

Table 2-1. Long-term trends in total nitrogen, through water year 2012.

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer]

Station abbreviation	Station ID	Station name	Start year	Trends in concentration				Trends in flux				Trends in yield	
				POR		Per year		POR		Per year		POR	Per year
				mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
CHOP	01491000	CHOPTANK RIVER NEAR GREENSBORO, MD	1985	0.261	15.7	0.010	0.581	13	2.1	0.482	0.078	0.045	0.002
SRTW	01531500	SUSQUEHANNA RIVER AT TOWANDA, PA	1985	-0.581	-41.9	-0.022	-1.55	-19,400	-44	-718	-1.63	-0.96	-0.036
SRWB	01536500	SUSQUEHANNA RIVER AT WILKES-BARRE, PA	1989	-1.02	-56	-0.045	-2.43	-35,300	-50.5	-1,540	-2.2	-1.37	-0.060
SRDA	01540500	SUSQUEHANNA RIVER AT DANVILLE, PA	1985	-0.596	-40.5	-0.022	-1.5	-27,500	-40	-1,020	-1.48	-0.945	-0.035
WBSL	01553500	WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	1985	-0.373	-30.6	-0.014	-1.13	-12,100	-36.1	-447	-1.34	-0.681	-0.025
JUNI	01567000	JUNIATA RIVER AT NEWPORT, PA	1985	-0.49	-25.9	-0.018	-0.959	-7,560	-31	-280	-1.15	-0.87	-0.032
SRMA	01576000	SUSQUEHANNA RIVER AT MARIETTA, PA	1987	-0.535	-31	-0.021	-1.24	-72,900	-36.7	-2,920	-1.47	-1.08	-0.043
CONE	01576754	CONESTOGA RIVER AT CONESTOGA, PA	1985	-2.1	-23.9	-0.078	-0.885	-4,650	-30.6	-172	-1.13	-3.82	-0.141
SRCW	01578310	SUSQUEHANNA RIVER AT CONOWINGO, MD	1985	-0.567	-28.4	-0.021	-1.05	-49,100	-23.9	-1,820	-0.885	-0.7	-0.026
GUNP	01582500	GUNPOWDER FALLS AT GLENCOE, MD	1985	0.438	18.6	0.016	0.689	237	21	8.78	0.778	0.572	0.021
NBPA	01586000	NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	1985	0.588	16.4	0.022	0.607	70.6	12.5	2.62	0.463	0.482	0.018
PAXU	01591000	PATUXENT RIVER NEAR UNITY, MD	1985	0.363	14	0.014	0.519	-7.33	-2.5	-0.271	-0.093	-0.081	-0.003
PAXB	01594440	PATUXENT RIVER AT BOWIE, MD	1985	-3.08	-65.1	-0.114	-2.41	-2,000	-57.7	-74.1	-2.14	-2.22	-0.082
GEOR	01599000	GEORGES CREEK AT FRANKLIN, MD	1985	-0.816	-45	-0.030	-1.67	-145	-35.1	-5.38	-1.3	-0.774	-0.029
WILL	01601500	WILLS CREEK NEAR CUMBERLAND, MD	1985	-0.628	-49.4	-0.023	-1.83	-758	-44.1	-28.1	-1.63	-1.18	-0.044
CONC	01614500	CONOCOCHIEGUE CREEK AT FAIRVIEW, MD	1985	-0.148	-3.2	-0.005	-0.119	-104	-1.5	-3.86	-0.056	-0.081	-0.003
ANTS	01619500	ANTIETAM CREEK NEAR SHARPSBURG, MD	1985	-0.501	-9.5	-0.019	-0.352	-469	-11.8	-17.4	-0.437	-0.645	-0.024
SFSF	01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	1985	-0.574	-35.7	-0.021	-1.32	-507	-7.6	-18.8	-0.281	-0.12	-0.004
NFSH	01634000	N F SHENANDOAH RIVER NEAR STRASBURG, VA	1985	0.14	9.8	0.005	0.363	642	24.3	23.8	0.9	0.322	0.012
CATM	01637500	CATOCTIN CREEK NEAR MIDDLETOWN, MD	1985	-0.3	-16.1	-0.011	-0.596	-48.2	-11	-1.78	-0.407	-0.278	-0.010
MONO	01639000	MONOCACY RIVER AT BRIDGEPORT, MD	1985	-0.78	-31.6	-0.029	-1.17	-930	-41.8	-34.5	-1.55	-2.08	-0.077
POTC	01646580	POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	1985	-0.311	-17.6	-0.012	-0.652	-12,100	-17.8	-450	-0.659	-0.405	-0.015
RPHF	01668000	RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	1985	-0.378	-34.4	-0.014	-1.27	-1,420	-22	-52.7	-0.815	-0.344	-0.013
NANN	01671020	NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	1985	0.003	0.7	0.000	0.026	45.3	10	1.68	0.37	0.038	0.001
PAMU	01673000	PAMUNKEY RIVER NEAR HANOVER, VA	1985	0.050	6.9	0.002	0.256	71.2	3.9	2.64	0.144	0.026	0.001
MABU	01674500	MATTAPONI RIVER NEAR BEULAHVILLE, VA	1985	-0.131	-19	-0.005	-0.704	-152	-16.7	-5.64	-0.619	-0.098	-0.004
JAMC	02035000	JAMES RIVER AT CARTERSVILLE, VA	1985	-0.284	-35.2	-0.011	-1.3	-998	-6.2	-37	-0.23	-0.062	-0.002
JAMR	02037500	JAMES RIVER NEAR RICHMOND, VA	1985	-0.121	-20.1	-0.004	-0.744	-635	-4.4	-23.5	-0.163	-0.036	-0.001
APPM	02041650	APPOMATTOX RIVER AT MATOACA, VA	1985	-0.026	-4	-0.001	-0.148	-264	-13.7	-9.77	-0.507	-0.076	-0.003
CHIC	02042500	CHICKAMOMINY RIVER NEAR PROVIDENCE FORGE, VA	1985	-0.076	-11.9	-0.003	-0.441	-23.2	-5.4	-0.858	-0.2	-0.036	-0.001

Table 2-2. Long-term trends in total phosphorus, through water year 2012.

