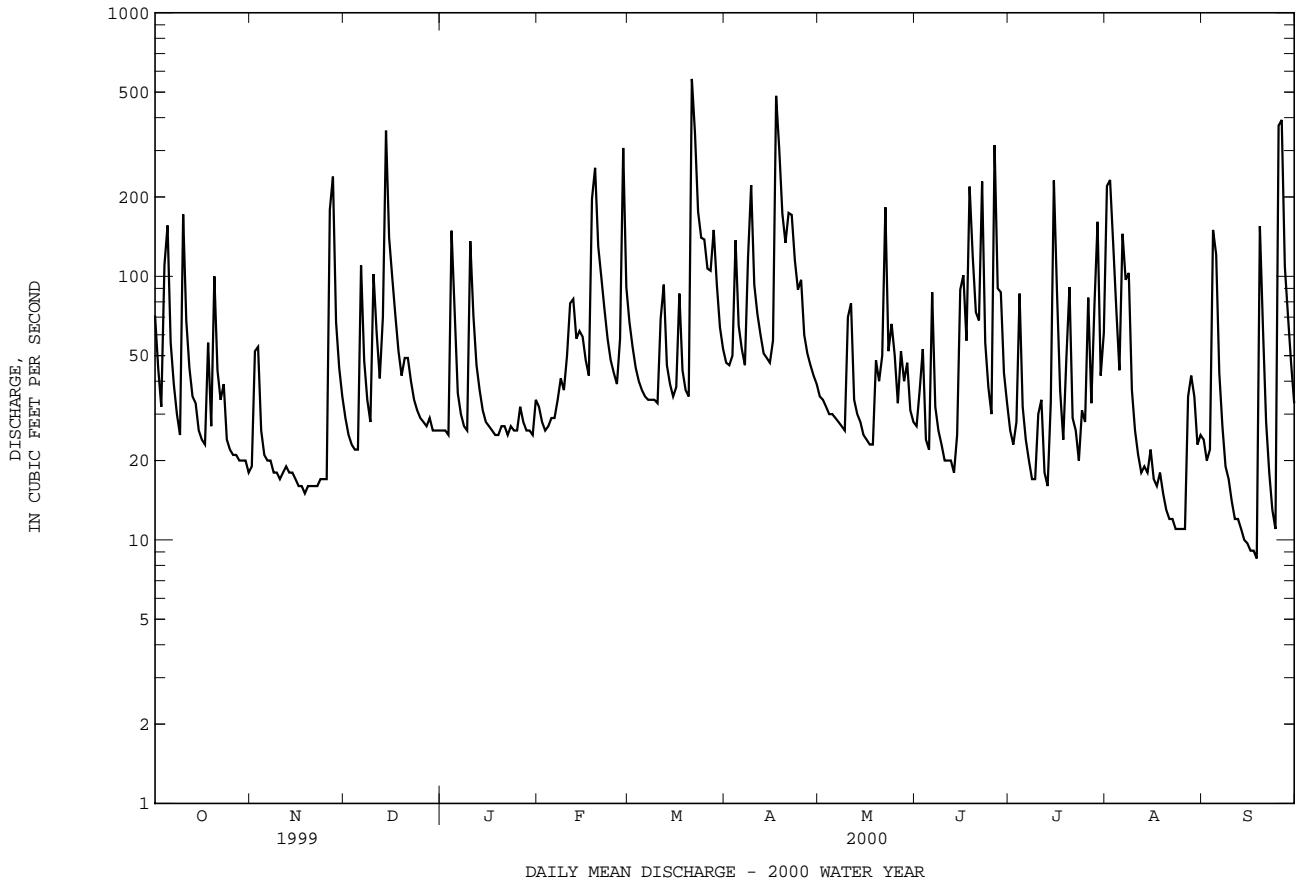
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
MEAN	40.9	52.6	61.6	73.2	83.3	92.0	84.7	73.9	59.7	48.5	47.2	47.1
MAX	196	165	184	201	210	221	215	232	456	192	174	348
(WY)	1980	1953	1973	1978	1979	1993	1973	1989	1972	1945	1955	1979
MIN	2.63	4.57	8.75	11.8	11.9	23.4	29.2	24.3	18.3	7.09	1.72	2.04
(WY)	1931	1932	1931	1931	1931	1931	1969	1955	1986	1930	1930	1930

01648000 ROCK CREEK AT SHERRILL DRIVE, WASHINGTON, DC--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	19486.9		22028.4		63.6	
ANNUAL MEAN	53.4		60.2		142	
HIGHEST ANNUAL MEAN					1972	
LOWEST ANNUAL MEAN					16.1	
HIGHEST DAILY MEAN	1230	Sep 16	561	Mar 21	5000	Jun 22 1972
LOWEST DAILY MEAN	1.3	Aug 13	8.5	Sep 18		(a)
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 2	9.9	Sep 12	.50	Oct 1 1930
INSTANTANEOUS PEAK FLOW			1280	Mar 21	(b)12500	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.95	Mar 21	(c)16.20	Jun 22 1972
INSTANTANEOUS LOW FLOW			7.8	Sep 19	.50	(a)
ANNUAL RUNOFF (CFSM)	.86		.97		1.02	
ANNUAL RUNOFF (INCHES)	11.65		13.17		13.90	
10 PERCENT EXCEEDS	117		136		123	
50 PERCENT EXCEEDS	29		35		38	
90 PERCENT EXCEEDS	6.1		17		12	

- a Oct. 1-7, 1930.
- b From rating curve extended above 5,640 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage heights of 13.19 and 16.2 ft.
- c From floodmarks.



POTOMAC RIVER BASIN

01649500 NORTHEAST BRANCH ANACOSTIA RIVER AT RIVERDALE, MD

LOCATION.--Lat 38°57'37", long 76°55'34", Prince Georges County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on Riverdale Road, 1.8 mi downstream from Indian Creek, and 1.8 mi upstream from confluence with Northwest Branch.

DRAINAGE AREA.--72.8 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1938 to current year.

REVISED RECORDS.--WDR MD-DE-75-1: 1972(M).

GAGE.--Water-stage recorders, crest-stage gage, and concrete control. Datum of gage is 12.68 ft above sea level (Washington Suburban Sanitary Commission bench mark). Prior to June 12, 1942, nonrecording gage; June 12, 1942 to Mar. 22, 1966, and Apr. 12, 1967 to Sept. 3, 1969, water-stage recorder, all at bridge at datum 14.00 ft above mean sea level. Mar. 23, 1966 to Apr. 11, 1967, nonrecording gage 600 ft downstream from bridge at datum 9.25 ft above mean sea level.

REMARKS.--No estimated daily discharges. Records good. Some regulation at low flow by sand and gravel plants upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 23 or 24, 1933, reached a stage of about 15.5 ft at datum 14.00 ft above sea level, from floodmarks, discharge, 10,500 ft<sup>3</sup>/s, from rating curve extended above 3,000 ft<sup>3</sup>/s on basis of velocity-area study.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 14	1345	2,260	5.32	Jul 14	2315	2,040	5.08
Jan 4	1830	2,270	5.33	Aug 27	1815	*2,760	*5.82
Mar 21	1315	2,030	5.07				

Minimum discharge 11 ft<sup>3</sup>/s, Aug 26, 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	37	55	45	69	80	60	48	28	38	81	207
2	68	93	50	44	57	68	59	47	36	38	97	150
3	53	81	49	43	55	57	66	43	32	32	79	189
4	135	48	47	503	51	52	133	40	22	62	63	171
5	169	43	46	369	53	48	71	38	21	33	37	71
6	73	41	148	98	54	45	55	36	96	28	144	32
7	57	39	83	68	73	44	48	34	39	24	84	25
8	49	38	59	57	87	42	147	32	26	22	53	23
9	45	36	53	53	81	42	280	30	22	20	35	22
10	302	35	167	300	116	41	90	73	19	37	28	21
11	120	34	114	156	200	55	63	58	17	52	23	19
12	70	35	72	79	180	133	57	37	17	27	21	18
13	59	35	118	66	89	57	49	36	19	22	19	17
14	55	35	994	53	127	47	46	36	29	122	21	17
15	47	35	324	48	114	42	48	27	104	301	18	17
16	43	34	125	47	76	57	59	25	127	167	23	16
17	49	33	88	45	64	129	337	25	110	72	17	16
18	84	33	74	48	372	59	474	24	191	35	23	15
19	49	32	66	48	605	48	193	49	138	56	19	181
20	154	32	71	49	166	45	103	41	46	133	16	65
21	87	32	76	51	93	986	133	51	91	41	14	26
22	67	33	66	61	75	673	168	201	306	37	13	20
23	69	34	60	48	69	173	89	70	58	29	12	18
24	51	35	56	41	63	105	70	71	37	42	17	18
25	46	36	53	36	57	96	284	70	31	35	13	620
26	43	263	59	63	54	87	177	37	255	273	12	638
27	41	414	51	55	75	230	89	52	95	107	341	102
28	39	101	49	55	496	588	73	63	128	209	119	48
29	38	71	48	48	116	150	61	80	99	264	60	31
30	36	61	46	74	---	89	52	40	79	128	103	25
31	36	---	46	86	---	72	---	32	---	63	78	---
TOTAL	2343	1909	3413	2837	3787	4440	3634	1546	2318	2549	1683	2838
MEAN	75.6	63.6	110	91.5	131	143	121	49.9	77.3	82.2	54.3	94.6
MAX	302	414	994	503	605	986	474	201	306	301	341	638
MIN	36	32	46	36	51	41	46	24	17	20	12	15
CFSM	1.04	.87	1.51	1.26	1.79	1.97	1.66	.69	1.06	1.13	.75	1.30
IN.	1.20	.98	1.74	1.45	1.94	2.27	1.86	.79	1.18	1.30	.86	1.45

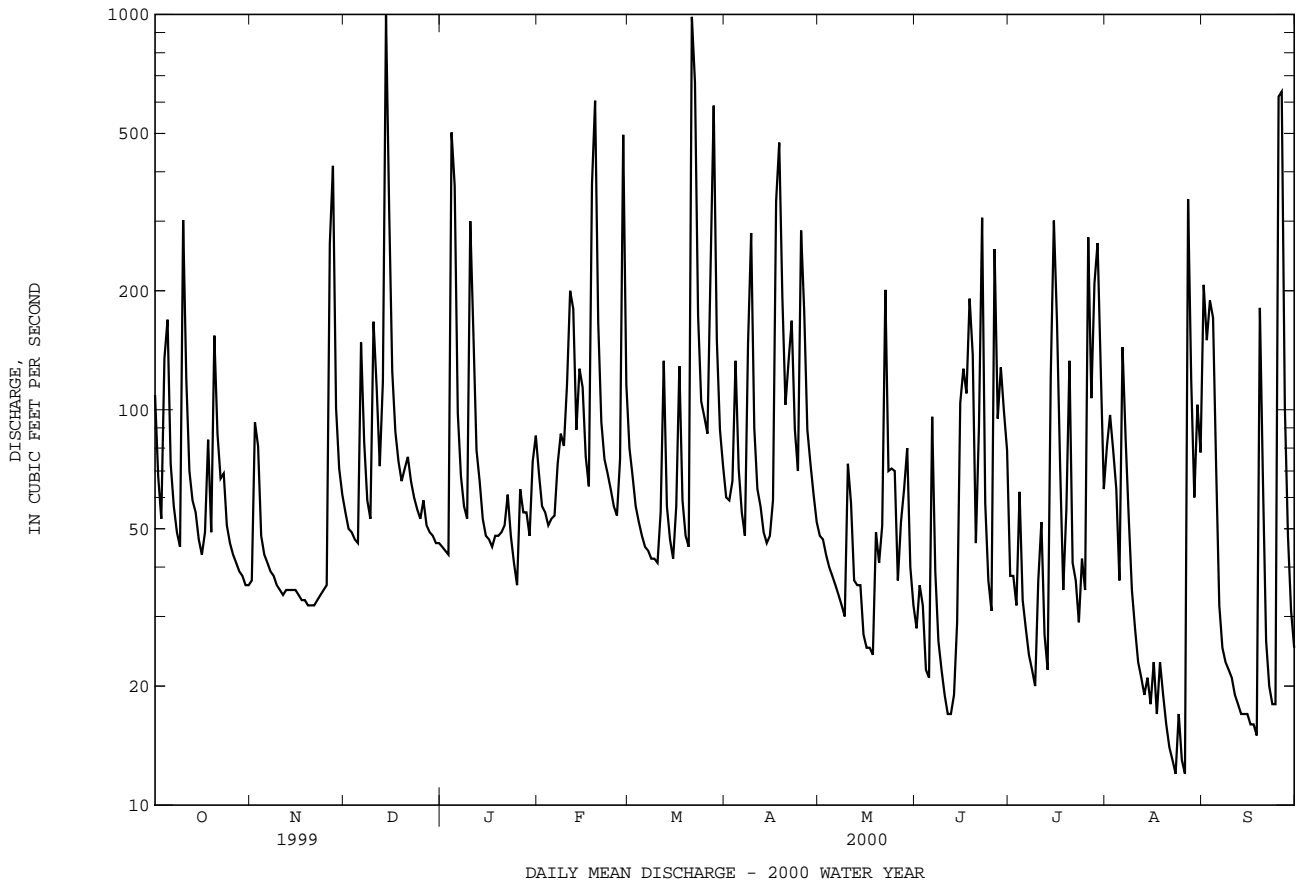
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	54.7	75.2	93.7	106	115	135	110	94.4	68.6	60.2	63.5	62.8
MAX	234	205	275	325	265	339	322	329	353	335	243	449
(WY)	1943	1973	1997	1979	1972	1994	1983	1989	1972	1945	1955	1975
MIN	9.37	15.9	19.8	25.6	39.3	37.0	32.4	23.9	20.3	8.72	7.94	8.32
(WY)	1942	1942	1966	1955	1947	1981	1985	1941	1965	1999	1962	1941

01649500 NORTHEAST BRANCH ANACOSTIA RIVER AT RIVERDALE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	30056.1		33297		86.4	
ANNUAL MEAN	82.3		91.0		150	
HIGHEST ANNUAL MEAN					49.3	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	4130	Sep 16	994	Dec 14	6830	Sep 26 1975
LOWEST DAILY MEAN	2.8	Aug 7	12	(a)	1.4	Sep 12 1966
ANNUAL SEVEN-DAY MINIMUM	3.3	Aug 6	14	Aug 20	1.7	Sep 7 1966
INSTANTANEOUS PEAK FLOW			2760	Aug 27	(b)12000	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.82	Aug 27	12.93	Oct 16 1942
INSTANTANEOUS LOW FLOW			11	(c)	UNKNOWN	
ANNUAL RUNOFF (CFSM)	1.13		1.25		1.19	
ANNUAL RUNOFF (INCHES)	15.36		17.01		16.13	
10 PERCENT EXCEEDS	154		178		167	
50 PERCENT EXCEEDS	40		55		44	
90 PERCENT EXCEEDS	7.5		23		16	

- a Aug. 23, 26.
- b From rating curve extended above 3,800 ft<sup>3</sup>/s on basis of average of contracted-opening and slope-area measurements at gage height 9.52 ft.
- c Aug. 26, 27.



POTOMAC RIVER BASIN

01650500 NORTHWEST BRANCH ANACOSTIA RIVER NEAR COLESVILLE, MD

LOCATION.--Lat 39°03'55", long 77°01'58", Montgomery County, Hydrologic Unit 02070010, on right bank 400 ft upstream from bridge on State Highway 183, 1.5 mi southwest of Colesville, 3 mi upstream from Burnt Mills, 10 mi upstream from Sligo Creek, and 12.5 mi upstream from confluence with Northeast Branch.

DRAINAGE AREA.--21.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1923 to September 1983, November 1997 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1432: 1942(M), 1925-26, 1929-30(M), 1933(M), 1939(P), 1940(M), 1943-46, 1948-49(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 264.75 ft above sea level. Prior to Apr. 22, 1932, nonrecording gages in same general vicinity at different datums. Apr. 22, 1932 to Apr. 11, 1934, nonrecording gages at present site and datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are fair. Diversions at low flow since 1962 for irrigation of golf courses upstream from station. Records include pumpage from the Patuxent River to augment water supply for Washington Suburban Sanitary District, Aug. 12, 1939 to Aug. 1960. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 21	1815	*795	*6.01	Sep 25	2230	628	5.24
Apr 17	1645	698	5.57				

Minimum discharge 3.0 ft<sup>3</sup>/s, Sep 15, 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.1	10	9.8	e11	20	19	19	11	8.8	48	27
2	9.5	14	9.8	10	e10	18	19	19	15	7.4	33	11
3	7.6	13	9.8	9.8	e10	16	22	20	12	8.2	13	14
4	35	7.7	9.3	33	e10	15	69	18	9.3	31	11	56
5	71	6.8	9.1	24	e10	14	26	17	9.5	10	8.5	26
6	13	6.8	42	13	11	14	21	16	22	7.1	40	8.2
7	9.4	7.2	17	12	13	13	19	14	12	6.2	32	6.7
8	7.8	6.8	12	11	14	13	52	14	9.7	5.5	24	5.5
9	8.2	6.9	11	11	16	14	91	13	8.5	5.4	11	5.1
10	71	7.4	49	67	24	13	28	40	6.8	7.9	8.1	5.0
11	19	7.2	23	26	69	24	23	24	6.6	8.6	7.1	4.7
12	11	7.4	14	15	42	32	21	15	6.3	6.0	6.3	4.4
13	9.0	7.2	33	13	18	16	19	13	7.2	5.7	6.2	3.8
14	9.6	7.7	223	11	36	15	19	13	14	18	6.2	3.3
15	7.3	6.8	44	11	29	14	19	12	28	74	6.3	3.3
16	6.9	6.6	22	e10	19	15	22	12	26	12	6.6	3.0
17	9.8	6.3	17	e10	16	28	241	11	54	10	5.2	3.5
18	15	6.3	15	e10	89	15	144	11	62	9.5	5.4	5.4
19	8.3	6.8	13	e10	160	14	54	16	28	13	5.6	48
20	38	6.8	17	e11	34	14	33	15	14	22	4.6	16
21	16	6.4	16	e11	21	325	87	18	21	9.4	4.2	6.5
22	12	5.9	14	e10	18	136	59	52	60	7.7	4.1	4.9
23	12	5.8	13	e10	17	39	32	19	14	6.9	4.1	4.7
24	9.2	5.9	12	e10	16	28	27	23	11	9.5	4.5	5.1
25	8.4	7.8	11	e10	16	29	27	14	9.8	9.4	4.5	168
26	8.6	102	11	e12	15	25	24	13	96	25	3.6	152
27	8.3	116	11	e11	29	31	24	16	20	13	29	23
28	7.8	20	10	e10	142	59	23	18	18	90	17	13
29	7.8	13	10	e10	27	32	21	18	13	75	15	9.7
30	7.9	11	10	e10	---	23	20	13	11	14	12	8.1
31	8.0	---	10	e13	---	21	---	13	---	11	15	---
TOTAL	487.4	447.6	728.0	444.6	942	1085	1305	549	635.7	547.2	401.1	654.9
MEAN	15.7	14.9	23.5	14.3	32.5	35.0	43.5	17.7	21.2	17.7	12.9	21.8
MAX	71	116	223	67	160	325	241	52	96	90	48	168
MIN	6.9	5.8	9.1	9.8	10	13	19	11	6.3	5.4	3.6	3.0
CFSM	.75	.71	1.11	.68	1.54	1.66	2.06	.84	1.00	.84	.61	1.03
IN.	.86	.79	1.28	.78	1.66	1.91	2.30	.97	1.12	.96	.71	1.15

e Estimated

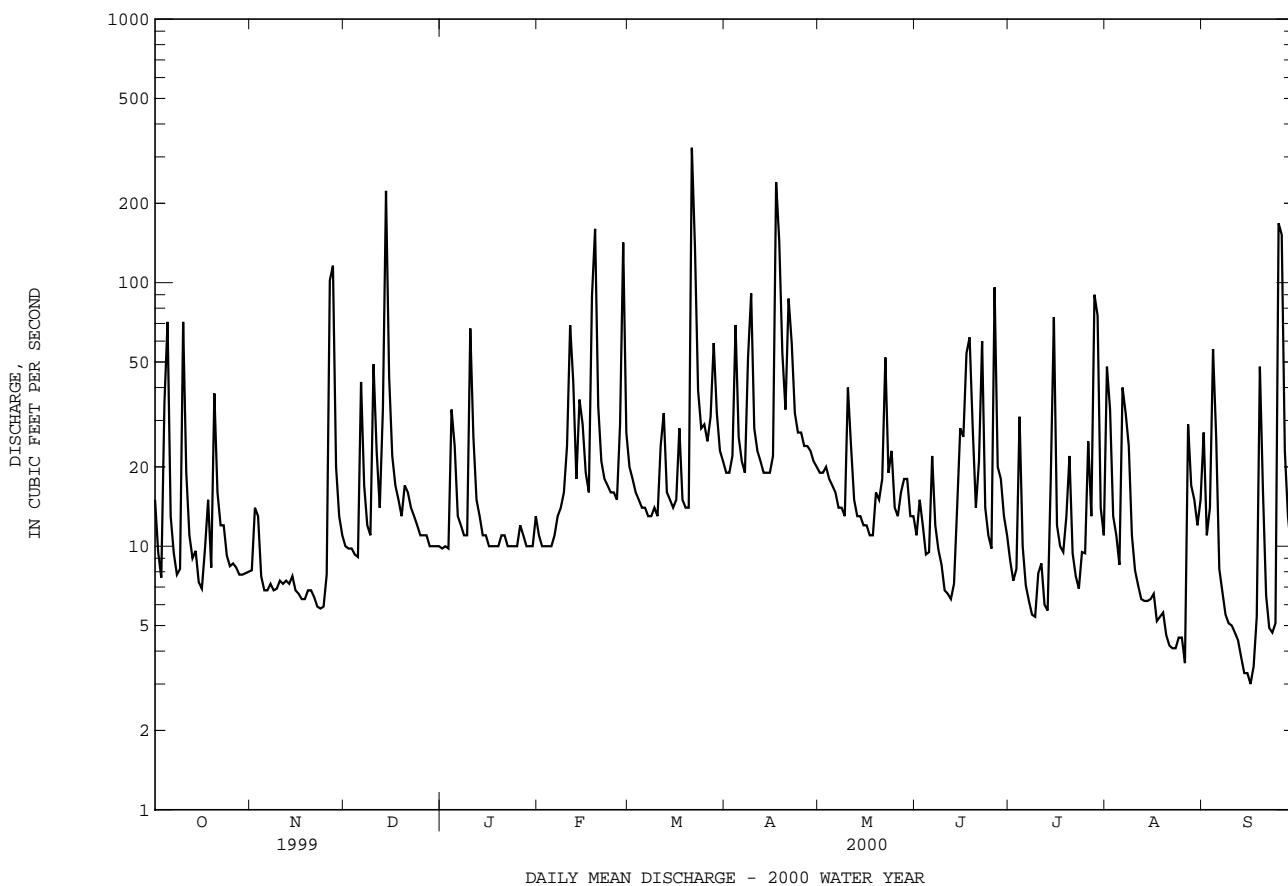
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1983, 1998 - 2000, BY WATER YEAR (WY)

MEAN	14.6	18.9	21.9	26.8	33.6	32.6	30.2	24.1	20.0	15.3	16.5	17.5
MAX	56.3	55.6	57.0	81.0	97.0	68.0	78.5	62.5	141	73.7	60.9	118
(WY)	1980	1927	1973	1979	1936	1953	1952	1978	1972	1975	1955	1979
MIN	1.79	2.37	3.50	5.93	4.52	7.46	11.3	7.37	4.03	.92	.72	1.40
(WY)	1932	1932	1932	1931	1931	1931	1969	1999	1999	1999	1930	1930

01650500 NORTHWEST BRANCH ANACOSTIA RIVER NEAR COLESVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 1983 1998 - 2000	
ANNUAL TOTAL	7123.60		8227.5		22.5	
ANNUAL MEAN	19.5		22.5		45.7	
HIGHEST ANNUAL MEAN					1972	
LOWEST ANNUAL MEAN					1931	
HIGHEST DAILY MEAN	942	Sep 16	325	Mar 21	2370	Jun 22 1972
LOWEST DAILY MEAN	.00	(a)	3.0	Sep 16	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 27	3.7	Sep 11	.00	Sep 5 1966
INSTANTANEOUS PEAK FLOW			795	Mar 21	(c)11000	Jun 22 1972
INSTANTANEOUS PEAK STAGE			6.01	Mar 21	15.89	Jun 22 1972
INSTANTANEOUS LOW FLOW			3.0	(d)	.00	(f)
ANNUAL RUNOFF (CFSM)	.92		1.07		1.07	
ANNUAL RUNOFF (INCHES)	12.56		14.51		14.49	
10 PERCENT EXCEEDS	38		43		36	
50 PERCENT EXCEEDS	9.1		13		14	
90 PERCENT EXCEEDS	.49		6.3		4.8	

- a July 27-31, Aug. 1-12, 19, 20.
- b Aug. 30, 31, Sept. 1, 3, 5-11, 1966, July 27-31, Aug. 1-12, 19, 20, 1999.
- c From rating curve extended above 1,200 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement at gage height 10.99 ft and computation of flow over Burnt Mills Dam , 3 mi downstream, adjusted for flow from intervening area, at gage height 15.89 ft.
- d Sept. 15, 16.
- f Aug. 29-31, Sept. 1-12, 1966, July 18, 19, 24-31, Aug. 1-14, 18-20, 1999.



POTOMAC RIVER BASIN

01651000 NORTHWEST BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD

LOCATION.--Lat 38°57'09", long 76°58'00", Prince Georges County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on Queens Chapel Road (State Highway 500), 0.8 mi downstream from Sligo Branch, 1.0 mi west of Hyattsville, and 1.6 mi upstream from confluence with Northeast Branch.

DRAINAGE AREA.--49.4 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1938 to current year. Monthly discharge only for July 1938 published in WSP 1302.

REVISED RECORDS.--WSP 971: 1942(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 17.10 ft above sea level (Washington Suburban Sanitary Commission bench mark). Prior to Oct. 22, 1938, nonrecording gage; Oct. 22, 1938 to Sept. 17, 1951, water-stage recorder; Sept. 17, 1951 to Aug. 29, 1952, nonrecording gage and crest-stage gage.

REMARKS.--Records good except those for estimated daily discharges (backwater, orifice line leak, equipment failure), which are fair. Prior to June 1961, low flow regulated by storage at Burnt Mills Dam, 7.0 mi upstream from station. Inflow pumped from Patuxent River to augment water supply for Washington Suburban Sanitary District, August 1939 to August 1960. Small diversion since 1962 for irrigation of golf courses upstream from station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug 27	1800	*2,150	*4.10	No other peak greater than base discharge.			

Minimum discharge 6.3 ft<sup>3</sup>/s, Sept. 16-18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	14	19	24	e43	51	41	40	22	17	86	39
2	25	39	19	25	e35	45	42	39	33	14	109	126
3	19	31	20	30	e27	39	45	37	38	19	66	79
4	100	14	21	e76	32	39	118	38	21	58	40	115
5	141	13	21	e60	35	38	50	35	20	19	22	79
6	37	14	97	e40	34	35	40	32	83	13	117	21
7	26	14	43	e29	47	35	38	29	29	11	67	13
8	23	15	24	e26	48	36	134	28	19	9.5	60	11
9	22	17	20	25	43	37	204	27	17	8.5	23	10
10	191	17	98	176	58	37	60	73	15	25	16	9.5
11	57	20	58	75	102	65	46	62	14	21	14	9.5
12	28	17	28	34	107	103	43	29	17	11	12	10
13	22	17	66	29	43	39	39	30	14	9.3	15	9.9
14	21	17	504	27	67	34	39	28	19	52	14	10
15	17	16	116	27	73	35	39	21	93	163	14	8.9
16	15	14	52	27	46	48	50	21	77	85	17	6.7
17	18	13	37	27	43	84	459	22	56	19	14	6.3
18	35	15	33	27	228	36	331	22	131	12	17	7.0
19	16	16	30	27	339	31	120	47	84	38	12	118
20	83	e16	36	27	94	31	71	35	32	72	9.6	51
21	35	e15	38	28	57	619	101	43	87	22	8.2	15
22	22	e14	32	e38	47	325	124	145	184	18	8.5	9.2
23	24	e14	28	e25	43	89	56	45	38	14	8.5	7.7
24	15	e14	25	e25	43	61	48	58	23	28	8.5	8.2
25	13	19	22	e24	42	63	120	45	17	22	9.4	395
26	13	207	24	e22	40	55	50	24	223	106	12	364
27	14	282	28	e22	64	127	43	42	67	36	229	58
28	14	49	24	e22	325	168	44	46	75	137	69	29
29	14	27	24	e24	73	67	42	44	35	207	38	16
30	14	21	24	e29	---	47	41	25	24	36	47	12
31	14	---	25	e33	---	42	---	22	---	23	27	---
TOTAL	1132	1011	1636	1130	2278	2561	2678	1234	1607	1325.3	1209.7	1653.9
MEAN	36.5	33.7	52.8	36.5	78.6	82.6	89.3	39.8	53.6	42.8	39.0	55.1
MAX	191	282	504	176	339	619	459	145	223	207	229	395
MIN	13	13	19	22	27	31	38	21	14	8.5	8.2	6.3
CFSM	.74	.68	1.07	.74	1.59	1.67	1.81	.81	1.08	.87	.79	1.12
IN.	.85	.76	1.23	.85	1.72	1.93	2.02	.93	1.21	1.00	.91	1.25

e Estimated

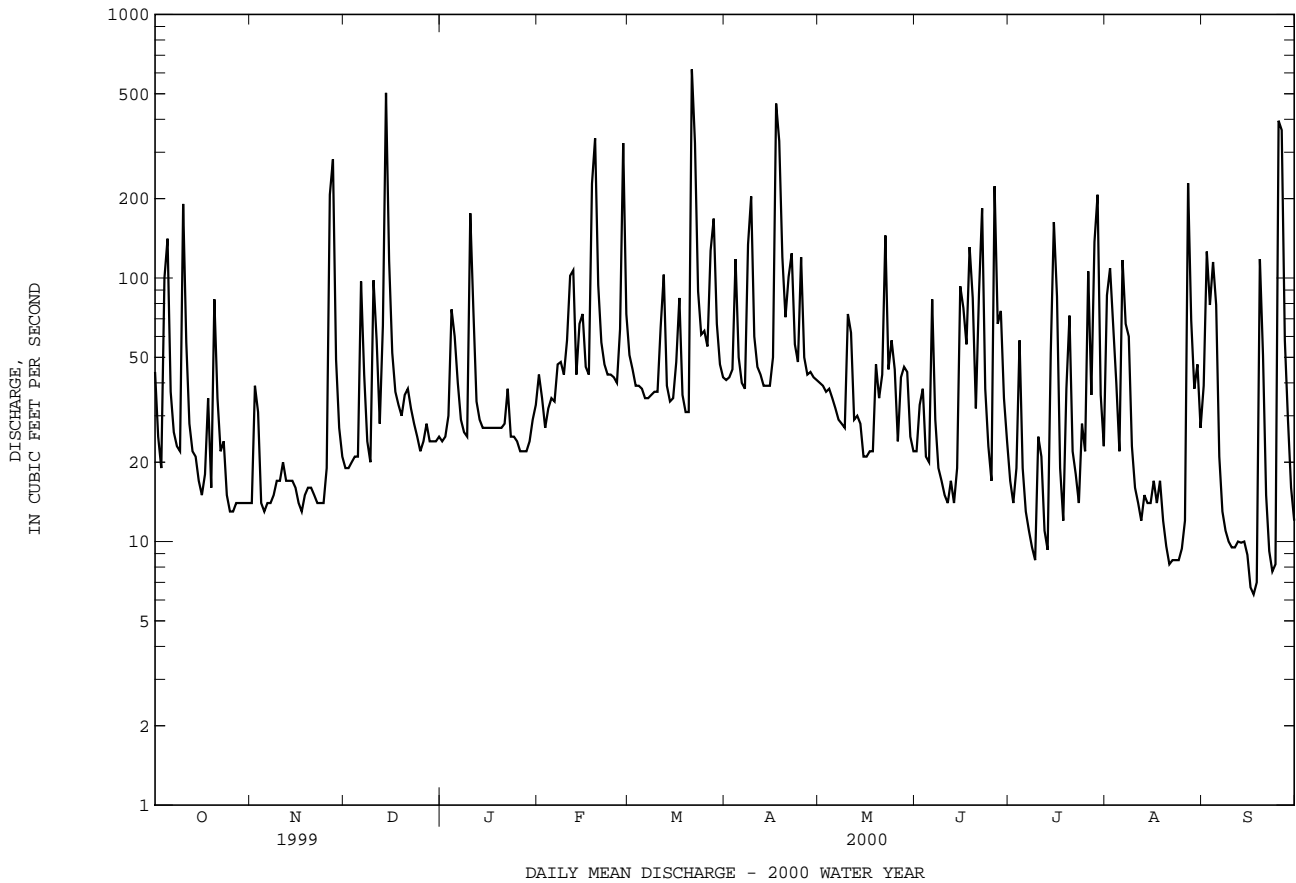
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	29.3	41.7	49.6	55.8	64.4	72.6	62.0	55.5	42.5	34.3	37.2	39.8
MAX	129	128	144	173	183	176	167	198	237	159	193	327
(WY)	1980	1994	1997	1979	1979	1994	1952	1989	1972	1945	1955	1975
MIN	2.44	4.30	11.4	8.04	13.6	23.5	15.3	9.91	10.1	4.07	3.61	2.58
(WY)	1942	1942	1966	1955	1947	1981	1950	1941	1940	1944	1943	1941

01651000 NORTHWEST BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	17008.0		19455.9		48.7	
ANNUAL MEAN	46.6		53.2		96.9	
HIGHEST ANNUAL MEAN					20.8	
LOWEST ANNUAL MEAN					1947	
HIGHEST DAILY MEAN	1880	Sep 16	619	Mar 21	5050	Sep 26 1975
LOWEST DAILY MEAN	1.4	Aug 7	6.3	Sep 17	.40	(a)
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 3	8.4	Sep 12	.60	Sep 7 1966
INSTANTANEOUS PEAK FLOW			2150	Aug 27	(b)18000	Jun 22 1972
INSTANTANEOUS PEAK STAGE			4.10	Aug 27	14.47	Jun 22 1972
INSTANTANEOUS LOW FLOW			6.3	(c)	.20	Sep 11 1966
ANNUAL RUNOFF (CFSM)	.94		1.08		.99	
ANNUAL RUNOFF (INCHES)	12.81		14.65		13.39	
10 PERCENT EXCEEDS	102		111		93	
50 PERCENT EXCEEDS	20		32		24	
90 PERCENT EXCEEDS	3.7		14		6.6	

- a Sept. 8, 11, 1966.
- b From rating curve extended above 4,000 ft<sup>3</sup>/s on basis of the average of slope-area and step-backwater measurements of peak flow.
- c Sept. 16-18.





## POTOMAC RIVER BASIN

01651800 WATTS BRANCH AT WASHINGTON, D.C.

LOCATION.--Lat 38°54'04", long 76°56'33", District of Columbia, Hydrologic Unit 02070010, on right bank 5 ft downstream from footbridge, 200 ft upstream from Minnesota Ave., and 1.0 mi upstream from mouth.

