

# **Changes in Streamflow and Water Quality in Selected Nontidal Basins in the Chesapeake Bay Watershed, 1985-2004**

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**Appendix 7.1.** Flow-adjusted trend for the 9 River Input Monitoring Program Sites and 23 Multi-Agency Nontidal Monitoring Program sites, 1985-2004, sorted by site number.

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**Appendix 7.1.** Flow-adjusted trend for the 9 River Input Monitoring Program Sites and 23 Multi-Agency Nontidal Monitoring Program sites, 1985-2004, sorted by site number.

[Values are in milligrams per liter. LCI, lower confidence interval; UCI, upper confidence interval; DIP, dissolved inorganic phosphorus; NO23, nitrite plus nitrate; TN, total nitrogen; TP, total phosphorus; SED, suspended sediment; NS, no significance; SIG-UP, significantly greater than; SIG-DOWN, significantly less than; PPCC, probability plot correlation coefficient; SCR, serial correlation of residuals]

Site name	Map ID	Site No.	Beginning date	End date	Constituent	LCI	Non-flow adjusted trend	UCI	TAU (p-value)	Significance	Comment
CHOPTANK RIVER NEAR GREENSBORO, MD	8	1491000	1985	2004	NO23	13.8	24.3	35.9	0.2179 (<0.0001)	SIG-UP	-
CHOPTANK RIVER NEAR GREENSBORO, MD	8	1491000	1985	2004	TP	0.1	19.3	42.2	0.1765 (0.0489)	SIG-UP	-
CHOPTANK RIVER NEAR GREENSBORO, MD	8	1491000	1985	2004	DIP	-6.7	18.9	51.4	0.1728 (0.1617)	NS	-
CHOPTANK RIVER NEAR GREENSBORO, MD	8	1491000	1985	2004	SED	-62.4	-53	-41.1	-0.7543 (<0.0001)	SIG-DOWN	-
SUSQUEHANNA RIVER AT TOWANDA, PA	1	1531500	1985	2004	TN	-39.9	-35.3	-30.4	-0.4351 (<0.0001)	SIG-DOWN	-
SUSQUEHANNA RIVER AT TOWANDA, PA	1	1531500	1991	2004	NO23	-46.5	-34.8	-20.5	-0.4273 (<0.0001)	SIG-DOWN	*PPCC < 0.95
SUSQUEHANNA RIVER AT TOWANDA, PA	1	1531500	1985	2004	TP	-44.2	-34.3	-22.6	-0.4194 (<0.0001)	SIG-DOWN	-
SUSQUEHANNA RIVER AT TOWANDA, PA	1	1531500	1989	2004	SED	-41.8	-26.3	-6.6	-0.3051 (0.0115)	SIG-DOWN	-
SUSQUEHANNA RIVER AT DANVILLE, PA	2	1540500	1985	2004	TN	-38.6	-34.8	-30.7	-0.4274 (<0.0001)	SIG-DOWN	-
SUSQUEHANNA RIVER AT DANVILLE, PA	2	1540500	1985	2004	NO23	-36.3	-28.3	-19.3	-0.3330 (<0.0001)	SIG-DOWN	*PPCC < 0.95
SUSQUEHANNA RIVER AT DANVILLE, PA	2	1540500	1985	2004	TP	-51.3	-44.1	-35.9	-0.5818 (<0.0001)	SIG-DOWN	-
SUSQUEHANNA RIVER AT DANVILLE, PA	2	1540500	1985	2004	SED	-50.5	-41	-29.5	-0.5269 (<0.0001)	SIG-DOWN	-
WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	3	1553500	1985	2004	TN	-25.9	-20.4	-14.5	-0.2280 (<0.0001)	SIG-DOWN	-
WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	3	1553500	1985	2004	NO23	-10.1	-2.7	5.2	-0.0278 (0.4872)	NS	*SCR > 0.5
WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	3	1553500	1985	2004	TP	-56.6	-47.9	-37.5	-0.6523 (<0.0001)	SIG-DOWN	-
WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	3	1553500	1985	2004	SED	-23.9	-4.6	19.7	-0.0467 (0.6867)	NS	-
JUNIATA RIVER AT NEWPORT, PA	4	1567000	1985	2004	TN	-16.6	-12	-7.2	-0.1283 (<0.0001)	SIG-DOWN	*SCR > 0.5
JUNIATA RIVER AT NEWPORT, PA	4	1567000	1985	2004	NO23	-3.1	6.3	16.5	0.0606 (0.1957)	NS	*PPCC < 0.95
JUNIATA RIVER AT NEWPORT, PA	4	1567000	1985	2004	TP	-44.2	-34.1	-22.1	-0.4165 (<0.0001)	SIG-DOWN	-
JUNIATA RIVER AT NEWPORT, PA	4	1567000	1985	2004	SED	-66.6	-54.6	-38.2	-0.7889 (<0.0001)	SIG-DOWN	*SCR > 0.5
SUSQUEHANNA RIVER AT MARIETTA, PA	5	1576000	1985	2004	TN	-21.7	-16.1	-10	-0.1752 (<0.0001)	SIG-DOWN	*SCR > 0.5
SUSQUEHANNA RIVER AT MARIETTA, PA	5	1576000	1987	2004	NO23	-12.4	-1.7	10.3	-0.0170 (0.7719)	NS	*SCR > 0.5
SUSQUEHANNA RIVER AT MARIETTA, PA	5	1576000	1985	2004	TP	-32.5	-22.6	-11.3	-0.2563 (0.0002)	SIG-DOWN	*SCR > 0.5
SUSQUEHANNA RIVER AT MARIETTA, PA	5	1576000	1987	2004	SED	-41	-27.4	-10.7	-0.3204 (0.0025)	SIG-DOWN	-
CONESTOGA RIVER AT CONESTOGA, PA	6	1576754	1985	2004	TN	-20.7	-17.2	-13.6	-0.1888 (<0.0001)	SIG-DOWN	*SCR > 0.5
CONESTOGA RIVER AT CONESTOGA, PA	6	1576754	1986	2004	NO23	0.6	8.1	16.2	0.0779 (0.0348)	SIG-UP	*SCR > 0.5
CONESTOGA RIVER AT CONESTOGA, PA	6	1576754	1985	2004	TP	-45.7	-38.9	-31.3	-0.4932 (<0.0001)	SIG-DOWN	*SCR > 0.5
CONESTOGA RIVER AT CONESTOGA, PA	6	1576754	1985	2004	SED	-66	-58.4	-49	-0.8765 (<0.0001)	SIG-DOWN	*SCR > 0.5
SUSQUEHANNA RIVER AT CONOWINGO, MD	7	1578310	1985	2004	TN	-30.9	-26.2	-21.2	-0.3038 (<0.0001)	SIG-DOWN	-
SUSQUEHANNA RIVER AT CONOWINGO, MD	7	1578310	1985	2004	NO23	-19.8	-13.2	-6.1	-0.1420 (0.0004)	SIG-DOWN	*SCR > 0.5
SUSQUEHANNA RIVER AT CONOWINGO, MD	7	1578310	1985	2004	TP	-34.8	-24.4	-12.2	-0.2792 (0.0002)	SIG-DOWN	-
SUSQUEHANNA RIVER AT CONOWINGO, MD	7	1578310	1985	2004	DIP	7.9	46.4	98.5	0.3809 (0.0143)	SIG-UP	-
SUSQUEHANNA RIVER AT CONOWINGO, MD	7	1578310	1985	2004	SED	-40	-31.7	-22.3	-0.3816 (<0.0001)	SIG-DOWN	-

**Appendix 7.1. (Continued)** Flow-adjusted trend for the 9 River Input Monitoring Program Sites and 23 Multi-Agency Nontidal Monitoring Program sites, 1985-2004, sorted by site number.