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer; E, estimated]

Station abbreviation	Station ID	Station name	Start year	Trends in concentration				Trends in flux				Trends in yield	
				POR		Per year		POR		Per year		POR	Per year
				mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
CHOP	01491000	CHOPTANK RIVER NEAR GREENSBORO, MD	1985	0.030	45.8	0.001	1.7	17.4	53.3	0.645	1.97	0.060	0.002
SRTW	01531500	SUSQUEHANNA RIVER AT TOWANDA, PA	1985	-0.053	-49.7	-0.002	-1.84	-1,400	-38.9	-52	-1.44	-0.070	-0.003
SRWB	01536500	SUSQUEHANNA RIVER AT WILKES-BARRE, PA	1985	-0.092	-65.2	-0.003	-2.41	-2,290	-38.8	-84.7	-1.44	-0.089	-0.003
SRDA	01540500	SUSQUEHANNA RIVER AT DANVILLE, PA	1985	-0.067	-56.1	-0.002	-2.08	-2,700	-42.2	-100	-1.56	-0.093	-0.003
WBSL	01553500	WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	1985	-0.056	-72.8	-0.002	-2.7	-1,260	-59.3	-46.7	-2.2	-0.071	-0.003
JUNI	01567000	JUNIATA RIVER AT NEWPORT, PA	1985	-0.073	-67.1	-0.003	-2.49	-856	-58.4	-31.7	-2.16	-0.099	-0.004
SRMA	01576000	SUSQUEHANNA RIVER AT MARIETTA, PA	1987	-0.046	-49.5	-0.002	-1.98	-4,570	-37.7	-183	-1.51	-0.068	-0.003
CONE	01576754	CONESTOGA RIVER AT CONESTOGA, PA	1985	-0.413	-68.4	-0.015	-2.53	-813	-62	-30.1	-2.3	-0.668	-0.025
SRCW	01578310	SUSQUEHANNA RIVER AT CONOWINGO, MD	1985	-0.010	-16.9	-0.000	-0.626	2,710	40.8	100	1.51	0.039	0.001
GUNP	01582500	GUNPOWDER FALLS AT GLENCOE, MD	1985	-0.021	-35.1	-0.001	-1.3	-19.3	-40.3	-0.713	-1.49	-0.047	-0.002
NBPA	01586000	NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	1985	-0.075	-64.5	-0.003	-2.39	-52.3	-75.5	-1.94	-2.8	-0.357	-0.013
PAXU	01591000	PATUXENT RIVER NEAR UNITY, MD	1985	-0.089	-67.6	-0.003	-2.5	-18.4	-57	-0.681	-2.11	-0.204	-0.008
PAXB	01594440	PATUXENT RIVER AT BOWIE, MD	1985	-0.315	-75.2	-0.012	-2.79	-231	-62.8	-8.56	-2.33	-0.256	-0.010
GEOR	01599000	GEORGES CREEK AT FRANKLIN, MD	1985	-0.12	-78.1	-0.004	-2.89	-9.9	-42.5	-0.367	-1.57	-0.053	-0.002
WILL	01601500	WILLS CREEK NEAR CUMBERLAND, MD	1985	-0.022	-46.2	-0.001	-1.71	-47.9	-45.3	-1.77	-1.68	-0.075	-0.003
CONC	01614500	CONOCOCHIEGUE CREEK AT FAIRVIEW, MD	1985	-0.164	-67	-0.006	-2.48	-141	-42.4	-5.23	-1.57	-0.11	-0.004
ANTS	01619500	ANTIETAM CREEK NEAR SHARPSBURG, MD	1985	-0.191	-63.5	-0.007	-2.35	-95.5	-42.3	-3.54	-1.57	-0.131	-0.005
SFSF	01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	1996	-0.072	-54.9	-0.005	-3.43	601	119	37.6	7.44	0.142	0.009
NFSH	01634000	N F SHENANDOAH RIVER NEAR STRASBURG, VA	1996	-0.036	-41.3	-0.002	-2.58	163	102.4	10.2	6.4	0.082	0.005
CATM	01637500	CATOCTIN CREEK NEAR MIDDLETOWN, MD	1985	-0.093	-59.4	-0.003	-2.2	-4.5	-12.2	-0.167	-0.452	-0.026	-0.001
MONO	01639000	MONOCACY RIVER AT BRIDGEPORT, MD	1985	-0.136	-54.9	-0.005	-2.03	-33.1	-20.7	-1.23	-0.767	-0.074	-0.003
POTC	01646580	POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	1985	-0.059	-47.8	-0.002	-1.77	-2,640	-37.5	-97.8	-1.39	-0.088	-0.003
RPHF	01668000	RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	1985	-0.015	-16.1	-0.001	-0.596	369	50	13.7	1.85	0.089	0.003
NANN	01671020	NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	1994	0.006	26.9	0.000	1.49	34.5	122.9	1.91	6.83	0.029	0.002
PAMU	01673000	PAMUNKEY RIVER NEAR HANOVER, VA	1985	0.038	77	0.001	2.85	130	103.6	4.83	3.84	0.047	0.002
MABU	01674500	MATTAPONI RIVER NEAR BEULAHVILLE, VA	1985	0.004	7.4	0.000	0.274	0.51	0.7	0.019	0.026	0.000	1.21E-5
JAMC	02035000	JAMES RIVER AT CARTERSVILLE, VA	1985	-0.212	-74.3	-0.008	-2.75	-630	-13.6	-23.3	-0.504	-0.039	-0.001
JAMR	02037500	JAMES RIVER NEAR RICHMOND, VA	1994	-0.036	-36.1	-0.002	-2.01	631	25.5	35	1.42	0.036	0.002
APPM	02041650	APPOMATTOX RIVER AT MATOACA, VA	1985	0.020	68.4	0.001	2.53	67.6	70.8	2.5	2.62	0.020	0.001
CHIC	02042500	CHICKAMOMINY RIVER NEAR PROVIDENCE FORGE, VA	1985	0.002	2.5	6.95E-5	0.093	13.5	31.4	0.499	1.16	0.021	0.001