DRAINAGE AREA.-- 3.28 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1992 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and cobblestone control. Datum of gage is 16.52 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (backwater, missing record), which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jun 21	2315	568	4.87	Jul 14	2245	*1,010	*6.25
Jul 3	2030	399	4.21	Aug 27	1745	388	4.16

Minimum discharge 0.67 ft<sup>3</sup>/s, Jul 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.9	1.7	e1.8	e1.6	2.4	2.2	2.5	1.4	1.6	2.4	1.4
2	1.9	e6.6	1.9	e1.7	e1.5	2.3	2.2	2.9	11	1.4	3.3	4.8
3	1.7	3.0	1.7	e1.6	e1.4	2.2	6.3	2.7	2.2	25	5.4	3.5
4	6.1	e2.0	1.6	e24	e1.4	2.2	5.9	2.7	1.6	5.4	8.9	1.5
5	2.1	e1.7	1.6	e11	e1.5	2.0	2.5	2.7	1.5	2.1	2.6	.92
6	1.7	e1.6	7.8	e3.6	e1.7	2.0	2.1	3.3	6.7	1.5	17	.89
7	1.4	e1.5	2.0	e3.0	e2.0	1.9	2.0	4.7	1.6	1.2	13	.89
8	2.2	e1.4	1.8	e2.3	e2.5	2.0	17	2.9	1.4	1.2	3.1	.91
9	2.1	e1.4	1.7	e2.0	e2.2	2.0	4.8	2.7	1.3	1.5	2.0	.98
10	17	e1.3	13	e11	e4.0	2.0	2.8	11	1.4	1.6	1.6	.88
11	3.0	e1.4	2.8	e4.8	e10	2.7	2.5	2.0	2.0	1.1	1.8	.87
12	1.9	e1.5	2.0	e2.8	e4.0	3.8	2.4	1.9	1.6	1.0	1.3	.82
13	2.1	e1.4	6.6	e1.7	e3.4	2.0	2.3	5.4	1.1	1.0	1.7	.81
14	2.8	e1.3	32	e1.6	e6.0	1.9	2.4	2.0	1.1	37	1.5	1.4
15	2.0	e1.3	5.0	e1.5	e3.8	1.9	3.3	1.4	18	14	1.4	7.2
16	1.9	e1.2	3.4	e1.5	2.8	4.9	3.5	1.3	4.0	8.9	1.5	1.1
17	2.9	e1.2	2.8	e1.6	2.4	5.8	26	1.2	1.6	1.7	1.1	.86
18	3.8	e1.2	2.6	e1.6	19	2.1	22	1.1	1.7	1.3	1.5	.92
19	2.1	e1.2	2.4	e1.6	13	2.0	5.3	4.4	1.6	5.2	1.2	11
20	13	e1.2	4.4	e1.7	3.9	1.9	3.6	1.7	1.4	3.0	1.0	1.4
21	3.0	e1.3	3.1	e1.8	3.1	52	9.8	2.3	21	1.2	.89	.95
22	4.8	e1.4	3.2	e2.0	2.7	17	4.9	15	15	.81	.89	.80
23	3.0	e2.0	2.5	e1.4	2.4	4.0	3.1	1.6	2.0	.83	.89	.78
24	e2.1	2.9	2.4	e1.3	2.2	2.7	2.9	2.0	1.6	4.6	.89	.78
25	e2.0	5.8	2.3	e1.2	2.2	7.2	33	1.4	7.9	1.0	.88	43
26	e1.8	34	2.3	e2.1	2.1	2.7	5.9	1.0	4.7	18	.78	14
27	e1.7	11	2.2	e1.8	7.9	32	3.8	2.5	1.9	2.0	15	2.1
28	e1.6	2.8	2.2	e1.7	12	7.6	3.2	9.2	1.9	17	2.1	1.5
29	e1.5	2.2	2.5	e1.6	2.9	3.6	2.8	1.9	8.2	4.2	2.8	1.2
30	e1.5	1.9	2.5	e2.3	---	2.7	2.6	1.1	2.9	8.6	1.4	1.0
31	e2.0	---	1.9	e2.9	---	2.3	---	1.0	---	2.5	3.2	---
TOTAL	99.2	101.6	125.9	102.5	125.6	183.8	193.1	99.5	131.3	177.44	103.02	109.16
MEAN	3.20	3.39	4.06	3.31	4.33	5.93	6.44	3.21	4.38	5.72	3.32	3.64
MAX	17	34	32	24	19	52	33	15	21	37	17	43
MIN	1.4	1.2	1.6	1.2	1.4	1.9	2.0	1.0	1.1	.81	.78	.78
CFSM	.98	1.03	1.24	1.01	1.32	1.81	1.96	.98	1.33	1.75	1.01	1.11
IN.	1.13	1.15	1.43	1.16	1.42	2.08	2.19	1.13	1.49	2.01	1.17	1.24

e Estimated

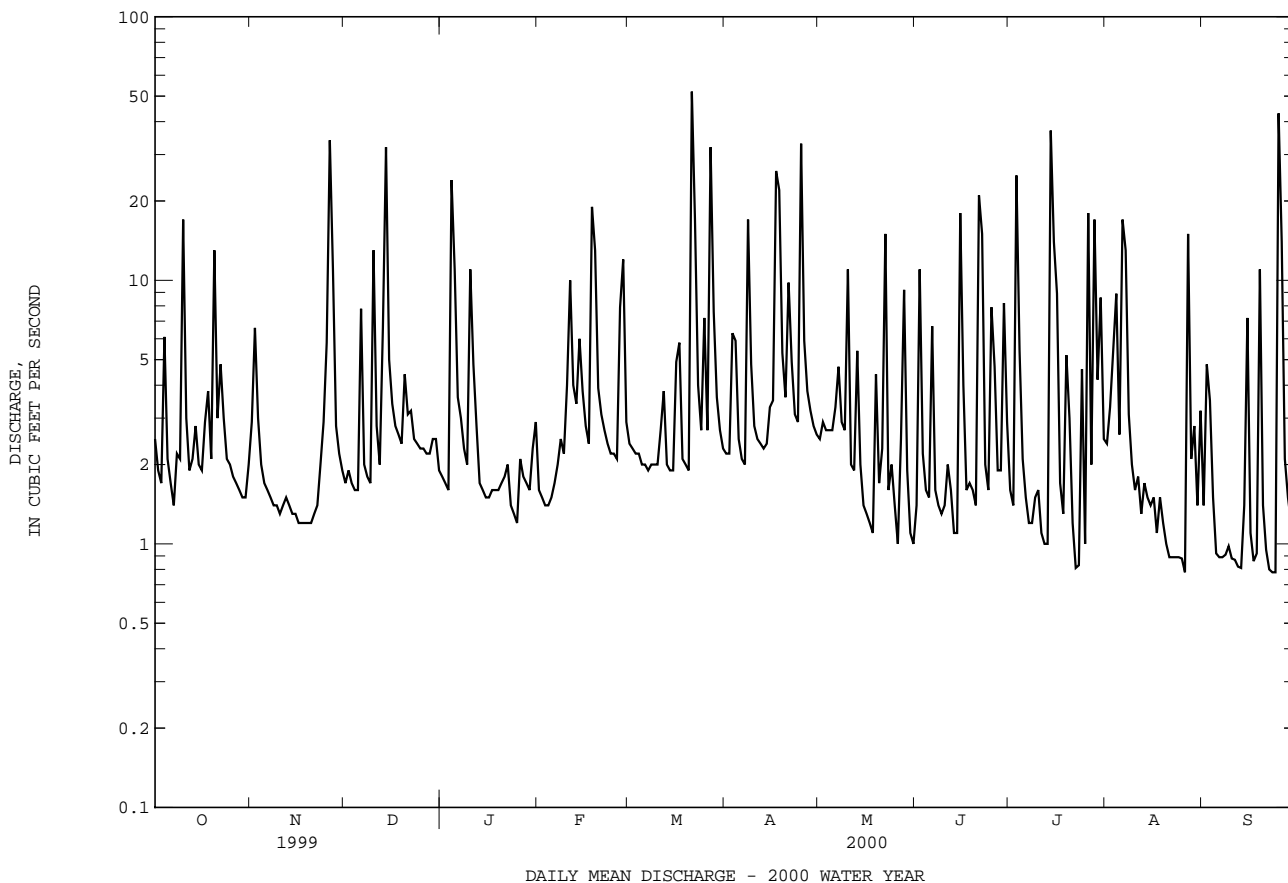
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	3.29	4.28	4.16	6.48	5.51	8.84	4.85	4.34	3.16	3.12	2.81	4.02						
MAX	9.08	6.74	9.57	9.71	11.3	15.7	6.55	6.72	4.64	5.72	4.39	13.0						
(WY)	1996	1998	1997	1996	1998	1994	1996	1998	1996	2000	1999	1999						
MIN	.73	1.37	2.14	3.31	2.80	5.25	2.36	1.59	1.83	1.63	1.23	1.37						
(WY)	1999	1999	1999	2000	1995	1995	1995	1999	1994	1998	1998	1998						

01651800 WATTS BRANCH AT WASHINGTON, D.C.--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1992 - 2000	
ANNUAL TOTAL	1569.42		1552.12			
ANNUAL MEAN	4.30		4.24		4.58	
HIGHEST ANNUAL MEAN					5.87	
LOWEST ANNUAL MEAN					2.84	
HIGHEST DAILY MEAN	204	Sep 16	52	Mar 21	204	Sep 16 1999
LOWEST DAILY MEAN	.42	Aug 12	.78	(a)	.37	Jul 23 1993
ANNUAL SEVEN-DAY MINIMUM	.68	May 15	.88	Sep 7	.45	Jul 30 1993
INSTANTANEOUS PEAK FLOW			1010	Jul 14	(b)1510	Sep 26 1994
INSTANTANEOUS PEAK STAGE			6.25	Jul 14	7.36	Sep 26 1994
INSTANTANEOUS LOW FLOW			.67	(c)	.28	(d)
ANNUAL RUNOFF (CFSM)	1.31		1.29		1.40	
ANNUAL RUNOFF (INCHES)	17.80		17.60		18.99	
10 PERCENT EXCEEDS	6.9		10		9.8	
50 PERCENT EXCEEDS	1.9		2.1		2.0	
90 PERCENT EXCEEDS	.83		1.1		.80	

- a Aug. 26, Sept. 23, 24.
- b From rating curve extended above 260 ft<sup>3</sup>/s.
- c July 23, 24.
- d Aug. 11, 12, 1999.



## POTOMAC RIVER BASIN

01653600 PISCATAWAY CREEK AT PISCATAWAY, MD

LOCATION.--Lat 38°42'20", long 76°58'00", Prince Georges County, Hydrologic Unit 02070010, on left bank 75 ft downstream from bridge on State Highway 223, at Piscataway, 0.4 mi upstream from Tinker Creek, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--39.5 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 10 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	0800	*617	*6.91	Sep 26	1130	509	6.49

Minimum discharge 5.8 ft<sup>3</sup>/s, Aug 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	16	19	19	89	48	66	57	19	15	19	27
2	42	27	17	19	61	44	63	52	18	13	16	62
3	32	46	17	19	51	41	62	47	27	12	30	155
4	44	20	17	37	49	38	87	44	16	23	27	188
5	53	17	16	153	47	37	73	42	15	14	42	133
6	31	17	29	54	44	34	58	38	27	11	58	32
7	25	16	34	44	49	32	52	35	21	9.4	88	21
8	22	15	21	38	69	32	66	32	15	8.2	37	18
9	22	15	18	37	60	33	250	28	13	8.1	18	16
10	60	15	43	72	83	31	90	29	11	7.7	14	14
11	51	15	59	75	116	31	65	37	11	8.4	12	13
12	28	14	27	45	103	56	58	26	72	7.9	11	12
13	23	14	24	40	64	38	50	34	138	6.7	11	11
14	21	15	203	34	77	33	49	92	34	7.3	13	11
15	18	14	163	31	85	31	51	31	26	126	11	88
16	17	13	59	35	55	30	53	25	52	23	9.4	21
17	19	12	43	31	47	80	116	23	28	14	7.7	14
18	27	12	35	27	94	43	224	21	101	11	8.4	12
19	18	12	32	29	148	35	146	20	81	10	9.5	19
20	76	13	34	34	76	33	87	23	33	32	7.4	26
21	63	13	43	30	57	236	126	24	22	14	6.8	14
22	31	13	40	29	51	501	205	172	205	10	6.3	11
23	34	13	32	28	47	158	96	74	49	9.2	5.9	11
24	24	13	27	29	47	98	72	40	26	9.4	49	11
25	20	14	24	31	43	101	204	37	19	12	31	92
26	19	39	24	42	41	157	227	26	16	133	11	450
27	18	212	24	37	42	113	105	23	16	63	9.4	97
28	17	46	22	34	114	334	89	26	28	26	20	46
29	16	27	21	33	60	126	73	29	25	67	19	31
30	16	22	20	39	---	89	63	24	25	25	21	26
31	16	---	20	95	---	74	---	20	---	26	47	---
TOTAL	974	750	1207	1300	1969	2767	3026	1231	1189	762.3	675.8	1682
MEAN	31.4	25.0	38.9	41.9	67.9	89.3	101	39.7	39.6	24.6	21.8	56.1
MAX	76	212	203	153	148	501	250	172	205	133	88	450
MIN	16	12	16	19	41	30	49	20	11	6.7	5.9	11
CFSM	.80	.63	.99	1.06	1.72	2.26	2.55	1.01	1.00	.62	.55	1.42
IN.	.92	.71	1.14	1.22	1.85	2.61	2.85	1.16	1.12	.72	.64	1.58

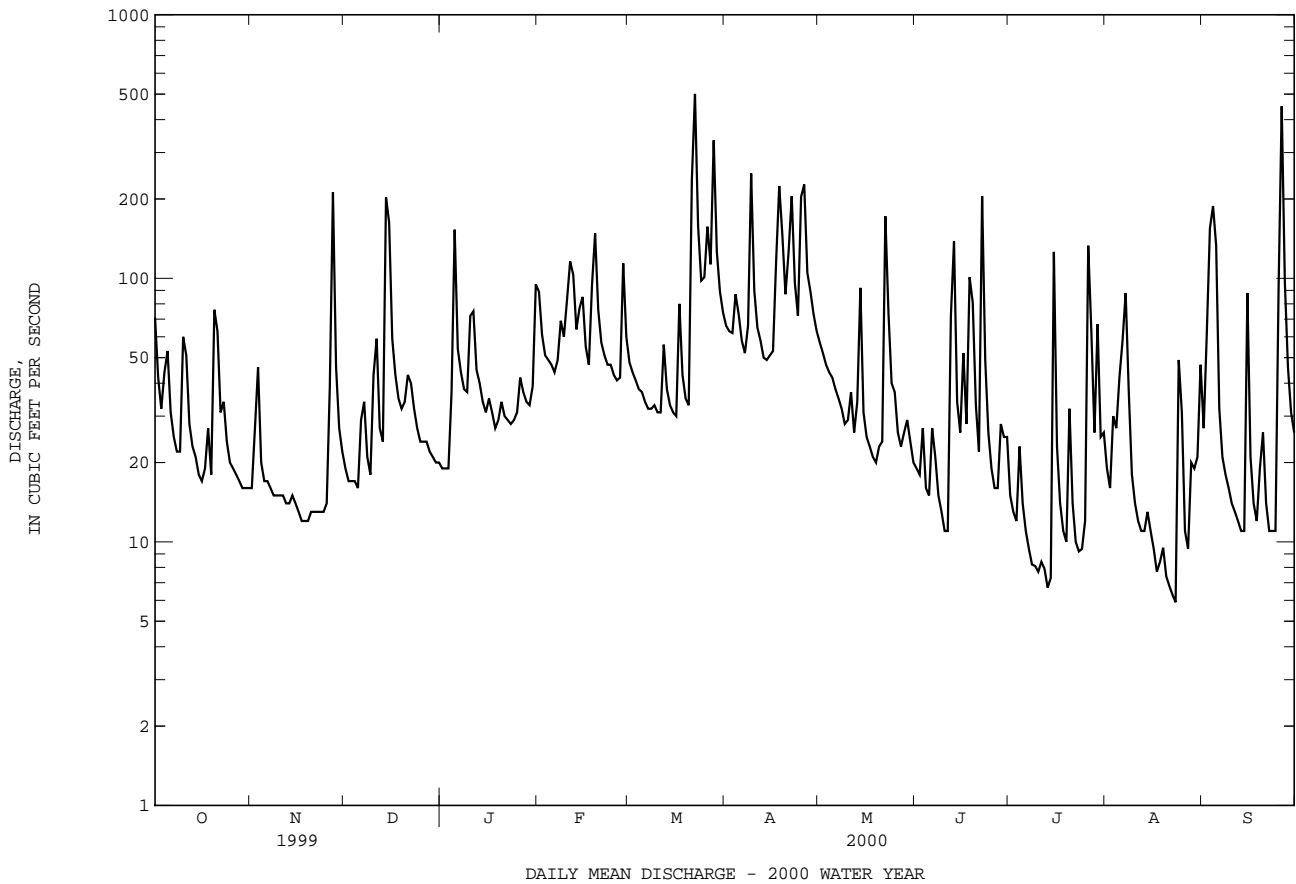
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
MEAN	28.1	33.2	51.0	64.1	71.1	85.3	67.1	48.0	30.6	18.2	20.4	31.1
MAX	177	95.8	153	217	188	268	218	189	173	92.7	88.8	256
(WY)	1980	1973	1973	1978	1972	1994	1983	1989	1972	1975	1971	1975
MIN	1.31	1.27	5.26	5.96	23.6	17.5	18.1	9.28	1.42	.14	.006	.000
(WY)	1987	1992	1966	1981	1977	1981	1985	1999	1986	1966	1966	1977

01653600 PISCATAWAY CREEK AT PISCATAWAY, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	15567.56		17533.1			
ANNUAL MEAN	42.7		47.9		45.5	
HIGHEST ANNUAL MEAN					85.9 1972	
LOWEST ANNUAL MEAN					13.4 1981	
HIGHEST DAILY MEAN	2260	Sep 16	501	Mar 22	4500	Sep 6 1979
LOWEST DAILY MEAN	.00	(a)	5.9	Aug 23	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 12	7.4	Aug 17	.00	Jul 9 1966
INSTANTANEOUS PEAK FLOW			617	Mar 22	(c) 8540	Sep 6 1979
INSTANTANEOUS PEAK STAGE			6.91	Mar 22	11.21	Sep 6 1979
INSTANTANEOUS LOW FLOW			5.8	(d)	.00	(f)
ANNUAL RUNOFF (CFSM)	1.08		1.21		1.15	
ANNUAL RUNOFF (INCHES)	14.66		16.51		15.66	
10 PERCENT EXCEEDS	67		97		90	
50 PERCENT EXCEEDS	18		31		24	
90 PERCENT EXCEEDS	.01		12		1.4	

- a July 12-20, Aug. 4-24.
- b Many days.
- c From rating curve extended above 1,700 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow at bridge 100 ft upstream.
- d Aug. 23, 24.
- f No flow at times in 1966, 1970, 1977, 1980-83, 1985-89, 1991-95, 1997-99.



POTOMAC RIVER BASIN

01660920 ZEKIAH SWAMP RUN NEAR NEWTOWN, MD

LOCATION.--Lat 38°29'26", long 76°55'37", Charles County, Hydrologic Unit 02070011, on left-center downstream side of bridge on State Highway 6, 1.0 mi southeast of Newtown, and 1.7 mi downstream from Kerrick Swamp.

DRAINAGE AREA.--79.9 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 34.88 ft above sea level.

REMARKS.--Water-discharge records good except those for estimated daily discharges (ice effect), which are fair. Low flow affected by ground-water diversions from municipal well fields at Waldorf and St. Charles, and occasional farm irrigation upstream from station during summer months.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 22	2100	*863	*3.90	No other peak greater than base discharge.			

Minimum discharge 14 ft<sup>3</sup>/s, Jun 27, Jul 7-9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	37	70	53	248	133	137	110	57	48	96	124
2	111	43	61	51	249	103	125	102	56	28	92	105
3	55	79	56	52	193	88	124	94	125	18	94	96
4	47	111	54	61	166	80	128	88	93	27	140	162
5	135	75	52	195	156	75	137	84	56	36	256	452
6	125	56	58	192	140	70	118	80	67	24	290	419
7	67	49	89	103	132	65	106	74	89	18	485	127
8	46	44	81	78	157	65	105	68	61	15	283	90
9	38	42	60	68	161	65	285	62	40	17	115	75
10	49	41	70	80	169	64	305	60	29	21	88	67
11	94	41	150	140	203	62	166	95	23	28	74	59
12	86	39	120	110	226	99	127	103	18	39	64	54
13	57	39	80	79	192	125	112	70	18	35	67	50
14	44	40	140	64	167	89	101	65	64	31	107	47
15	34	41	332	55	183	72	105	56	56	172	91	58
16	28	38	281	56	146	66	121	47	64	202	68	83
17	28	35	153	55	111	135	122	43	72	146	56	67
18	43	31	106	47	115	159	194	40	70	155	53	52
19	51	29	87	49	218	100	230	38	98	76	59	53
20	71	29	80	57	221	81	169	44	86	334	53	76
21	194	31	90	56	150	213	139	53	55	390	46	71
22	157	33	103	47	110	716	243	218	72	122	44	53
23	121	35	100	49	97	717	244	386	102	73	43	44
24	111	35	e80	54	90	356	154	197	60	60	43	43
25	74	44	e66	53	87	195	210	93	35	62	44	71
26	57	81	e65	67	83	213	373	70	23	258	44	460
27	48	272	64	e63	80	250	300	59	17	555	106	593
28	44	376	61	e60	179	451	187	61	68	310	242	226
29	39	191	57	e59	206	487	146	75	112	275	144	100
30	38	96	56	e71	---	259	124	86	87	296	87	74
31	37	---	55	161	---	167	---	69	---	118	96	---
TOTAL	2370	2133	2977	2385	4635	5820	5137	2790	1873	3989	3570	4051
MEAN	76.5	71.1	96.0	76.9	160	188	171	90.0	62.4	129	115	135
MAX	241	376	332	195	249	717	373	386	125	555	485	593
MIN	28	29	52	47	80	62	101	38	17	15	43	43
CFSM	.96	.89	1.20	.96	2.00	2.35	2.14	1.13	.78	1.61	1.44	1.69
IN.	1.10	.99	1.39	1.11	2.16	2.71	2.39	1.30	.87	1.86	1.66	1.89

e Estimated

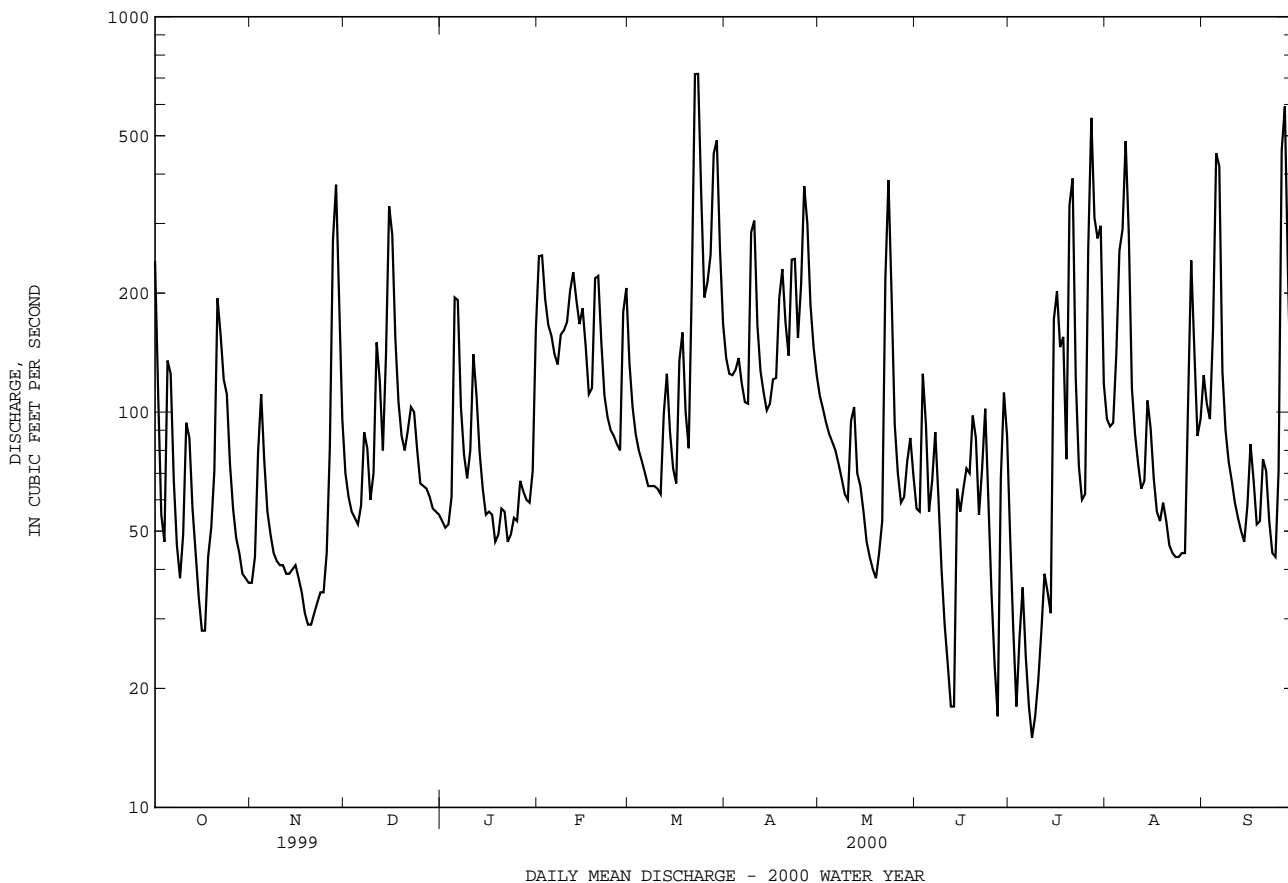
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

MEAN	45.2	72.7	101	132	149	193	133	101	59.3	34.5	33.1	42.8
MAX	163	139	236	268	375	491	277	334	311	129	115	175
(WY)	1990	1986	1997	1996	1998	1994	1993	1989	1989	2000	2000	1999
MIN	.000	.000	14.0	49.1	50.2	57.0	30.5	19.7	1.67	1.66	.39	.000
(WY)	1999	1999	1999	1985	1999	1985	1985	1999	1999	1999	1995	1995

01660920 ZEKIAH SWAMP RUN NEAR NEWTOWN, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	25127.44		41730		91.5	
ANNUAL MEAN	68.8		114		137	
HIGHEST ANNUAL MEAN					43.5	
LOWEST ANNUAL MEAN					2570	
HIGHEST DAILY MEAN	2530	Sep 17	717	Mar 23	Mar 29 1994	
LOWEST DAILY MEAN	.00	(a)	15	Jul 8	(a)	
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 8	22	Jul 3	Jul 20 1987	
INSTANTANEOUS PEAK FLOW			863	Mar 22	(b)4080	
INSTANTANEOUS PEAK STAGE			3.90	Mar 22	5.51	
INSTANTANEOUS LOW FLOW			14	(c)	.00	
ANNUAL RUNOFF (CFSM)	.86		1.43		1.14	
ANNUAL RUNOFF (INCHES)	11.70		19.43		15.55	
10 PERCENT EXCEEDS	120		241		204	
50 PERCENT EXCEEDS	40		80		52	
90 PERCENT EXCEEDS	.00		39		1.2	

- a Many days.
- b From rating curve extended above 1,500 ft<sup>3</sup>/s.
- c June 27, July 7-9.
- d No flow at times in 1983, 1985-89, 1991, 1993, 1995-1999.



POTOMAC RIVER BASIN

01660920 ZEKIAH SWAMP RUN NEAR NEWTOWN, MD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to September 2000.

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

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	
SEP 27...	1000	ENVIRONMENTAL	652	68	6.3	19.0	13.7	766	8.9	
SEP 27...	1001	REPLICATE	--	68	6.3	19.0	13.7	766	8.9	
DATE		OXYGEN, DIS-SOLVED (PER-CENT FIELD SATUR-ATION) (00301)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE DIS IT FIELD MG/L AS HCO3 (00453)	NITRO-GEN, DIS-SOLVED TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
SEP 27...	85	3	4	.60	<.010	.080	<.020	.52	.40	
SEP 27...	85	--	--	.60	<.010	.084	.032	.52	.44	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
SEP 27...	.48	--	--	.096	.024	.011	24	42	75	
SEP 27...	.53	.48	.41	.094	.025	.011	29	--	62	

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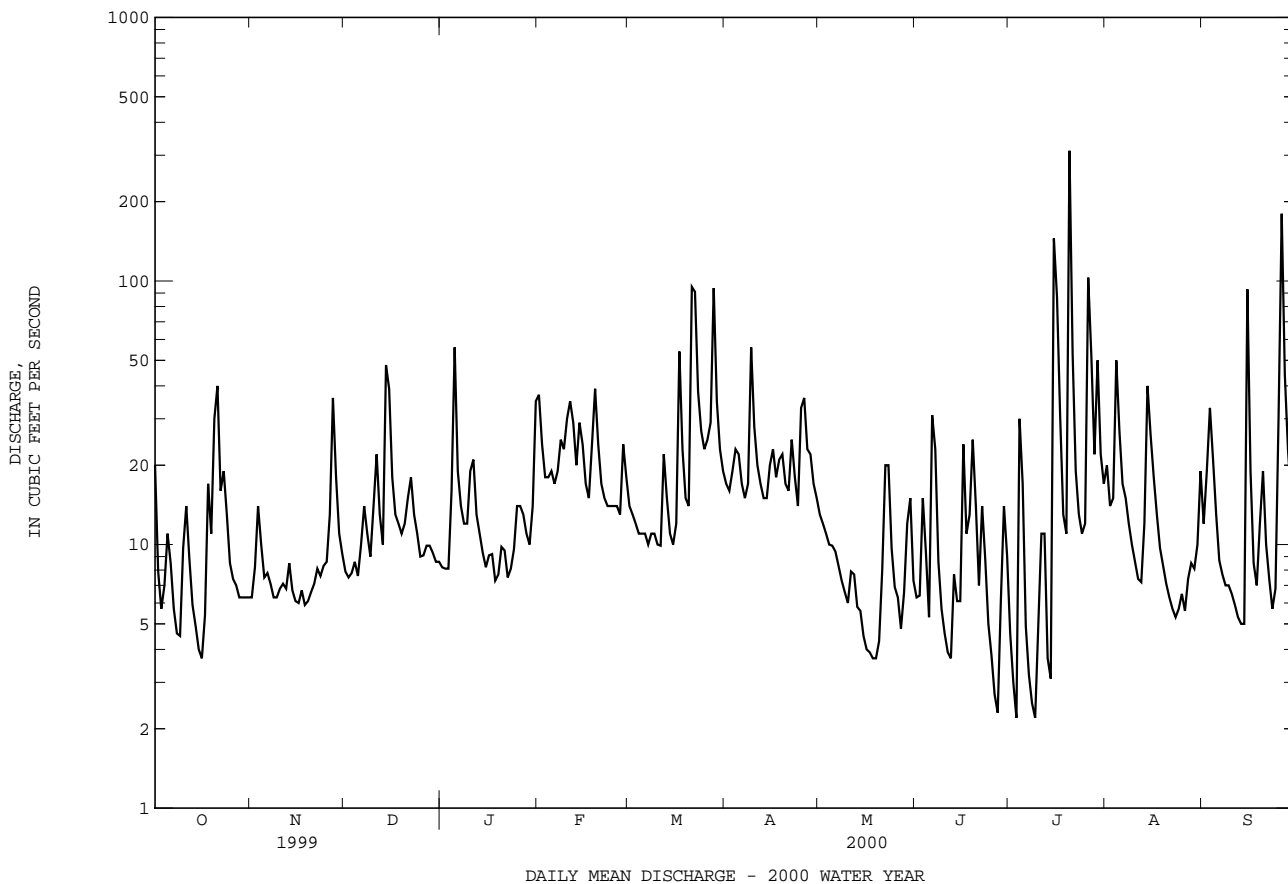




01661050 ST. CLEMENT CREEK NEAR CLEMENTS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	5067.06		6220.4			
ANNUAL MEAN	13.9		17.0		19.6	
HIGHEST ANNUAL MEAN					34.5 1972	
LOWEST ANNUAL MEAN					9.19 1981	
HIGHEST DAILY MEAN	1120	Sep 16	312	Jul 20	1580	Jun 22 1972
LOWEST DAILY MEAN	.00	(a)	2.2	(b)	.00	(c)
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 12	4.2	May 14	.00	Aug 31 1980
INSTANTANEOUS PEAK FLOW			457	Jul 20	(d)4500	Sep 6 1979
INSTANTANEOUS PEAK STAGE			4.67	Jul 20	(f)6.96	Sep 6 1979
INSTANTANEOUS LOW FLOW			2.0	Jul 10	.00	(g)
ANNUAL RUNOFF (CFSM)	.75		.92		1.06	
ANNUAL RUNOFF (INCHES)	10.19		12.51		14.41	
10 PERCENT EXCEEDS	20		30		38	
50 PERCENT EXCEEDS	6.8		11		11	
90 PERCENT EXCEEDS	.00		5.6		1.3	

- a July 12-27, Aug. 2-24.
- b July 3, 9.
- c Many days.
- d From rating curve extended above 480 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow.
- f Backwater from tide; maximum gage height unaffected by backwater, 6.55 ft, June 22, 1972.
- g No flow at times in 1977, 1980, 1981, 1983, 1985-89, 1991, 1993, 1995, 1999.