[Values are in milligrams per liter. LCI, lower confidence interval; UCI, upper confidence interval; DIP, dissolved inorganic phosphorus; NO23, nitrite plus nitrate; TN, total nitrogen; TP, total phosphorus; SED, suspended sediment; NS, no significance; SIG-UP, significantly greater than; SIG-DOWN, significantly less than; PPCC, probability plot correlation coefficient; SCR, serial correlation of residuals]

Site name	Map ID	Site No.	Beginning date	End date	Constituent	LCI	Non-flow adjusted trend	UCI	TAU (p-value)	Significance	Comment
NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	9	1586000	1985	2004	TSS	-68.2	-51.6	-26.4	-0.7265 (0.0007)	SIG-DOWN	-
NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	9	1586000	1985	2004	TN	1.7	9.4	17.6	0.0897 (0.0156)	SIG-UP	-
NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	9	1586000	1985	2004	TP	-73.1	-61.5	-44.9	-0.9551 (<0.0001)	SIG-DOWN	-
PATUXENT RIV NEAR LAUREL, MD	10	1592500	1985	2004	TSS	-15.1	20	69.6	0.1823 (0.3013)	NS	-
PATUXENT RIV NEAR LAUREL, MD	10	1592500	1985	2004	TN	-12.5	-5.2	2.8	-0.0531 (0.1970)	NS	-
PATUXENT RIV NEAR LAUREL, MD	10	1592500	1985	2004	TP	-43.5	-25.3	-1.2	-0.2918 (0.0407)	SIG-DOWN	-
PATUXENT RIVER NEAR BOWIE, MD	11	1594440	1985	2004	TN	-58.1	-55.1	-51.9	-0.8011 (<0.0001)	SIG-DOWN	-
PATUXENT RIVER NEAR BOWIE, MD	11	1594440	1985	2004	NO23	-56	-52.3	-48.4	-0.7412 (<0.0001)	SIG-DOWN	-
PATUXENT RIVER NEAR BOWIE, MD	11	1594440	1985	2004	TP	-68.4	-63.1	-57	-0.9975 (<0.0001)	SIG-DOWN	-
PATUXENT RIVER NEAR BOWIE, MD	11	1594440	1985	2004	DIP	-69.5	-62.6	-54	-0.9826 (<0.0001)	SIG-DOWN	-
PATUXENT RIVER NEAR BOWIE, MD	11	1594440	1985	2004	SED	-64.1	-56	-46	-0.8207 (<0.0001)	SIG-DOWN	-
GEORGES CREEK AT FRANKLIN, MD	12	1599000	1985	2004	TSS	-58.3	-37.1	-5.2	-0.4635 (0.0269)	SIG-DOWN	-
GEORGES CREEK AT FRANKLIN, MD	12	1599000	1985	2004	TN	-49	-42	-34.1	-0.5453 (<0.0001)	SIG-DOWN	-
GEORGES CREEK AT FRANKLIN, MD	12	1599000	1985	2004	TP	-74.3	-62.4	-45.1	-0.9792 (<0.0001)	SIG-DOWN	-
WILLS CREEK NEAR CUMBERLAND, MD	13	1601500	1985	2004	TSS	-37.4	-10.2	28.9	-0.1072 (0.5604)	NS	-
WILLS CREEK NEAR CUMBERLAND, MD	13	1601500	1985	2004	TN	-34.4	-26.1	-16.8	-0.3027 (<0.0001)	SIG-DOWN	-
WILLS CREEK NEAR CUMBERLAND, MD	13	1601500	1985	2004	TP	-61.1	-47.1	-28	-0.6362 (<0.0001)	SIG-DOWN	-
POTOMAC RIVER AT PAW PAW, WV	14	1610000	1985	2004	TSS	-49.2	-23	16.8	-0.2608 (0.2193)	NS	-
POTOMAC RIVER AT PAW PAW, WV	14	1610000	1985	2004	TN	-31.9	-24	-15.1	-0.2742 (<0.0001)	SIG-DOWN	-
POTOMAC RIVER AT PAW PAW, WV	14	1610000	1985	2004	TP	-39.2	-19.3	7.1	-0.2149 (0.1372)	NS	-
CONOCOCHEAGUE CREEK AT FAIRVIEW, MD	15	1614500	1985	2004	TSS	-37.8	-5.8	42.8	-0.0594 (0.7793)	NS	-