Table 2-3. Long-term trends in sediment, through water year 2012.

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer; SSC, suspended-sediment concentration; TSS, total suspended solids]

Station abbreviation	Station ID	Station name	Start year	Constituent	Trends in concentration				Trends in flux				Trends in yield	
					POR		Per year		POR		Per year		POR	Per year
					mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
CHOP	01491000	CHOPTANK RIVER NEAR GREENSBORO, MD	1985	SSC	-1.38	-12.5	-0.051	-0.463	-27.4	-0.4	-1.02	-0.015	-0.094	-0.003
SRTW	01531500	SUSQUEHANNA RIVER AT TOWANDA, PA	1989	SSC	-14.4	-35.6	-0.626	-1.55	-1,990,000	-47.8	-86,500	-2.08	-98.5	-4.28
SRDA	01540500	SUSQUEHANNA RIVER AT DANVILLE, PA	1985	SSC	-24.4	-47	-0.902	-1.74	-3,510,000	-49.8	-130,000	-1.84	-121	-4.48
WBSL	01553500	WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	1985	SSC	-7.35	-38.5	-0.272	-1.43	-798,000	-50.7	-29,500	-1.88	-45	-1.67
JUNI	01567000	JUNIATA RIVER AT NEWPORT, PA	1985	SSC	-16.3	-56.3	-0.604	-2.09	-536,000	-61.8	-19,900	-2.29	-61.7	-2.29
SRMA	01576000	SUSQUEHANNA RIVER AT MARIETTA, PA	1987	SSC	-23.8	-49.8	-0.95	-1.99	-6,020,000	-51.5	-241,000	-2.06	-89.4	-3.58
CONE	01576754	CONESTOGA RIVER AT CONESTOGA, PA	1985	SSC	-77.3	-71.4	-2.86	-2.64	-479,000	-74.9	-17,800	-2.77	-394	-14.6
SRCW	01578310	SUSQUEHANNA RIVER AT CONOWINGO, MD	1985	SSC	2.82	17.7	0.105	0.656	3,770,000	110.9	140,000	4.11	53.7	1.99
GUNP	01582500	GUNPOWDER FALLS AT GLENCOE, MD	1985	TSS	19.5	232.6	0.723	8.61	23,000	241.9	851	8.96	55.5	2.05
NBPA	01586000	NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	1985	TSS	-74.2	-70.9	-2.75	-2.63	-187,000	-89.3	-6,940	-3.31	-1280	-47.3
PAXU	01591000	PATUXENT RIVER NEAR UNITY, MD	1985	TSS	4.05	10.5	0.15	0.389	12,700	85.8	469	3.18	141	5.21
PAXB	01594440	PATUXENT RIVER AT BOWIE, MD	1985	SSC	-28	-41	-1.04	-1.52	-30,800	-29.4	-1,140	-1.09	-34.2	-1.27
GEOR	01599000	GEORGES CREEK AT FRANKLIN, MD	1985	TSS	26.4	99.1	0.979	3.67	22,000	209.4	814	7.76	117	4.34
WILL	01601500	WILLS CREEK NEAR CUMBERLAND, MD	1985	TSS	12	69.4	0.444	2.57	123,000	199.8	4,570	7.4	193	7.14
CONC	01614500	CONOCOCHIEGUE CREEK AT FAIRVIEW, MD	1985	TSS	-8.05	-25.9	-0.298	-0.959	-85,000	-39.9	-3,150	-1.48	-66.4	-2.46
ANTS	01619500	ANTIETAM CREEK NEAR SHARPSBURG, MD	1985	TSS	3.61	14.5	0.134	0.537	12,000	23.2	444	0.859	16.5	0.609
SFSF	01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	1985	TSS	-0.993	-3.7	-0.037	-0.137	-619,000	-25.7	-22,900	-0.952	-146	-5.41
NFSH	01634000	N F SHENANDOAH RIVER NEAR STRASBURG, VA	1985	TSS	5.81	23.5	0.215	0.87	-96,700	-6.8	-3,580	-0.252	-48.5	-1.8
CATM	01637500	CATOCTIN CREEK NEAR MIDDLETOWN, MD	1985	TSS	19.2	207.1	0.712	7.67	51,100	562.6	1,890	20.8	295	10.9
MONO	01639000	MONOCACY RIVER AT BRIDGEPORT, MD	1985	TSS	-4.09	-21.8	-0.151	-0.807	15,600	39.4	578	1.46	34.8	1.29
POTC	01646580	POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	1985	SSC	-44.2	-58	-1.64	-2.15	-4,140,000	-51.2	-153,000	-1.9	-138	-5.12
RPHF	01668000	RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	1988	TSS	-18.5	-39	-0.772	-1.62	-94,400	-13.8	-3,940	-0.575	-22.9	-0.953
NANN	01671020	NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	1985	TSS	8.72	214.4	0.323	7.94	37,900	246.3	1,400	9.12	31.7	1.17
PAMU	01673000	PAMUNKEY RIVER NEAR HANOVER, VA	1989	TSS	20.1	159.6	0.874	6.94	62,300	95.2	2,710	4.14	22.3	0.97
MABU	01674500	MATTAPONI RIVER NEAR BEULAHVILLE, VA	1989	TSS	0.149	2.2	0.006	0.096	475	4	20.7	0.174	0.304	0.013
JAMC	02035000	JAMES RIVER AT CARTERSVILLE, VA	1988	TSS	4.81	16.7	0.2	0.696	732,000	49.3	30,500	2.05	45.2	1.88
JAMR	02037500	JAMES RIVER NEAR RICHMOND, VA	1985	TSS	-1.73	-5.6	-0.064	-0.207	-343,000	-12.7	-12,700	-0.47	-19.6	-0.726
APPM	02041650	APPOMATTOX RIVER AT MATOACA, VA	1989	TSS	2.11	30.7	0.092	1.33	5,070	11.7	220	0.509	1.46	0.063
CHIC	02042500	CHICKAMOMINY RIVER NEAR PROVIDENCE FORGE, VA	1985	TSS	3.01	57	0.112	2.11	3,820	76.5	142	2.83	5.88	0.218