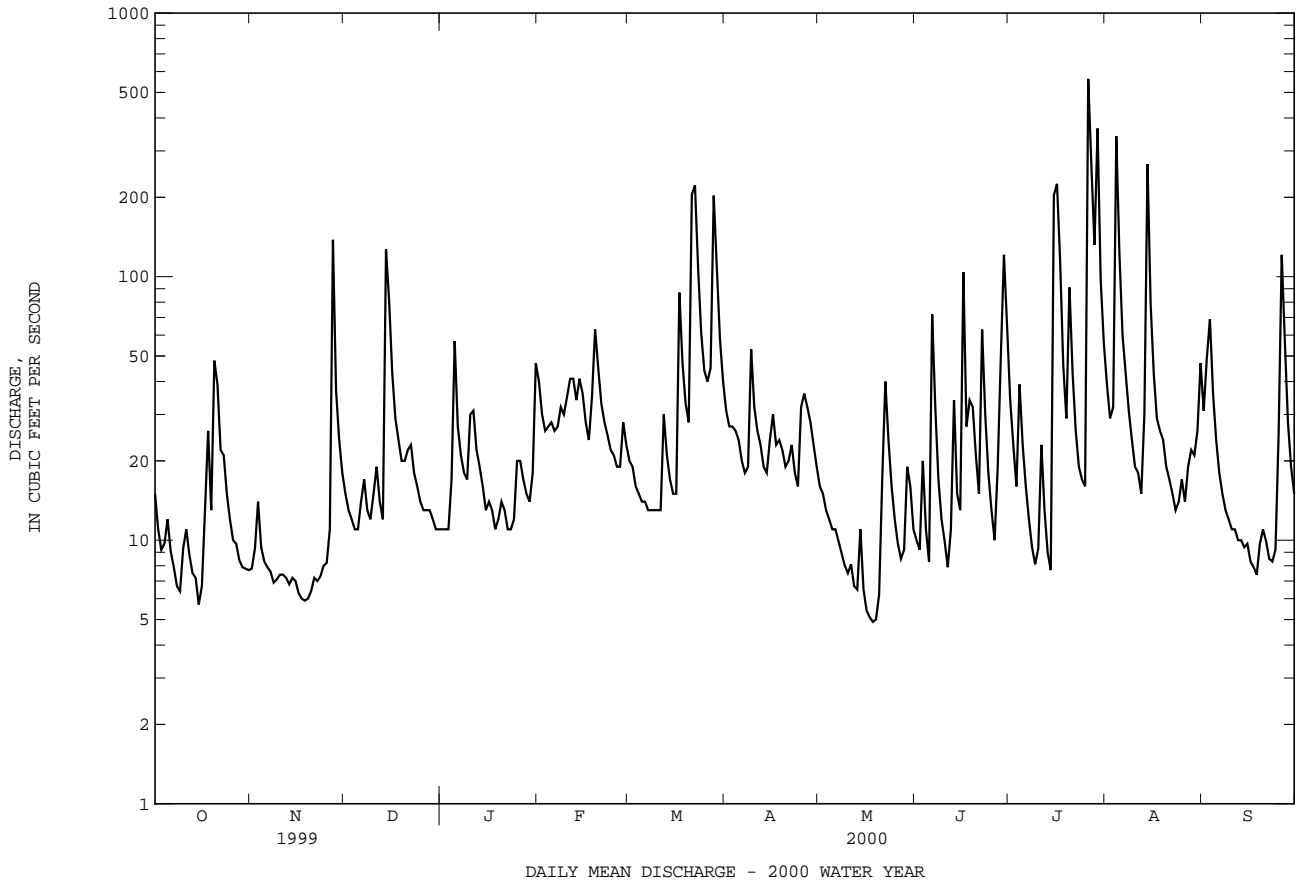




01661500 ST. MARYS RIVER AT GREAT MILLS, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1946 - 2000	
ANNUAL TOTAL	9273.24		11347.5			
ANNUAL MEAN	25.4		31.0		24.9	
HIGHEST ANNUAL MEAN					50.9	
LOWEST ANNUAL MEAN					11.1	
HIGHEST DAILY MEAN	2650	Sep 16	563	Jul 26	2650	Sep 16 1999
LOWEST DAILY MEAN	.17	Aug 11	4.9	May 18	.17	Aug 11 1999
ANNUAL SEVEN-DAY MINIMUM	.22	Aug 7	6.3	May 14	.22	Aug 7 1999
INSTANTANEOUS PEAK FLOW			1240	Jul 26	(a) 7950	Aug 20 1969
INSTANTANEOUS PEAK STAGE			8.64	Jul 26	13.34	Aug 20 1969
INSTANTANEOUS LOW FLOW			4.3	May 19	.13	(b)
ANNUAL RUNOFF (CFSM)	1.06		1.29		1.04	
ANNUAL RUNOFF (INCHES)	14.37		17.59		14.07	
10 PERCENT EXCEEDS	33		54		48	
50 PERCENT EXCEEDS	8.7		18		12	
90 PERCENT EXCEEDS	.95		7.8		3.2	

a From rating curve extended above 1,500 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 12.08 ft.  
 b Aug. 10-14.



MONONGAHELA RIVER BASIN

03075500 YOUGHIOGHENY RIVER NEAR OAKLAND, MD

LOCATION.--Lat 39°25'19", long 79°25'32", Garrett County, Hydrologic Unit 05020006, on left bank 200 ft downstream from Baltimore and Ohio Railroad bridge, 250 ft downstream from Little Youghiogheny River, 1.2 mi northwest of Oakland, and 1.5 mi upstream from Dunkard Lick Run.

DRAINAGE AREA.--134 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1941 to current year.

REVISED RECORDS.--WSP 1113: 1947(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,353.61 ft above sea level. Prior to Aug. 1, 1946, nonrecording gage at bridge 200 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Town of Oakland diverted an average of 0.4 ft<sup>3</sup>/s for water supply. The diversion is returned upstream from station as sewage. U.S. Army Corps of Engineers satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of 15.3 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 14	2115	2,970	6.01	Jul 11	1145	2,300	5.37
Feb 19	0700	*9,450	*10.50				

Minimum discharge 17 ft<sup>3</sup>/s, Oct 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	19	175	e85	e72	289	220	125	222	63	171	32
2	24	101	145	e82	e70	265	217	190	177	53	96	65
3	18	647	131	e95	e66	224	281	157	172	48	149	60
4	32	244	134	e110	e64	197	1120	128	131	88	187	59
5	71	195	133	e120	e62	176	1150	118	132	70	111	54
6	52	172	123	e110	e60	154	742	110	1460	51	151	43
7	33	134	127	e100	e59	139	498	100	1320	39	166	33
8	26	105	111	e100	e58	127	460	92	715	32	114	27
9	23	87	106	e95	e57	120	580	97	407	28	92	24
10	219	73	324	e160	e56	127	466	76	270	36	98	24
11	205	67	574	276	e170	172	431	66	208	1860	84	41
12	90	59	348	246	e400	687	607	60	161	739	70	37
13	53	52	343	e200	e250	441	481	58	138	268	59	33
14	52	48	724	e180	1850	344	387	58	114	175	53	27
15	46	44	986	e165	2090	281	316	52	138	198	48	26
16	33	41	651	e160	1160	252	266	47	164	148	42	30
17	27	39	428	e160	1010	326	340	43	104	232	38	27
18	23	37	311	e170	1910	275	350	41	115	144	67	24
19	22	35	248	e150	7430	244	291	72	150	534	87	23
20	22	35	214	e130	2580	222	253	151	113	1200	55	26
21	24	62	193	e120	1190	371	279	101	103	553	41	26
22	23	54	166	e130	786	696	340	88	257	307	37	22
23	22	53	141	e120	591	746	571	85	138	212	34	20
24	31	49	119	e110	480	641	478	289	104	174	50	22
25	50	85	105	e100	407	489	363	170	87	154	48	182
26	40	658	98	e90	336	371	286	121	83	121	38	1100
27	30	980	101	e85	284	296	234	113	78	103	33	344
28	25	505	96	90	516	269	201	412	123	88	37	197
29	22	303	94	80	329	279	171	945	113	78	33	142
30	20	223	90	e77	---	290	146	509	80	76	31	111
31	19	---	e88	e75	---	254	---	325	---	127	29	---
TOTAL	1421	5206	7627	3971	24393	9764	12525	4999	7577	7999	2349	2881
MEAN	45.8	174	246	128	841	315	418	161	253	258	75.8	96.0
MAX	219	980	986	276	7430	746	1150	945	1460	1860	187	1100
MIN	18	19	88	75	56	120	146	41	78	28	29	20
CFSM	.34	1.30	1.84	.96	6.28	2.35	3.12	1.20	1.88	1.93	.57	.72
IN.	.39	1.45	2.12	1.10	6.77	2.71	3.48	1.39	2.10	2.22	.65	.80

e Estimated

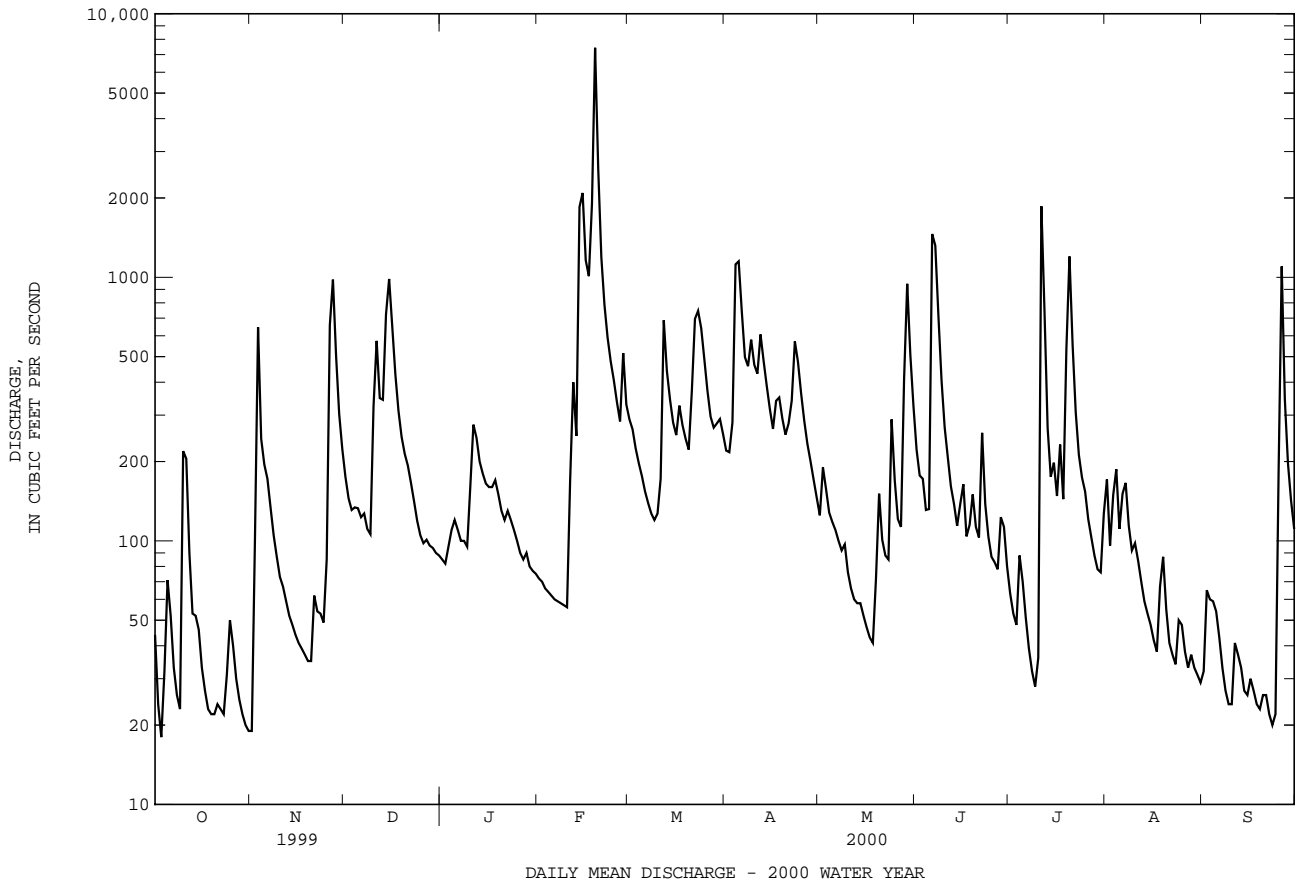
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

MEAN	114	241	403	434	504	610	450	330	204	162	130	86.8
MAX	608	1152	1027	973	1100	1477	879	995	730	629	586	600
(WY)	1955	1986	1973	1996	1986	1963	1973	1996	1981	1978	1956	1996
MIN	4.45	7.08	62.2	63.2	127	168	121	76.0	22.9	10.3	10.5	5.99
(WY)	1954	1954	1944	1977	1978	1990	1946	1982	1999	1953	1944	1953

03075500 YOUGHIOGHENY RIVER NEAR OAKLAND, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	92603.7		90712			
ANNUAL MEAN	254		248		305	
HIGHEST ANNUAL MEAN					518	1996
LOWEST ANNUAL MEAN					193	1947
HIGHEST DAILY MEAN	2030	Jan 24	7430	Feb 19	8740	Jan 19 1996
LOWEST DAILY MEAN	3.4	Sep 4	18	Oct 3	2.5	Oct 4 1953
ANNUAL SEVEN-DAY MINIMUM	4.6	Sep 21	23	Oct 17	2.7	Oct 2 1953
INSTANTANEOUS PEAK FLOW			9450	Feb 19	(a)14100	Jan 19 1996
INSTANTANEOUS PEAK STAGE			10.50	Feb 19	13.06	Jan 19 1996
INSTANTANEOUS LOW FLOW			17	Oct 4	UNKNOWN	
ANNUAL RUNOFF (CFSM)	1.89		1.85		2.28	
ANNUAL RUNOFF (INCHES)	25.71		25.18		30.91	
10 PERCENT EXCEEDS	850		540		726	
50 PERCENT EXCEEDS	71		120		164	
90 PERCENT EXCEEDS	9.8		32		24	

a From rating curve extended above 7,000 ft<sup>3</sup>/s.



## MONONGAHELA RIVER BASIN

03076000 DEEP CREEK RESERVOIR NEAR OAKLAND, MD

LOCATION.--Lat 39°30'34", long 79°23'28", Garrett County, Hydrologic Unit 05020006, on Deep Creek at dam, 1.8 mi upstream from mouth and 7.0 mi north of Oakland.

DRAINAGE AREA.--64.7 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1950, monthend contents published in WSP 1305, and October 1950 to September 1955, monthend contents published in WSP 1385.

GAGE.--Water-stage recorder at right end of spillway. Datum of gage is at sea level, unadjusted.

REMARKS.--Reservoir is formed by an earthfill dam completed January 1925, with storage beginning at that time. Usable capacity, 92,975 acre-ft between elevations 2,425 ft, top of intake to outlet tunnel, and 2,462 ft, crest of spillway. Dead storage, 13,085 acre-ft. Figures given herein represent usable contents. Reservoir is used for hydroelectric power.

COOPERATION.--Elevations and capacity table furnished by Pennsylvania Electric Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 93,800 acre-ft, July 14, 1990, elevation, 2,462.25 ft; minimum observed, 11,763 acre-ft, Sept. 30, 1925, elevation, 2,433.45 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 91,500 acre-ft, June 7, elevation, 2,461.6 ft; minimum, 70,100 acre-ft, Dec. 25-29, Feb. 6-9, elevation, 2,455.7 ft.

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30 . . . . .	2456.5	72900	
Oct. 31 . . . . .	2456.4	72500	-400
Nov. 30 . . . . .	2456.5	72900	+400
Dec. 31 . . . . .	2456.0	71100	-1800
CAL YR 1999 . . . . .			+300
Jan. 31 . . . . .	2455.8	70500	-600
Feb. 29 . . . . .	2457.8	77500	+7000
Mar. 31 . . . . .	2459.2	82600	+5100
Apr. 30 . . . . .	2460.8	88500	+5900
May 31 . . . . .	2461.2	90000	+1500
June 30 . . . . .	2461.1	89600	-400
July 31 . . . . .	2460.1	85900	-3700
Aug. 31 . . . . .	2459.0	81900	-4000
Sept. 30 . . . . .	2458.1	78600	-3300
WTR YR 2000 . . . . .			+5700

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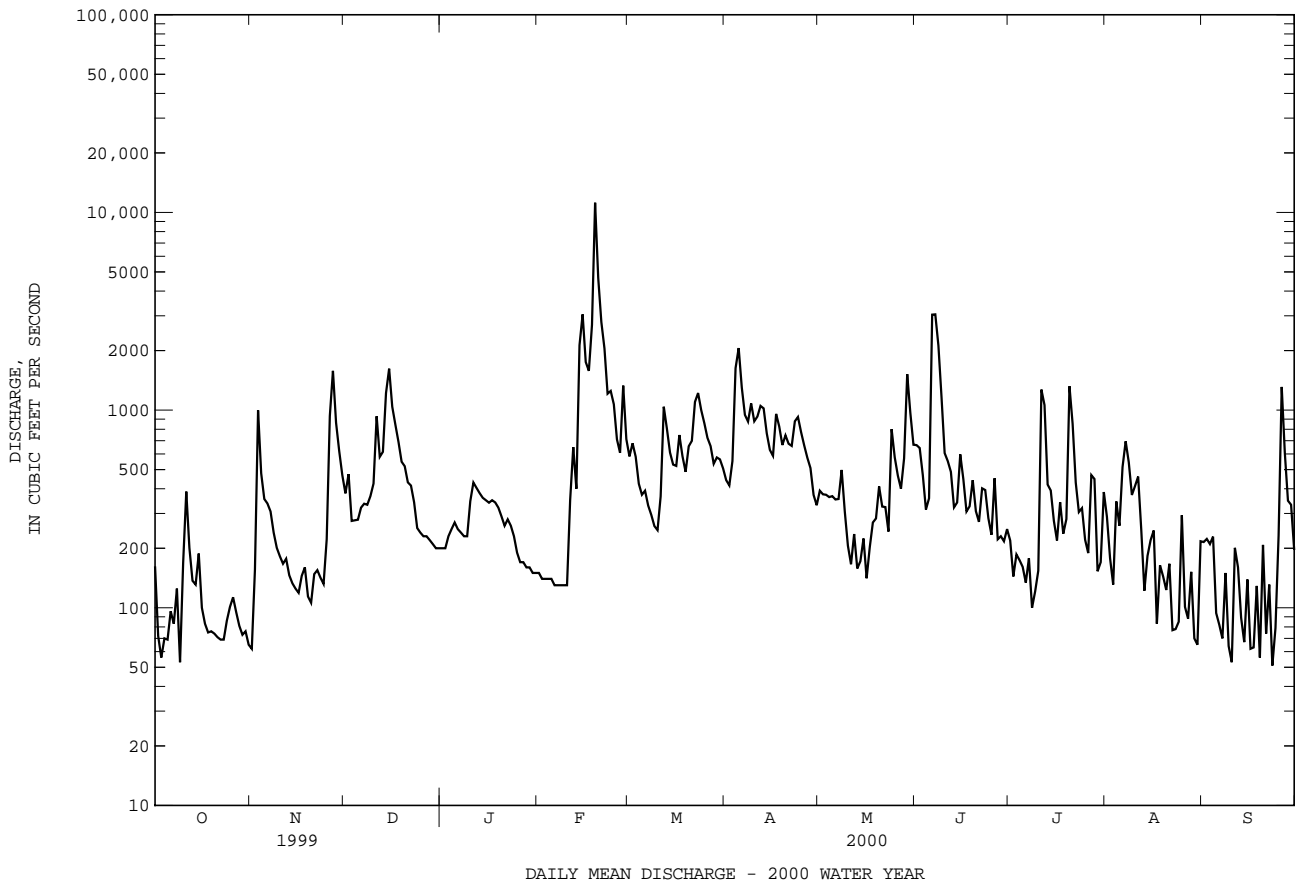




03076500 YOUGHIOGHENY RIVER AT FRIENDSVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1898 - 2000	
ANNUAL TOTAL	171238		178339			
ANNUAL MEAN	469		487		641	
ANNUAL MEAN†	475		495		644	
HIGHEST ANNUAL MEAN					1052	
LOWEST ANNUAL MEAN					375	
HIGHEST DAILY MEAN	3150	Jan 24	11200	Feb 19	11200	Jan 19 1996
LOWEST DAILY MEAN	49	Aug 16	51	Sep 23	8.2	Sep 11 1966
ANNUAL SEVEN-DAY MINIMUM	64	Sep 11	74	Oct 17	29	Sep 21 1972
INSTANTANEOUS PEAK FLOW			13100	Feb 19	(a)16100	Jan 19 1996
INSTANTANEOUS PEAK STAGE			8.63	Feb 19	(b)14.20	Mar 29 1924
INSTANTANEOUS LOW FLOW			48	Sep 23	UNKNOWN	
ANNUAL RUNOFF (CFSM)	1.59		1.65		2.17	
ANNUAL RUNOFF (CFSM)†	1.61		1.68		2.18	
ANNUAL RUNOFF (INCHES)	21.59		22.49		29.51	
ANNUAL RUNOFF (INCHES)†	21.88		22.79		29.84	
10 PERCENT EXCEEDS	1380		999		1430	
50 PERCENT EXCEEDS	191		307		406	
90 PERCENT EXCEEDS	67		87		102	

† Adjusted for change in reservoir contents since October 1940.  
 a From rating curve extended above 5,800 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 b From floodmarks.

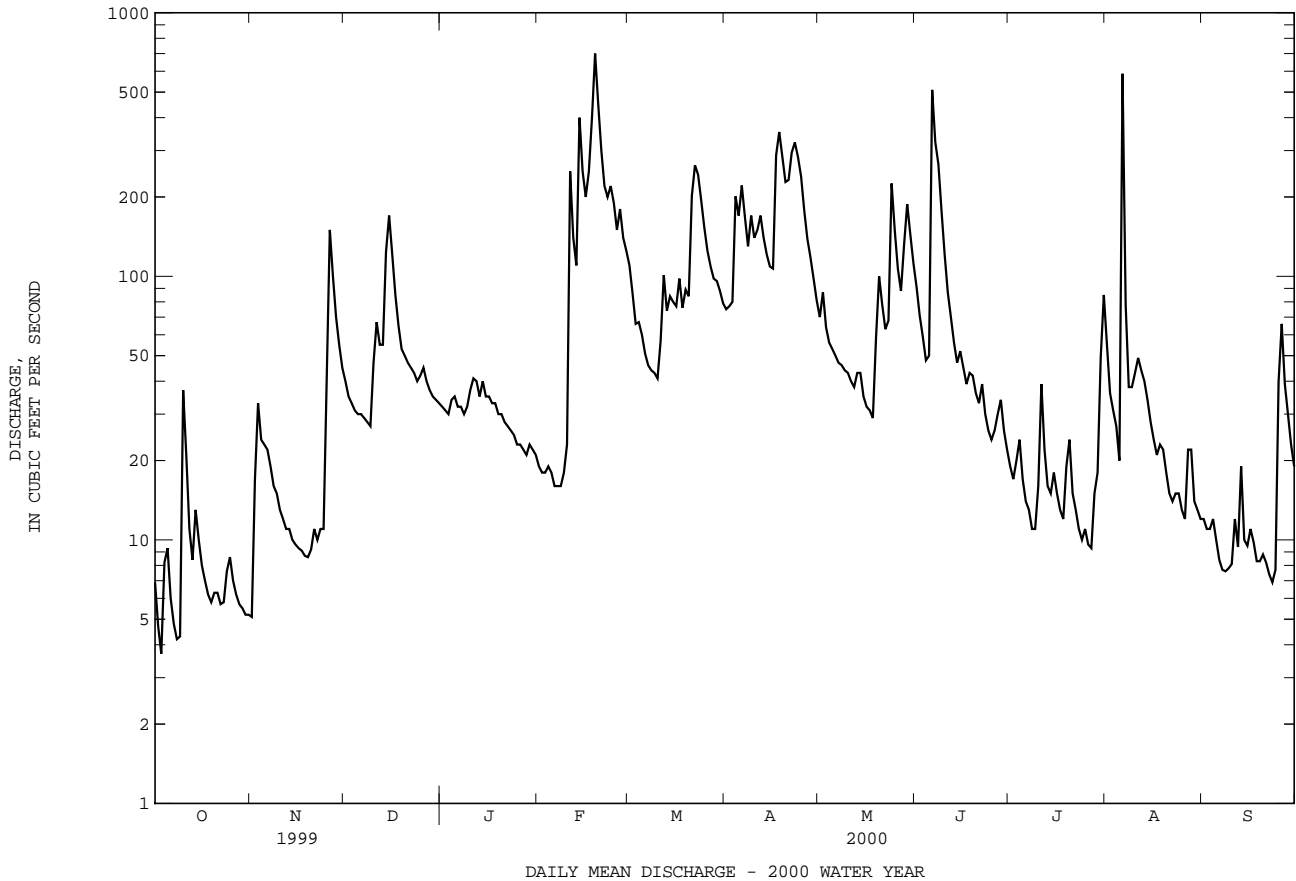




03076600 BEAR CREEK AT FRIENDSVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	25035.4		24466.0		91.4	
ANNUAL MEAN	68.6		66.8		133	
HIGHEST ANNUAL MEAN					53.4	
LOWEST ANNUAL MEAN					1996	
HIGHEST DAILY MEAN	557	Apr 10	(e)700	Feb 19	3100	Sep 14 1971
LOWEST DAILY MEAN	2.2	Sep 4	3.7	Oct 3	1.6	(a)
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 29	5.7	Oct 26	2.0	Sep 7 1966
INSTANTANEOUS PEAK FLOW			3790	Feb 19	(b)4650	Sep 14 1971
INSTANTANEOUS PEAK STAGE			(c)8.30	Feb 19	(c)9.60	Sep 14 1971
INSTANTANEOUS LOW FLOW			3.4	Oct 4	1.5	Sep 12 1966
ANNUAL RUNOFF (CFSM)	1.40		1.37		1.87	
ANNUAL RUNOFF (INCHES)	19.05		18.61		25.39	
10 PERCENT EXCEEDS	217		177		226	
50 PERCENT EXCEEDS	22		34		50	
90 PERCENT EXCEEDS	3.8		8.5		8.3	

e Estimated.  
 a Sept. 12, 13, 1966.  
 b From rating curve extended above 2,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 c From floodmarks.



MONONGAHELA RIVER BASIN

03078000 CASSELMAN RIVER AT GRANTSVILLE, MD

LOCATION.--Lat 39°42'08", long 79°08'12", Garrett County, Hydrologic Unit 05020006, on left bank at downstream side of highway bridge, 0.3 mi upstream from Slaubaugh Run, 0.7 mi downstream from U.S. Highway 40, and 1.0 mi northeast of Grantsville.

DRAINAGE AREA.--62.5 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1947 to current year.

REVISED RECORDS.--WSP 1143: 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,088.97 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. U.S. Army Corps of Engineers satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb 19	0330	*3,740	*6.75	Aug 6	1645	3,630	6.64

Minimum discharge 3.7 ft<sup>3</sup>/s, Oct 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.2	50	e44	e34	144	103	84	94	21	79	22
2	6.3	18	71	e43	e34	133	100	117	81	17	50	19
3	4.7	81	44	e42	e33	113	113	95	72	19	53	16
4	12	44	40	e41	e33	103	270	79	61	38	54	15
5	16	38	39	e40	e32	93	237	72	58	24	36	13
6	9.6	38	35	e40	e32	84	204	69	676	16	1340	11
7	6.5	29	34	e39	e31	75	157	62	526	12	608	10
8	5.8	22	30	e38	e31	72	161	56	220	9.7	210	9.6
9	6.8	18	28	e37	e30	67	185	53	143	8.7	135	9.4
10	83	16	86	e60	e30	64	164	49	103	37	106	11
11	53	14	134	101	e90	107	157	45	82	154	82	20
12	23	14	78	81	e160	239	195	42	73	51	68	16
13	14	13	74	85	e100	140	152	48	69	28	57	22
14	18	12	235	80	e300	117	132	60	62	21	50	17
15	23	11	242	72	e170	103	120	44	79	31	41	14
16	14	11	138	e70	e160	96	108	37	73	35	37	16
17	11	10	102	e64	e150	134	355	34	51	20	29	14
18	9.6	9.4	87	e60	e400	109	319	33	75	16	30	12
19	7.2	9.0	75	e56	2250	95	230	79	74	27	34	11
20	7.0	10	70	e52	609	90	185	188	55	52	26	12
21	7.1	12	68	e49	343	154	258	117	43	30	21	12
22	7.9	12	64	e47	267	242	390	87	65	22	19	10
23	9.1	12	e62	e45	260	300	326	84	45	15	18	9.2
24	11	12	e60	e43	281	267	244	242	34	14	23	9.5
25	15	29	e68	e41	261	199	197	138	30	15	19	110
26	14	271	e62	e39	207	160	161	93	36	12	16	302
27	10	229	e57	e38	177	137	137	81	42	12	37	100
28	8.6	96	e53	e37	229	131	121	159	61	48	58	58
29	7.6	64	e50	e36	164	138	107	226	38	57	27	43
30	7.3	52	e48	e35	---	145	94	137	27	161	23	36
31	6.5	---	e46	e34	---	122	---	104	---	153	21	---
TOTAL	446.6	1212.6	2330	1589	6898	4173	5682	2814	3148	1176.4	3407	979.7
MEAN	14.4	40.4	75.2	51.3	238	135	189	90.8	105	37.9	110	32.7
MAX	83	271	242	101	2250	300	390	242	676	161	1340	302
MIN	4.7	6.2	28	34	30	64	94	33	27	8.7	16	9.2
CFSM	.23	.65	1.20	.82	3.81	2.15	3.03	1.45	1.68	.61	1.76	.52
IN.	.27	.72	1.39	.95	4.11	2.48	3.38	1.67	1.87	.70	2.03	.58

e Estimated

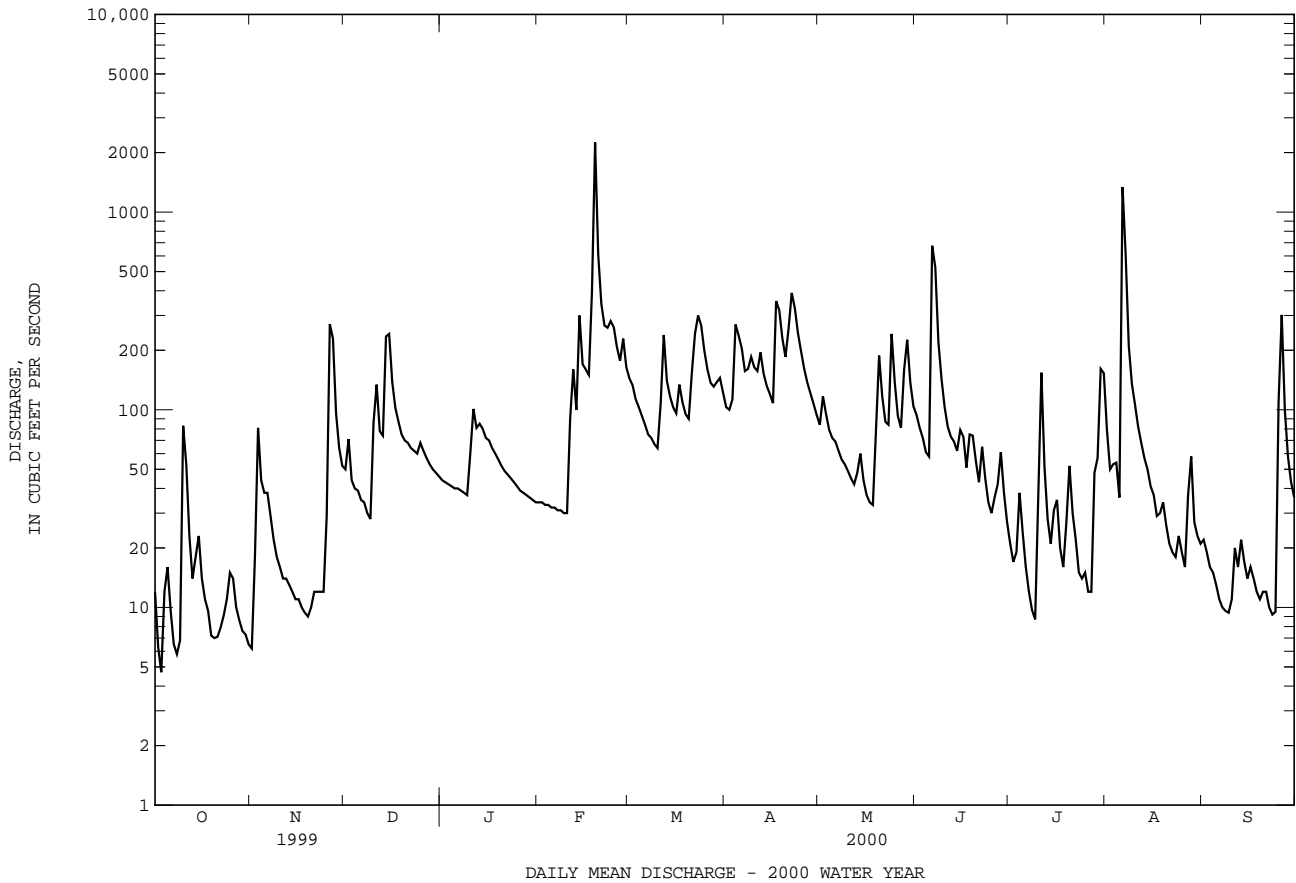
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	45.8	88.0	147	163	198	262	212	136	73.2	48.9	38.7	34.2
MAX	288	449	341	376	414	582	468	312	200	175	202	290
(WY)	1955	1986	1973	1996	1956	1963	1970	1996	1951	1996	1956	1996
MIN	1.65	3.38	13.8	26.4	60.3	57.0	77.1	40.1	10.0	4.30	2.87	1.58
(WY)	1954	1954	1999	1977	1964	1990	1968	1976	1965	1965	1991	1991

03078000 CASSELMAN RIVER AT GRANTSVILLE, MD--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	35750.1		33856.3		120	
ANNUAL MEAN	97.9		92.5		203	
HIGHEST ANNUAL MEAN					64.2	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	1210	Jan 24	2250	Feb 19	(e)3600	Jan 19 1996
LOWEST DAILY MEAN	1.6	(a)	4.7	Oct 3	(b).00	Aug 31 1962
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 18	8.4	Oct 17	.89	Aug 27 1962
INSTANTANEOUS PEAK FLOW			3740	Feb 19	(c)8400	Oct 15 1954
INSTANTANEOUS PEAK STAGE			6.75	Feb 19	10.70	Oct 15 1954
INSTANTANEOUS LOW FLOW			3.7	Oct 9	(b).00	(d)
ANNUAL RUNOFF (CFSM)	1.57		1.48		1.92	
ANNUAL RUNOFF (INCHES)	21.28		20.15		26.09	
10 PERCENT EXCEEDS	282		208		280	
50 PERCENT EXCEEDS	33		52		67	
90 PERCENT EXCEEDS	2.8		11		8.2	

- e Estimated
- a Aug. 23, 24, Sept. 3.
- b Result of regulation from unknown source.
- c From rating curve extended above 1,600 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height of 8.13 ft.
- d Aug. 31, Sept. 1, 1962.



As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of annual maximum stage for tidal crest-stage stations.

#### Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 2000

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
INDIAN RIVER BASIN						
01484530	Iron Branch at Millsboro, De.	Lat 38°34'40", long 75°17'19", Sussex County, Hydrologic Unit 02060010, at bridge on U.S. Highway 113, at Millsboro, 1.1 mi upstream from Whartons Branch, and 1.4 mi upstream from mouth.	8.0	1985-88, 1997-99, 2000	10-13-99	2.68
					11-23-99	3.72
					02-10-00	11.5
					03-02-00	6.94
					04-03-00	12.7
05-04-00	10.7					
01484531	Whartons Branch near Millsboro, De.	Lat 38°33'42", long 75°16'30", Sussex County, Hydrologic Unit 02060010, at bridge on U.S. Highway 113, 2.2 mi southeast of Millsboro, and 1.7 mi upstream from mouth.	5.8	1968-69, 1971, 1985-88, 1999, 2000	10-13-99	2.48
					11-23-99	2.24
					02-10-00	11.4
					03-02-00	5.73
					04-03-00	9.07
05-04-00	6.40					
01484550	Pepper Creek at Dagsboro, De.	Lat 38°32'50", long 75°14'40", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 26, at Dagsboro, and 3.5 mi upstream from mouth.	8.78	1955-71, 1985-88, 1997-99, 2000	10-13-99	2.57
					11-23-99	3.52
					02-10-00	12.2
					03-02-00	8.44
					04-03-00	14.3
05-04-00	9.24					
01484655	Love Creek at Robinsonville, De.	Lat 38°43'03", long 75°11'14", Sussex County, Hydrologic Unit 02060010, at bridge on road No. 277, 0.4 mi northeast of Robinsonville, and about 2.8 mi upstream from mouth.	11.1 (Revised)	1985-88, 1997-99, 2000	10-13-99	3.94
					11-23-99	4.66
					02-10-00	6.17
					03-02-00	6.48
					04-03-00	11.3
05-04-00	11.7					
01484677	Chapel Branch at Angola, De.	Lat 38°40'18", long 75°11'10", Sussex County, Hydrologic Unit 02060010, at bridge on State Highway 24, at Angola, and 0.3 mi upstream from mouth.	8.0	1985-88, 1997-99, 2000	10-13-99	1.64
					11-23-99	2.40
					02-10-00	3.35
					03-02-00	4.51
					04-03-00	10.9
05-04-00	10.0					
01484678	Unity Branch at Angola, De.	Lat 38°39'53", long 75°12'11", Sussex County, Hydrologic Unit 02060010, at bridge on road No. 302, 0.7 mi southeast of Angola, and 0.7 mi upstream from mouth.	4.2	1999, 2000	10-13-99	2.02
					11-23-99	2.67
					02-10-00	3.42
					03-02-00	3.89
					04-03-00	8.32
05-04-00	7.55					

Discharge measurements made at low-flow partial-record stations during water year 2000

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
ST. MARTIN RIVER BASIN						
01484710	Buntings Branch near Selbyville, De.	Lat 38°27'20", long 75°12'25", Sussex County, Hydrologic Unit 02060010, 50 ft upstream from bridge on State Highway 54, 0.8 mi east of Selbyville.	4.15	1999	02-23-99	5.17
01484714	Taylorville Creek near Berlin, Md.	Lat 38°21'09", long 75°11'40", Worcester County, Hydrologic Unit 02060010, upstream from culvert on Friendship Road, 0.6 mi northeast of Berlin, and 2.4 mi upstream from mouth.	0.94	1999	02-23-99	0.61
TRAPPE CREEK BASIN						
01484716	Bottle Branch at Berlin, Md.	Lat 38°19'01", long 75°12'59", Worcester County, Hydrologic Unit 02060010, 600 ft upstream from culvert on U.S. Highway 113, 0.5 mi south of Berlin and 1.3 mi upstream from Kitts Branch.	0.35	1999, 2000	01-27-99 02-08-00	1.46 1.12
NEWPORT CREEK BASIN						
01484717	Newport Creek near Berlin, Md.	Lat 38°18'08", long 75°12'41", Worcester County, Hydrologic Unit 02060010, 20 ft upstream from culvert on Harrison Road, 1.5 mi southeast of Berlin, and 3.4 mi upstream from mouth.	0.51	1999, 2000	01-13-99 02-09-00	0.05 0.23
01484718	Beaverdam Creek at Ironshire, Md.	Lat 38°16'57", long 75°13'23", Worcester County, Hydrologic Unit 02060010, 50 ft upstream from culvert on Beaverdam Creek Road, 0.2 mi east of Ironshire, and 0.8 mi upstream from mouth.	1.33	1999, 2000	01-13-99 02-09-00	0.83 1.40
BASSETT CREEK BASIN						
01484719	Bassett Creek near Ironshire, Md.	Lat 38°16'04", long 75°14'41", Worcester County, Hydrologic Unit 02060010, 100 ft upstream from bridge on U.S. Highway 113, 1.4 mi south of Ironshire, and 1.8 mi upstream from Catbird Creek.	1.22	1999, 2000	01-28-99 02-08-00	1.49 1.62
01484720	Porter Creek near Newark, Md.	Lat 38°15'32", long 75°15'32", Worcester County, Hydrologic Unit 02060010, 250 ft upstream from culvert on U.S. Highway 113, 2.0 mi northeast of Newark, and 2.0 mi upstream from mouth.	0.76	1999, 2000	01-28-99 02-09-00	0.85 0.50
MARSHALL CREEK BASIN						
01484721	Marshall Creek at Newark, Md.	Lat 38°14'19", long 75°16'59", Worcester County, Hydrologic Unit 02060010, 100 ft upstream from culvert on Langmaid Road, 1.0 mi southeast of Newark, and 1.4 mi upstream from Icehouse Branch.	1.30	1999, 2000	01-28-99 02-09-00	0.60 0.92
01484722	Massey Branch near Newark, Md.	Lat 38°15'41", long 75°16'21", Worcester County, Hydrologic Unit 02060010, 70 ft upstream from culvert on Newark Road, 1.3 mi northeast of Newark, and 2.1 mi upstream from mouth.	0.54	1999, 2000	01-27-99 02-09-00	0.55 0.62



## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record stations during water year 2000

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
WATERWORKS CREEK BASIN						
01484723	Waterworks Creek Tributary near Cedartown, Md.	Lat 38°13'06", long 75°17'40", Worcester County, Hydrologic Unit 02060010, 3 ft upstream from culvert on Basket Switch Road, 0.9 mi upstream from mouth, and 1.6 mi north of Cedartown.	0.09	1999, 2000	01-28-99	0.14
					02-09-00	0.16
SCARBORO CREEK BASIN						
01484725	Scarboro Creek at Spence, Md.	Lat 38°09'56", long 75°18'23", Worcester County, Hydrologic Unit 02060010, 2 ft upstream from culvert on Taylor Road, 0.3 mi north of Spence, and 2.0 mi upstream from mouth.	0.27	1999, 2000	02-11-99	0.10
					02-10-00	0.15
PAWPAW CREEK BASIN						
01484726	Pawpaw Creek at Spence, Md.	Lat 38°09'07", long 75°19'02", Worcester County, Hydrologic Unit 02060010, 100 ft upstream from culvert on Pawpaw Creek Road, 0.8 mi south of Spence, and 2.0 mi upstream from mouth.	1.48	1999, 2000	01-29-99	0.01
					02-09-00	1.62
TANHOUSE CREEK BASIN						
01484727	Tanhouse Creek near Boxiron, Md.	Lat 38°07'59", long 75°19'37", Worcester County, Hydrologic Unit 02060010, 10 ft upstream from culvert on Pawpaw Creek Road, 1.7 mi northeast of Boxiron, and 2.3 mi upstream from mouth.	0.45	1999, 2000	02-11-99	0.73
					02-10-00	0.28
BROCKATONORTON BAY BASIN						
01484728	Boxiron Creek at Boxiron, Md.	Lat 38°07'42", long 75°20'53", Worcester County, Hydrologic Unit 02060010, 50 ft upstream from culvert on Ayres Lane Road, 0.9 mi north of Boxiron, and 2.1 mi upstream from mouth.	0.41	1999, 2000	01-29-99	0.13
					02-10-00	0.37
01484729	Brockatonorton Bay Tributary at Boxiron, Md.	Lat 38°06'13", long 75°21'24", Worcester County, Hydrologic Unit 02060010, 40 ft upstream from culvert on Hudson Road, 0.9 mi south of Boxiron, and 1.0 mi upstream from mouth.	0.26	1999, 2000	02-11-99	0.09
					02-10-00	0.30
PIKES CREEK BASIN						
01484730	Pikes Creek near Stockton, Md.	Lat 38°04'24", long 75°24'12", Worcester County, Hydrologic Unit 02060010, 20 ft upstream from culvert on State Highway 12, 1.4 mi north of Stockton, and 3.0 mi upstream from mouth.	0.86	1999, 2000	02-10-99	0.44
					02-10-00	1.00
RILEY CREEK BASIN						
01484731	Riley Creek at Stockton, Md.	Lat 38°03'11", long 75°24'37", Worcester County, Hydrologic Unit 02060010, 10 ft downstream from culvert on State Highway 12, 0.1 mi south of Stockton, and 2.7 mi upstream from mouth.	0.12	1999, 2000	02-10-99	0.06
					02-11-00	0.15

Discharge measurements made at low-flow partial-record stations during water year 2000

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
SWANS GUT CREEK BASIN						
01484732	Little Mill Creek near Stockton, Md.	Lat 38°02'39", long 75°26'49", Worcester County, Hydrologic Unit 02060010, 40 ft upstream from culvert on Little Mill Road, 0.4 mi upstream from Marshall Mill Run, and 2.1 mi west of Stockton.	0.81	1999, 2000	02-10-99	0.43
					02-11-00	0.87
01484733	Marshall Ditch near Stockton, Md.	Lat 38°02'02", long 75°29'02", Worcester County, Hydrologic Unit 02060010, at upstream side of culvert on Sheephouse Road, 1.3 mi upstream from Little Mill Run, and 4.2 mi west of Stockton.	0.28	1999, 2000	02-10-99	0.46
					02-11-00	0.41
LITTLE MOSQUITO CREEK BASIN						
0148473510	Wattsville Branch Tributary No. 1 at Wattsville, Va.	Lat 37°55'50", long 75°30'03", Accomack County, Hydrologic Unit 02060010, 20 ft upstream from culvert on State Highway 679, 0.2 mi south of Wattsville, and 0.3 mi upstream from mouth.	0.34	1999, 2000	02-09-99	0.21
					03-02-00	0.24
0148474010	Snead Branch near Horntown, Va.	Lat 37°58'24", long 75°29'21", Accomack County, Hydrologic Unit 02060010, 50 ft upstream from culvert on State Highway 709, 1.5 mi west of Horntown, and 1.9 mi upstream from mouth.	0.77	1999, 2000	02-10-99	0.17
					03-02-00	0.38

## Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. 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 2000 maximum		Period of record maximum			
			Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	
POTOMAC RIVER BASIN								
North Branch Potomac River at Kitzmiller, Md. (01595500)	Lat 39°23'38", long 79°10'55", Garrett County, Hydrologic Unit 02070002, on left bank 0.6 mi downstream from bridge on State Highway 38 in Kitz- miller. Drainage area is 225 mi <sup>2</sup> .	1950-85 <sup>≠</sup> , 1986-99, 2000	02-19-00	9.93	14,300	10-15-54	a13.73	33,400
North Branch Potomac River at Barnum, W. Va. (01595800)	Lat 39°26'44", long 79°06'39", Garrett County, Hydrologic Unit 02070002, on right bank at highway bridge at Barnum. Drainage area is 266 mi <sup>2</sup> .	1967-85 <sup>≠</sup> , 1986-99, 2000	02-20-00	6.99	4,350	7-03-78	13.37	27,100
North Branch Potomac River at Pinto, Md. (01600000)	Lat 39°26'44", long 79°06'39", Mineral County, W. Va., Hydrologic Unit 02070002, on right bank at downstream side of Western Maryland railroad bridge at Pinto, 2.8 mi down- stream from Mill Run. Drain- age area is 596 mi <sup>2</sup> .	1939-85 <sup>≠</sup> , 1986-99, 2000	02-19-00	8.96	7,410	10-16-54	23.23	37,000

<sup>≠</sup> Operated as a continuous-record station.

<sup>a</sup> From floodmark

## Tidal crest-stage partial-record stations

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above National Geodetic Vertical Datum of 1929. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum stage at tidal crest-stage partial-record stations during water year 2000

Station No.	Station Name	Location	Period of Record	Annual Maximum	
				Date	Elevation, in feet NGVD
DELAWARE RIVER BASIN					
01480065	Christina River at Newport, De.	Lat 39°42'38", long 75°36'33", New Castle County, Hydrologic Unit 02040205, on downstream side of bridge on James Street, at Newport and 7.5 mi upstream from the confluence with Delaware River.	1995-99, 2000	11- 2-99	5.83
01481602	Delaware River below Christina River, at Wilmington, De.	Lat 39°43'00", long 75°31'03", New Castle County, Hydrologic Unit 02040205, on right bank, 1,000 ft from mouth of Christina River at the Wilmington Marine Terminal, 2.0 mi upstream of Delaware Memorial Bridge, and at river mi 69.70.	1983-91, 1995-99, 2000	11- 2-99	5.92
MURDERKILL RIVER BASIN					
01484085	Murderkill River at Bowers, De.	Lat 39°03'30", long 75°23'51", Kent County, Hydrologic Unit 02040207, at Faulkner's Landing in Bowers, on left bank 10 ft southeast of south- west corner of Faulkner's Pier nr near public boat ramp.	1966-86, 1997-99, 2000	3-21-00	5.94
ASSAWOMAM BAY BASIN					
01484696	Jefferson Creek at South Bethany, De.	Lat 38°31'18", long 75°03'46", Sussex County, Hydrologic Unit 02060010, near mouth of canal off Jefferson Creek, at bulkhead at the end of West 1st Street at South Bethany.	2000	9-27-00	2.23
01484701	Little Assawoman Bay at Fenwick Island, De.	Lat 38°27'18", long 75°03'31", Sussex County, Hydrologic Unit 02060010, at bulkhead at end of Madison Ave at Fenwick Island.	2000	9-26-00	UNKNOWN

Water-quality partial-record stations are particular sites where chemical-quality, biological, and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly. Samples collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin are referred to as miscellaneous sites.

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

## DELAWARE RIVER BASIN

393404075391701 DRAGON CREEK NEAR DELAWARE CITY, DE

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
MAY 10...	0900	265	6.2	32.0	21.5	761	5.6	64	72	16.2	7.64	16.7
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRO- GEN, DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, NITRO- GEN, DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRO- GEN, DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
MAY 10...	2.5	35	43	14.8	39.2	<.1	12.5	163	2.3	1.61	.039	1.65
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
MAY 10...	.130	.62	.42	2.1	.49	.29	.045	E.005	<.010	80	1020	<.003
DATE	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD DISS, GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 10...	<.002	<.002	<.002	.065	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.14
DATE	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT DISS PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
MAY 10...	84	.007	<.001	<.017	<.002	<.004	<.003	<.003	78	<.004	<.002	<.005
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
MAY 10...	<.001	<.006	.017	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002
DATE	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 10...	E.005	<.003	<.007	<.004	<.013	E.005	<.010	<.007	<.013	<.002	<.001	<.002

E Estimated value.

&lt; Actual value is known to be less than the value shown.

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

DELAWARE RIVER BASIN--Continued

394445075371301 LITTLE MILL CREEK TRIBUTARY NEAR WILMINGTON, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
MAY 12...	0900	.47	6.2	24.0	18.0	762	9.3	93	22.1	9.22	14.6	2.5	
DATE	ALKA-LINITY WAT TOT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS MG/L AS (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE, WAT FLT REC (UG/L) (82660)	ACETO-CHLOR, WATER REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, SOLVED (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
MAY 12...	58	71	16.4	38.5	<.1	20.0	192	1.9	<.010	1.62	<.020	.26	
DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE, WAT FLT REC (UG/L) (82660)	ACETO-CHLOR, WATER REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, SOLVED (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	
MAY 12...	.21	1.8	.014	.012	<.010	30	29	<.003	.006	E.004	<.002	.043	
DATE	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-INON, ZINE, WAT FLT REC (UG/L) (04040)	DIAZ-INON D10 SRG, WAT FLT REC (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)		
MAY 12...	.005	<.002	E.009	<.003	<.004	<.007	<.002	E.063	92	2.20	.016		
DATE	DISUL-FOTON WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-BARYL ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FONO-FOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG, WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE, WAT FLT DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-THION, WAT FLT REC (UG/L) (39532)	METHYL AZIN-THION, WAT FLT REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)		
MAY 12...	<.017	<.002	<.004	<.003	<.003	82	<.004	<.002	<.005	<.010	<.006		
DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)		
MAY 12...	.033	<.004	<.004	<.003	E.002	<.004	<.004	.029	<.005	<.002	.043		
DATE	PRON-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER, FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER, FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)		
MAY 12...	<.003	<.007	<.004	<.013	.011	<.010	<.007	<.200	<.002	<.001	.005		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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

LEIPSIC RIVER BASIN

391200075313801 MUDDY BRANCH NEAR DOVER, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)
MAR 27...	1100	1.9	157	6.2	18.5	13.5	754	7.7	75	38	8.79	3.79	
DATE		SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) (39086)	BICAR-BONATE DIS IT FIELD (MG/L) (00453)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L) (00600)	NITRITE, DIS-SOLVED (MG/L) (00613)	NITRO-GEN, DIS-SOLVED (MG/L) (00631)
MAR 27...	12.2	2.2	22	27	10.4	23.5	<.1	4.4	103	1.0	<.010	.329	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	NITRO-GEN DIS-SOLVED (MG/L) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
MAR 27...	<.020	.69	.57	.90	.063	.021	<.010	460	84	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) (PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
MAR 27...	<.002	.005	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.006	103	<.002	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) (91065)	LINDANE (UG/L) (39341)	LIN-URON WATER FLTRD (GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)
MAR 27...	<.001	<.017	<.002	<.004	<.003	<.003	85	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISS (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAR 27...	.034	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	.108	
DATE		PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER FLTRD (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAR 27...	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

LEIPSIC RIVER BASIN--Continued

391354075344301 ALSTON BRANCH NEAR CHESWOLD, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
APR 03...	1000	1.7	276	7.1	17.5	13.0	768	9.9	93	71	19.8	5.23	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
APR 03...	18.1	2.1	33	40	25.4	34.8	.2	15.8	161	2.0	<.010	1.67	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)
APR 03...	<.020	.38	.22	1.9	.102	.040	.038	350	77	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
APR 03...	<.002	.032	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.060	114	<.002	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91065)	LINDANE FLTRD (UG/L) (39341)	LIN-URON WATER, FLTRD (GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL-PARA-THION WAT FLT (GF, REC) (UG/L) (82667)
APR 03...	E.003	<.017	<.002	<.004	<.003	<.003	97	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
APR 03...	.036	<.004	<.004	<.003	E.002	<.004	<.004	<.004	<.004	<.005	<.002	E.014	
DATE		PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER, FLTRD (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
APR 03...	<.003	<.007	<.004	<.013	.006	E.040	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

LITTLE RIVER BASIN

390915075292101 MORGAN BRANCH NEAR DOVER, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
APR 03...	1330	.91	167	7.0	22.5	15.0	768	10.9	107	51	11.0	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
APR 03...	5.73	8.8	2.6	22	27	22.1	17.2	<.1	10.9	102	1.8	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
APR 03...	1.37	.010	1.38	.030	.46	.28	1.7	.43	.25	.049	.016	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR 03...	.011	290	52	<.003	<.002	.030	<.002	.055	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
APR 03...	<.003	<.004	<.004	<.002	E.007	91	.005	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE DISSOLV (PERCENT) (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
APR 03...	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	.025	<.003	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U DDE DISSOLV (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U DISS, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
APR 03...	<.007	<.004	<.013	E.004	<.010	<.007	<.013	<.002	<.001	<.002		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U DDE DISSOLV (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

MISPILLION RIVER BASIN

385451075260201 MULLET RUN AT MILFORD, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
JUN 01...	0800	.89	160	5.5	25.0	15.0	773	9.7	95	48	10.1	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
JUN 01...	5.58	8.2	2.4	21	25	12.0	15.1	.2	12.9	112	3.2	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
JUN 01...	2.81	.017	2.82	.053	.38	.19	3.0	.32	.14	.033	.009	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
JUN 01...	<.010	100	93	<.003	<.002	<.002	<.002	.021	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
JUN 01...	<.003	.007	<.004	<.002	E.016	107	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER FLTRD 0.7 U DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER (UG/L) (82630)	
JUN 01...	<.003	<.003	103	<.004	<.002	<.005	<.001	<.006	.013	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
JUN 01...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.124	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
JUN 01...	<.007	<.004	<.013	.021	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

DIRICKSON CREEK BASIN

382955075065301 WILLIAMS CANAL DITCH NEAR BETHANY BEACH, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
APR 05...	1030	1.4	291	6.9	8.0	9.5	768	10.6	92	71	18.4	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
APR 05...	6.01	12.9	9.8	14	17	42.0	24.8	<.1	6.6	159	7.1	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
APR 05...	6.52	.016	6.54	.093	.54	.73	7.3	.44	.63	.022	.007	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR 05...	<.010	220	77	<.003	<.002	.045	<.002	.015	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
APR 05...	<.003	<.004	<.004	<.002	E.010	115	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
APR 05...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.001	<.006	.073	<.004	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82684)	P,P' DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
APR 05...	<.007	<.004	<.013	E.004	<.010	<.007	<.013	<.002	<.001	<.002	<.002	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

ST MARTIN RIVER BASIN

0148471220 BIRCH BRANCH AT SHOWELL, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
MAR										
22...	1130	ENVIRONMENTAL	245	--	--	3.7	1.83	.021	1.85	.543
22...	1131	REPLICATE	--	--	--	3.8	1.80	.021	1.82	.544
APR										
20...	1059	BLANK	--	--	--	--	--	<.010	<.050	<.020
20...	1100	ENVIRONMENTAL	19	18.5	12.0	4.9	3.62	.014	3.64	.249
MAY										
10...	0850	ENVIRONMENTAL	2.6	25.0	21.5	2.1	.964	.020	.984	.185
10...	0851	REPLICATE	2.6	25.0	21.5	2.0	.990	.021	1.01	.192
30...	0930	ENVIRONMENTAL	2.1	--	13.5	2.5	1.44	.048	1.49	.263
JUN										
14...	0815	ENVIRONMENTAL	1.3	21.0	19.0	1.8	.787	.016	.803	.218
28...	0830	ENVIRONMENTAL	1.6	27.0	23.0	1.7	.814	.019	.833	.163
JUL										
12...	0815	ENVIRONMENTAL	2.1	21.0	20.0	2.0	1.12	.017	1.14	.135
27...	0815	ENVIRONMENTAL	10	25.5	21.5	3.5	2.19	.024	2.22	.110
27...	0816	REPLICATE	--	--	--	3.5	2.20	.024	2.22	.107
AUG										
09...	0830	ENVIRONMENTAL	4.1	30.0	23.5	2.9	1.77	.014	1.78	.091
14...	0850	ENVIRONMENTAL	13	21.0	20.5	2.9	1.33	.031	1.36	.256
SEP										
06...	0830	ENVIRONMENTAL	6.7	20.0	18.0	2.8	1.52	.026	1.54	.165
20...	0815	ENVIRONMENTAL	2.1	23.0	17.5	1.6	1.01	.010	1.02	.106

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR											
22...	1.8	1.6	3.4	1.3	1.0	.526	.317	.251	62	41	85
22...	2.0	1.6	3.4	1.4	1.1	.544	.304	.248	62	--	74
APR											
20...	<.10	<.10	--	--	--	<.008	<.006	<.010	--	--	--
20...	1.3	1.1	4.7	1.0	.86	.106	.056	.045	9	.46	78
MAY											
10...	1.1	.79	1.8	.94	.60	.095	.024	.015	11	.08	--
10...	1.0	.79	1.8	.83	.60	.092	.034	.012	--	--	--
30...	1.0	.92	2.4	.74	.65	.103	.040	.026	6	.03	--
JUN											
14...	.98	.78	1.6	.76	.56	.133	.043	.028	10	.03	--
28...	.84	.72	1.6	.68	.56	.139	.040	.037	10	.04	--
JUL											
12...	.85	.77	1.9	.72	.63	.087	.032	.023	4	.02	--
27...	1.3	1.2	3.4	1.2	1.0	.107	.044	.029	9	.24	86
27...	1.3	1.1	3.4	1.2	1.0	.104	.046	.030	8	--	90
AUG											
09...	1.1	.98	2.8	1.0	.89	.101	.051	.032	7	.07	--
14...	1.5	1.4	2.8	1.3	1.2	.225	.112	.103	--	--	--
SEP											
06...	1.2	1.1	2.7	1.1	.95	.114	.051	.034	10	.18	--
20...	.62	.55	1.6	.52	.44	.071	.017	<.010	3	.02	--

< Actual value is known to be less than the value shown.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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

## TRAPPE CREEK BASIN

01484716 BOTTLE BRANCH AT BERLIN, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 08...	1230	1.1	221	7.0	4.0	8.0	775	12.0	100	80	19.7	7.47	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L AS N) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 08...	9.8	2.6	46	57	29.2	13.2	<.1	11.6	133	2.1	<.010	1.57	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 08...		.049	.51	.32	1.9	.46	.28	.077	.024	.022	40	46	

## NEWPORT CREEK BASIN

01484717 NEWPORT CREEK NEAR BERLIN, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	0905	.23	230	5.8	-1.0	.3	768	11.0	75	59	9.87	8.39	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L AS N) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	13.7	2.1	12	15	33.2	31.9	<.1	11.5	131	1.6	<.010	1.02	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...		.023	.57	.26	1.3	.55	.23	.074	.006	<.010	260	47	

&lt; Actual value is known to be less than the value shown.

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

NEWPORT CREEK BASIN--Continued

01484718 BEAVERDAM CREEK AT IRONSHIRE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	1000	1.4	169	5.8	9.0	6.3	768	9.9	79	37	8.01	4.24	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	13.3	1.8	18	22	10.6	19.4	<.1	19.6	108	5.2	<.010	4.67	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...		.022	.54	.15	4.8	.52	.13	.049	.011	.014	30	13	

BASSETT CREEK BASIN

01484719 BASSETT CREEK NEAR IRONSHIRE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 08...	1430	1.6	143	6.0	4.5	3.9	775	10.6	79	39	6.50	5.55	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 08...	8.5	2.3	1	1	22.6	18.5	<.1	10.7	105	1.7	<.010	1.18	
FEB 08...		.030	.53	.46	1.6	.50	.43	.031	.013	.017	370	46	

< Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

BASSETT CREEK BASIN--Continued

01484720 PORTER CREEK NEAR NEWARK, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L CAS) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	1000	.50	164	6.4	11.0	10.2	768	11.2	99	55	9.88	7.31	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS N) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	9.8	2.3	9	11	32.3	16.4	<.1	15.8	122	3.1	<.010	2.62	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...		.035	.44	.32	2.9	.41	.29	.052	.039	.035	120	47	

MARSHALL CREEK BASIN

01484721 MARSHALL CREEK AT NEWARK, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L CAS) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	1245	.92	105	5.5	13.5	3.7	768	10.4	78	21	4.02	2.65	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS N) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	8.4	1.6	0.1	0.12	16.5	12.9	<.1	16.5	89	.71	<.010	.281	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...		.029	.43	.34	.62	.40	.31	.014	.020	<.010	300	19	

< Actual value is known to be less than the value shown.

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

MARSHALL CREEK BASIN--Continued

01484722 MASSEY BRANCH NEAR NEWARK, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	1300	.62	131	6.3	14.5	10.2	768	10.5	93	32	5.95	4.14	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L AS N) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	11.3	1.7	8	10	16.6	18.9	<.1	16.0	104	.84	<.010	.398	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORG-ANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORG-ANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORG-ANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORG-ANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...		.022	.45	.34	.74	.42	.32	.029	.014	.012	350	26	

WATERWORKS CREEK BASIN

01484723 WATERWORKS CREEK TRIBUTARY NEAR CEDARTOWN, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	1415	.16	119	4.7	13.5	9.1	768	9.2	80	24	4.35	3.20	
DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L AS N) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	7.7	1.8	0.1	0.12	15.0	16.0	<.1	12.9	117	1.2	<.010	.213	
DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORG-ANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORG-ANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORG-ANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORG-ANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...		.253	1.0	.90	1.1	.78	.65	.056	.027	.017	650	33	

< Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

SCARBORO CREEK BASIN

01484725 SCARBORO CREEK AT SPENCE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
FEB 10...	0915	.15	120	6.0	9.5	1.1	762	12.6	89	24	4.02	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS K) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT TOT IT (MG/L AS) (39086)	BICAR-BONATE DIS IT (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L AS) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
FEB 10...	3.32	8.8	1.7	2	2	16.8	14.9	<.1	10.7	88	1.3	
DATE		NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB 10...	<.010	.427	<.020	.85	.30	.73	.111	.018	.013	490	38	

PAW PAW CREEK BASIN

01484726 PAWPAW CREEK AT SPENCE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 09...	1515	1.6	121	5.7	11.5	9.5	768	11.8	102	29	5.82	3.47	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT TOT IT (MG/L AS) (39086)	BICAR-BONATE DIS IT (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L AS) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
FEB 09...	8.0	2.2	2	3	14.4	17.2	<.1	8.7	88	1.7	<.010	1.17	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 09...	.020	.53	.44	1.6	.51	.41	.019	.011	<.010	150	26		

< Actual value is known to be less than the value shown.

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

TANHOUSE CREEK BASIN

01484727 TANHOUSE CREEK NEAR BOXIRON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
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FEB 10...	1045	.28	107	4.5	14.0	4.9	762	7.6	59	12
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DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
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FEB 10...	1.95	1.83	8.6	1.0	10.9	16.5	<.1	11.8	86	<.010
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DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
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FEB 10...	<.050	<.020	.73	.37	.045	E.003	<.010	380	17
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BROCKATONORTON BAY BASIN

01484728 BOXIRON CREEK AT BOXIRON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L AS) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
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FEB 10...	1000	.37	119	5.9	14.5	6.1	762	10.5	85	24	4.82	2.88
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DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS-TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
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FEB 10...	9.4	2.6	6	7	14.5	18.1	<.1	9.4	82	.75	<.010	.364
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DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
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FEB 10...	.028	.39	.25	.61	.36	.22	.036	.013	<.010	260	27
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E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

BROCKATONORTON BAY BASIN--Continued

01484729 BROCKATONORTON BAY TRIBUTARY AT BOXIRON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
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FEB 10...	1215	.30	139	5.9	14.0	10.0	762	10.3	91	37	6.84	4.80
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DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L AS N) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
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FEB 10...	8.4	2.2	8	10	19.4	16.4	<.1	11.1	103	1.8	<.010	1.34
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DATE	TIME	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
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FEB 10...		.029	.49	.38	1.7	.46	.35	.044	.023	.016	330	33
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PIKES CREEK BASIN

01484730 PIKES CREEK NEAR STOCKTON, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
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FEB 10...	1530	ENVIRONMENTAL	1.0	126	6.3	11.5	9.9	762	12.2	108	34
10...	1535	REPLICATE	1.0	126	6.3	11.5	9.9	--	12.2	--	34

DATE	TIME	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L AS N) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
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FEB 10...	7.34	3.80	7.8	1.9	4	6	20.1	13.3	<.1	11.5	99	1.2
10...	7.30	3.79	7.7	2.0	--	--	20.0	13.6	<.1	11.4	99	1.2

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
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FEB 10...		<.010	.800	<.020	.42	.31	1.1	.033	.020	.011	280	33
10...		<.010	.777	<.020	.44	.32	1.1	.033	.014	.010	360	33

< Actual value is known to be less than the value shown.

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

RILEY CREEK BASIN

01484731 RILEY CREEK AT STOCKTON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)
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FEB 11... 0915 .15 282 7.0 10.5 7.3 10.6 97 23.3 9.46 16.0 4.1

DATE	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L) HCO3 (00453)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00600)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00618)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)
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FEB 11... 30 37 46.8 29.7 <.1 7.0 199 4.6 4.08 .016 4.09

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN DIS-SOLVED (MG/L) AS N (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L) AS N (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
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FEB 11... .093 .52 .48 4.6 .43 .38 .092 .056 .044 120 73

SWANS GUT CREEK BASIN

01484732 LITTLE MILL CREEK NEAR STOCKTON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)
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FEB 11... 1415 .87 195 6.4 13.0 8.8 9.6 61 11.2 8.13 9.8

DATE	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L) HCO3 (00453)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00600)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00613)
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FEB 11... 2.1 10 12 31.0 17.5 <.1 13.3 139 4.6 <.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00602)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
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FEB 11... 4.21 <.020 .41 .35 4.6 .042 .022 .012 170 25

< Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

SWANS GUT CREEK BASIN--Continued

01484733 MARSHALL DITCH NEAR STOCKTON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)
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FEB 11...	1215	.41	211	6.2	12.0	10.2	11.5	66	15.4	6.70	8.2	4.3
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DATE	ALKA-LINITY WAT TOT IT FIELD (MG/L) CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L) HCO3 (00453)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRATE (MG/L) AS N (00600)	NITRO-GEN, NITRITE (MG/L) AS N (00618)	NITRO-GEN, NITRITE (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)
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FEB 11...	7	9	43.0	17.9	<.1	11.9	147	3.9	3.23	.013	3.24
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DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN DIS-SOLVED (MG/L) AS N (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L) AS N (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
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FEB 11...	.091	.62	.54	3.8	.53	.44	.035	.008	<.010	330	60
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POCOMOKE RIVER BASIN

0148498080 UNNAMED DITCH TO NORTH FORK GREEN RUN NEAR WHITESVILLE, DE

DATE	TIME	SAMPLE TYPE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)
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MAR 13...	1145	BLANK	--	--	--	--	--	--	--	--
MAR 13...	1200	ENVIRONMENTAL	227	5.4	--	10.2	4.4	--	--	--
JUN 26...	0930	ENVIRONMENTAL	--	6.0	31.0	27.0	--	43	8.38	5.47

DATE	SODIUM, DIS-SOLVED (MG/L) AS K (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) AS NA (00935)	ALKA-LINITY WAT TOT IT FIELD (MG/L) AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L) AS HCO3 (00453)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRATE (MG/L) AS N (00600)	NITRO-GEN, NITRITE (MG/L) AS N (00618)	NITRO-GEN, NITRITE (MG/L) AS N (00613)
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MAR 13...	--	--	--	--	--	--	--	--	--	--	--	<.010
MAR 13...	--	--	--	--	--	--	--	--	11	9.46	--	.029
JUN 26...	10.5	2.7	26	31	17.1	85.8	<.1	3.7	146	--	--	<.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN DIS-SOLVED (MG/L) AS N (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L) AS N (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
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MAR 13...	<.050	.279	E.10	.41	--	--	.14	.065	.380	.367	--	--
MAR 13...	9.49	.103	1.3	1.4	11	1.2	1.3	.026	.023	<.010	--	--
JUN 26...	<.050	.206	3.2	1.7	--	3.0	1.5	.493	.111	.032	270	95

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

POCOMOKE RIVER BASIN--Continued

01484981 NORTH FORK GREEN RUN NEAR WHITESVILLE, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAR 14...	1000	--	139	6.5	--	11.9	--	8.0	--	--	--	
JUN 02...	0900	1.6	135	6.1	38.0	21.0	761	8.3	93	33	8.64	
JUN 26...	1300	--	--	6.0	--	24.5	--	--	--	30	7.86	
DATE	TIME	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	3.9
JUN 02...	2.76	9.9	3.1	21	25	9.8	12.6	<.1	21.5	111	3.2	
JUN 26...	2.41	9.9	3.1	20	25	8.1	15.5	<.1	21.4	105	2.6	
DATE	TIME	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAR 14...	3.49	.011	3.50	.038	.42	.37	3.9	.38	.33	.063	.009	
JUN 02...	2.54	.017	2.55	.091	.64	.47	3.0	.55	.37	.129	.019	
JUN 26...	1.72	.011	1.73	.087	.90	.42	2.2	.81	.34	.273	.017	
DATE	TIME	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
MAR 14...	<.010	--	--	--	--	--	--	--	--	--	--	--
JUN 02...	.012	210	82	<.003	.006	.010	<.002	.242	<.002	<.002	<.003	
JUN 26...	<.010	120	63	--	--	--	--	--	--	--	--	
DATE	TIME	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 02...	E.009	<.004	<.004	<.002	E.027	111	<.002	<.001	<.017	<.002	<.004	
JUN 26...	--	--	--	--	--	--	--	--	--	--	--	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POCOMOKE RIVER BASIN--Continued

01484981 NORTH FORK GREEN RUN NEAR WHITESVILLE, DE--Continued

DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 02...	<.003	<.003	89	<.004	<.002	<.005	<.001	<.006	.183	.023
26...	--	--	--	--	--	--	--	--	--	--
DATE	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS- SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 02...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003
26...	--	--	--	--	--	--	--	--	--	--
DATE	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 02...	<.007	<.004	<.013	.052	.019	<.007	<.013	<.002	<.001	<.002
26...	--	--	--	--	--	--	--	--	--	--

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

POCOMOKE RIVER BASIN--Continued

01484983 SOUTH FORK GREEN RUN NEAR WHITESVILLE, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 31...	1045	1.2	92	6.7	24.0	24.0	775	9.5	111	31	7.54	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 31...	2.89	9.0	4.0	18	22	10.0	12.5	<.1	11.9	105	2.5	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 31...	1.38	.034	1.42	.088	1.1	.79	2.2	1.0	.70	.198	.079	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 31...	.060	570	31	E.001	.047	.011	<.002	.357	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 31...	<.003	<.004	<.004	<.002	E.024	101	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 31...	<.003	<.003	101	<.004	<.002	<.005	<.001	<.006	.132	<.004		

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POCOMOKE RIVER BASIN--Continued

01484983 SOUTH FORK GREEN RUN NEAR WHITESVILLE, DE--Continued

DATE	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS- SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
MAY 31...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.031	<.003
DATE	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 31...	<.007	<.004	<.013	.028	<.010	<.007	<.013	<.002	<.001	<.002

01484985 GREEN RUN NEAR CAREYTOWN, MD

DATE	TIME	SAMPLE TYPE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAR 14...	1345	BLANK	--	--	--	--	--	--	--	--	--	
MAR 14...	1400	ENVIRONMENTAL	138	6.2	--	16.8	--	9.6	--	--	--	
JUN 27...	1100	BLANK	--	--	--	--	--	--	--	--	--	
JUN 27...	1530	ENVIRONMENTAL	139	5.9	30.0	28.5	768	7.0	90	27	7.13	
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS NA) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	
MAR 14...	--	--	--	--	--	--	--	--	--	--	<.010	
MAR 14...	--	--	--	--	--	--	--	--	--	2.7	<.010	
JUN 27...	--	--	--	--	--	--	--	--	--	--	--	
JUN 27...	2.24	9.5	1.9	23	28	5.2	27.0	<.1	18.4	97	<.010	
DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
MAR 14...	<.050	<.020	<.10	<.10	--	--	--	<.008	.006	<.010	--	--
MAR 14...	2.19	.028	.48	.43	2.6	.45	.40	.047	.012	<.010	--	--
JUN 27...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 27...	.122	.024	.51	.39	.51	.48	.36	.066	.007	<.010	160	53

E Estimated value.