CONOCOCHEAGUE CREEK AT FAIRVIEW, MD	15	1614500	1985	2004	TN	-21	-14.8	-8.2	-0.1604 (<0.0001)	SIG-DOWN	*SCR > 0.5
CONOCOCHEAGUE CREEK AT FAIRVIEW, MD	15	1614500	1985	2004	NO23	-18.3	-11.7	-4.6	-0.1248 (0.0016)	SIG-DOWN	*SCR > 0.5
CONOCOCHEAGUE CREEK AT FAIRVIEW, MD	15	1614500	1985	2004	TP	-42	-24.8	-2.6	-0.2853 (0.0306)	SIG-DOWN	*SCR > 0.5
CONOCOCHEAGUE CREEK AT FAIRVIEW, MD	15	1614500	1985	2004	DIP	-69	-62.6	-55.1	-0.9847 (<0.0001)	SIG-DOWN	-
ANTIETAM CREEK NEAR SHARPSBURG, MD	16	1619500	1985	2004	TSS	-49.5	-29.9	-2.9	-0.3558 (0.0328)	SIG-DOWN	-
ANTIETAM CREEK NEAR SHARPSBURG, MD	16	1619500	1985	2004	TN	-30.7	-25.6	-20.3	-0.2963 (<0.0001)	SIG-DOWN	-
ANTIETAM CREEK NEAR SHARPSBURG, MD	16	1619500	1985	2004	TP	-63.2	-56	-47.4	-0.8214 (<0.0001)	SIG-DOWN	-
SOUTH RIVER NEAR WAYNESBORO, VA	17	1626000	1985	2004	TSS	-51.6	-29.2	3.3	-0.3459 (0.0735)	NS	-
SOUTH RIVER NEAR WAYNESBORO, VA	17	1626000	1985	2004	TN	-19	-6.2	8.7	-0.0637 (0.3950)	NS	-
SOUTH RIVER NEAR WAYNESBORO, VA	17	1626000	1985	2004	TP	-75.4	-67.9	-58.2	-1.1370 (<0.0001)	SIG-DOWN	-
S F SHENANDOAH RIVER AT FRONT ROYAL, VA	18	1631000	1985	2004	TSS	-58.4	-35.2	1	-0.4334 (0.0554)	NS	-

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Site name	Map ID	Site No.	Beginning date	End date	Constituent	LCI	Non-flow adjusted trend	UCI	TAU (p-value)	Significance	Comment
S F SHENANDOAH RIVER AT FRONT ROYAL, VA	18	1631000	1985	2004	TN	-49.8	-41.8	-32.6	-0.5415 (<0.0001)	SIG-DOWN	-
S F SHENANDOAH RIVER AT FRONT ROYAL, VA	18	1631000	1985	2004	TP	-46.9	-29.6	-6.7	-0.3510 (0.0144)	SIG-DOWN	-
S F SHENANDOAH RIVER AT FRONT ROYAL, VA	18	1631000	1985	2004	DIP	-27.9	4.6	51.6	0.0445 (0.8141)	NS	-
N F SHENANDOAH RIVER NEAR STRASBURG, VA	19	1634000	1985	2004	TSS	-52.6	-15.2	51.7	-0.1651 (0.5779)	NS	*PPCC < 0.95
N F SHENANDOAH RIVER NEAR STRASBURG, VA	19	1634000	1985	2004	TN	21.3	40.8	63.5	0.3423 (<0.0001)	SIG-UP	-
N F SHENANDOAH RIVER NEAR STRASBURG, VA	19	1634000	1985	2004	TP	201.6	328	507.4	1.4540 (<0.0001)	SIG-UP	-
N F SHENANDOAH RIVER NEAR STRASBURG, VA	19	1634000	1985	2004	DIP	461.5	770.5	1249.4	2.1639 (<0.0001)	SIG-UP	-
MONOCACY RIVER AT BRIDGEPORT, MD	20	1639000	1985	2004	TSS	-55.5	-37	-10.7	-0.4616 (0.0093)	SIG-DOWN	-
MONOCACY RIVER AT BRIDGEPORT, MD	20	1639000	1985	2004	TN	-37.9	-26.8	-13.8	-0.3120 (0.0002)	SIG-DOWN	*SCR > 0.5
MONOCACY RIVER AT BRIDGEPORT, MD	20	1639000	1985	2004	TP	-43.9	-31.5	-16.5	-0.3789 (0.0002)	SIG-DOWN	-
MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD	21	1643000	1985	2004	TSS	-40.3	-12.9	27.2	-0.1378 (0.4755)	NS	-
MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD	21	1643000	1985	2004	TN	-20.3	-11.9	-2.8	-0.1271 (0.0122)	SIG-DOWN	-
MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD	21	1643000	1985	2004	TP	-37.2	-22.3	-4	-0.2529 (0.0193)	SIG-DOWN	-
POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	23	1646580	1985	2004	TN	-21.1	-16.2	-11	-0.1766 (<0.0001)	SIG-DOWN	-
POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	23	1646580	1985	2004	NO23	-20.9	-12.6	-3.5	-0.1351 (0.0078)	SIG-DOWN	*SCR > 0.5, *PPCC < 0.95
POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	23	1646580	1985	2004	TP	19.2	39.2	62.5	0.3304 (<0.0001)	SIG-UP	-
POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	23	1646580	1985	2004	DIP	1.9	24.9	53	0.2224 (0.0319)	SIG-UP	*SCR > 0.5
POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	23	1646580	1985	2004	SED	-75.9	-67.1	-55.1	-1.1113 (<0.0001)	SIG-DOWN	-
NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD	22	1651000	1985	2004	TSS	-66.1	-48.8	-22.6	-0.6689 (0.0015)	SIG-DOWN	-
NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD	22	1651000	1985	2004	TN	-38.1	-28.1	-16.5	-0.3304 (<0.0001)	SIG-DOWN	-
NW BRANCH ANACOSTIA RIVER NEAR HYATTSVILLE, MD	22	1651000	1985	2004	TP	-57.1	-43.1	-24.6	-0.5644 (<0.0001)	SIG-DOWN	-
ROBINSON RIVER NEAR LOCUST DALE, VA	24	1666500	1985	2004	TSS	-32.1	8.8	74.5	0.0845 (0.7258)	NS	-
ROBINSON RIVER NEAR LOCUST DALE, VA	24	1666500	1985	2004	TN	-29.3	-16.5	-1.4	-0.1800 (0.0341)	SIG-DOWN	-
ROBINSON RIVER NEAR LOCUST DALE, VA	24	1666500	1985	2004	TP	-72.1	-58.6	-38.7	-0.8820 (<0.0001)	SIG-DOWN	*PPCC < 0.95
RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	25	1668000	1988	2004	TSS	-42.2	-18.7	14.5	-0.2065 (0.2370)	NS	-
RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	25	1668000	1985	2004	TN	-30.8	-20.1	-7.7	-0.2243 (0.0023)	SIG-DOWN	-
RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	25	1668000	1985	2004	NO23	-56.9	-43.1	-25	-0.5645 (<0.0001)	SIG-DOWN	-
RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	25	1668000	1985	2004	TP	-48.8	-35.4	-18.5	-0.4371 (0.0002)	SIG-DOWN	-
RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	25	1668000	1985	2004	DIP	-35.7	-20.6	-1.9	-0.2302 (0.0328)	SIG-DOWN	-
NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	27	1671020	1985	2004	TSS	33.5	138.1	324.6	0.8673 (0.0033)	SIG-UP	*PPCC < 0.95
NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	27	1671020	1985	2004	TN	3.1	18.8	36.9	0.1724 (0.0175)	SIG-UP	-
NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	27	1671020	1985	2004	TP	-85.6	-79.5	-70.8	-1.5842 (<0.0001)	SIG-DOWN	-
PAMUNKEY RIVER NEAR HANOVER, VA	28	1673000	1989	2004	TSS	24.6	63.6	114.9	0.4925 (0.0004)	SIG-UP	-