Table 2-4. Ten-year trends in total nitrogen, through water year 2012.

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer]

Station abbreviation	Station ID	Station name	Start year	Trends in concentration				Trends in flux				Trends in yield	
				POR		Per year		POR		Per year		POR	Per year
				mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
CHOP	01491000	CHOPTANK RIVER NEAR GREENSBORO, MD	2003	0.131	7.3	0.013	0.73	-6.46	-0.9	-0.646	-0.09	-0.022	-0.002
SRTW	01531500	SUSQUEHANNA RIVER AT TOWANDA, PA	2003	-0.259	-24.2	-0.026	-2.42	-8,130	-22.3	-813	-2.23	-0.403	-0.040
SRWB	01536500	SUSQUEHANNA RIVER AT WILKES-BARRE, PA	2003	-0.294	-26.6	-0.029	-2.66	-12,300	-24.3	-1,230	-2.43	-0.476	-0.048
SRDA	01540500	SUSQUEHANNA RIVER AT DANVILLE, PA	2003	-0.184	-17.2	-0.018	-1.72	-7,100	-12.9	-710	-1.29	-0.244	-0.024
WBSL	01553500	WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	2003	-0.307	-26.8	-0.031	-2.68	-8,520	-26.6	-852	-2.66	-0.481	-0.048
JUNI	01567000	JUNIATA RIVER AT NEWPORT, PA	2003	-0.434	-23.3	-0.043	-2.33	-5,490	-22.4	-549	-2.24	-0.632	-0.063
SRMA	01576000	SUSQUEHANNA RIVER AT MARIETTA, PA	2003	-0.638	-34.6	-0.064	-3.46	-60,500	-29.5	-6,050	-2.95	-0.898	-0.090
CONE	01576754	CONESTOGA RIVER AT CONESTOGA, PA	2003	-2.54	-27.8	-0.254	-2.78	-4,500	-26.8	-450	-2.68	-3.7	-0.37
SRCW	01578310	SUSQUEHANNA RIVER AT CONOWINGO, MD	2003	-0.45	-23.8	-0.045	-2.38	-54,500	-22.8	-5,450	-2.28	-0.777	-0.078
GUNP	01582500	GUNPOWDER FALLS AT GLENCOE, MD	2003	-0.028		-0.003	-0.1	-11.7	-0.8	-1.17	-0.08	-0.028	-0.003
NBPA	01586000	NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	2003	-0.305	-6.9	-0.031	-0.69	-54.2	-7.2	-5.42	-0.72	-0.37	-0.037
GWYN	01589300	GWYNNNS FALLS AT VILLA NOVA, MD	2003	-0.251	-13.2	-0.025	-1.32	-24.1	-11.1	-2.41	-1.11	-0.287	-0.029
PAXU	01591000	PATUXENT RIVER NEAR UNITY, MD	2003	0.080	2.7	0.008	0.27	-0.63	-0.2	-0.063	-0.02	-0.007	-0.001
PAXB	01594440	PATUXENT RIVER AT BOWIE, MD	2003	-0.349	-17.6	-0.035	-1.76	-301	-15.4	-30.1	-1.54	-0.333	-0.033
GEOR	01599000	GEORGES CREEK AT FRANKLIN, MD	2003	-0.292	-22.4	-0.029	-2.24	-98.6	-24.2	-9.86	-2.42	-0.526	-0.053
WILL	01601500	WILLS CREEK NEAR CUMBERLAND, MD	2003	-0.441	-40	-0.044	-4	-734	-41.9	-73.4	-4.19	-1.15	-0.115
CONC	01614500	CONOCOCHIEGUE CREEK AT FAIRVIEW, MD	2003	-0.399	-8.1	-0.040	-0.81	-774	-9.1	-77.4	-0.91	-0.605	-0.061
ANTS	01619500	ANTIETAM CREEK NEAR SHARPSBURG, MD	2003	-0.061	-1.3	-0.006	-0.13	-135	-3.4	-13.5	-0.34	-0.185	-0.019
SOUT	01626000	SOUTH RIVER NEAR WAYNESBORO, VA	2003	-0.13	-14.4	-0.013	-1.44	-48.3	-15.5	-4.83	-1.55	-0.147	-0.015
SFSL	01628500	S F SHENANDOAH RIVER NEAR LYNNWOOD, VA	2003	-0.374	-17.9	-0.037	-1.79	-738	-12.5	-73.8	-1.25	-0.264	-0.026
SFSF	01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	2003	-0.348	-25	-0.035	-2.5	-1,030	-15.2	-103	-1.52	-0.243	-0.024
NFSH	01634000	N F SHENANDOAH RIVER NEAR STRASBURG, VA	2003	-0.102	-6	-0.010	-0.6	-117	-3.4	-11.7	-0.34	-0.059	-0.006
CATM	01637500	CATOCTIN CREEK NEAR MIDDLETOWN, MD	2003	-0.025	-1.5	-0.002	-0.15	-34.3	-7.7	-3.43	-0.77	-0.198	-0.020
CATT	01638480	CATOCTIN CREEK NEAR TAYLORSTOWN, VA	2003	-0.084	-7.1	-0.008	-0.71	-36.5	-8.9	-3.65	-0.89	-0.157	-0.016
MONO	01639000	MONOCACY RIVER AT BRIDGEPORT, MD	2003	-0.245	-12.3	-0.025	-1.23	-167	-10.2	-16.7	-1.02	-0.373	-0.037
POTC	01646580	POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	2003	-0.495	-24.8	-0.050	-2.48	-12,900	-17.7	-1,290	-1.77	-0.429	-0.043
ACCO	01654000	ACCOTINK CREEK NEAR ANNANDALE, VA	2003	-0.412	-31.9	-0.041	-3.19	-42.3	-29.4	-4.23	-2.94	-0.683	-0.068
RPHR	01664000	RAPPAHANNOCK RIVER AT REMINGTON, VA	2003	-0.229	-29.1	-0.023	-2.91	-318	-20.8	-31.8	-2.08	-0.198	-0.020
RPDR	01665500	RAPIDAN RIVER NEAR RUCKERSVILLE, VA	2003	-0.119	-19.4	-0.012	-1.94	-66.3	-24.8	-6.63	-2.48	-0.223	-0.022
RPHF	01668000	RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	2003	-0.095	-11.3	-0.010	-1.13	-342	-5.9	-34.2	-0.59	-0.083	-0.008
NANN	01671020	NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	2003	-0.091	-18.6	-0.009	-1.86	-92.3	-16	-9.23	-1.6	-0.077	-0.008