< Actual value is known to be less than the value shown.

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

POCOMOKE RIVER BASIN--Continued

382945075232401 GUM BRANCH NEAR MILLSBORO, DE

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT- SATUR- ATION) (00301)	HARD- NESS TOTAL AS (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED AS (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED AS (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JUN 27...	1130	87	6.5	32.0	22.0	771	1.9	21	16	3.47	1.84	7.1
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS K) (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS K) (00453)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L AS N) (70300)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
JUN 27...		2.6	14	17	6.1	9.1	<.1	17.9	71	.96	<.010	.251
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS DIS- SOLVED TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JUN 27...		.180	.71	.49	.74	.53	.31	.086	.011	.010	340	35

< Actual value is known to be less than the value shown.

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

POCOMOKE RIVER BASIN--Continued

383748075114401 POCOMOKE RIVER NEAR MILLSBORO, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAY 31...	1100	.41	52	5.8	22.5	17.0	775	7.2	73	7	1.68	.75	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L AS N) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
MAY 31...	5.9	1.1	4	5	5.7	7.5	<.1	16.6	54	.47	<.010	.090	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS DIS-SOLVED (MG/L AS FE) (01046)	IRON, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
MAY 31...	.028	.38	.21	.30	.35	.19	.059	.015	.011	340	12	<.003	
DATE		ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 31...	E.004	<.002	<.002	.009	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.005	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
MAY 31...	91	<.002	<.001	<.017	<.002	<.004	<.003	<.003	87	<.004	<.002	<.005	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

POCOMOKE RIVER BASIN--Continued

383748075114401 POCOMOKE RIVER NEAR MILLSBORO, DE--Continued

DATE	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER 0.7 U GF, REC (UG/L) (82664)
MAY 31...	<.001	<.006	.012	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002
DATE	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER, FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER, FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 31...	<.018	<.003	<.007	<.004	<.013	.006	<.010	<.007	<.013	<.002	<.001	<.002
DATE	MOL-INATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82676)		
MAY 11...	<.004	<.025	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.003	<.003	
DATE	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER, FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER, FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)		
MAY 11...	<.007	<.004	<.013	.022	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POCOMOKE RIVER BASIN--Continued

380430075331101 TOWN BRANCH NEAR POCOMOKE CITY, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
APR 05...	1130	1.4	246	5.7	9.0	11.5	760	9.5	87	61	16.4	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
APR 05...	4.91	18.5	3.2	26	32	24.6	34.0	<.1	10.5	149	1.5	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
APR 05...	.876	.012	.888	.131	.63	.59	1.5	.50	.46	.056	.028	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR 05...	.025	690	76	<.003	<.002	<.002	<.002	.004	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS WATER, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG 0.7 U GF, REC (PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
APR 05...	<.003	<.004	.018	<.002	E.006	95	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
APR 05...	<.004	<.007	<.006	<.004	<.004	<.004	<.004	<.005	<.002	.034	<.003	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WATER FLTRD 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
APR 05...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	<.002	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

## POCOMOKE RIVER BASIN--Continued

380459075304601 PILCHARD CREEK NEAR POCOMOKE CITY, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARDS) (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
APR 05...	1500	4.7	179	5.5	9.0	13.0	760	10.0	95	50	12.1	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
APR 05...	4.66	8.2	4.2	11	13	29.1	15.5	.4	13.4	114	3.2	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
APR 05...	2.52	.011	2.53	.197	.71	.64	3.2	.52	.44	.069	.018	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
APR 05...	.019	520	65	<.003	<.002	.006	<.002	.007	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
APR 05...	<.013	<.004	<.004	<.002	E.013	124	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER FLTRD 0.7 U DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
APR 05...	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.006	<.003	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82684)	P,P' DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U DISS, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
APR 05...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	<.002	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	

E Estimated value.

&lt; Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POCOMOKE RIVER BASIN--Continued

382854075203001 POCOMOKE RIVER NEAR GUMBORO, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
JUN 02...	1030	8.7	99	5.9	34.0	21.5	771	6.2	69	20	5.08	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
JUN 02...	1.82	8.4	2.0	9	11	9.9	10.9	<.1	23.7	94	1.7	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
JUN 02...	.897	.018	.915	.110	.80	.41	1.3	.69	.30	.285	.014	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
JUN 02...	.012	620	63	<.003	.074	.015	<.002	.123	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
JUN 02...	<.003	<.004	.017	<.002	E.012	106	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
JUN 02...	<.003	<.003	104	<.004	<.002	<.005	<.001	<.006	.024	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
JUN 02...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
JUN 02...	<.007	<.004	<.013	.017	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

MANOKIN RIVER BASIN

381152075392801 LONG BROUGHTON BRANCH NEAR PRINCESS ANNE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 06...	0930	1.1	110	5.3	22.0	8.5	760	8.6	74	27	5.76	3.05	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE WAT FLT (MG/L AS N) (00631)
APR 06...	7.5	3.1	5	6	20.4	11.1	<.1	11.7	136	1.7	<.010	.639	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (UG/L) (82660)
APR 06...	.189	1.1	.98	1.6	.86	.79	.180	.117	.093	1730	42	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 06...	<.002	<.002	<.002	.007	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.004	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	HCH ALPHA FONOFOS D6 SRG WAT FLT DISS REC (UG/L) (91065)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (39341)	LINDANE, DIS-SOLVED (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	
APR 06...	97	<.002	<.001	<.017	<.002	<.004	<.003	<.003	100	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (82684)	P,P' DDE WAT FLT 0.7 U DISS REC (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)
APR 06...	<.001	<.006	.009	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WAT FLT 0.7 U GF, REC (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (82661)
APR 06...	E.006	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

WICOMICO RIVER BASIN

381655075404901 BARKLEY BRANCH NEAR FRUITLAND, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARDS) (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT) (00300)	OXYGEN, SATUR-ATION (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
APR 06...	1330	.82	85	6.5	22.0	14.5	760	8.4	83	19	4.71	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	ANC WATER UNFLTRD IT (MG/L AS CAC03) (00419)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	ANC BICAR-BONATE IT (MG/L AS HCO3) (00450)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
APR 06...	1.85	7.9	1.4	16	16	19	19	12.0	8.5	.6	19.6	
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
APR 06...	76	.57	<.010	.187	.065	.38	.45	.64	.31	.39	.045	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER, FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)
APR 06...	.014	.016	680	46	<.003	<.002	<.002	<.002	<.008	<.002	<.002	
DATE		CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG DI- AZINON, 0.7 U SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)		
APR 06...	<.003	<.003	<.004	<.004	<.002	E.004	92	<.002	<.001	<.017	<.002	
DATE		ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FONOFOS DIS-SOLVED (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U REC (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, WATER, DISS, SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	
APR 06...	<.004	<.003	<.003	93	<.004	<.002	<.005	<.001	<.006	.030	<.004	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, WAT FLT 0.7 U SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
APR 06...	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.006	<.003	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
APR 06...	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

TRANSQUAKING RIVER BASIN

383218075523801 CHICAMACOMICO RIVER TRIBUTARY NEAR CAMBRIDGE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 06...	1215	1.3	31	6.4	24.0	15.5	765	8.3	83	13	2.60	1.51	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE WAT FLT (MG/L) (82660)
APR 06...	4.0	1.4	4	4	8.4	6.2	<.1	14.6	63	.88	<.010	.568	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (UG/L) (82660)	
APR 06...	.047	.32	.19	.76	.27	.14	.026	.007	<.010	560	40	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 06...	<.002	<.002	<.002	.007	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.006	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT DISS PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 06...	98	<.002	<.001	<.017	<.002	<.004	<.003	<.003	96	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (82684)	P,P' DDE WATER FLTRD 0.7 U DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)
APR 06...	<.001	<.006	.124	<.004	<.004	<.003	E.002	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WAT FLT 0.7 U GF, REC (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (82661)
APR 06...	<.018	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

NANTICOKE RIVER BASIN

382958075301101 WARD BRANCH NEAR DELMAR, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARDS) (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	
MAY 09...	1130	1.5	105	6.9	30.5	20.0	765	5.0	55	25	5.98	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS) (00453)	SULFATE FIELD SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L) (00600)
MAY 09...	2.49	9.0	3.2	22	27	1.5	9.9	<.1	18.3	121	3.9	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00607)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)
MAY 09...	2.89	.025	2.92	.099	.98	.77	3.7	.88	.67	.172	.110	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U (UG/L) (82680)
MAY 09...	.087	1360	75	<.003	<.002	<.002	<.002	.013	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U (PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)
MAY 09...	<.003	<.004	<.004	<.002	E.006	96	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)	FONO-FOS WATER DISS (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U (PERCENT) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, DIS-SOLVED (UG/L) (82686)	METHYL PARA-THION, DIS-SOLVED (UG/L) (82667)	METHO-LACHLOR WATER DISS (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 09...	<.003	<.003	91	<.004	<.002	<.005	<.001	<.006	.027	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	
MAY 09...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.016	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	
MAY 09...	<.007	<.004	<.013	.037	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

NANTICOKE RIVER BASIN--Continued

383311075374501 TURKEY BRANCH NEAR LAUREL, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
APR 06...	0915	.31	266	4.6	20.0	10.0	765	8.4	74	63	14.0	6.81	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
APR 06...	9.7	11.8	31.0	19.4	<.1	6.5	161	14	<.010	12.4	.273	1.1	
DATE		NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT GF, REC (UG/L) (82660)	ACETO-MONIA + WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
APR 06...	1.0	13	.86	.73	.015	E.004	<.010	110	69	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD GF, REC (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT GF, REC PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
APR 06...	<.002	.010	<.002	<.002	E.008	<.003	<.004	<.004	<.002	E.007	100	E.003	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD GF, REC (UG/L) (82677)	EPTC WATER FLTRD GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT GF, REC (UG/L) (91065)	LINDANE FLTRD (UG/L) (39341)	LIN-URON WATER FLTRD GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION WAT FLT GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT GF, REC (UG/L) (82667)
APR 06...	<.001	<.017	<.002	<.004	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT GF, REC (UG/L) (82687)	PHORATE WATER FLTRD GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
APR 06...	.018	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	.034	
DATE		PRON-AMIDE WATER FLTRD GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD GF, REC (UG/L) (82675)	THIO-BENCARB WAT FLT GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT GF, REC (UG/L) (82661)	
APR 06...	<.003	<.007	<.004	<.013	.011	<.010	E.019	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

NANTICOKE RIVER BASIN--Continued

383323075274501 GRAYS BRANCH NEAR LAUREL, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 09...	0900	4.6	82	6.8	27.0	19.0	765	5.8	62	19	4.82	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 09...	1.66	7.9	1.9	22	27	1.7	8.7	<.1	19.4	87	1.8	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 09...	1.27	.017	1.29	.109	.54	.46	1.8	.43	.35	.082	.060	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 09...	.045	290	14	<.003	<.002	<.002	<.002	.045	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 09...	<.003	<.004	<.004	<.002	E.015	90	<.002	<.001	<.017	.006	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 09...	<.003	<.003	77	<.004	<.002	<.005	<.010	<.006	.061	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 09...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 09...	<.007	<.004	<.013	.107	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

NANTICOKE RIVER BASIN--Continued

384610075485001 WOLFPIIT BRANCH TRIBUTARY NEAR FEDERALSBURG, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 11...	1030	.92	171	6.8	20.0	16.0	768	5.2	52	50	11.1	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 11...	5.42	8.8	4.0	15	18	12.1	14.9	<.1	15.2	133	7.2	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 11...	6.39	.036	6.42	.094	.73	.49	6.9	.64	.39	.052	.013	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 11...	<.010	360	123	<.003	<.002	<.002	<.002	.047	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 11...	<.010	<.004	<.004	<.002	E.056	81	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 11...	<.003	<.003	74	<.004	<.002	<.005	<.001	<.006	.106	<.004		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

CHOPTANK RIVER BASIN

385833075582101 BLOCKSTON BRANCH TRIBUTARY NEAR HILLSBORO, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 16...	0900	.24	160	5.9	23.0	13.0	765	8.5	80	59	12.6	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 16...	6.58	4.8	2.0	21	26	9.2	15.0	<.1	14.6	128	6.6	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 16...	5.97	.036	6.01	.109	.57	.40	6.4	.46	.29	.058	.028	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 16...	.022	550	75	<.003	.008	<.002	<.002	.066	<.002	<.002	E.002	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 16...	<.003	<.004	<.004	<.002	E.21	90	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 16...	<.003	<.003	86	<.004	<.002	<.005	<.001	<.006	.022	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 16...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.005	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 16...	<.007	<.004	<.013	.009	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

CHOPTANK RIVER BASIN--Continued

385947075584401 BLOCKSTON BRANCH TRIBUTARY NEAR CENTREVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
JUN 05...	1100	.27	216	6.3	23.0	14.0	770	10.1	97	70	15.4	7.70	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
JUN 05...	9.3	3.0	18	22	8.2	21.0	<.1	17.8	160	10	<.010	9.68	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
JUN 05...	.056	.39	.14	9.8	.33	.10	.064	.036	.025	20	53	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
JUN 05...	<.002	.376	<.002	.821	<.002	<.002	<.003	<.007	<.004	<.004	<.002	E.39	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
JUN 05...	113	<.002	.004	<.017	<.002	<.004	<.003	<.003	90	<.004	<.002	<.005	
DATE		METHYL AZIN-THION WAT FLT 0.7 U (GF, REC) (82686)	METHYL PARA-THION WAT FLT 0.7 U (GF, REC) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	P,P' DDE (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U (GF, REC) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (GF, REC) (82683)	PER-METHRIN CIS WAT FLT 0.7 U (GF, REC) (82687)	PHORATE WATER FLTRD 0.7 U (GF, REC) (82664)
JUN 05...	<.001	<.006	2.77	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U (GF, REC) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U (GF, REC) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (GF, REC) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (GF, REC) (82670)	TER-BACIL WATER FLTRD 0.7 U (GF, REC) (82665)	TER-BUFOS WATER FLTRD 0.7 U (GF, REC) (82675)	THIO-BENCARB WAT FLT 0.7 U (GF, REC) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (GF, REC) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (GF, REC) (82661)
JUN 05...	<.018	<.003	<.007	<.004	<.013	.016	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

MILES RIVER BASIN

384801076085101 HUNTING CREEK NEAR UNIONVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAY 12...	0900	.00	332	6.2	30.5	20.0	757	1.2	13	51	9.64	6.54	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
MAY 12...	36.5	5.1	28	34	10.0	59.0	.1	4.8	213	<.010	<.050	1.00	
DATE		NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
MAY 12...	11	2.3	9.9	1.3	3.75	.211	.161	2290	678	E.002	<.002	<.013	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
MAY 12...	<.002	.046	<.002	<.002	E.006	<.003	<.004	<.004	<.002	E.010	88	<.002	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) (91065)	LINDANE FLTRD (UG/L) (39341)	LIN-URON WATER, FLTRD (GF, REC) (UG/L) (82666)	METHYL AZIN-THION, WAT FLT (GF, REC) (UG/L) (39532)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)
MAY 12...	<.001	<.017	<.002	<.004	<.003	<.003	83	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISS (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAY 12...	.029	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.008	
DATE		PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER, FLTRD (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAY 12...	<.003	<.007	<.004	<.013	.015	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

CHESTER RIVER BASIN

01493109 COW CREEK NEAR CHESTERTVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAR 02...	1030	.28	181	6.2	13.0	9.5	757	11.9	105	64	14.3	6.81	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
MAR 02...	5.0	3.2	16	19	8.9	13.3	<.1	8.8	117	9.8	<.010	9.64	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT REC (UG/L) (82660)	ACETO-CHLOR, WATER REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
MAR 02...	<.020	.17	E.10	.019	E.003	<.010	10	50	<.003	<.002	.136	<.002	
DATE		ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON WAT FLT REC (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)
MAR 02...	.051	<.002	<.002	<.003	E.013	<.004	<.004	<.002	E.18	99	<.002	<.001	
DATE		DISUL-FOTON WATER, FLTRD GF, REC (UG/L) (82677)	EPTC WATER, FLTRD GF, REC (UG/L) (82668)	ETHAL-ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD GF, REC (UG/L) (82672)	FONOFOS WATER, DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT GF, REC PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD GF, REC (UG/L) (82666)	MALA-THION, WAT FLT GF, REC (UG/L) (39532)	METHYL AZIN-THION, WAT FLT GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT GF, REC (UG/L) (82667)	
MAR 02...	<.017	<.002	<.004	<.003	<.003	<.003	99	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD GF, REC (UG/L) (82669)	PENDI-ALIN WAT FLT GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT GF, REC (UG/L) (82687)	PHORATE WATER, FLTRD GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAR 02...	.673	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.004	
DATE		PRON-AMIDE WATER, FLTRD GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD GF, REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD GF, REC (UG/L) (82670)	TER-BACIL WATER, FLTRD GF, REC (UG/L) (82665)	TER-BUFOS WATER, FLTRD GF, REC (UG/L) (82675)	THIO-BENCARB WAT FLT GF, REC (UG/L) (82681)	TRIAL-LATE WATER, FLTRD GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT GF, REC (UG/L) (82661)	
MAR 02...	.007	<.007	<.004	<.013	.089	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

CHESTER RIVER BASIN--Continued

01493110 CHESTERVILLE BRANCH NEAR CHESTERVILLE, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)		
OCT 13...	0900	ENVIRONMENTAL	.53	187	5.8	16.0	14.0	765	7.5	72	70		
13...	0901	REPLICATE	--	--	--	--	--	--	--	--	70		
FEB 24...	1150	BLANK	--	--	--	--	--	--	--	--	--		
24...	1200	ENVIRONMENTAL	.78	187	6.5	20.0	9.5	769	11.0	95	68		
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)
OCT 13...	16.9	6.83	4.5	4.2	20	25	11.0	12.4	<.1	11.3	122	9.9	
13...	16.8	6.74	4.4	4.4	--	--	11.0	12.4	<.1	11.1	121	10	
FEB 24...	--	--	--	--	--	--	--	--	--	--	--	--	
24...	16.1	6.64	4.7	3.0	17	21	9.6	12.1	<.1	9.5	143	11	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT 13...	9.56	.013	9.58	.046	.27	.19	9.8	.23	.14	.030	.010	<.010	
13...	9.71	.012	9.72	.045	.25	.22	9.9	.20	.18	.031	.010	<.010	
FEB 24...	--	--	--	--	--	--	--	--	--	--	--	--	
24...	--	<.010	10.4	<.020	.14	E.10	--	--	--	.010	E.004	<.010	
DATE		CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	2,6-DI-ETHYL ANILINE, DIS-SOLVED (UG/L AS GF, REC) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
OCT 13...	1.4	.3	<15	<1	<2.0	20	74	<.1	<2.4	<.003	<.002	.111	
13...	1.2	.2	<15	<1	<2.0	20	73	<.1	<2.4	<.003	<.002	.094	
FEB 24...	--	--	--	--	--	--	--	--	--	<.003	<.002	<.002	
24...	--	--	--	--	--	10	37	--	--	<.003	<.002	.161	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD DISS, GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD (UG/L) (82680)	CARBO-FURAN WATER FLTRD (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
OCT 13...	<.002	.024	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.065	135	<.002	
13...	<.002	.021	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.070	131	<.002	
FEB 24...	<.002	<.001	<.002	<.002	<.003	<.003	<.004	<.004	<.002	<.002	93	<.002	
24...	<.002	.018	<.002	<.002	<.003	E.015	<.004	<.004	<.002	E.066	90	<.002	

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

CHESTER RIVER BASIN--Continued

01493110 CHESTERVILLE BRANCH NEAR CHESTERVILLE, MD--Continued

DATE	DI-ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS- (UG/L) (39532)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)
OCT 13...	<.001	<.017	<.002	<.004	<.003	<.003	109	<.004	<.002	<.005	<.001	<.006
OCT 13...	<.001	<.017	<.002	<.004	<.003	<.003	106	<.004	<.002	<.005	<.001	<.006
FEB 24...	<.001	<.017	<.002	<.004	<.003	<.003	73	<.004	<.002	<.005	<.001	<.006
FEB 24...	<.001	<.017	<.002	<.004	<.003	<.003	74	<.004	<.002	<.005	<.001	<.006

DATE	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS- (UG/L) (39542)	PEB-ULATE FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, DISS, REC (UG/L) (04037)
OCT 13...	.990	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
OCT 13...	.912	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
FEB 24...	<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
FEB 24...	.733	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.003

DATE	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT 13...	<.003	<.007	<.004	<.013	.193	<.010	<.007	<.013	<.002	<.001	<.002
OCT 13...	<.003	<.007	<.004	<.013	.187	<.010	<.007	<.013	<.002	<.001	<.002
FEB 24...	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002
FEB 24...	<.003	<.007	<.004	<.013	.074	<.010	<.007	<.013	<.002	<.001	<.002

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

CHESTER RIVER BASIN--Continued

01493491 MORGAN CREEK TRIBUTARY NEAR GALENA, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
FEB 23...	1445	.03	234	7.3	14.5	10.0	771	11.5	101	39	8.16	4.48

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 23...	19.5	9.3	30	36	11.0	34.5	.1	9.3	2.7	1.44	.016	1.45

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB 23...	.576	1.3	1.2	2.6	.72	.60	.204	.054	.034	480	233

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

CHESTER RIVER BASIN--Continued

01493495 MORGAN CREEK NEAR LOCUST GROVE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
FEB 22...	1300	1.5	202	7.1	13.5	7.5	776	10.5	86	42	9.97	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
FEB 22...	4.20	11.1	5.1	25	31	6.7	23.5	.1	7.7	102	7.1	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
FEB 22...	2.47	.022	2.49	.214	4.6	.59	3.1	4.4	.38	.169	.023	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
FEB 22...	.011	200	184	<.003	<.002	<.002	<.002	.062	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
FEB 22...	<.003	<.004	<.004	<.002	E.084	113	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL-AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL-PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-METH-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL-METH-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL-METH-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL-METH-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82667)
FEB 22...	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006	.057	<.010	<.010	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN, WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
FEB 22...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.003	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
FEB 22...	<.007	<.004	<.013	.013	<.010	<.007	<.013	<.002	<.001	<.002	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

CHESTER RIVER BASIN--Continued

01493496 MORGAN CREEK TRIBUTARY NEAR KENNEDYVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-CENT SATUR-ATION (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 22...	1430	1.1	211	7.2	12.0	15.0	776	12.7	124	36	9.00	3.24	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 22...	13.0	8.5	35	43	5.7	25.7	.1	4.5	3.1	1.12	.049	1.16	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 22...		1.83	1.9	2.8	4.0	.09	1.0	.463	.061	.027	20	122	

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

CHESTER RIVER BASIN--Continued

01493497 MORGAN CREEK AT KENNEDYVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
FEB 23...	1030	4.8	184	6.7	13.5	5.0	774	10.3	79	44	11.0	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
FEB 23...	4.06	10.9	5.7	35	43	6.1	22.4	<.1	7.7	113	4.3	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
FEB 23...	2.33	.035	2.36	.788	1.9	1.4	3.8	1.1	.63	.267	.026	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
FEB 23...	.016	220	332	<.003	<.002	<.002	<.002	.033	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
FEB 23...	<.003	<.004	<.004	<.002	E.072	92	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONO-FOS WATER DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
FEB 23...	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	<.018	<.003	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82684)	P,P' DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
FEB 23...	<.007	<.004	<.013	.011	<.010	E.024	<.013	<.002	<.001	<.002		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

CHESTER RIVER BASIN--Continued

0149349810 MORGAN CREEK TRIBUTARY NEAR MORGNEC, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
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FEB 23...	1330	.11	187	6.6	14.0	12.0	774	2.3	21	46	11.2	4.36
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DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
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FEB 23...	9.8	9.7	24	29	8.5	21.9	.2	3.2	6.7	4.05	.020	4.07
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DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
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FEB 23...	.070	2.7	.89	5.0	2.6	.82	.515	.029	<.010	60	152
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0149349820 MORGAN CREEK TRIBUTARY NEAR LYNCH, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
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FEB 25...	1330	.09	279	7.1	23.5	12.0	766	12.8	118	79	17.6	8.49
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DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
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FEB 25...	12.4	5.6	29	36	16.2	37.1	<.1	10.1	5.7	5.01	.035	5.04
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DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
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FEB 25...	.229	.65	.48	5.5	.42	.25	.078	.011	<.010	250	426
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< Actual value is known to be less than the value shown.

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

CHESTER RIVER BASIN--Continued

01493499 MORGAN CREEK NEAR WORTON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-A-TURE AIR (DEG C) (00020)	TEMPER-A-TURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
FEB 25...	1100	6.4	178	7.1	18.5	9.5	766	9.6	84	54	13.3	5.07	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
FEB 25...	8.9	5.4	32	39	7.5	20.8	<.1	8.4	4.1	3.31	.048	3.36	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
FEB 25...		.224	.70	.57	3.9	.48	.35	.100	.017	.011	190	164	

< Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

CHESTER RIVER BASIN--Continued

391255075450201 GRAVELLY RUN TRIBUTARY NEAR HARTLY, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 16...	1230	.02	285	6.6	24.0	19.5	765	9.4	102	95	28.7	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 16...	5.74	10.3	3.4	51	62	22.4	23.6	.1	14.4	180	5.0	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 16...	4.20	.024	4.23	.115	.77	.54	4.8	.66	.42	.237	.058	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 16...	.060	270	72	<.003	<.002	<.008	<.002	.034	<.002	<.002	E.004	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 16...	<.003	<.004	<.004	<.002	E.073	97	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 16...	<.003	<.003	91	<.004	<.002	<.005	<.001	<.006	.020	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 16...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.007	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 16...	<.007	<.004	<.013	.043	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

ELK RIVER BASIN

392517075531601 MILL POND CREEK TRIBUTARY NEAR CECILTON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 15...	1000	.49	224	6.3	17.5	15.5	773	7.9	78	84	25.4	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	
MAY 15...	5.07	5.5	2.2	57	70	15.0	16.8	.2	13.0	159	2.1	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	
MAY 15...	1.60	.035	1.64	.074	.51	.37	2.0	.44	.30	.077	.031	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 15...	.019	160	66	<.003	<.002	<.002	<.002	.166	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 15...	<.003	<.004	<.004	<.002	E.080	103	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 15...	<.003	<.003	91	<.004	<.002	<.005	<.001	<.006	.112	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82684)	P,P' DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 15...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.004	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 15...	<.007	<.004	<.013	.045	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

ELK RIVER BASIN--Continued

393201075462201 CHESAPEAKE AND DELAWARE CANAL TRIBUTARY NEAR MIDDLETOWN, DE

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 18...	0900	.77	161	6.1	24.5	15.0	764	9.6	95	68	11.8	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 18...	9.27	3.6	2.8	13	15	27.3	11.2	<.1	9.1	108	5.4	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	
MAY 18...	5.18	.015	5.19	.025	.26	.20	5.4	.23	.18	.021	E.004	
DATE		PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 18...	<.010	90	39	<.003	<.002	<.002	<.002	.720	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 18...	E.009	.019	.097	<.002	E.42	125	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER FLTRD 0.7 U GF, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE DISSOLV (UG/L) (34653)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER FLTRD 0.7 U DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 18...	<.003	<.003	96	<.004	<.002	<.005	<.001	<.006	.241	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U DISS, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 18...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 18...	<.007	<.004	<.013	.037	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

PRINCIPIO CREEK BASIN

393513076012901 PRINCIPIO CREEK TRIBUTARY NEAR PERRYVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
MAY 18...	1200	.16	48	6.2	26.5	16.5	764	8.7	89	19	3.67	2.43	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE DIS-SOLVED (MG/L AS N) (00631)
MAY 18...	5.8	1.0	9	10	5.2	9.1	<.1	7.8	63	1.1	<.010	.606	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
MAY 18...	.053	.50	.39	.99	.44	.33	.030	.008	<.010	870	92	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 18...	<.002	<.002	<.002	.048	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.034	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD 0.7 U (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91065)	LIN-URON WATER, FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	
MAY 18...	126	<.002	<.001	<.017	<.002	<.004	<.003	<.003	92	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U (GF, REC) (82686)	METHYL PARA-THION WAT FLT 0.7 U (GF, REC) (82667)	METO-LACHLOR WATER, DISS, REC (UG/L) (39415)	METRI-BUZIN WATER, FLTRD 0.7 U (UG/L) (82630)	MOL-INATE WATER, FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD 0.7 U (UG/L) (82684)	P,P' DDE WATER, FLTRD 0.7 U (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (GF, REC) (82683)	PER-METHRIN CIS WAT FLT 0.7 U (GF, REC) (82687)	PHORATE WATER, FLTRD 0.7 U (GF, REC) (82664)
MAY 18...	<.001	<.006	.035	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U (GF, REC) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U (GF, REC) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U (GF, REC) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U (GF, REC) (82670)	TER-BACIL WATER, FLTRD 0.7 U (GF, REC) (82665)	TER-BUFOS WATER, FLTRD 0.7 U (GF, REC) (82675)	THIO-BENCARB WAT FLT 0.7 U (GF, REC) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U (GF, REC) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (GF, REC) (82661)
MAY 18...	E.006	<.003	<.007	<.004	<.013	<.010	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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

ROMNEY CREEK BASIN

392834076090401 ROMNEY CREEK TRIBUTARY NEAR PERRYMAN, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAY 04...	1115	.00	1070	7.3	24.5	14.5	769	12.1	118	500	145	34.1	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
MAY 04...	25.5	5.2	187	228	342	34.4	.2	2.4	770	<.010	<.050	.028	
DATE		NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
MAY 04...	.60	.53	.57	.50	.038	.012	<.010	30	184	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT REC (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
MAY 04...	<.002	.012	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.007	104	<.002	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	LIN-DANE FLTRD 0.7 U GF, REC (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-THION, WAT FLT DIS-0.7 U GF, REC (UG/L) (39532)	METHYL AZIN-THION WAT FLT REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)
MAY 04...	<.001	<.017	<.002	<.004	<.003	<.003	89	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAY 04...	.009	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	<.018	
DATE		PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 04...	<.003	<.007	<.004	<.013	<.010	<.010	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

BUSH RIVER BASIN

393002076115001 CRANBERRY RUN AT ABERDEEN, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAY 05...	1000	1.1	304	7.4	25.0	16.0	764	10.6	107	70	15.0	7.93	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
MAY 05...	29.2	1.4	37	45	9.9	61.7	<.1	11.1	181	.53	<.010	.347	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
MAY 05...	<.020	.18	.14	.49	E.006	<.006	<.010	30	20	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
MAY 05...	<.002	.008	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.014	100	<.002	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) (91065)	LINDANE (UG/L) (39341)	LIN-URON WATER FLTRD (GF, REC) (UG/L) (82666)	METHYL AZIN-THION, WAT FLT (GF, REC) (UG/L) (39532)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)
MAY 05...	<.001	<.017	<.002	<.004	<.003	<.003	85	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISS (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAY 05...	.005	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.009	
DATE		PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WAT FLT (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAY 05...	<.003	<.007	<.004	<.013	.023	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.



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

## PATAPSCO RIVER BASIN

## 01589227 RED RUN NEAR BELLTOWN, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
SEP 07...	1250	1.5	202	8.0	23.0	16.8	78	13.1	11.1
DATE	TIME	POTAS- SIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
SEP 07...	9.3	1.9	9.9	26.1	<.1	14.3	1.0	<10	39

## 01589238 GWYNNS FALLS TRIBUTARY AT MCDONOGH, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
SEP 07...	1020	.01	165	6.9	23.0	14.2	46	11.2	4.43
DATE	TIME	POTAS- SIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
SEP 07...	7.7	2.0	16.4	4.0	<.1	26.6	6.1	10	8

## 01589295 SCOTTS LEVEL BRANCH AT VILLA NOVA, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
SEP 07...	1445	.78	319	7.9	20.5	16.8	120	33.3	9.68
DATE	TIME	POTAS- SIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
SEP 07...	10.3	2.9	9.4	26.9	.2	16.2	2.5	<10	3

&lt; Actual value is known to be less than the value shown.