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Site name	Map ID	Site No.	Beginning date	End date	Constituent	LCI	Non-flow adjusted trend	UCI	TAU (p-value)	Significance	Comment
PAMUNKEY RIVER NEAR HANOVER, VA	28	1673000	1985	2004	TN	5.5	16.3	28.3	0.1514 (0.0024)	SIG-UP	-
PAMUNKEY RIVER NEAR HANOVER, VA	28	1673000	1985	2004	NO23	26.8	45.1	66.1	0.3726 (<0.0001)	SIG-UP	-
PAMUNKEY RIVER NEAR HANOVER, VA	28	1673000	1985	2004	TP	59.3	89.6	125.6	0.6395 (<0.0001)	SIG-UP	-
PAMUNKEY RIVER NEAR HANOVER, VA	28	1673000	1985	2004	DIP	96.5	134.5	179.8	0.8521 (<0.0001)	SIG-UP	-
MATTAPONI RIVER NEAR BEULAHVILLE, VA	26	1674500	1989	2004	TSS	-8	15.4	44.8	0.1434 (0.2149)	NS	-
MATTAPONI RIVER NEAR BEULAHVILLE, VA	26	1674500	1985	2004	TN	-15.6	-8.4	-0.6	-0.0879 (0.0349)	SIG-DOWN	-
MATTAPONI RIVER NEAR BEULAHVILLE, VA	26	1674500	1985	2004	NO23	-25.5	-11.2	5.7	-0.1192 (0.1816)	NS	*SCR > 0.5
MATTAPONI RIVER NEAR BEULAHVILLE, VA	26	1674500	1985	2004	TP	-24	-13.4	-1.4	-0.1441 (0.0300)	SIG-DOWN	-
MATTAPONI RIVER NEAR BEULAHVILLE, VA	26	1674500	1985	2004	DIP	-5.4	12.7	34.2	0.1193 (0.1817)	NS	-
JAMES RIVER AT BENT CREEK, VA	29	2026000	1985	2004	TSS	-31.8	9.1	74.6	0.0872 (0.7161)	NS	-
JAMES RIVER AT BENT CREEK, VA	29	2026000	1985	2004	TN	-36.9	-24.2	-9.1	-0.2776 (0.0031)	SIG-DOWN	-
JAMES RIVER AT BENT CREEK, VA	29	2026000	1985	2004	TP	-84	-78.3	-70.6	-1.5287 (<0.0001)	SIG-DOWN	-
JAMES RIVER AT CARTERSVILLE, VA	30	2035000	1988	2004	TSS	-37.5	-20.8	0.2	-0.2337 (0.0523)	NS	-
JAMES RIVER AT CARTERSVILLE, VA	30	2035000	1985	2004	TN	-31.5	-22.9	-13.2	-0.2602 (<0.0001)	SIG-DOWN	-
JAMES RIVER AT CARTERSVILLE, VA	30	2035000	1985	2004	NO23	-55.3	-46	-34.8	-0.6167 (<0.0001)	SIG-DOWN	-
JAMES RIVER AT CARTERSVILLE, VA	30	2035000	1985	2004	TP	-64.8	-57.4	-48.5	-0.8544 (<0.0001)	SIG-DOWN	-
JAMES RIVER AT CARTERSVILLE, VA	30	2035000	1985	2004	DIP	-79.1	-74.3	-68.3	-1.3570 (<0.0001)	SIG-DOWN	-
JAMES RIVER NEAR RICHMOND, VA	31	2037500	1985	2004	TSS	-28.3	5.6	55.3	0.0541 (0.7839)	NS	-
JAMES RIVER NEAR RICHMOND, VA	31	2037500	1985	2004	TN	-28.3	-14.1	3	-0.1514 (0.1006)	NS	-
JAMES RIVER NEAR RICHMOND, VA	31	2037500	1985	2004	TP	-76.2	-69.5	-60.9	-1.1887 (<0.0001)	SIG-DOWN	-
APPOMATTOX RIVER AT MATOACA, VA	32	2041650	1989	2004	TSS	-16.7	-0.9	17.8	-0.0094 (0.9154)	NS	-
APPOMATTOX RIVER AT MATOACA, VA	32	2041650	1985	2004	TN	-15.7	-6.9	2.8	-0.0714 (0.1591)	NS	-
APPOMATTOX RIVER AT MATOACA, VA	32	2041650	1985	2004	NO23	-41	-25.1	-4.9	-0.2888 (0.0177)	SIG-DOWN	-
APPOMATTOX RIVER AT MATOACA, VA	32	2041650	1985	2004	TP	-0.2	17.9	39.2	0.1644 (0.0526)	NS	-
APPOMATTOX RIVER AT MATOACA, VA	32	2041650	1985	2004	DIP	-25.3	-7.9	13.5	-0.0822 (0.4404)	NS	-