Table 2-4. Ten-year trends in total nitrogen, through water year 2012.—Continued

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer]

Station abbreviation	Station ID	Station name	Start year	Trends in concentration				Trends in flux				Trends in yield	
				POR		Per year		POR		Per year		POR	Per year
				mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
LITT	01671100	LITTLE RIVER NEAR DOSWELL, VA	2003	0.045	8.9	0.004	0.89	14.7	12.3	1.47	1.23	0.053	0.005
PAMU	01673000	PAMUNKEY RIVER NEAR HANOVER, VA	2003	0.019	2.6	0.002	0.26	42.2	2.3	4.22	0.23	0.015	0.002
PORV	01673800	PO RIVER NEAR SPOTSYLVANIA, VA	2003	0.025	5.5	0.003	0.55	5.17	3.9	0.517	0.39	0.026	0.003
MABG	01674000	MATTAPONI RIVER NEAR BOWLING GREEN, VA	2003	-0.015	-3.1	-0.002	-0.31	-20.3	-5.8	-2.03	-0.58	-0.031	-0.003
MABU	01674500	MATTAPONI RIVER NEAR BEULAHVILLE, VA	2003	-0.068	-10.8	-0.007	-1.08	-75.4	-8.1	-7.54	-0.81	-0.048	-0.005
BACK	02011500	BACK CREEK NEAR MOUNTAIN GROVE, VA	2003	-0.074	-21.1	-0.007	-2.11	-47.5	-22	-4.75	-2.2	-0.137	-0.014
BULL	02015700	BULLPASTURE RIVER AT WILLIAMSVILLE, VA	2003	0.002	0.6	0.000	0.06	-8.6	-3.1	-0.86	-0.31	-0.030	-0.003
CALF	02020500	CALFPASTURE RIVER ABV MILL CREEK AT GOSHEN, VA	2003	-0.053	-15.5	-0.005	-1.55	-26.2	-11.6	-2.62	-1.16	-0.072	-0.007
MECH	02031000	MECHUMS RIVER NEAR WHITE HALL, VA	2003	-0.048	-8.7	-0.005	-0.87	3.37	1.9	0.337	0.19	0.014	0.001
JAMC	02035000	JAMES RIVER AT CARTERSVILLE, VA	2003	-0.004	-0.8	-0.000	-0.08	1,510	11.4	151	1.14	0.093	0.009
JAMR	02037500	JAMES RIVER NEAR RICHMOND, VA	2003	-0.017	-3.3	-0.002	-0.33	2,380	19.2	238	1.92	0.136	0.014
APPF	02039500	APPOMATTOX RIVER AT FARMVILLE, VA	2003	0.094	22.7	0.009	2.27	112	30.2	11.2	3.02	0.143	0.014
DEEP	02041000	DEEP CREEK NEAR MANNBORO, VA	2003	0.035	6.2	0.003	0.62	-9.17	-3.3	-0.917	-0.33	-0.022	-0.002
APPM	02041650	APPOMATTOX RIVER AT MATOACA, VA	2003	0.003	0.5	0.000	0.05	-162	-8.3	-16.2	-0.83	-0.047	-0.005
CHIC	02042500	CHICKAHOMINY RIVER NEAR PROVIDENCE FORGE, VA	2003	-0.077	-11.8	-0.008	-1.18	-20.7	-3.9	-2.07	-0.39	-0.032	-0.003

Table 2-5. Ten-year trends in total phosphorus, through water year 2012.