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

PATAPSCO RIVER BASIN--Continued

391309075404601 PATAPSCO RIVER TRIBUTARY NEAR PATAPSCO, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAY 05...	0800	.17	294	6.7	15.0	770	8.7	85	95	26.8	6.71	16.3
DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)
MAY 05...	3.0	56	68	32.4	27.4	.2	9.0	175	.93	<.010	.557	.032
DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-TOTAL (MG/L AS P) (00665)	PHOS-PHORUS PHOS-DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WAT FLT REC (UG/L) (49260)
MAY 05...	.38	.32	.88	.34	.29	.010	E.003	<.010	350	197	<.003	<.002
DATE	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT PERCENT (GF, REC) (UG/L) (91063)
MAY 05...	<.002	<.002	.004	<.002	<.002	<.003	<.003	<.004	<.004	<.002	<.003	100
DATE	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT PERCENT (UG/L) (91065)	LIN-URON WATER FLTRD (GF, REC) (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT (GF, REC) (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT (GF, REC) (UG/L) (82686)
MAY 05...	<.004	<.001	<.017	<.002	<.004	<.003	<.003	84	<.004	<.002	<.005	<.001
DATE	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (GF, REC) (UG/L) (82669)	PENDI-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
MAY 05...	<.006	<.005	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
DATE	PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER, FLTRD (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAY 05...	<.003	<.007	<.004	<.013	<.006	E.007	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

PATAPSCO RIVER BASIN--Continued

391357076395001 PATAPSCO RIVER TRIBUTARY AT HALETHORPE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
APR 10...	1415	1.3	574	7.7	17.5	13.5	765	13.3	127	150	42.7	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
APR 10...	9.43	55.1	3.8	96	117	33.1	95.9	.3	5.8	336	1.7	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
APR 10...	1.35	.013	1.36	.025	.32	.23	1.6	.29	.20	.022	<.006	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
APR 10...	<.010	30	339	<.003	<.002	<.002	<.002	.019	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
APR 10...	<.003	.005	<.004	<.002	E.026	104	.023	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL METO-WATER FLTRD 0.7 U GF, REC (UG/L) (82667)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
APR 10...	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	.024	<.003	
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
APR 10...	<.007	<.004	<.013	.012	.102	<.007	<.013	<.002	<.001	<.002	<.002	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

## SEVERN RIVER BASIN

383148076315701 PARKER CREEK TRIBUTARY NEAR PORT REPUBLIC, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
MAY 04...	0815	1.5	315	7.2	12.5	12.5	769	9.5	88	150	50.5	4.75	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE WAT FLT (MG/L AS N) (00631)
MAY 04...	6.8	1.0	126	154	17.2	10.3	.2	14.0	202	.52	<.010	.197	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (UG/L) (82660)
MAY 04...	.043	.33	.20	.40	.28	.16	.121	.010	<.010	120	110	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 04...	<.002	.038	<.002	E.004	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.003	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	HCH ALPHA FONOFOS D6 SRG WAT FLT DISS REC (UG/L) (04095)	HCH ALPHA FONOFOS D6 SRG WAT FLT DISS REC (UG/L) (91065)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (39341)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	MALA-THION, DIS-SOLVED (UG/L) (39532)
MAY 04...	104	<.004	<.001	<.017	<.002	<.004	<.003	<.003	84	<.004	<.002	<.005	
DATE		METHYL AZIN-THION WAT FLT 0.7 U GF, REC (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (82684)	P,P' DDE WATER FLTRD 0.7 U DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)
MAY 04...	<.001	<.006	.004	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI-FLUR-ALIN WAT FLT (UG/L) (82661)
MAY 04...	<.018	<.003	<.007	<.004	<.013	.006	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.

&lt; Actual value is known to be less than the value shown.

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

SEVERN RIVER BASIN--Continued

390412076394201 JABEZ BRANCH TRIBUTARY AT GAMBRILLS, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 10...	1030	.05	149	5.8	14.5	10.0	762	10.8	96	15	2.82	1.93	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
APR 10...	20.2	1.2	6	7	3.9	36.6	<.1	6.2	91	.56	<.010	.308	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
APR 10...	.042	.25	.22	.52	.21	.17	.018	<.006	<.010	270	54	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 10...	<.002	<.002	<.002	.007	<.002	<.002	<.003	<.003	<.004	<.004	<.002	<.002	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 10...	103	<.002	<.001	<.017	<.002	<.004	<.003	<.003	93	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE WATER FLTRD 0.7 U DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
APR 10...	<.001	<.006	.006	<.010	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WAT FLT 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR 10...	<.018	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

< Actual value is known to be less than the value shown.

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

RHODE RIVER BASIN

385329076335801 BLUEJAY BRANCH NEAR SOUTH RIVER, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 03...	1215	.31	175	6.1	23.5	14.0	758	11.6	113	46	12.7	3.51	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
APR 03...	9.2	2.1	6	7	28.0	23.3	.2	22.4	119	.62	<.010	.366	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
APR 03...	.022	.26	.18	.55	.24	.16	.064	E.005	<.010	110	236	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 03...	<.002	<.002	<.002	<.002	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.002	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT DISS PERCENT (91065)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (39341)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 03...	90	<.002	<.001	<.017	<.002	<.004	<.003	<.003	77	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE WAT FLT 0.7 U DISS REC (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
APR 03...	<.001	<.006	<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR 03...	<.018	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

PATUXENT RIVER BASIN

384821076411201 GALLOWAY CREEK NEAR WAYSONS CORNER, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAR 31...	1330	.64	203	7.3	15.0	14.5	764	12.7	124	61	17.8	4.01	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
MAR 31...	10.8	3.6	25	31	30.5	12.5	.1	14.9	138	4.6	4.10	.048	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WAT FLT (GF, REC) (UG/L) (49260)
MAR 31...	4.14	<.020	.45	.44	4.6	.291	.254	.227	90	43	<.003	<.002	
DATE		ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD, GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD, 0.7 U (UG/L) (82680)	CARBO-FURAN WATER, FLTRD, 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS, WATER, DISS, REC (UG/L) (38933)	CYANA-ZINE, WATER, FLTRD, 0.7 U (UG/L) (04041)	DCPA, WATER, FLTRD, 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON, D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)
MAR 31...	<.002	<.002	<.005	<.002	<.002	E.039	<.003	<.004	<.004	<.002	<.002	100	
DATE		DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82677)	EPTC WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN, WAT FLT, GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91065)	LIN-URON WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT (GF, REC) (UG/L) (82686)	
MAR 31...	.019	<.001	<.017	<.002	<.004	<.003	<.003	84	<.004	<.002	<.005	<.001	
DATE		METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)	METHO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER, DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82684)	P,P'DE WATER, DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD, 0.7 U (GF, REC) (UG/L) (82669)	PENDI-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
MAR 31...	<.006	<.002	<.004	<.004	<.003	<.006	<.004	<.004	.012	<.005	<.002	E.005	
DATE		PRON-AMIDE WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER, FLTRD, 0.7 U (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAR 31...	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

PATUXENT RIVER BASIN--Continued

384844076470801 FEDERAL SPRING AT UPPER MARLBORO, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 07...	1030	.79	208	6.4	21.0	12.5	758	11.3	107	56	16.6	3.53	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
APR 07...	16.3	1.2	5	7	31.4	40.2	.2	26.5	155	.72	<.010	.517	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
APR 07...	.050	.21	.17	.69	.16	.12	.051	E.003	<.010	230	140	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 07...	<.002	<.002	<.002	<.001	<.002	<.002	<.003	<.003	<.004	<.004	<.002	<.002	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 07...	108	<.002	<.001	<.017	<.002	<.004	<.003	<.003	96	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE WATER FLTRD 0.7 U DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
APR 07...	<.001	<.006	<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR 07...	<.018	<.003	<.007	<.004	<.013	.008	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

PATUXENT RIVER BASIN--Continued

385231076481301 SOUTHWEST BRANCH NEAR LARGO, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
MAY 01...	1000	11	411	7.5	23.5	12.5	764	11.2	105	120	39.3	5.89	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
MAY 01...	27.5	2.8	62	75	42.1	55.0	.2	11.1	246	.57	<.010	.368	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
MAY 01...	.026	.20	.20	.57	.18	.17	.041	.008	.012	80	83	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 01...	<.002	<.002	<.002	.011	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.006	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD 0.7 U (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91065)	LIN-URON WATER, FLTRD 0.7 U (UG/L) (82666)	LINDANE, DIS-SOLVED (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (39532)
MAY 01...	101	.027	<.001	<.017	<.002	<.004	<.003	<.003	82	<.004	<.002	E.005	
DATE		METHYL AZIN-THION WAT FLT 0.7 U (GF, REC) (82686)	METHYL PARA-THION WAT FLT 0.7 U (GF, REC) (82667)	METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN WATER, DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD 0.7 U (UG/L) (82684)	P,P' DDE WATER, DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U (GF, REC) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (GF, REC) (82683)	PER-METHRIN CIS WAT FLT 0.7 U (GF, REC) (82687)	PHORATE WATER, FLTRD 0.7 U (GF, REC) (82664)
MAY 01...	<.001	<.006	.006	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U (GF, REC) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U (GF, REC) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U (GF, REC) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U (GF, REC) (82670)	TER-BACIL WATER, FLTRD 0.7 U (GF, REC) (82665)	TER-BUFOS WATER, FLTRD 0.7 U (GF, REC) (82675)	THIO-BENCARB WAT FLT 0.7 U (GF, REC) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U (GF, REC) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (GF, REC) (82661)
MAY 01...	E.005	<.003	<.007	<.004	<.013	.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

## PATUXENT RIVER BASIN--Continued

385328076481001 WESTERN BRANCH NEAR KOLBES CORNER, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	
APR 12...	1330	.94	267	7.3	11.5	14.5	767	10.8	105	60	17.3	4.09	
DATE		SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L) (00600)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00613)	NITRO-GEN, AMMONIA + DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	
APR 12...	23.2	3.1	22.6	45.1	.1	8.2	153	.58	<.010	.186	.025	.40	
DATE		NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	NITRO-GEN, DIS-SOLVED (MG/L) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00607)	PHOS-PHORUS PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-MONIA + WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
APR 12...	.27	.45	.37	.24	.037	.007	<.010	160	233	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
APR 12...	<.002	.011	<.002	<.002	E.016	<.003	.007	<.007	E.003	E.005	96	.066	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) (91065)	LINDANE (UG/L) (39341)	LIN-URON WATER, FLTRD (GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL-PARA-THION WAT FLT (GF, REC) (UG/L) (82667)
APR 12...	<.001	<.017	<.002	<.004	<.003	<.003	96	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FLTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
APR 12...	.008	<.004	<.004	<.003	<.006	<.004	<.004	<.020	<.005	<.002	E.012		
DATE		PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WAT FLT (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
APR 12...	<.003	<.007	<.004	<.013	.007	E.005	<.007	<.013	<.002	<.001	<.002		

E Estimated value.

&lt; Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

PATUXENT RIVER BASIN--Continued

385406076475001 NORTHEAST BRANCH AT KOLBES CORNER, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 12...	1030	.34	203	6.9	15.0	13.5	766	11.1	106	54	15.1	3.88	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE DIS-SOLVED (MG/L AS N) (00631)
APR 12...	12.6	3.5	18	22	25.4	27.8	.1	12.4	119	.62	<.010	.279	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (0.7 U) (UG/L) (82660)
APR 12...	.032	.35	.25	.53	.31	.22	.046	.007	<.010	70	387	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 12...	<.002	<.004	<.002	.007	<.002	<.002	E.006	<.003	<.004	<.004	<.002	E.005	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE, DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 12...	100	.042	<.001	<.017	<.002	<.004	<.003	<.003	94	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER, DISS, REC (UG/L) (39415)	METRI-BUZIN WATER, FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL-INATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE WAT FLT 0.7 U DISS, REC (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82664)
APR 12...	<.001	<.006	.006	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER, FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WAT FLT 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
APR 12...	<.018	<.003	<.007	<.004	<.013	.007	E.006	<.007	<.013	<.002	<.001	<.004	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

PATUXENT RIVER BASIN--Continued

385408076440601 COLLINGTON BRANCH AT BOWIE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 24...	1100	.86	217	7.5	20.0	14.0	758	12.1	118	51	14.8	3.51	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE DIS-SOLVED (MG/L AS N) (00631)
APR 24...	16.3	3.0	28	35	20.4	30.6	.2	12.3	138	.49	<.010	.118	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
APR 24...		.037	.37	.35	.47	.33	.32	.068	.012	<.010	130	91	<.003
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 24...		<.002	<.002	<.002	.012	E.001	<.002	E.083	<.003	<.004	<.004	<.002	E.004
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD 0.7 U (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U (GF, REC PERCENT) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 24...	102	.026	<.001	<.017	<.002	<.004	<.003	<.003	83	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U (GF, REC) (82686)	METHYL PARA-THION WAT FLT 0.7 U (GF, REC) (82667)	METO-LACHLOR WATER, DISS, REC (UG/L) (39415)	METRI-BUZIN WATER, FLTRD 0.7 U (UG/L) (82630)	MOL-INATE WATER, FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD 0.7 U (UG/L) (82684)	P,P' DDE WATER, FLTRD 0.7 U (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U (GF, REC) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (GF, REC) (82683)	PER-METHRIN CIS WAT FLT 0.7 U (GF, REC) (82687)	PHORATE WATER, FLTRD 0.7 U (GF, REC) (82664)
APR 24...		<.001	<.006	.006	<.004	<.004	<.003	E.002	<.004	<.004	<.004	<.005	<.002
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U (GF, REC) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U (GF, REC) (82679)	PRO-PARGITE WATER, FLTRD 0.7 U (GF, REC) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD 0.7 U (GF, REC) (82670)	TER-BACIL WATER, FLTRD 0.7 U (GF, REC) (82665)	TER-BUFOS WATER, FLTRD 0.7 U (GF, REC) (82675)	THIO-BENCARB WATER, FLTRD 0.7 U (GF, REC) (82681)	TRIAL-LATE WATER, FLTRD 0.7 U (GF, REC) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (GF, REC) (82661)
APR 24...		E.007	<.003	<.007	<.004	<.013	E.003	.030	<.007	<.013	<.002	<.001	<.002

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

PATUXENT RIVER BASIN--Continued

385543076404701 PATUXENT RIVER TRIBUTARY NEAR BOWIE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAR 27...	1445	.00	296	7.8	19.0	14.0	747	11.3	112	100	35.3	3.61	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	
MAR 27...	9.9	3.3	33.1	23.8	.2	18.5	178	1.1	<.010	.984	<.020	.13	
DATE		NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, PHOS-PHURUS TOTAL SOLVED (MG/L AS P) (00602)	PHOS-PHURUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHURUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHURUS, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER, DISS, REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA, BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
MAR 27...	.11	1.1	.025	.012	<.010	100	44	<.003	<.002	E.003	<.002	E.002	
DATE		BEN-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	
MAR 27...		<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.003	98	<.002	<.001	
DATE		DISUL-FOTON WATER, FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER, FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER, FLTRD (GF, REC) (UG/L) (82672)	FONO-FOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91065)	LINDANE WATER, FLTRD (UG/L) (39341)	LIN-URON WATER, FLTRD (UG/L) (82666)	MALA-THION, WAT FLT (GF, REC) (UG/L) (39532)	METHYL-AZIN-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL-PARA-THION WAT FLT (GF, REC) (UG/L) (82667)	
MAR 27...		<.017	<.002	<.004	<.003	<.003	81	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER, DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD (GF, REC) (UG/L) (82684)	P,P'DE DISS, DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER, FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAR 27...		.024	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	
DATE		PRON-AMIDE WATER, FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER, FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WAT FLT (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER, FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAR 27...		<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

PATUXENT RIVER BASIN--Continued

385605076490701 LOTTSFORD BRANCH NEAR GLENARDEN, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 08...	1200	2.4	271	7.1	27.0	23.5	756	7.6	90	57	14.5	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 08...	5.11	25.3	3.2	37	46	12.9	45.4	.1	7.4	163	1.1	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	
MAY 08...	.195	.020	.215	.276	.93	.68	.89	.65	.40	.062	.009	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U (UG/L) (82680)
MAY 08...	<.010	170	774	<.003	<.002	<.002	<.002	.007	<.002	<.002	E.008	
DATE		CARBO-FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U (PERCENT) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)
MAY 08...	<.003	<.004	<.004	<.002	E.005	101	.015	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U (PERCENT) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U (UG/L) (82667)	METHO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER (UG/L) (82630)	
MAY 08...	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.011	<.003	
DATE		MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	
MAY 08...	<.007	<.004	<.013	.007	<.010	E.013	<.013	<.002	<.001	<.002	<.002	
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

PATUXENT RIVER BASIN--Continued

385723076574701 BALD MILL BRANCH AT LANHAM, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 03...	1015	.00	383	7.1	20.5	14.5	766	8.4	82	100	31.4	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 03...	5.90	32.9	3.7	77	93	24.9	52.2	<.1	8.6	221	1.5	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 03...	.215	.042	.257	.613	1.3	1.3	1.6	.67	.70	.072	.015	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 03...	.010	1180	409	<.003	<.002	<.002	<.002	.009	<.004	<.002	E.037	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 03...	<.003	.008	<.004	<.002	E.006	112	.034	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 03...	<.003	<.003	89	<.004	<.002	<.005	<.001	<.006	.009	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 03...	<.004	<.003	<.006	<.004	<.004	.024	<.005	<.002	E.012	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 03...	<.007	<.004	<.013	<.008	<.010	<.007	<.013	<.002	<.001	<.004		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

PATUXENT RIVER BASIN--Continued

385911076470901 HORSEPEN BRANCH AT BOWIE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 10...	0945	.00	236	6.8	29.0	20.0	751	8.4	94	74	21.3	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 10...	5.15	12.8	3.9	39	48	23.2	25.6	.1	13.2	153	1.3	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
MAY 10...	.487	.022	.509	.182	.81	.52	1.0	.63	.33	.062	.013	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 10...	<.010	450	288	<.003	<.002	.014	<.002	.010	<.002	<.002	E.010	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 10...	<.003	<.004	<.004	<.002	E.009	97	.027	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 10...	<.003	<.003	79	<.004	<.002	<.005	E.022	<.006	.008	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 10...	<.004	<.003	<.006	<.004	<.004	<.008	<.005	<.002	E.011	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 10...	<.007	<.004	<.013	.009	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN

01647610 ROCK CREEK NEAR LAYTONSVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS, DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L) AS P (00671)
OCT 19...	1000	.57	89	6.3	11.4	9.6	<.010	1.11	.020	<.050	<.010

01647611 ROCK CREEK TRIBUTARY NEAR CLAYSVILLE, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS, DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L) AS P (00671)
OCT 19...	1330	.51	138	6.6	11.6	9.4	<.010	1.91	<.020	<.050	<.010
DEC 21...	1300	1.0	131	6.4	6.8	10.6	--	2.13	--	--	--

0164761150 ROCK CREEK TRIBUTARY NEAR REDLAND, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS, DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L) AS P (00671)
OCT 19...	1500	.00	138	6.5	11.6	10.0	<.010	3.20	<.020	<.050	<.010
NOV 10...	1300	.45	126	6.5	12.0	9.3	--	3.14	--	--	--
DEC 15...	1400	2.4	122	6.5	7.8	11.4	--	2.15	--	--	--

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01647612 ROCK CREEK TRIBUTARY AT MUNCASTER ROAD AT REDLAND, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)
OCT 28...	1400	.55	180	6.9	9.9	11.4	2.90
DEC 15...	1300	1.3	161	6.6	7.7	11.5	2.17

01647613 ROCK CREEK TRIBUTARY AT STREAM VALLEY PARK AT REDLAND, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)
OCT 28...	1300	ENVIRONMENTAL	.20	135	7.2	10.9	--	2.89
DEC 15...	1100	ENVIRONMENTAL	.45	126	6.0	7.0	11.5	1.95
DEC 15...	1105	REPLICATE	--	--	--	--	--	2.01

< Actual value is known to be less than the value shown.

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

## POTOMAC RIVER BASIN--Continued

## 01647614 ROCK CREEK TRIBUTARY AT STREAM VALLEY PARK NEAR REDLAND, MD

DATE	TIME	SAMPLE TYPE	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)
OCT 28...	1300	ENVIRONMENTAL	.14	130	7.0	11.9	--	3.15
DEC 15...	1200	ENVIRONMENTAL	.35	116	6.3	7.9	10.7	2.84
15...	1205	REPLICATE	--	--	--	--	--	2.86

## 0164762010 MILL CREEK AT SHADY GROVE AVE NEAR GAITHERSBURG, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)
NOV 08...	1130	.14	326	6.1	8.8	8.6	.229

## 0164762015 MILL CREEK AT REDLAND RD NEAR REDLAND, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)
NOV 01...	1200	.53	288	6.4	12.7	9.5	1.33

## 0164762020 MILL CREEK TRIBUTARY NEAR NEDHAM RD NEAR REDLAND, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)
NOV 01...	1300	.05	143	6.4	13.9	4.7	.978

## 01647622 CRABBS BRANCH NEAR OSKALOOSA CT NEAR DERWOOD, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)
NOV 01...	1500	.51	363	6.9	15.9	11.3	1.09

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

## POTOMAC RIVER BASIN--Continued

01647680 NORTH BRANCH ROCK CREEK NEAR GRANBY WOODS NEAR MT. ZION, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)
DEC 13...	1200	ENVIRONMENTAL	.41	95	5.3	5.3	11.4	1.38
13...	1205	REPLICATE	--	--	--	--	--	1.38

01647681 NORTH BRANCH ROCK CREEK TRIBUTARY NEAR GRANBY WOODS NEAR MT. ZION, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)
DEC 13...	1300	ENVIRONMENTAL	.01	35	5.4	5.8	8.1	<.050
13...	1305	REPLICATE	--	--	--	--	--	--

01647683 NORTH BRANCH ROCK CREEK TRIBUTARY NEAR OLNEY, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)
NOV 02...	1100	ENVIRONMENTAL	.15	125	6.2	13.8	7.2	2.63
DEC 21...	1120	ENVIRONMENTAL	.36	115	6.1	6.7	11.1	3.31
21...	1125	REPLICATE	--	--	--	--	--	3.22

0164768495 NORTH BRANCH ROCK CREEK TRIBUTARY NEAR REDLAND, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)
NOV 10...	1100		.07	91	5.9	9.4	5.0	.776
DEC 21...	1530		.23	88	6.8	6.6	10.3	1.16

0164768510 WILLIAMSBURG RUN NEAR REDLAND, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)
NOV 10...	1000		.92	189	6.4	9.7	11.8	1.69
DEC 21...	1500		1.6	176	6.9	7.3	11.6	1.79

&lt; Actual value is known to be less than the value shown.

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

## POTOMAC RIVER BASIN--Continued

## 01647687 NORTH BRANCH ROCK CREEK TRIBUTARY AT OAKDALE, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 09...	1600	.47	208	6.6	11.2	10.1	1.43

## 01647688 NORTH BRANCH ROCK CREEK TRIBUTARY NEAR EMORY LN NEAR OAKDALE, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 09...	1430	.18	193	6.5	10.1	8.2	.427

## 01647710 NORTH BRANCH ROCK CREEK TRIBUTARY NEAR MUNCASTER MILL RD NEAR NORBECK, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 09...	1130	.03	140	6.1	8.6	8.4	1.72

## 01647726 MANOR RUN NEAR AVERY, MD

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 08...	1400	.41	313	7.5	9.0	12.1	.757

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

## POTOMAC RIVER BASIN--Continued

## 01648010 ROCK CREEK AT JOYCE RD AT WASHINGTON, DC

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	
OCT 13...	0930	ENVIRONMENTAL	35	227	7.8	10.5	14.3	762	10.3	101	--	
JAN 10...	1430	ENVIRONMENTAL	276	197	6.1	9.0	6.8	743	11.6	97	--	
FEB 09...	1300	ENVIRONMENTAL	32	1380	7.7	12.5	.1	761	15.6	108	--	
MAR 21...	1159	BLANK	368	--	--	--	--	--	--	--	--	
MAR 21...	1200	ENVIRONMENTAL	402	247	7.4	5.5	7.3	765	12.2	101	--	
MAY 16...	1145	ENVIRONMENTAL	24	340	7.9	21.0	17.3	763	9.3	97	--	
JUN 22...	1000	ENVIRONMENTAL	149	118	7.2	24.4	23.3	--	6.1	--	--	
JUL 26...	0900	ENVIRONMENTAL	124	229	7.4	22.7	20.5	--	--	--	--	
SEP 11...	1229	BLANK	13	--	--	--	--	--	--	--	--	
SEP 11...	1230	ENVIRONMENTAL	13	292	7.9	25.5	28.8	761	8.9	116	--	
SEP 26...	0945	ENVIRONMENTAL	364	115	7.2	11.0	14.2	756	9.2	90	--	
SEP 26...	0946	REPLICATE	364	--	--	--	--	--	--	--	--	
DATE	2,4,5-T DIS-SOLVED (UG/L) (39742)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DI-ETHYL ANILINE WAT FLT GF 0.7 U (UG/L) (82660)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA-CHLOR, DISS, REC (UG/L) (46342)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
OCT 13...	<.04	<.11	<.10	<.003	<.13	<.002	<.09	<.002	<1.05	<.02	<.67	<.002
JAN 10...	<.04	<.32	<.10	<.003	<.11	<.002	<.09	<.002	<.10	<.02	<1.66	<.002
FEB 09...	<.04	<.26	<.10	<.003	<.11	<.002	<.09	<.002	<.10	<.18	<.21	<.002
MAR 21...	<.04	<.11	<.10	<.003	<.11	<.002	<.09	<.002	<.10	<.02	<.21	<.002
MAR 21...	<.04	<.39	<.10	<.003	<.17	<.002	<.09	<.002	<.10	<.02	<2.26	<.002
MAY 16...	<.04	<.11	<.10	<.003	<.16	<.002	<.09	<.002	<.11	<.02	<.22	<.002
JUN 22...	<.04	<.73	<.10	<.003	<.11	.013	<.09	<.002	<.27	<.15	<.38	<.002
JUL 26...	<.04	<.34	<.16	<.003	<41.6	<.002	<.09	<.002	<4.29	<.02	<12.1	<.002
SEP 11...	<.04	<.11	<.10	<.003	<.11	<.002	<.09	<.002	<.10	<.02	<.21	<.002
SEP 11...	<.04	<.11	<.10	<.003	<.30	<.002	<.09	<.002	<.10	<.45	<.21	<.002
SEP 26...	<.04	.55	<.10	<.003	<.11	<.002	<.09	<.002	<.30	<.33	<.23	<.002
SEP 26...	<.04	.30	<.10	<.003	<.15	<.002	<.09	<.002	<.56	<.02	<.21	<.002
DATE	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BDMC, SURROG, WATER, UNFLTRD REC PERCENT (99835)	BEN-FLUR-ALIN WAT FLD GF, REC (UG/L) (82673)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (82680)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (82674)	CHLOR-AMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)
OCT 13...	.013	69	<.002	<.04	<.12	<.04	<.002	<.07	E.015	<.29	<.003	--
JAN 10...	.011	100	<.002	<.04	<.15	<.04	<.002	<.07	E.055	<.29	<.003	<.14
FEB 09...	.016	105	<.002	<.04	<.21	<.04	<.002	<.07	E.012	<.29	<.003	<.14
MAR 21...	<.001	76	<.002	<.04	<.06	<.04	<.002	<.07	<.003	<.29	<.003	<.14
MAR 21...	.010	85	.004	<.04	<.23	<.04	<.002	<.07	E.042	<.29	<.003	<.14
MAY 16...	.039	78	<.002	<.04	<.06	<.04	<.002	<.07	E.007	<.29	<.003	<.14
JUN 22...	.145	109	<.002	<.04	<.29	<.04	<.002	1.14	E1.7	<.29	<.003	<.14
JUL 26...	.063	111	<.002	<.04	<.67	<.04	<.002	.34	E.52	<.29	<.006	<.14
SEP 11...	<.001	73	<.002	<.04	<.06	<.04	<.002	<.07	<.003	<.29	<.003	<.14
SEP 11...	.023	91	<.002	<.04	<.19	<.04	<.002	<.07	E.009	<.29	<.003	<.14
SEP 26...	<.001	127	<.002	<.04	<.06	<.04	<.002	.12	E.22	<.29	<.003	<.14
SEP 26...	<.001	108	<.002	<.04	<.18	<.04	<.002	.10	E.22	<.29	<.003	<.14

E Estimated value.

&lt; Actual value is known to be less than the value shown.

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

## POTOMAC RIVER BASIN--Continued

## 01648010 ROCK CREEK AT JOYCE RD AT WASHINGTON, DC--Continued

DATE	CHLOR-AMBEN, WATER, FLTRD, GF 0.7U REC (49307)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (49306)	CHLOR-PYRIFOS DIS-SOLVED (38933)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (49305)	CYANA-ZINE, WATER, DISS, REC (04041)	DACTHAL-MONO-ACID, WAT,FLT GF 0.7U REC (49304)	DCPA WATER, FLTRD, 0.7 U GF, REC (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (04040)	DIAZ-INON, D10 SRG, WAT FLT 0.7 U GF, REC (91063)	DI-AZINON, DIS-SOLVED (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (38442)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (49303)
OCT 13...	<.140	<.48	.006	<.49	<.004	<.04	<.002	E.038	120	.060	<.10	<.07
JAN 10...	--	<.48	.017	<.23	<.004	<.04	<.002	E.034	120	.019	<.04	<.07
FEB 09...	--	<.48	E.008	<.23	<.004	<.04	E.002	E.058	106	.011	<.04	<.07
MAR 21...	--	<.48	<.004	<.23	<.004	<.04	<.002	<.002	95	<.002	<.04	<.07
MAR 21...	--	<.48	<.004	<.23	<.004	<.04	<.002	E.033	97	.054	<.67	<.07
MAY 16...	--	<.48	.005	<.23	<.007	<.04	<.002	E.062	87	.028	<.04	<.07
JUN 22...	--	<.48	.010	<.23	<.004	<.04	<.002	E.023	113	.307	<.04	<.07
JUL 26...	--	<.48	<.004	<.23	<.004	<.04	<.002	E.029	120	.079	<.29	<.92
SEP 11...	--	<.48	<.004	<.23	<.004	<.04	<.002	E.002	117	<.002	<.04	<.07
SEP 11...	--	<.48	E.003	<.23	<.004	<.04	<.002	E.058	114	.035	<.04	<.07
SEP 26...	--	<.48	.007	<.23	<.004	<.04	<.002	E.012	109	.106	<.04	<.07
SEP 26...	--	<.48	.008	<.23	<.004	<.04	<.002	E.012	110	.106	<.13	<.07
DATE	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (49302)	DI-ELDRIN, DIS-SOLVED (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (49301)	DISUL-FOTON WATER, FLTRD, GF 0.7 U (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (49300)	DNOC WAT,FLT GF 0.7U REC (49299)	EPTC WATER, FLTRD, 0.7 U GF, REC (82668)	ETHAL-FLUR-ALIN, WAT FLT 0.7 U GF, REC (82663)	ETHO-PROP WATER, FLTRD, 0.7 U GF, REC (82672)	FEN-URON, WATER, FLTRD, GF 0.7U REC (49297)	FLUO-METURON, WATER, FLTRD, GF 0.7U REC (38811)	FONOFOFOS WATER, DISS REC (04095)
OCT 13...	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
JAN 10...	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.19	<.003
FEB 09...	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
MAR 21...	<.03	<.001	<.14	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
MAR 21...	<.12	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
MAY 16...	<.03	<.001	<.06	<.017	E.03	<.42	<.002	<.004	<.003	<.07	<.06	<.003
JUN 22...	<.17	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.10	<.003
JUL 26...	<2.08	<.001	<.06	<.017	<.18	<.42	<.002	<.004	<.003	<.29	<.06	<.003
SEP 11...	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
SEP 11...	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
SEP 26...	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.27	<.003
SEP 26...	<.10	<.001	<.06	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003
DATE	HCH ALPHA D6 SRG, WAT FLT 0.7 U GF, REC (91065)	LINDANE DIS-SOLVED (39341)	LINURON WATER, FLTRD, GF 0.7U REC (38478)	LIN-URON WATER, FLTRD, GF 0.7 U (82666)	MALA-THION, DIS-SOLVED (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (38487)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (38501)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (49296)	METHYL-AZIN, PHOS, WAT FLT 0.7 U GF, REC (82686)	METHYL-PARA-THION, WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR, WATER, DISSOLV (39415)
OCT 13...	110	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<.28	<.001	<.006	.012
JAN 10...	108	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<1.01	<.001	<.006	.008
FEB 09...	97	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<.02	<.001	<.006	.013
MAR 21...	78	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<.02	<.001	<.006	<.002
MAR 21...	78	<.004	<.09	<.002	.014	<.17	<.13	<.03	<.72	<.020	<.006	.010
MAY 16...	79	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<.62	<.010	<.006	.031
JUN 22...	96	<.004	<.09	<.002	.010	E.10	<.13	<.03	<1.70	<.001	<.006	.115
JUL 26...	106	<.004	<.09	<.002	.274	<.17	<.13	<.03	<.02	<.001	<.006	.030
SEP 11...	99	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<.02	<.001	<.006	<.002
SEP 11...	108	<.004	<.09	<.002	<.005	<.17	<.13	<.03	<.16	<.001	<.006	.014
SEP 26...	108	<.004	<.11	<.002	.006	<.17	<.13	<.23	<.55	<.001	<.006	.014
SEP 26...	108	<.004	<.09	<.002	.005	E.04	<.13	<.17	<.38	<.001	<.006	.013

E Estimated value.

&lt; Actual value is known to be less than the value shown.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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

## POTOMAC RIVER BASIN--Continued

01648010 ROCK CREEK AT JOYCE RD AT WASHINGTON, DC--Continued

DATE	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	P,P' DDE (UG/L) (34653)	PARA- THON, DIS- (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
OCT											
13...	<.004	<.004	<.003	<.07	<.04	<.31	<.08	<.006	<.004	<.004	<.004
JAN											
10...	<.020	<.004	<.003	<.07	<.04	<.31	<.28	<.006	<.004	<.004	<.004
FEB											
09...	<.015	<.004	<.003	<.07	<.04	<.31	<.02	<.006	<.004	<.004	<.004
MAR											
21...	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006	<.004	<.004	<.004
21...	<.004	<.004	<.003	<.07	<.04	<.31	<.62	<.006	<.004	<.004	.036
MAY											
16...	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006	<.004	<.004	<.010
JUN											
22...	<.004	<.004	<.003	<.10	<.04	<.31	<.34	<.006	<.004	<.004	.027
JUL											
26...	<.004	<.004	<.003	<.30	<.04	<.31	<.02	<.006	<.004	<.004	<.010
SEP											
11...	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006	<.004	<.004	<.004
11...	<.004	<.004	<.003	<.07	<.04	<.31	<.37	<.006	<.004	<.004	<.004
26...	<.004	<.004	<.003	<.07	<.04	<.31	<.56	<.006	<.004	<.004	<.004
26...	<.004	<.004	<.003	<.07	<.04	<.58	<.51	<.006	<.004	<.004	<.004
DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, FLTRD, DISS, 0.7 U REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)
OCT											
13...	<.005	<.002	<.05	E.011	<.003	<.007	<.004	<.013	<.12	<.08	<.06
JAN											
10...	<.005	<.002	<.05	E.009	<.003	<.007	<.004	<.013	<.04	<.08	<.06
FEB											
09...	<.005	<.002	<.05	E.011	<.003	<.007	<.004	<.013	<.04	<.08	<.06
MAR											
21...	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04	<.08	<.06
21...	<.005	<.002	<.05	E.005	<.003	<.007	<.004	<.013	<.04	<.08	<.06
MAY											
16...	<.005	<.002	<.13	E.011	<.003	<.007	<.004	<.013	<.04	<.08	<.06
JUN											
22...	<.005	<.002	<.05	.058	<.020	<.007	<.004	<.013	<.66	<.29	<.06
JUL											
26...	<.005	<.002	<.05	.072	<.020	<.007	<.004	<.013	<.31	<.19	<.06
SEP											
11...	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04	<.08	<.06
11...	<.005	<.002	<.05	E.013	<.003	<.007	<.004	<.013	<.04	<.37	<.06
26...	<.005	<.002	<.05	E.012	<.003	<.007	<.004	<.013	<.04	<.18	<.06
26...	<.005	<.002	<.05	E.012	<.003	<.007	<.004	<.013	<.04	<.18	<.06
DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, DIS- CHARGE, SUS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
13...	.010	E.006	<.007	<.013	<.002	<.001	<.25	<.002	6	.57	--
JAN											
10...	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	149	111	76
FEB											
09...	.020	<.010	<.007	<.013	<.002	<.001	<.25	<.002	6	.49	--
MAR											
21...	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	1	.99	--
21...	.008	<.010	<.007	<.013	<.002	<.001	<.25	.006	305	331	--
MAY											
16...	.016	<.010	<.007	<.013	<.002	<.001	<.25	<.002	17	1.1	--
JUN											
22...	.012	<.010	<.007	<.013	<.002	<.001	<.25	E.002	128	52	--
JUL											
26...	.010	<.010	<.007	<.013	<.002	<.001	<.25	<.002	38	13	--
SEP											
11...	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	M	.01	--
11...	.014	E.004	<.007	<.013	<.002	<.001	.26	<.002	15	.51	--
26...	.018	<.010	<.007	<.013	<.002	<.001	E.23	<.002	314	309	77
26...	.017	<.010	<.007	<.013	<.002	<.001	E.15	.004	--	--	--

E Estimated value.

&lt; Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

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

## POTOMAC RIVER BASIN--Continued

01660745 HOGHOLE RUN AT MARSHALLS CORNER, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	
NOV 02...	1050	ENVIRONMENTAL	.18	73	5.7	--	14.6	672	7.0	78	
FEB 09...	1059	BLANK	--	--	--	--	--	--	--	--	
09...	1100	ENVIRONMENTAL	1.3	253	5.3	7.0	3.0	767	13.2	97	
09...	1101	REPLICATE	--	--	--	--	--	--	--	--	
MAR 14...	1015	ENVIRONMENTAL	.47	--	--	11.5	7.5	--	--	--	
JUN 13...	1005	ENVIRONMENTAL	.16	64	5.9	23.0	19.5	--	5.9	64	
AUG 08...	1040	ENVIRONMENTAL	1.7	63	5.3	29.0	21.5	761	7.4	84	
DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	ANC BICAR-BONATE IT FIELD (MG/L AS HCO3) (00450)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 02...	16	3.98	1.46	4.8	1.1	6	7	6.7	9.9	<.1	19.0
FEB 09...	--	<.02	<.01	<.1	<.2	--	--	<.3	<.3	<.1	.5
09...	31	7.40	2.93	32.9	1.1	2	3	7.6	64.7	<.1	12.1
09...	31	7.40	2.93	33.0	1.1	--	--	7.5	66.6	<.1	11.8
MAR 14...	--	--	--	--	--	--	--	--	--	--	--
JUN 13...	15	3.91	1.37	3.7	.8	8	10	5.6	5.9	<.1	18.9
AUG 08...	12	3.00	1.10	5.2	.9	4	6	6.7	6.8	<.1	14.9
DATE	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	
NOV 02...	--	<.010	<.050	<.020	.55	.13	--	--	--	.430	
FEB 09...	--	<.010	<.050	<.020	<.10	<.10	--	--	--	<.008	
09...	.19	<.010	.072	<.020	.12	<.10	--	--	--	.010	
09...	.21	<.010	.075	<.020	.14	.10	.18	--	--	.012	
MAR 14...	--	--	--	--	--	--	--	--	--	--	
JUN 13...	--	<.010	<.050	.048	.33	.24	--	.28	.19	.099	
AUG 08...	--	<.010	<.050	<.020	.42	.36	--	--	--	.053	



## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN--Continued

01660745 HOGHOLE RUN AT MARSHALLS CORNER, MD--Continued

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (006666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (006671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	E. COLI WATER WHOLE TOTAL (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
NOV 02...	.023	.012	31	4.4	--	140	130	15	<1	<2.0
FEB 09...	<.006	<.010	--	--	--	--	--	<1	<1	<2.0
09...	<.006	<.010	45	2.4	--	K3	--	69	<1	<2.0
09...	<.006	<.010	--	2.5	--	--	--	67	<1	<2.0
MAR 14...	--	--	--	--	<10	--	K9	--	--	--
JUN 13...	.032	.026	24	4.8	320	650	1700	29	<1	<2.0
AUG 08...	.020	.012	41	--	90	470	580	110	<1	E1.1
DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 02...	35	<1	<.8	3	80	<1	66	2	<1	13
FEB 09...	<1	<1	<.8	<1	<10	<1	<2	<1	<1	<1
09...	99	<1	<.8	1	120	<1	240	5	<1	36
09...	100	<1	<.8	1	120	<1	240	5	<1	36
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 13...	25	<1	<.8	<1	370	<1	108	3	<1	6
AUG 08...	36	<1	<.8	2	360	<1	315	3	<1	15

E Estimated value.

&lt; 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).

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

POTOMAC RIVER BASIN--Continued

0166074520 HOGHOLE RUN TRIBUTARY NEAR PORT TOBACCO, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)
NOV 02...	1310	.09	68	6.1	20.0	14.6	662	6.4	72
FEB 09...	1245	.14	64	5.8	10.0	3.5	--	12.9	97
MAR 14...	1100	.15	--	--	12.0	8.0	--	--	--
JUN 13...	1107	.07	58	6.2	23.0	18.7	--	7.9	64
AUG 08...	1210	.10	58	5.8	34.0	22.5	--	7.3	--

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	ANC BICAR-BONATE IT FIELD (MG/L AS HCO3) (00450)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 02...	--	--	--	<.010	<.050	<.020	.44	.20
FEB 09...	4	5	.25	<.010	.092	<.020	.16	E.10
MAR 14...	--	--	--	--	--	--	--	--
JUN 13...	6	7	.51	<.010	.166	.023	.35	.25
AUG 08...	6	8	.50	<.010	.159	.022	.35	.26

DATE	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS. / 100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 02...	--	--	--	.140	.064	.042	--	61	230
FEB 09...	--	--	--	E.007	E.003	<.010	--	K6	--
MAR 14...	--	--	--	--	--	--	20	--	24
JUN 13...	.41	.32	.22	.050	.030	.021	80	140	1200
AUG 08...	.42	.32	.24	.045	.026	.016	370	730	1000

E Estimated value.  
 < 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).

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN--Continued

0166074530 THOMAS STONE POND NEAR PORT TOBACCO, MD

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)
NOV 02...	1600	25	5.8	--	12.8	659	4.6	5
FEB 09...	1800	34	6.3	4.0	.5	767	4.5	29
MAR 14...	1345	--	--	21.0	14.0	--	--	--
JUN 14...	1200	29	5.4	29.5	23.8	--	2.2	28
AUG 08...	1700	26	5.4	--	29.5	759	6.3	83

DATE	ANC WATER UNFLTRD IT FIELD CACO3 (00419)	ANC BICAR- BONATE IT FIELD HCO3 (00450)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 02...	1	1	<.010	<.050	<.020	.63	.46
FEB 09...	2	3	<.010	<.050	<.020	1.1	.61
MAR 14...	--	--	--	--	--	--	--
JUN 14...	2	2	<.010	<.050	.061	.99	.67
AUG 08...	1	1	<.010	<.050	<.020	.87	.47

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, TOTAL UM-MF (COLS / 100 ML) (31625)	STREP- TOCOCCI FECAL, 0.7 KF AGAR (COLS . PER 100 ML) (31673)
NOV 02...	--	--	.050	.010	<.010	--	<1	K40
FEB 09...	--	--	.086	.023	.015	--	K3	--
MAR 14...	--	--	--	--	--	<10	--	<1
JUN 14...	.93	.61	.063	.015	<.010	<10	<1	K14
AUG 08...	--	--	.035	E.003	<.010	<10	6	K10

E Estimated value.

< 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).

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

POTOMAC RIVER BASIN--Continued

0166074540 HOGHOLE RUN AT PORT TOBACCO, MD

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)
NOV 02...	1635	ENVIRONMENTAL	1.4	63	6.0	--	15.7	659	7.1
FEB 09...	1600	ENVIRONMENTAL	2.6	164	6.6	11.0	5.0	--	12.3
MAR 14...	1430	ENVIRONMENTAL	1.3	--	--	18.0	12.0	--	--
JUN 13...	1215	ENVIRONMENTAL	.53	54	6.2	23.0	20.6	--	6.2
AUG 08...	1529	BLANK	--	--	--	--	--	--	--
08...	1530	ENVIRONMENTAL	2.5	58	5.8	28.0	24.5	760	7.1
08...	1531	REPLICATE	--	--	--	--	--	--	--

DATE	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNPLTRD IT (MG/L AS CaCO3) (00419)	ANC BICAR-BONATE IT (MG/L AS HCO3) (00450)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940)
NOV 02...	83	15	3.57	1.44	3.6	1.4	4	5	6.7	7.1
FEB 09...	96	24	5.73	2.37	18.7	.9	2	2	8.6	38.4
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 13...	73	13	3.19	1.31	3.0	.7	7	8	5.0	4.8
AUG 08...	--	--	<.02	<.01	<.1	<.2	--	--	<.3	<.3
08...	86	13	3.06	1.26	4.0	.7	4	6	6.7	5.7
08...	--	13	3.06	1.26	4.1	.8	--	--	6.7	5.8

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
NOV 02...	<.1	14.7	<.010	<.050	<.020	.46	.14	--	--	.178
FEB 09...	<.1	12.4	<.010	<.050	<.020	.14	<.10	--	--	.016
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 13...	<.1	14.8	<.010	<.050	.023	.27	.20	.25	.18	.115
AUG 08...	<.1	<.1	<.010	<.050	<.020	E.10	<.10	--	--	<.008
08...	<.1	14.7	<.010	<.050	<.020	.37	.26	--	--	.073
08...	<.1	14.8	<.010	<.050	<.020	.37	.26	--	--	.074

E Estimated value.  
 < Actual value is known to be less than the value shown.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN--Continued

0166074540 HOGHOLE RUN AT PORT TOBACCO, MD--Continued

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	E. COLI WATER WHOLE TOTAL (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
NOV 02...	.030	.019	15	6.3	--	110	560	17	<1	<2.0
FEB 09...	<.006	<.010	1.9	3.2	--	K7	--	21	<1	<2.0
MAR 14...	--	--	--	--	<10	--	19	--	--	--
JUN 13...	.041	.031	10	4.6	70	85	790	29	<1	<2.0
AUG 08...	<.006	<.010	--	--	--	--	--	3	<1	<2.0
08...	.026	.016	17	--	130	140	1800	52	<1	<2.0
08...	.026	.016	--	--	--	--	--	49	<1	<2.0

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
NOV 02...	26	<1	<.8	<1	80	<1	37	2	<1	9
FEB 09...	65	<1	<.8	<1	340	<1	145	3	<1	21
MAR 14...	--	--	--	--	--	--	--	--	--	--
JUN 13...	19	<1	<.8	1	340	<1	60	2	<1	5
AUG 08...	<1	<1	<.8	<1	<10	<1	<2	<1	<1	2
08...	30	<1	E.8	1	210	<1	144	3	<1	10
08...	30	<1	E.7	1	220	<1	144	3	<1	8

E Estimated value.

&lt; 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).

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

## POTOMAC RIVER BASIN--Continued

384532076563001 PEA HILL BRANCH AT CAMP SPRINGS, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAY 02...	0800	.36	237	6.1	18.0	15.0	758	7.9	79	52	13.1	4.74	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
MAY 02...	22.2	2.0	23	28	17.3	40.7	.1	11.6	140	.74	<.010	.483	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (MG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (MG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (0.7 U GF, REC) (UG/L) (82660)
MAY 02...	.064	.26	.24	.72	.20	.17	.047	E.004	<.010	160	229	<.003	
DATE		ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (UG/L) (82673)	BUTYL-ATE, WATER, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD (0.7 U GF, REC) (UG/L) (82680)	CARBO-FURAN WATER FLTRD (0.7 U GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, REC (UG/L) (04041)	DCPA, WATER FLTRD (0.7 U GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 02...	<.002	<.002	<.002	.006	<.004	<.002	E.012	<.003	<.004	<.004	<.002	E.004	
DATE		DIAZ-INON D10 SRG WAT FLT (0.7 U GF, REC) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (0.7 U GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (0.7 U GF, REC) (UG/L) (82668)	ETHAL-ALIN WAT FLT (0.7 U GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (0.7 U GF, REC) (UG/L) (82672)	FONO-FOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (0.7 U GF, REC) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD (0.7 U GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
MAY 02...	107	.016	<.001	<.017	<.002	<.004	<.003	<.003	91	<.004	<.002	<.005	
DATE		METHYL AZIN-THION WAT FLT (0.7 U GF, REC) (82686)	METHYL PARA-THION WAT FLT (0.7 U GF, REC) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (0.7 U GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (0.7 U GF, REC) (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD (0.7 U GF, REC) (82669)	PENDI-METH-ALIN WAT FLT (0.7 U GF, REC) (82683)	PER-METHRIN CIS WAT FLT (0.7 U GF, REC) (82687)	PHORATE WATER FLTRD (0.7 U GF, REC) (82664)
MAY 02...	<.001	<.006	.005	<.004	<.004	<.003	<.006	<.004	<.004	<.007	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD (0.7 U GF, REC) (82676)	PRO-PA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (0.7 U GF, REC) (82679)	PRO-PARGITE WATER FLTRD (0.7 U GF, REC) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD (0.7 U GF, REC) (82670)	TER-BACIL WATER FLTRD (0.7 U GF, REC) (82665)	TER-BUFOS WATER FLTRD (0.7 U GF, REC) (82675)	THIO-BENCARB WATER FLTRD (0.7 U GF, REC) (82681)	TRIAL-LATE WATER FLTRD (0.7 U GF, REC) (82678)	TRI-FLUR-ALIN WAT FLT (0.7 U GF, REC) (82661)
MAY 02...	E.013	<.003	<.007	<.004	<.013	.007	<.010	<.007	<.013	<.002	<.001	<.003	

E Estimated value.

&lt; Actual value is known to be less than the value shown.

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

## POTOMAC RIVER BASIN--Continued

384539076590101 HUNTERS MILL BRANCH TRIBUTARY NEAR FRIENDLY, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
APR 05...	1000	.20	163	7.1	8.5	10.0	757	12.5	111	46	14.5	2.50	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	
APR 05...	7.7	1.6	28	34	17.1	17.0	.1	13.1	100	.40	<.010	.207	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (MG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (MG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (0.7 U GF, REC) (UG/L) (82660)
APR 05...	.106	.19	.25	.46	.08	.15	.029	E.003	<.010	1380	165	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (0.7 U GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (0.7 U GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD (0.7 U GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 05...	<.002	<.002	<.002	.004	<.002	<.002	E.031	<.003	.005	<.004	<.002	E.004	
DATE		DIAZ-INON D10 SRG WAT FLT (0.7 U GF, REC) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD (0.7 U GF, REC) (UG/L) (82677)	EPTC WATER, FLTRD (0.7 U GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (0.7 U GF, REC) (UG/L) (82663)	ETHO-PROP WATER, FLTRD (0.7 U GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (0.7 U GF, REC) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD (0.7 U GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 05...	94	<.002	<.001	<.017	<.002	<.004	<.003	<.003	63	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT (0.7 U GF, REC) (82686)	METHYL PARA-THION WAT FLT (0.7 U GF, REC) (82667)	METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER, DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD (0.7 U GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD (0.7 U GF, REC) (UG/L) (82684)	P,P', DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (0.7 U GF, REC) (82669)	PENDI-METH-ALIN WAT FLT (0.7 U GF, REC) (82683)	PER-METHRIN CIS WAT FLT (0.7 U GF, REC) (82687)	PHORATE WATER, FLTRD (0.7 U GF, REC) (UG/L) (82664)
APR 05...	<.001	<.006	.005	<.004	<.004	<.003	<.006	<.004	<.004	.011	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD (0.7 U GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD (0.7 U GF, REC) (UG/L) (82679)	PRO-PARGITE WATER, FLTRD (0.7 U GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (0.7 U GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (0.7 U GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (0.7 U GF, REC) (82675)	THIO-BENCARB WATER, FLTRD (0.7 U GF, REC) (82681)	TRIAL-LATE WATER, FLTRD (0.7 U GF, REC) (82678)	TRI-FLUR-ALIN WAT FLT (0.7 U GF, REC) (UG/L) (82661)
APR 05...	<.018	<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.

&lt; Actual value is known to be less than the value shown.

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

POTOMAC RIVER BASIN--Continued

381541076330301 ST MARY'S LAKE TRIBUTARY NEAR CALLAWAY, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	OXYGEN, SATUR-ATION (00900)	HARD-NESS TOTAL (MG/L AS CAC03) (00915)	CALCIUM DIS-SOLVED (MG/L AS CA) (00925)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
MAY 03...	1400	.14	37	4.5	20.5	15.0	770	7.6	75	4	.39	.78	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
MAY 03...	3.6	.8	1	1	5.1	5.4	<.1	10.7	39	<.010	<.050	<.020	
DATE		NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER DISS, REC (UG/L) (49260)	ALA-CHLOR, WATER DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	
MAY 03...	.13	.10	E.004	E.003	<.010	350	60	<.003	<.002	<.002	<.002	<.001	
DATE		BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	
MAY 03...		<.002	<.002	<.003	<.003	<.004	<.004	<.002	<.002	102	<.002	<.001	
DATE		DISUL-FOTON WATER, FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER, FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER, FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91065)	LINDANE WATER, FLTRD (SOLVED) (UG/L) (39341)	LIN-URON WATER, FLTRD (GF, REC) (UG/L) (82666)	MALA-THION, WAT FLT (GF, REC) (UG/L) (39532)	METHYL AZIN-THION, WAT FLT (GF, REC) (UG/L) (82686)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)	
MAY 03...		<.017	<.002	<.004	<.003	<.003	91	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER, DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER, FLTRD (GF, REC) (UG/L) (82684)	P,P' DDE DISS, (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER, FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAY 03...		<.002	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	
DATE		PRON-AMIDE WATER, FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER, FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WAT FLT (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER, FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAY 03...		<.003	<.007	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.



ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN--Continued

381848076421901 ST CLEMENTS BAY TRIBUTARY NEAR CLEMENTS, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARDS) (UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
MAY 03...	0900	.41	171	6.8	20.0	13.5	770	8.4	80	58	17.0	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
MAY 03...	3.90	6.6	2.0	37	45	12.9	13.3	<.1	10.3	111	1.7	
DATE		NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	
MAY 03...	1.53	.011	1.54	.030	.14	.18	1.7	.11	.15	.010	.007	
DATE		PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
MAY 03...	<.010	40	38	<.003	<.002	<.002	<.002	2.22	<.002	<.002	<.003	
DATE		CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-WATER, PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91063)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
MAY 03...	<.003	<.004	<.004	<.002	E.038	110	<.002	<.001	<.017	<.002	<.004	
DATE		ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U DDE PERCENT (UG/L) (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION, WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISS, REC (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
MAY 03...	<.003	<.003	93	<.004	<.002	<.005	<.001	<.006	.005	<.004		
DATE		MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82684)	P,P' DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	
MAY 03...	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003		
DATE		PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U DDE GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
MAY 03...	<.007	<.004	<.013	1.38	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

POTOMAC RIVER BASIN--Continued

383345076525101 PINEY BRANCH TRIBUTARY AT GARDNER, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	
MAY 02...	1315	1.8	79	6.5	31.0	16.5	762	9.3	95	27	6.76	2.48	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
MAY 02...	3.3	.8	13	16	10.4	5.1	<.1	12.6	60	.45	<.010	.054	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
MAY 02...	<.020	.40	.13	.18	.021	.006	<.010	110	59	<.003	<.002	<.002	
DATE		ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT (GF, REC) PERCENT (UG/L) (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
MAY 02...	<.002	.004	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.003	109	<.002	
DATE		DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) (91065)	LINDANE FLTRD (UG/L) (39341)	LIN-URON WATER FLTRD (GF, REC) (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-THION WAT FLT (GF, REC) (UG/L) (82686)	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)
MAY 02...	<.001	<.017	<.002	<.004	<.003	<.003	94	<.004	<.002	<.005	<.001	<.006	
DATE		METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P'DE DISS (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD (GF, REC) (UG/L) (82669)	PENDI-METH-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	
MAY 02...	.005	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.004	<.005	<.002	E.008	
DATE		PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER FLTRD (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAY 02...	<.003	<.007	<.004	<.013	<.006	<.010	<.007	<.013	<.002	<.001	<.002		

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN--Continued

383520076502501 ZEKIAH SWAMP RUN NEAR ST CHARLES, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WAT-ER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAY 04...	1400	21	62	5.9	18.0	769	8.7	91	18	3.97	1.85	6.3
DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)
MAY 04...	1.1	6	7	7.4	9.5	<.1	7.2	68	.64	<.010	.187	.035
DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (GF, REC) (UG/L) (82660)	ACETO-CHLOR, WAT FLT REC (UG/L) (49260)
MAY 04...	.46	.33	.52	.42	.30	.042	.015	<.010	770	97	<.003	.007
DATE	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD (GF, REC) (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD (GF, REC) (UG/L) (82680)	CARBO-FURAN WATER, FLTRD (GF, REC) (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD (GF, REC) (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON, WAT FLT REC (UG/L) (91063)
MAY 04...	<.002	<.002	.118	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.015	99
DATE	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (GF, REC) (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82663)	ETHO-PROP WATER FLTRD (GF, REC) (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT (GF, REC) (91065)	LIN-URON WATER, FLTRD (GF, REC) (UG/L) (39341)	MALA-THION, DIS-SOLVED (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT (GF, REC) (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT (GF, REC) (UG/L) (82686)
MAY 04...	.006	<.001	<.017	<.002	<.004	<.003	<.003	86	<.004	<.002	<.005	<.001
DATE	METHYL PARA-THION WAT FLT (GF, REC) (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (GF, REC) (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (GF, REC) (UG/L) (82684)	P,P',DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD (GF, REC) (UG/L) (82669)	PENDI-ALIN WAT FLT (GF, REC) (UG/L) (82683)	PER-METHRIN CIS WAT FLT (GF, REC) (UG/L) (82687)	PHORATE WATER, FLTRD (GF, REC) (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
MAY 04...	<.006	.007	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018
DATE	PRON-AMIDE WATER FLTRD (GF, REC) (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (GF, REC) (UG/L) (82679)	PRO-PARGITE WATER FLTRD (GF, REC) (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER, FLTRD (GF, REC) (UG/L) (82670)	TER-BACIL WATER, FLTRD (GF, REC) (UG/L) (82665)	TER-BUFOS WATER, FLTRD (GF, REC) (UG/L) (82675)	THIO-BENCARB WATER, FLTRD (GF, REC) (UG/L) (82681)	TRIAL-LATE WATER, FLTRD (GF, REC) (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (GF, REC) (UG/L) (82661)	
MAY 04...	<.003	<.007	<.004	<.013	.007	E.008	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

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

POTOMAC RIVER BASIN--Continued

384724076540401 PAYNES BRANCH AT CLINTON, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM DIS-SOLVED (MG/L AS MG) (00925)	
APR 05...	1415	1.6	300	6.9	13.5	13.5	756	12.4	120	53	14.0	4.46	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ANILINE DIS-SOLVED (MG/L AS N) (00631)
APR 05...	30.7	2.8	28	34	18.6	58.3	.1	6.5	169	1.3	<.010	.796	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT (0.7 U) (UG/L) (82660)
APR 05...	.111	.50	.61	1.4	.38	.50	.042	.014	<.010	400	79	<.003	
DATE		ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
APR 05...	<.002	.006	<.002	.008	<.002	<.002	<.010	<.003	<.004	<.004	<.002	E.005	
DATE		DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
APR 05...	93	E.003	.012	<.017	<.002	<.004	<.003	<.003	80	<.004	<.002	<.005	
DATE		METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE WAT FLT 0.7 U DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
APR 05...	<.001	<.006	.014	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	
DATE		PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT (0.7 U) (UG/L) (82661)
APR 05...	E.008	<.003	<.007	<.004	<.013	.030	<.010	<.007	<.013	<.002	<.001	<.002	

E Estimated value.  
 < Actual value is known to be less than the value shown.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLENEOUS SITES

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

POTOMAC RIVER BASIN--Continued

385001076545801 HENSON CREEK TRIBUTARY AT SUITLAND, MD

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAY 11...	0930	.67	265	6.3	16.5	762	8.5	87	77	21.4	5.68	17.7
DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00631)
MAY 11...	3.8	43	52	17.2	33.1	.1	8.8	158	1.6	.999	.025	1.02
DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOS-PHORUS PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
MAY 11...	.080	.59	.45	1.5	.51	.37	.039	.012	<.010	400	109	<.003
DATE	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
MAY 11...	<.002	<.002	<.002	.036	<.002	<.002	E.28	<.003	<.004	<.004	<.002	E.014
DATE	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
MAY 11...	95	.059	<.001	<.017	<.002	<.004	<.003	<.003	87	<.004	<.002	.032
DATE	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE WAT FLT 0.7 U DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
MAY 11...	<.010	<.006	.014	<.004	<.004	<.003	<.006	<.004	<.004	<.020	<.005	<.002
DATE	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WAT FLT 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
MAY 11...	E.012	<.003	<.007	<.004	<.013	.015	<.010	<.007	<.013	<.002	<.001	<.002

E Estimated value.  
 < Actual value is known to be less than the value shown.

INDEX

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	Page		Page
Aberdeen, MD, Cranberry Run at.....	455	Bibliographic Data Sheet.....	iv
Access to USGS data.....	14	Big Elk Creek at Elk Mills, MD.....	144-145
Accuracy of stage and water-discharge records....	10	Big Pipe Creek at Bruceville, MD.....	342-243
Acid neutralizing capacity, definition of.....	15	Biochemical oxygen demand (BOD), definition of...	15
Acre-foot, definition of.....	15	Biomass, definition of.....	16
Adamsville, DE, Marshyhope Creek near.....	120-121	Biomass pigment ratio, definition of.....	16
Adenosine triphosphate (ATP), definition of.....	15	Birch Branch at Showell, MD.....	411
Algae, definition of.....	15	Blackbird Creek at Blackbird, DE.....	64-65
Algal growth potential (AGP), definition of.....	15	Blackwater Creek near Clarkesville, DE.....	80-83
Alkalinity, definition of.....	15	Blockston Branch tributary near Centreville, MD..	439
Alston Branch near Cheswold, DE.....	407	near Hillsboro, MD.....	438
Anacostia River, Northeast Branch,		Bloomington, MD, Savage River below Savage River	
at Riverdale, MD.....	370-371	Dam, near.....	296-297
Anacostia River, Northwest Branch,		Blue-green algae, definition of.....	21
near Colesville, MD.....	372-373	Bluejay Branch near South River, MD.....	461
near Hyattsville, MD.....	374-375	Blue Mount, MD, Little Falls at.....	168-169
Analyses of samples collected at partial-record		Bottle Branch at Berlin, MD.....	399, 412
and miscellaneous sites.....	404-492	Bottom material, definition of.....	16
Angola, DE, Chapel Branch at.....	398	Bowers, DE, Murderkill River at.....	403
Unity Branch at.....	398	Bowie, MD, Collington Branch at.....	467
Annual mean, explanation of.....	9	Horsepen Branch at.....	471
Annual runoff, explanation/definition of.....	9, 15	Patuxent River near.....	266-271
(AC-FT), explanation/definition of.....	9, 15	Patuxent River tributary near.....	468
(CFSM), explanation/definition of.....	9, 15	Boxiron Creek at Boxiron, MD.....	400, 417
(INCHES), explanation/definition of.....	9, 15	Boxiron, MD, Boxiron Creek at.....	400, 417
Annual 7-day minimum, explanation/definition of..	9, 15	Brockatonorton Bay tributary at.....	400, 418
Annual total, explanation/definition of.....	9, 17	Tanhouse Creek near.....	400, 417
Antietam Creek near Sharpsburg, MD.....	330-331	Brandywine Creek at Wilmington, DE.....	60-63
Arbutus, MD, East Branch Herbert Run at.....	212-213	Bridgeport, MD, Monocacy River at.....	338-339
Aroclor, definition of.....	15	Bridgeville, DE, Nanticoke River near.....	116-119
Arrangement of surface-water quality records....	11	Brighton, MD, Patuxent River below	
Artificial substrate, definition of.....	23	Brighton Dam near.....	254-255
Ash mass, definition of.....	16	Broadmoor, MD, Baisman Run at.....	180-181
Assawoman Bay basin, tidal crest-stage		Brockatonorton Bay basin, low-flow partial-record	
partial-record stations in.....	403	stations in.....	400
Avery, MD, Manor Run near.....	475	water-quality partial-record stations in....	417-418
Back River basin, gaging-station records in.....	198-203	Brockatonorton Bay tributary at Boxiron, MD.....	400, 418
Bacteria, definition of.....	15	Bruceville, MD, Big Pipe Creek at.....	342-343
enterococcus, definition of.....	16	Bundicks Branch at Robinsonville, DE.....	84-89
fecal coliform, definition of.....	15	Buntings Branch near Selbyville, DE.....	399
fecal streptococcal, definition of.....	15	Burnt Mills Dam.....	374
total coliform, definition of.....	15	Bush River basin, gaging-station records in.....	160-163
Baisman Run at Broadmoor, MD.....	180-181	water-quality partial-record station in.....	455
Bald Mill Branch at Lanham, MD.....	470	Bynum Run at Bel Air, MD.....	160-161
Baltimore, MD, Gwynns Falls at Washington Blvd... 234-237		Cacapon River near Great Cacapon, WV.....	318-319
Jones Falls at Maryland Avenue at.....	240-241	Callaway, MD, St. Marys Lake tributary near.....	487
Moore Run at Radecke Ave at.....	202-203	Cambridge, MD, Chicamacomico River	
Moore Run tributary near Todd Ave at.....	200-201	tributary near.....	433
Rognel Heights Storm Sewer Outfall at.....	228-233	Camp Springs, MD, Pea Hill Branch at.....	485
Barkley Branch near Fruitland, MD.....	432	Careytown, MD, Green Run near.....	424
Barnum, WV, North Branch Potomac River at.....	402	Casselman River at Grantsville, MD.....	396-397
Barton, MD, Savage River near.....	294-295	Catoctin Creek near Middletown, MD.....	334-335
Baseflow, definition of.....	16	Cattail Creek near Glenwood, MD.....	252-253
Bassett Creek basin, low-flow partial-record		Cecilton, MD, Mill Pond Creek tributary near....	451
stations in.....	399	Cedarhurst, MD, North Branch Patapsco River at... 206-207	
water-quality partial-record stations in....	413-414	Cedartown, MD, Waterworks Creek tributary near... 400, 415	
Bassett Creek near Ironshire, MD.....	399, 413	Cells/volume, definition of.....	16
Bear Creek at Friendsville, MD.....	394-395	Cells volume (biovolume), definition of.....	16
Beaver Run near Finksburg, MD.....	208-209	Centreville, MD, Blockston Branch tributary near.	439
Beaverdam Branch at Houston, DE.....	68-69	CFSM, explanation of.....	9
Beaverdam Creek at Ironshire, MD.....	399, 413	Cfs-day, definition of.....	16
Beaverdam Ditch near Millville, DE.....	96-101	Chain Bridge, Washington, DC, Potomac River at... 360-367	
Beaverdam Run at Cockeysville, MD.....	182-183	Chapel Branch at Angola, DE.....	398
Bed load, definition of.....	22	Chemical data, explanation of.....	10-14
Bed load discharge, definition of.....	22	Chemical oxygen demand (COD), definition of.....	16
Bed material, definition of.....	16	Chesapeake and Delaware Canal tributary	
Beetree Run at Bentley Springs, MD.....	166-167	near Middletown, DE.....	452
Bel Air, MD, Bynum Run at.....	160-161	Chesapeake and Ohio Canal, diversions to.....	352
Bellegrave, MD, Sideling Hill Creek near.....	316-317	Chester River basin, gaging-station	
Belltown, MD, Red Run near.....	456	records in.....	126-143
Bennett Creek at Park Mills, MD.....	346-347	water-quality partial-record stations in....	441-450
Benson, MD, Winters Run near.....	162-163	Chesterville, MD, Chesterville Branch near.....	442-443
Benthic organisms (invertebrates),		Cow Creek near.....	441
definition of.....	16	Chesterville Branch near Chesterville, MD.....	442-443
Bentley Springs, MD, Beetree Run at.....	166-167	near Crumpton, MD.....	128-139
Berlin, MD, Bottle Branch at.....	399, 412	Cheswold, DE, Alston Branch near.....	407
Newport Creek near.....	399, 412	Chicamacomico River tributary near	
Taylorville Creek near.....	399	Cambridge, MD.....	433
Bernard Frank Lake.....	368	Chlorophyll, definition of.....	16