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer; E, estimated]

Station abbreviation	Station ID	Station name	Start year	Trends in concentration				Trends in flux				Trends in yield	
				POR		Per year		POR		Per year		POR	Per year
				mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
CHOP	01491000	CHOPTANK RIVER NEAR GREENSBORO, MD	2003	0.023	30.2	0.002	3.02	17.1	34.8	1.71	3.48	0.059	0.006
SRTW	01531500	SUSQUEHANNA RIVER AT TOWANDA, PA	2003	-0.013	-19	-0.001	-1.9	-410	-13.2	-41	-1.32	-0.020	-0.002
SRWB	01536500	SUSQUEHANNA RIVER AT WILKES-BARRE, PA	2003	-0.044	-44.8	-0.004	-4.48	-3,370	-41.9	-337	-4.19	-0.131	-0.013
SRDA	01540500	SUSQUEHANNA RIVER AT DANVILLE, PA	2003	-0.018	-23.9	-0.002	-2.39	-1,030	-17.8	-103	-1.78	-0.036	-0.004
WBSL	01553500	WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	2003	-0.017	-42.8	-0.002	-4.28	-563	-35.3	-56.3	-3.53	-0.032	-0.003
JUNI	01567000	JUNIATA RIVER AT NEWPORT, PA	2003	-0.026	-40.9	-0.003	-4.09	-525	-42.4	-52.5	-4.24	-0.060	-0.006
SRMA	01576000	SUSQUEHANNA RIVER AT MARIETTA, PA	2003	-0.027	-34.1	-0.003	-3.41	-4,550	-32.6	-455	-3.26	-0.068	-0.007
CONE	01576754	CONESTOGA RIVER AT CONESTOGA, PA	2003	-0.012	-5.6	-0.001	-0.56	-65.6	-9.5	-6.56	-0.95	-0.054	-0.005
SRCW	01578310	SUSQUEHANNA RIVER AT CONOWINGO, MD	2003	0.003	6.8	0.000	0.68	2,880	29.2	288	2.92	0.041	0.004
GUNP	01582500	GUNPOWDER FALLS AT GLENCOE, MD	2003	0.012	38.5	0.001	3.85	10.4	39.7	1.04	3.97	0.025	0.003
NBPA	01586000	NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	2003	0.010	29.2	0.001	2.92	4.03	25.9	0.403	2.59	0.028	0.003
GWYN	01589300	GWYNNNS FALLS AT VILLA NOVA, MD	2003	0.006	17.8	0.001	1.78	3.48	33.8	0.348	3.38	0.041	0.004
PAXU	01591000	PATUXENT RIVER NEAR UNITY, MD	2003	0.014	40.9	0.001	4.09	11.4	130.9	1.14	13.1	0.127	0.013
PAXB	01594440	PATUXENT RIVER AT BOWIE, MD	2003	0.009	9	0.001	0.9	33.7	24.2	3.37	2.42	0.037	0.004
GEOR	01599000	GEORGES CREEK AT FRANKLIN, MD	2003	-0.026	-42.3	-0.003	-4.23	1.06	7	0.106	0.7	0.006	0.001
WILL	01601500	WILLS CREEK NEAR CUMBERLAND, MD	2003	-0.000	-0.4	-1.13E-5	-0.04	-16.4	-23	-1.64	-2.3	-0.026	-0.003
CONC	01614500	CONOCOCHIEGUE CREEK AT FAIRVIEW, MD	2003	-0.012	-12.9	-0.001	-1.29	-65.8	-23.1	-6.58	-2.31	-0.051	-0.005
ANTS	01619500	ANTIETAM CREEK NEAR SHARPSBURG, MD	2003	-0.010	-8.1	-0.001	-0.81	11.3	9.1	1.13	0.91	0.016	0.002
SOUT	01626000	SOUTH RIVER NEAR WAYNESBORO, VA	2003	-0.002	-5.4	-0.000	-0.54	2.34	17	0.234	1.7	0.007	0.001
SFSL	01628500	S F SHENANDOAH RIVER NEAR LYNNWOOD, VA	2003	-0.029	-29.4	-0.003	-2.94	-70.8	-19.2	-7.08	-1.92	-0.025	-0.003
SFSF	01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	2003	-0.030	-34	-0.003	-3.4	81.4	12.6	8.14	1.26	0.019	0.002
NFSH	01634000	N F SHENANDOAH RIVER NEAR STRASBURG, VA	2003	-0.101	-66.8	-0.010	-6.68	-182	-44.9	-18.2	-4.49	-0.091	-0.009
CATM	01637500	CATOCTIN CREEK NEAR MIDDLETOWN, MD	2003	-0.039	-37.3	-0.004	-3.73	-18.4	-37.7	-1.84	-3.77	-0.106	-0.011
CATT	01638480	CATOCTIN CREEK NEAR TAYLORSTOWN, VA	2003	0.015	35.9	0.002	3.59	11.5	54.5	1.15	5.45	0.050	0.005
MONO	01639000	MONOCACY RIVER AT BRIDGEPORT, MD	2003	-0.002	-1.3	-0.000	-0.13	14.8	11.2	1.48	1.12	0.033	0.003
POTC	01646580	POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	2003	0.006	9	0.001	0.9	361	8.6	36.1	0.86	0.012	0.001
ACCO	01654000	ACCOTINK CREEK NEAR ANNANDALE, VA	2003	-0.002	-3	-0.000	-0.3	2.01	13.8	0.201	1.38	0.032	0.003
RPHR	01664000	RAPPAHANNOCK RIVER AT REMINGTON, VA	2003	0.000	1	3.28E-5	0.1	11.8	11.9	1.18	1.19	0.007	0.001
RPDR	01665500	RAPIDAN RIVER NEAR RUCKERSVILLE, VA	2003	-0.009	-24.5	-0.001	-2.45	-5.27	-25.8	-0.527	-2.58	-0.018	-0.002
RPHF	01668000	RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	2003	0.028	47.2	0.003	4.72	458	61	45.8	6.1	0.111	0.011