	Page		Page
Choptank River basin, gaging-station record in... water-quality partial-record stations in.....	122-125 438-439	Diel, definition of.....	17
Choptank River near Greensboro, MD.....	3, 122-125	Dirickson Creek basin, water-quality partial-record station in.....	410
Christina River at Coochs Bridge, DE.....	50-51	Discharge at partial-record stations and miscellaneous sites.....	398-403
at Newport, DE.....	403	Discharge, definition of.....	17
Clarksville, DE, Blackwater Creek near.....	80-83	estimated daily, identification of.....	10
Classification of surface-water-quality records.....	10	instantaneous, definition of.....	17
Claysville, MD, Rock Creek tributary near.....	472	mean, definition of.....	17
Clements, MD, St. Clement Creek near.....	384-385	Discharge during 2000 water year compared with median discharge for period 1971-2000 for two representative gaging stations.....	3
St. Clements Bay tributary near.....	488	Discontinued crest-stage partial-record stations, list of.....	xiii-xv
Clinton, MD, Paynes Branch at.....	491	Discontinued gaging stations, list of.....	ix-xii
Cockeysville, MD, Beaverdam Run at.....	182-183	Discontinued water-quality stations, list of.....	xvi-xvii
Colesville, MD, Northwest Branch Anacostia River near.....	372-373	Dissolved, definition of.....	17
Coliform bacteria, fecal, definition of.....	15	Dissolved oxygen, definition of.....	17
total, definition of.....	15	Dissolved-solids concentration, definition of.....	17
Collection and computation of stage and water discharge records.....	6	Diversity index, definition of.....	18
Collection and examination of data, explanation of:		Dover, DE, Morgan Branch near.....	408
sediment.....	11-12	Muddy Branch near.....	406
water temperature.....	11	St. Jones River at.....	66-67
Collington Branch at Bowie, MD.....	467	Dover, MD, Piney Run at.....	172-173
Color unit, definition of.....	17	Downstream order and station number.....	4
Concentration, explanation of.....	11-12	Downstream order system, explanation of.....	4
Conococheague Creek at Fairview, MD.....	322-327	Dragon Creek near Delaware City, DE.....	404
Conowingo, MD, Susquehanna River at.....	146-157	Drainage area, definition of.....	17
Conowingo Reservoir, MD, capacity of.....	146	explanation of, stage and water discharge....	7
Contents, definition of.....	17	explanation of, surface-water quality.....	12
Continuing-record station, definition of.....	17	Drainage basin, definition of.....	17
Control, definition of.....	17	Dry mass, definition of.....	16
Control structure, definition of.....	17	East Branch Herbert Run at Arbutus, MD.....	212-213
Conversion factors, English units to International System (SI) units...Inside back cover		Elk Mills, MD, Big Elk Creek at.....	144-145
Coochs Bridge, DE, Christina River at.....	50-51	Elk River basin, gaging-station record in.....	144-145
Cooperation, explanation of.....	1-2	water-quality partial-record stations in.....	451-452
Cow Creek near Chesterville, MD.....	441	Enterococcus bacteria.....	16
Crabbs Branch near Oskaloosa Court near Derwood, MD.....	473	Estimated daily discharge, identification of....	10
Cranberry Branch near Westminster, MD.....	204-205	Euglenoids, definition of.....	21
Cranberry Run at Aberdeen, MD.....	455	Explanation of stage and water-discharge records.	5-10
Cranberry Reservoir, MD, capacity of.....	204	Explanation of water-quality records.....	10-14
Crest-stage partial-record stations.....	402	Extractable organic halides, definition of.....	18
Crest-stage partial-record stations, discontinued list of.....	xiii-xv	Extremes, explanation of:	
Crumpton, Md, Chesterville Branch near.....	128-139	stage and water discharge.....	7
Cubic feet per second-day, definition of.....	17	surface-water quality.....	12
Cubic feet per second per square mile, definition of.....	9	Factors for converting English units to International System (SI) units...Inside back cover	
Cubic foot per second, definition of.....	17	Fairfax Water Treatment Plant.....	352
Cumberland, MD, North Branch Potomac River near.....	304-305	Fairview, MD, Conococheague Creek at.....	322-327
Wills Creek near.....	302-303	Fecal coliform bacteria, definition of.....	15
Dagsboro, DE, Pepper Creek at.....	398	Fecal streptococcal bacteria, definition of.....	15
Daily mean value table, explanation of.....	8	Federalsburg, MD, Wolfpit Branch tributary near..	437
Daily record, definition of.....	17	Federal Spring at Upper Marlboro, MD.....	463
Daily record station, definition of.....	17	Fenwick Island, DE, Little Assawoman Bay at.....	403
Data, accuracy of.....	10	Ferndale, MD, Sawmill tributary at BWI Airport near.....	244-245
collection and computation of stage and water discharge.....	6	Finksburg, MD, Beaver Run near.....	208-209
presentation, stage and water-discharge.....	7-9	Fire algae, definition of.....	21
surface-water quality.....	12	Flow duration percentiles, definition of.....	18
Datum, definition of.....	17	Fluvial sediment data, explanation of.....	11-12
Dawsonville, MD, Seneca Creek at.....	350-351	Footnotes, surface-water and quality-water records.....	13
Dead Run at Franklinton, MD.....	226-227	Fort Pendelton, MD, McMillan Fork near.....	286-287
Deep Creek Reservoir near Oakland, MD.....	390	Franklin, MD, Georges Creek at.....	300-301
Deer Creek at Rocks, MD.....	158-159	Franklinton, MD, Dead Run at.....	226-227
Definition of terms.....	15-25	Frederick, MD, Monocacy River at Jug Bridge near.	344-345
Delaware and Maryland, 2000, water resources data for, explanation of.....	1-25	Friendly, MD, Hunters Mill Branch tributary near.....	486
Delaware City, DE, Dragon Creek near.....	404	Friendsville, MD, Bear Creek at.....	394-395
Delaware River basin, gaging-station records in.....	48-65	Youghiogheny River at.....	392-393
tidal crest-stage partial-record stations in.....	403	Fruitland, MD, Barkley Branch near.....	432
water-quality partial-record stations in.....	404-405	Fullerton, Md, Whitemarsh Run near.....	190-191
Delaware River below Christina River at Wilmington, DE.....	403	Gage, explanation of.....	7
Delight, MD, Gwynns Falls near.....	220-221	Gage datum, definition of.....	18
Delmar, DE, Ward Branch near.....	437	Gage height, definition of.....	18
Derwood, MD, Crabbs Branch near Oskaloosa Court near.....	473	Gaging station, definition of.....	18
Diatoms, definition of.....	21	Gaging station records.....	48-397
		Gaging stations, discontinued list of.....	ix-xii
		Gaithersburg, MD, Mill Creek at Shady Grove Avenue near.....	473
		Galena, MD, Morgan Creek tributary near.....	444

Page		Page		
	Galloway Creek near Waysons Corner, MD.....	462	Kitzmilller, MD, North Branch Potomac River at....	402
	Gambrills, MD, Jabez Branch tributary at.....	460	Kolbes Corner, MD, Northeast Branch at.....	466
	Gardner, MD, Piney Branch tributary at.....	489	Western Branch near.....	465
	Gas chromatography/flame ionization detector, definition of.....	18	Laboratory measurements.....	12
	Georges Creek at Franklin, MD.....	300-301	Lakes and reservoirs:	
	Glenarden, MD, Lottsford Branch near.....	469	Deep Creek Reservoir near Oakland, MD, month-end contents of.....	390
	Glen Arm, MD, Long Green Creek at.....	186-187	Prettyboy Reservoir, MD, month-end contents of.....	170
	Glen Burnie, MD, Sawmill Creek at.....	242-243	Savage River Reservoir, MD, month-end contents of.....	296
	Glencoe, MD, Gunpowder Falls at.....	170-171	T. Howard Duckett, and Triadelphia Reservoirs, MD, combined month-end contents of.....	258
	Glenwood, MD, Cattail Creek near.....	252-253	Triadelphia Reservoir, MD, month-end contents of.....	254
	Glyndon, MD, Gwynns Falls at.....	214-219	Lanham, MD, Bald Mill Branch at.....	440
	Goose Creek, diversions from.....	352	Largo, MD, Southwest Branch near.....	464
	Grantsville, MD, Casselman River at.....	396-397	Latitude-longitude system, explanation of.....	5
	Gravelly Run tributary near Hartly, DE.....	450	Laurel Brook, MD, Little Gunpowder Falls at.....	188-189
	Grays Branch near Laurel, DE.....	436	Laurel, DE, Grays Branch near.....	436
	Great Cacapon, WV, Cacapon River near.....	318-319	Turkey Branch near.....	435
	Great Falls, MD, diversions at.....	352	Laurel, MD, Patuxent River near.....	258-259
	Great Mills, MD, St. Marys River at.....	386-387	Laurel Run at Dobbin Road near Wilson, MD.....	282-283
	Great Seneca Creek near Quince Orchard, MD.....	348-349	Laytonsville, MD, Rock Creek near.....	472
	Green algae, definition of.....	21	Leipsic River basin, water-quality partial-record stations in.....	406-407
	Green Run near Careytown, MD.....	424	Light attenuation coefficient, definition of.....	18
	North Fork, near Whitesville, MD.....	421-422	Lipid, definition of.....	19
	South Fork, near Whitesville, MD.....	423-424	Little Assawoman Bay at Fenwick Island, DE.....	403
	Greensboro, MD, Choptank River near.....	122-125	Little Falls at Blue Mount, Md.....	168-169
	Grimes, MD, Marsh Run at.....	328-329	Little Falls Dam, diversions at.....	352
	Guilford, MD, Little Patuxent River at.....	260-261	Little Gunpowder Falls at Laurel Brook, MD.....	188-189
	Gumboro, DE, Pocomoke River near.....	427	Little Mill Creek near Stockton, MD.....	401, 419
	Gum Branch near Millsboro, DE.....	425	Little Mill Creek tributary near Wilmington, DE.....	405
	Gunpowder Falls at Glencoe, MD.....	170-171	Little Mosquito Creek basin, low-flow partial-record stations in.....	301
	Gunpowder River basin, gaging station records in.....	160-197	Little Patuxent River at Guilford, MD.....	260-261
	Gwynns Falls at Glyndon, MD.....	214-219	at Savage, MD.....	262-265
	at Villa Nova, MD.....	222-225	Little River basin, water-quality partial-record station in.....	408
	at Washington Blvd at Baltimore, MD.....	234-237	Location, explanation of:	
	near Delight, MD.....	220-221	stage and water discharge.....	7
	Gwynns Falls tributary at McDonogh, MD.....	456	surface-water quality.....	12
	Halethorpe, MD, Patapsco River tributary at.....	458	Loch Raven, MD, Minebank Run at.....	184-185
	Hancock, MD, Potomac River at.....	320-321	Locust Grove, MD, Morgan Creek near.....	445
	Hardness, definition of.....	18	Long Broughton Branch near Princess Anne, MD....	431
	Hartly, DE, Gravelly Run tributary near.....	450	Long Green Creek at Glen Arm, MD.....	186-187
	Hawlings River near Sandy Spring, MD.....	256-257	Lottsford Branch near Glenarden, MD.....	469
	Headsville, WV, Patterson Creek near.....	306-307	Louisville, MD, Morgan Run near.....	210-211
	Henson Creek tributary at Suitland, MD.....	492	Love Creek at Robinsonville, DE.....	398
	Herbert Run, East Branch, at Arbutus, MD.....	212-213	Low-flow partial-record stations.....	398-401
	Hereford, MD, Mingo Branch near.....	164-165	Low-flow, partial-record stations, list of.....	xviii-xxv
	High tide, definition of.....	18	Low tide, definition of.....	18
	Hillsboro, MD, Blockston Branch tributary near...	438	Luke, MD, North Branch Potomac River.....	298-299
	Hoghole Run at Marshalls Corner, MD.....	479-480	Lynch, MD, Morgan Creek tributary near.....	448
	at Port Tobacco, MD.....	483-484	Macrophytes, definition of.....	19
	Hoghole Run tributary near Port Tobacco, MD.....	481	Manokin Branch near Princess Anne, MD.....	114-115
	Honeygo Run near White Marsh, MD.....	196-197	Manokin River basin, gaging-station record in....	114-115
	Hoopes Reservoir.....	56	water-quality partial-record station in.....	431
	Horntown, VA, Snead Branch near.....	401	Manor Run near Avery, MD.....	471
	Horsepen Branch at Bowie, MD.....	471	Marsh Creek Reservoir.....	60
	Houston, DE, Beaverdam Branch at.....	68-69	Marsh Run at Grimes, MD.....	328-329
	Hunters Mill Branch tributary near Friendly, MD..	486	Marshall Creek at Newark, MD.....	399, 414
	Hunting Creek near Unionville, MD.....	440	Marshall Creek basin, low-flow partial-record stations in.....	399
	Hyattsville, MD, Northwest Branch Anacostia River near.....	374-375	water-quality partial-record stations in.....	414-415
	Hydrologic bench mark station, definition of.....	18	Marshall Ditch near Stockton, MD.....	401, 421
	Hydrologic conditions, summary of.....	2	Marshalls Corner, MD, Hoghole Run at.....	479-480
	Hydrologic unit, definition of.....	18	Marshyhope Creek near Adamsville, DE.....	120-121
	Identifying estimated daily discharge.....	10	Maryland and Delaware, 2000, water resources data for, explanation of.....	1-22
	Idlewylde, MD, West Branch Herring Run at.....	198-199	Massey Branch near Newark, MD.....	399, 415
	Indian River basin, gaging station records in....	70-101	Max discharge, explanation of.....	8
	low-flow partial-record stations in.....	398	McDonogh, MD, Gwynns Falls tributary at.....	456
	Instantaneous discharge, definition of.....	16	McMillan Fork near Fort Pendelton, MD.....	286-287
	Instrumentation, explanation of.....	12	Mean concentration, definition of.....	20
	Introduction.....	1	Mean discharge, explanation of.....	8
	Iron Branch at Millsboro, DE.....	398	Membrane filter, definition of.....	19
	Ironshire, MD, Bassett Creek near.....	399, 413	Metamorphic stage, definition of.....	19
	Beaverdam Creek at.....	399, 413	Methylene blue active substance (MBAS), definition of.....	19
	Jabez Branch, South Fork, at Millersville, MD....	246-247	Micrograms per gram, definition of.....	19
	Jabez Branch tributary at Gambrills, MD.....	460		
	Jefferson Creek at South Bethany, DE.....	403		
	Jones Falls at Sorrento, MD.....	238-239		
	Jones Falls at Maryland Avenue at Baltimore, MD..	240-241		
	Kennedyville, MD, Morgan Creek at.....	447		
	Morgan Creek near.....	140-143		
	Morgan Creek tributary near.....	446		



	Page		Page
Micrograms per kilogram, definition of.....	19	Newark, DE, White Clay Creek at.....	52-53
Micrograms per liter, definition of.....	19	White Clay Creek near.....	54-55
Microsiemens per centimeter, definition of.....	19	Newark, MD, Marshall Creek at.....	399, 414
Middletown, DE, Chesapeake and Delaware Canal tributary near.....	452	Massey Branch near.....	399, 415
Middletown, MD, Catoctin Creek near.....	334-335	Porter Creek near.....	399, 414
Miles River basin, water-quality partial-record station in.....	440	Newport Creek basin, low-flow partial-record stations in.....	399
Milford, DE, Mullet Run at.....	409	water-quality partial-record stations in.....	412-412
Mill Creek at Redland Road near Redland, MD.....	473	Newport Creek near Berlin, MD.....	399, 412
at Shady Grove Avenue near Gaithersburg, MD...	473	Newport, DE, Christina River at.....	403
Mill Creek tributary near Nedham Road near Redland, MD.....	473	Newtown, MD, Zekiah Swamp Run near.....	380-383
Millersville, MD, South Fork Jabez Branch at.....	246-247	Norbeck, MD, North Branch Rock Creek tributary near Muncaster Mill Road near.....	475
Milligrams per liter, definition of.....	19	North Branch Patapsco River at Cedarhurst, MD....	206-207
Millington, MD, Unicorn Branch near.....	126-127	North Branch Potomac River at Barnum, WV.....	402
Mill Pond Creek tributary near Cecilton, MD.....	451	at Kitzmiller, MD.....	402
Millsboro, DE, Gum Branch near.....	425	at Luke, MD.....	298-299
Iron Branch at.....	398	at Pinto, MD.....	402
Millsboro Pond Outlet at.....	72-73	at Steyer, MD.....	288-289
Pocomoke River near.....	426-427	near Cumberland, MD.....	304-305
Swan Creek near.....	74-79	North Branch Rock Creek near Granby Woods near Mt Zion, MD.....	474
Whartons Branch near.....	398	North Branch Rock Creek tributary at Oakdale, MD.....	475
Millsboro Pond Outlet at Millsboro, DE.....	72-73	near Emory Lane near Oakdale, MD.....	475
Millville, DE, Beaverdam Ditch near.....	96-101	near Granby Woods near Mt Zion.....	474
Millville, WV, Shenandoah River at.....	332-333	near Muncaster Mill Road near Norbeck, MD....	475
Min discharge, explanation of.....	8	near Olney, MD.....	474
Minebank Run at Loch Raven, MD.....	184-185	near Redland, MD.....	474
Mingo Branch near, Hereford, MD.....	164-165	Northeast Branch at Kolbes Corner, MD.....	466
Miscellaneous site, explanation/definition of....	10, 19	Northeast Branch Anacostia River at Riverdale, MD.....	370-371
numbering system for.....	5	North Fork Green Run near Whitesville, DE.....	420-422
Mispillion River basin, gaging-station record in.....	68-69	North Fork Green Run, Unnamed Ditch to near Whitesville, DE.....	420
water-quality partial-record station in.....	409	North Fork Sand Run near Wilson, MD.....	284-285
Monocacy River at Bridgeport, MD.....	338-339	North Fork Whitmarsh Run near White Marsh, MD.....	192-193
at Jug Bridge near Frederick, MD.....	344-345	Northwest Branch Anacostia River near Colesville, MD.....	372-373
Monongahela River basin, gaging-station records in.....	388-397	near Hyattsville, MD.....	374-375
Monthly and annual mean discharge during water year 2000 compared with median of monthly and annual mean discharge for 1971-2000 for two representative streamflow-gaging stations..	3	Numbering system miscellaneous sites.....	5
Moorefield, WV, South Fork South Branch Potomac River near.....	310-311	Numbers, station identification.....	5
Moores Run at Radecke Ave at Baltimore, MD.....	202-203	Oakdale, MD, North Branch Rock Creek tributary at.....	475
tributary near Todd Ave at Baltimore, MD.....	200-201	North Branch Rock Creek tributary near Emory Lane near.....	475
Morgan Branch near Dover, DE.....	408	Oakland, MD, Youghiogheny River near.....	388-389
Morgan Creek at Kennedyville, MD.....	447	Deep Creek Reservoir near.....	390
near Kennedyville, MD.....	140-143	Ohio River basin.....	388-397
near Locust Grove, MD.....	445	Olney, MD, North Branch Rock Creek tributary near.....	474
near Worton, MD.....	449	On-site measurements and sample collection, surface-water quality.....	11
Morgan Creek tributary near Galena, MD.....	444	Order, downstream and station number.....	4
near Kennedyville, MD.....	446	Oregon Ridge, MD, Pond Branch at.....	176-179
near Lynch, MD.....	448	Organic carbon, definition of.....	20
near Morgnec, MD.....	448	Organic mass, definition of.....	16
Morgan Run near Louisville, MD.....	210-211	Organism, definition of.....	20
Morgnec, MD, Morgan Creek tributary near.....	448	Organism count/area, definition of.....	20
Most probable number, definition of.....	19	Organism count/volume, definition of.....	20
Mt. Storm, WV, Stony River near.....	290-293	Organism total count, definition of.....	20
Mt. Zion, MD, North Branch Rock Creek near Granby Woods near.....	474	Organochlorine compounds, definition of.....	20
North Branch Rock Creek tributary near Granby Woods near.....	474	Other records available, explanation of.....	10
Muddy Branch near Dover, DE.....	406	Parameter code, definition of.....	20
Mullet Run at Milford, DE.....	409	Park Mills, MD, Bennett Creek at.....	346-347
Multiple-plate samplers, definition of.....	19	Parker Creek tributary near Port Republic, MD.....	459
Munchy Branch near Rehobeth Beach, DE.....	90-95	Partial-record station, definition of.....	20
Murderkill River basin, tidal crest-gage partial-record station in.....	403	explanation of.....	10
Murderkill River at Bowers, DE.....	403	Partial-record stations and miscellaneous sites.....	398-403
Nanticoke River basin, gaging-station records in.....	116-121	Particle-size classification, definition of.....	20
water-quality partial-record stations in.....	434-437	Particle size, definition of.....	20
Nanticoke River near Bridgeville, DE.....	116-119	Patapsco, MD, Patapsco River tributary near.....	457
Nassawango Creek near Snow Hill, MD.....	108-113	Patapsco River, North Branch, at Cedarhurst, MD.....	206-207
National Geodetic Vertical Datum of 1929 (NGVD), definition of.....	19	Patapsco River basin, gaging-station records in.....	204-245
National Technical Information Service.....	1	water-quality partial-record stations in.....	456-458
National Water-Quality Assessment (NAWQA) Program, definition of.....	4	Patapsco River tributary at Halethorpe, MD.....	458
Natural substrate, definition of.....	23	near Patapsco, MD.....	457
Needwood Lake.....	368	Patterson Creek near Headsville, WV.....	306-307
Nekton, definition of.....	19		
Nephelometric turbidity unit, definition of.....	19		

Page	Page		
Patuxent Filtration Plant, diversions at.....	258	Principio Creek basin, water-quality	
Patuxent River basin, gaging-station records in..	248-281	partial-record station in.....	453
water-quality partial-record stations in....	462-471	Principio Creek tributary near Perryville, MD....	453
Patuxent River below Brighton Dam		Publications on Techniques of Water-Resources	
near Brighton, MD.....	254-255	Investigations.....	26-29
near Bowie, MD.....	266-271	Quince Orchard, MD, Great Seneca Creek near.....	348-349
near Laurel, MD.....	258-259	Radioisotopes, definition of.....	21
near Unity, MD.....	248-251	Records, accuracy of.....	10
Patuxent River tributary near Bowie, MD.....	468	arrangement of surface-water quality.....	11
Pawpaw Creek at Spence, MD.....	400, 416	classification of surface-water quality.....	10
Pawpaw Creek basin, low-flow partial-record		explanation of, stage and water discharge....	5-10
station in.....	400	surface-water quality.....	10-14
water-quality partial-record station in.....	416	other available.....	10
Paw Paw, WV, Potomac River at.....	314-315	Recoverable from bottom material,	
Paynes Branch at Clinton, MD.....	491	definition of.....	21
Pea Hill Branch at Camp Springs, MD.....	485	Recurrence interval, definition of.....	22
Peak discharge, explanation of.....	7	Red Clay Creek at Wooddale, DE.....	56-57
Pepper Creek at Dagsboro, DE.....	398	near Stanton, DE.....	58-59
Percent composition, definition of.....	19	Redland, MD, Mill Creek at Redland Road near....	473
Period of record, explanation of:		Mill Creek tributary near Nedham Road near....	473
stage and water discharge.....	7	North Branch Rock Creek tributary near.....	474
surface-water quality.....	12	Rock Creek tributary at Muncaster Road at....	472
Periodic station, definition of.....	20	Rock Creek tributary at Stream Valley Park at.	472
Periphyton, definition of.....	20	Rock Creek tributary at Stream Valley	
Perryman, MD, Romney Creek tributary near.....	454	Park near.....	473
Perryville, MD, Principio Creek tributary near...	443	Rock Creek tributary near.....	472
Pesticides, definition of.....	20	Williamsburg Run near.....	474
Petersburg, WV, South Branch Potomac River near..	308-309	Red Run near Belltown, MD.....	456
pH, definition of.....	20	Rehobeth Beach, DE, Munchy Branch near.....	90-95
Phytoplankton, definition of.....	21	Remark codes.....	13, 47
Picocurie, definition of.....	20	Remarks, explanation of:	
Pikes Creek basin, low-flow partial-record		stage and water discharge.....	7
station in.....	400	surface-water quality.....	12
water-quality partial-record station in.....	419	Replicate samples, definition of.....	22
Pikes Creek near Stockton, MD.....	400, 419	Reservoir stations, explanation of.....	10
Pilchard Creek near Pocomoke City, MD.....	429	Reservoirs, See Lakes and reservoirs	
Piney Branch tributary at Gardner, MD.....	489	Return period, definition of.....	20
Piney Creek near Taneytown, MD.....	340-341	Revised stage and discharge records,	
Piney Run at Dover, MD.....	172-173	explanation of.....	8
Pinto, MD, North Branch Potomac River at.....	402	Revisions, stage and water-discharge records....	7
Piscataway Creek at Piscataway, MD.....	378-379	surface-water quality records.....	12
Plankton, definition of.....	19	Rhode River basin, water-quality	
Pocomoke City, MD, Pilchard Creek near.....	429	partial-record station in.....	461
Town Branch near.....	428	Riley Creek at Stockton, MD.....	400, 419
Pocomoke River basin, gaging-station		Riley Creek basin, low-flow partial-record	
records in.....	102-113	station in.....	400
water-quality partial-record stations in.....	420-430	water-quality partial-record station in.....	419
Pocomoke River near Gumboro, DE.....	430	Riverdale, MD, Northeast Branch Anacostia	
near Millsboro, DE.....	426-427	River at.....	370-371
near Willards, MD.....	102-107	River mile, definition of.....	22
Point of Rocks, MD, Potomac River at.....	3, 336-337	River mileage, definition of.....	22
Polychlorinated biphenyls, definition of.....	20	Robinsonville, DE, Bundicks Branch at.....	84-89
Pond Branch at Oregon Ridge, MD.....	176-179	Love Creek at.....	398
Porter Creek near Newark, MD.....	399, 414	Rock Creek at Joyce Road, Washington, DC.....	476-478
Port Republic, MD, Parker Creek tributary near...	459	at Sherrill Drive, Washington, DC.....	368-369
Port Tobacco, MD, Hoghole Run at.....	483-484	near Laytonsville, MD.....	472
Hoghole Run tributary near.....	481	North Branch near Granby Woods	
Thomas Stone Pond near.....	482	near Mt Zion, MD.....	474
Potomac Filtration Plant, diversions at.....	352	North Branch tributary at Oakdale, MD.....	475
Potomac River at Chain Bridge, Washington, DC....	360-367	near Emory Lane near Oakdale, MD.....	475
at Hancock, MD.....	320-321	near Granby Woods near Mt Zion, MD.....	474
at Paw Paw, WV.....	314-315	near Muncaster Mill Road near Norbeck, MD..	475
at Point of Rocks, MD.....	336-337	near Olney, MD.....	474
near Washington, DC.....	352-359	near Redland, MD.....	474
North Branch at Barnum, WV.....	402	Rock Creek tributary at Muncaster Road	
at Kitzmiller, MD.....	402	at Redland, MD.....	472
at Luke, MD.....	298-299	at Stream Valley Park at Redland, Md.....	472
at Pinto, MD.....	402	at Stream Valley Park near Redland, Md.....	473
at Steyer, MD.....	288-289	near Claysville, Md.....	472
near Cumberland, MD.....	304-305	near Redland, MD.....	472
South Branch, near Petersburg, WV.....	308-309	Rocks, MD, Deer Creek at.....	158-159
near Springfield, WV.....	312-313	Rockville, MD, City of, diversions by.....	352
South Fork South Branch near Moorefield, WV... 310-311		Rognel Heights Storm Sewer Outfall at	
Potomac River basin, crest-stage		Baltimore, MD.....	228-233
partial-record stations in.....	402	Romney Creek basin, water-quality partial-record	
gaging-station records in.....	282-387	station in.....	454
water-quality partial-record stations in.....	472-492	Romney Creek tributary near Perryman, MD.....	454
Preface.....	iii	Runoff in inches, definition of.....	22
Prettyboy Reservoir, MD, capacity of.....	170	St. Charles, MD, Zekiah Run near.....	490
month-end contents of.....	170	St. Clements Creek near Clements, MD.....	384-385
Primary productivity, definition of.....	21	St. Clements Bay tributary near Clements, MD....	488
carbon method, definition of.....	21	St. Jones River at Dover, DE.....	66-67
oxygen method, definition of.....	21		
Princess Anne, MD, Long Broughton Branch near....	431		
Manokin Branch near.....	114-115		

	Page		Page
St. Jones River basin, gaging-station record in.....	66-67	Surface-water quality records, explanation of ...	10-14
St. Martin River basin, low-flow partial-record stations in.....	399	Surficial bed material, definition of.....	23
water-quality partial-record station in.....	411	Suspended, definition of.....	23
St. Marys Lake tributary near Callaway, MD.....	487	Suspended, recoverable, definition of.....	23
St. Marys River at Great Mills, MD.....	386-387	Suspended-sediment concentration, definition of.....	22
Sample collection, surface-water quality, explanation of.....	11	Suspended sediment, definition of.....	22
Sand Run, North Fork, near Wilson, MD.....	284-285	Suspended-sediment discharge, definition of.....	22
Sandy Spring, MD, Hawlings River near.....	256-257	Suspended-sediment load, definition of.....	23
Savage, Md, Little Patuxent River at.....	262-265	Suspended, total, definition of.....	23
Savage River, below Savage River Dam, near Bloomington, MD.....	296-297	Susquehanna River at Conowingo, MD.....	146-157
near Barton, MD.....	294-295	Susquehanna River basin, gaging-station records in.....	146-159
Savage River Reservoir, MD, capacity of.....	296	Swan Creek near Millsboro, DE.....	74-79
month-end contents of.....	296	Swans Gut Creek basin, low-flow partial-record stations in.....	401
Sawmill Creek at Glen Burnie, MD.....	242-243	water-quality partial-record stations in.....	419-420
Sawmill Creek tributary at BWI Airport near Ferndale, MD.....	244-245	Synoptic studies, definition of.....	24
Scarboro Creek at Spence, MD.....	400, 416	System for numbering miscellaneous sites.....	5
Scarboro Creek basin, low-flow partial-record station in.....	400	Taneytown, MD, Piney Creek near.....	340-341
water-quality partial-record station in.....	415	Tanhouse Creek basin, low-flow partial-record station in.....	400
Scotts Level Branch at Villa Nova, MD.....	456	water-quality partial-record station in.....	417
Sea level, definition of.....	22	Tanhouse Creek near Boxiron, MD.....	400, 417
Sediment, definition of.....	22	Taxonomy, definition of.....	24
explanation of.....	11-12	Taylorville Creek near Berlin, MD.....	399
Selbyville, DE, Buntings Branch near.....	399	Techniques of Water-Resources Investigations, publications on.....	26-29
Seneca Creek at Dawsonville, MD.....	350-351	Temperature, water, explanation of.....	11
Seven-day 10-year low flow, definition of.....	23	Terms and abbreviations, definition of.....	4-22
Severn River basin, gaging-station record in.....	246-247	Thomas Stone Pond near Port Tobacco, MD.....	482
water-quality partial-record stations in.....	459-460	T. Howard Duckett and Triadelphia Reservoirs, MD, combined month-end contents of.....	258
Sharpsburg, MD, Antietam Creek near.....	330-331	Tidal crest-stage stations.....	403
Shellpot Creek at Wilmington, DE.....	48-49	Time-weighted average, definition of.....	24
Shenandoah River at Millville, WV.....	332-333	Tons per acre-foot, definition of.....	24
Showell, MD, Birch Branch at.....	411	Tons per day, definition of.....	24
Sideling Hill Creek near Bellegrove, MD.....	316-317	Total coliform bacteria, definition of.....	15
Silver Lake, DE.....	66	Total, definition of.....	24
Snead Branch near Horntown, VA.....	401	Total discharge, explanation of.....	24
Snow Hill, MD, Nassawango Creek near.....	108-113	Total in bottom material, definition of.....	24
Sodium-adsorption-ratio, definition of.....	23	Total length (fish), definition of.....	24
Solute, definition of.....	23	Total load, definition of.....	24
Sorrento, MD, Jones Falls at.....	238-239	Total organism count, definition of.....	20
South Bethany, DE, Jefferson Creek at.....	403	Total, recoverable, definition of.....	24
South Branch Potomac River near Petersburg, WV... near Springfield, WV.....	308-309 312-313	Total sediment discharge, definition of.....	22
South Fork Green Run near Whitesville, DE.....	423-424	Total sediment load, definition of.....	22
South Fork Jabez Branch at Millersville, MD.....	246-247	Town Branch near Pocomoke City, MD.....	428
South Fork South Branch Potomac River near Moorefield, WV.....	310-311	Transquaking River basin, water-quality partial-record station in.....	433
South River, MD, Bluejay Branch near.....	461	Trappe Creek basin, low-flow partial-record station in.....	399
Southwest Branch near Largo, MD.....	464	water-quality partial-record station in.....	412
Special networks and programs.....	4	Triadelphia and T. Howard Duckett Reservoirs, MD, combined month-end contents of.....	258
Specific conductance, definition of.....	23	Triadelphia Reservoir, MD, capacity of.....	254
Spence, MD, Pawpaw Creek at.....	400, 416	month-end contents of.....	254
Scarboro Creek at.....	400, 416	Turbidity, definition of.....	24
Springfield, WV, South Branch Potomac River near.....	312-313	Turkey Branch near Laurel, DE.....	435
Stable isotope, definition of.....	23	Unicorn Branch near Millington, MD.....	126-127
Stage, definition of.....	23	Unionville, MD, Hunting Creek near.....	440
Stage and water discharge records, explanation of.....	5	Unity Branch at Angola, DE.....	398
Stage-discharge relation, definition of.....	23	Unity, MD, Patuxent River near.....	248-251
Stanton, DE, Red Clay Creek near.....	58-59	Upper Marlboro, MD, Federal Spring at.....	463
Station identification number, explanation of....	4-5	Western Branch at.....	272-281
Statistics, monthly mean data, explanation of.... summary, explanation of.....	8 8-9	USGS data, access to.....	14
Steyer, MD, North Branch Potomac River at.....	288-289	Villa Nova, MD, Gwynns Falls at.....	222-225
Stockley Branch at Stockley, DE.....	70-71	Scotts Level Branch at.....	456
Stockton, MD, Little Mill Creek near.....	401, 420	Violets Lock, diversions at.....	352
Marshall Ditch near.....	401, 421	Volatile organic compounds, definition of.....	24
Pikes Creek near.....	400, 419	Ward Branch near Delmar, DE.....	434
Riley Creek at.....	400, 420	Washington, DC, Potomac River at Chain Bridge... Potomac River near.....	360-367 352-359
Stony River near Mt. Storm, WV.....	290-293	Rock Creek at Joyce Road.....	476-478
Streamflow, definition of.....	23	Rock Creek at Sherrill Drive.....	368-369
Streptococcal bacteria, fecal.....	15	Watts Branch at.....	376-377
Substrate, definition of.....	23	Water-discharge records and stage, explanation of.....	5-10
artificial, definition of.....	23	Water level, definition of.....	25
natural, definition of.....	23	Water-quality codes.....	13, 47
Suitland, MD, Henson Creek tributary at.....	492	Water-quality control data.....	13-14
Summary of hydrologic conditions.....	2		
Summary statistics, explanation of.....	8-9		
Surface area, lake/impoundment, definition of....	23		
Surface-water records, explanation of.....	5-10		

	Page		Page
Water-quality records, explanation of.....	10-14	White Marsh, MD, Honeygo Run near.....	196-197
Water-quality stations, discontinued		North Fork Whitemarsh Run near.....	192-193
list of.....	xvi-xvii	Whitemarsh Run at.....	194-195
Water resources data for Maryland and Delaware,		Whitemarsh Run at White Marsh, MD.....	194-195
2000, explanation of.....	1-25	near Fullerton, MD.....	190-191
Water Resources Investigations, publications		Whitesville, MD, North Fork Green Run near.....	421-422
on Techniques of.....	26-29	North Fork Green Run, Unnamed Ditch to, near..	420
Water temperature, explanation of.....	11	South Fork Green Run near.....	423-424
Waterworks Creek basin, low-flow partial-record		Wicomico River basin, water-quality	
station in.....	400	partial-record station in.....	432
water-quality partial-record		Willards, MD, Pocomoke River near.....	102-107
station in.....	415	Williamsburg Run near Redland, MD.....	474
Waterworks Creek tributary near		Williams Canal Ditch near Bethany Ditch, DE.....	410
Cedartown, MD.....	400, 415	Wills Creek near Cumberland, MD.....	302-303
Water year, definition of.....	25	Wilmington, DE, Brandywine Creek at.....	60-63
Watts Branch at Washington, DC.....	376-377	Delaware River below Christina River at.....	403
Wattsville Branch tributary No. 1		Little Mill Creek tributary near.....	405
at Wattsville, VA.....	401	Shellpot Creek at.....	48-49
Wattsville, VA, Wattsville Branch		Wilson, MD, Laurel Run at Dobbin Road.....	282-283
tributary No. 1 at.....	401	North Fork Sand Run near.....	284-285
Waysons Corner, MD, Galloway Creek near.....	462	Winters Run near Benson, MD.....	162-163
WDR (Water Data Reports), definition of.....	25	Wolfpit Branch tributary near	
Weighted average, definition of.....	25	Federalsburg, MD.....	437
West Branch Herring Run at Idlewylde, MD.....	198-199	Wooddale, DE, Red Clay Creek at.....	55-57
Western Branch at Upper Marlboro, MD.....	272-281	Worton, MD, Morgan Creek near.....	449
near Kolbes Corner, MD.....	465	WSP (Water-Supply Paper), definition of.....	25
Western Run at Western Run, MD.....	174-175		
Westminster, MD, Cranberry Branch near.....	204-205	Youghiogheny River at Friendsville, MD.....	392-393
Wet mass, definition of.....	16	near Oakland, MD.....	388-389
Wet weight, definition of.....	25		
Whartons Branch near Millsboro, DE.....	398	Zekiah Swamp Run near Newton, MD.....	380-383
White Clay Creek at Newark, DE.....	52-53	near St. Charles, MD.....	490
near Newark, DE.....	54-55	Zooplankton, definition of.....	21

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