Table 2-5. Ten-year trends in total phosphorus, through water year 2012.—Continued

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer; E, estimated]

Station abbreviation	Station ID	Station name	Start year	Trends in concentration				Trends in flux				Trends in yield	
				POR		Per year		POR		Per year		POR	Per year
				mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
NANN	01671020	NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	2003	0.005	21.3	0.001	2.13	12.7	29.4	1.27	2.94	0.011	0.001
LITT	01671100	LITTLE RIVER NEAR DOSWELL, VA	2003	0.017	45.9	0.002	4.59	4.48	36.8	0.448	3.68	0.016	0.002
PAMU	01673000	PAMUNKEY RIVER NEAR HANOVER, VA	2003	-0.006	-6.6	-0.001	-0.66	42.7	20.1	4.27	2.01	0.015	0.002
PORV	01673800	PO RIVER NEAR SPOTSYLVANIA, VA	2003	-0.001	-2.8	-0.000	-0.28	0.262	2.5	0.026	0.25	0.001	0.000
MABG	01674000	MATTAPONI RIVER NEAR BOWLING GREEN, VA	2003	-0.001	-3.1	-0.000	-0.31	0.508	1.7	0.051	0.17	0.001	7.66E-5
MABU	01674500	MATTAPONI RIVER NEAR BEULAHVILLE, VA	2003	0.008	15.6	0.001	1.56	13.8	19.3	1.38	1.93	0.009	0.001
MECH	02031000	MECHUMS RIVER NEAR WHITE HALL, VA	2003	0.032	85.9	0.003	8.59	43.2	140.6	4.32	14.1	0.175	0.018
JAMC	02035000	JAMES RIVER AT CARTERSVILLE, VA	2003	-0.001	-1.4	-0.000	-0.14	1,410	64.8	141	6.48	0.087	0.009
JAMR	02037500	JAMES RIVER NEAR RICHMOND, VA	2003	0.003	4.7	0.000	0.47	638	25.7	63.8	2.57	0.037	0.004
APPF	02039500	APPOMATTOX RIVER AT FARMVILLE, VA	2003	0.019	65.8	0.002	6.58	48.1	94.5	4.81	9.45	0.061	0.006
DEEP	02041000	DEEP CREEK NEAR MANNBORO, VA	2003	0.014	28.7	0.001	2.87	7.37	25.3	0.737	2.53	0.018	0.002
APPM	02041650	APPOMATTOX RIVER AT MATOACA, VA	2003	0.003	6.8	0.000	0.68	11.3	6.7	1.13	0.67	0.003	0.000
CHIC	02042500	CHICKAHOMINY RIVER NEAR PROVIDENCE FORGE, VA	2003	-0.024	-23.2	-0.002	-2.32	-28.7	-28.8	-2.87	-2.88	-0.044	-0.004

Table 2-6. Ten-year trends in sediment, through water year 2012.

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer; SSC, suspended-sediment concentration; TSS, total suspended solids]

Station abbreviation	Station ID	Station name	Start year	Con-stituent	Trends in concentration				Trends in flux				Trends in yield	
					POR		Per year		POR		Per year		POR	Per year
					mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
CHOP	01491000	CHOPTANK RIVER NEAR GREENSBORO, MD	2003	SSC	4.46	72.8	0.446	72.8	3,990	65.8	399	6.58	13.6	1.36
SRTW	01531500	SUSQUEHANNA RIVER AT TOWANDA, PA	2003	SSC	-1.47	-4.9	-0.147	-0.49	-339,000	-12.1	-33,900	-1.21	-16.8	-1.68
SRDA	01540500	SUSQUEHANNA RIVER AT DANVILLE, PA	2003	SSC	-0.588	-1.8	-0.059	-0.18	-174,000	-3.6	-17,400	-0.36	-6	-0.6
WBSL	01553500	WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA	2003	SSC	-5.44	-29.5	-0.544	-2.95	-594,000	-38.3	-59,400	-3.83	-33.5	-3.35
JUNI	01567000	JUNIATA RIVER AT NEWPORT, PA	2003	SSC	-7.24	-34.4	-0.724	-3.44	-460,000	-55	-46,000	-5.5	-52.9	-5.29
SRMA	01576000	SUSQUEHANNA RIVER AT MARIETTA, PA	2003	SSC	-4.19	-13	-0.419	-1.3	-3,360,000	-32	-336,000	-3.2	-50	-5
CONE	01576754	CONESTOGA RIVER AT CONESTOGA, PA	2003	SSC	-4.36	-10.7	-0.436	-1.07	-98,100	-32.4	-9,810	-3.24	-80.6	-8.06
SRCW	01578310	SUSQUEHANNA RIVER AT CONOWINGO, MD	2003	SSC	5.12	29	0.512	2.9	1,540,000	16.3	154,000	1.63	21.9	2.19
GUNP	01582500	GUNPOWDER FALLS AT GLENCOE, MD	2003	TSS	21.7	186	2.17	18.6	23,200	96.8	2,320	9.68	56	5.6
NBPA	01586000	NORTH BRANCH PATAPSCO RIVER AT CEDARHURST, MD	2003	TSS	22.1	190.3	2.21	19	13,500	127.2	1,350	12.7	92.1	9.21
GWYN	01589300	GWYNNS FALLS AT VILLA NOVA, MD	2003	TSS	17.6	225.7	1.76	22.6	17,000	285	1,700	28.5	202	20.2
PAXU	01591000	PATUXENT RIVER NEAR UNITY, MD	2003	TSS	38.4	263.9	3.84	26.4	34,600	269.1	3,460	26.9	383	38.3
PAXB	01594440	PATUXENT RIVER AT BOWIE, MD	2003	SSC	16.8	59.4	1.68	5.94	35,600	57.5	3,560	5.75	39.5	3.95
GEOR	01599000	GEORGES CREEK AT FRANKLIN, MD	2003	TSS	34.1	142.9	3.41	14.3	28,700	246.6	2,870	24.7	153	15.3
WILL	01601500	WILLS CREEK NEAR CUMBERLAND, MD	2003	TSS	10	49.4	1	4.94	85,000	108.4	8,500	10.8	133	13.3
CONC	01614500	CONOCOCHIEAGUE CREEK AT FAIRVIEW, MD	2003	TSS	7.04	35.8	0.704	3.58	56,100	52.2	5,610	5.22	43.8	4.38
ANTS	01619500	ANTIETAM CREEK NEAR SHARPSBURG, MD	2003	TSS	14.5	89.6	1.45	8.96	31,500	96.6	3,150	9.66	43.2	4.32
SOUT	01626000	SOUTH RIVER NEAR WAYNESBORO, VA	2003	TSS	-0.557	-8.6	-0.056	-0.86	1,540	20.7	154	2.07	4.69	0.469
SFSL	01628500	S.F. SHENANDOAH RIVER NEAR LYNNWOOD, VA	2003	TSS	12.2	65.4	1.22	6.54	384,000	91	38,400	9.1	137	13.7
SFSF	01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	2003	SSC	7.77	40.1	0.777	4.01	478,000	116.2	47,800	11.6	113	11.3
NFSH	01634000	N F SHENANDOAH RIVER NEAR STRASBURG, VA	2003	SSC	11.5	76.7	1.15	7.67	101,000	54.6	10,100	5.46	50.6	5.06
CATM	01637500	CATOCTIN CREEK NEAR MIDDLETOWN, MD	2003	TSS	0.363	1.4	0.036	0.14	-18,900	-30.5	-1,890	-3.05	-109	-10.9
CATT	01638480	CATOCTIN CREEK NEAR TAYLORSTOWN, VA	2003	TSS	5.45	71.6	0.545	7.16	9,730	82.7	973	8.27	42	4.2
MONO	01639000	MONOCACY RIVER AT BRIDGEPORT, MD	2003	TSS	3.51	29.8	0.351	2.98	19,600	56.8	1,960	5.68	43.6	4.36
POTC	01646580	POTOMAC RIVER AT CHAIN BRIDGE, AT WASHINGTON, DC	2003	SSC	7.68	29.8	0.768	2.98	173,000	4.9	17,300	0.49	5.78	0.578

Table 2-6. Ten-year trends in sediment, through water year 2012.—Continued

[POR, period of record; mg/L, milligrams per liter; kg day⁻¹, kilograms per day; kg day⁻¹ km⁻², kilograms per day per square kilometer; SSC, suspended-sediment concentration; TSS, total suspended solids]

Station abbreviation	Station ID	Station name	Start year	Constituent	Trends in concentration				Trends in flux				Trends in yield	
					POR		Per year		POR		Per year		POR	Per year
					mg/L	percent	mg/L	percent	kg day ⁻¹	percent	kg day ⁻¹	percent	kg day ⁻¹ km ⁻²	kg day ⁻¹ km ⁻²
ACCO	01654000	ACCOTINK CREEK NEAR ANNANDALE, VA	2003	TSS	-7.47	-28.8	-0.747	-2.88	-3,070	-17	-307	-1.7	-49.6	-4.96
RPHR	01664000	RAPPAHANNOCK RIVER AT REMINGTON, VA	2003	TSS	2.82	22.9	0.282	2.29	30,600	26.5	3,060	2.65	19.1	1.91
RPHF	01668000	RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA	2003	SSC	11.3	35.8	1.13	3.58	185,000	26.3	18,500	2.63	44.8	4.48
NANN	01671020	NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA	2003	TSS	3.06	32.4	0.306	3.24	11,000	34.3	1,100	3.43	9.22	0.922
RPHF	01671100	LITTLE RIVER NEAR DOSWELL, VA	2003	TSS	6.64	126.5	0.664	12.6	1,110	29.7	111	2.97	4	0.4
NANN	01673000	PAMUNKEY RIVER NEAR HANOVER, VA	2003	SSC	18.2	86.7	1.82	8.67	73,000	70	7,300	7	26.1	2.61
MABU	01674500	MATTAPONI RIVER NEAR BEULAHVILLE, VA	2003	SSC	0.053	0.5	0.005	0.05	-2,880	-12.5	-288	-1.25	-1.85	-0.185
MECH	02031000	MECHUMS RIVER NEAR WHITE HALL, VA	2003	TSS	15.3	132.9	1.53	13.3	35,600	125.6	3,560	12.6	144	14.4
JAMC	02035000	JAMES RIVER AT CARTERSVILLE, VA	2003	SSC	15.7	58.6	1.57	5.86	958,000	55.3	95,800	5.53	59.2	5.92
JAMR	02037500	JAMES RIVER NEAR RICHMOND, VA	2003	TSS	12.2	64.5	1.22	6.45	785,000	62.8	78,500	6.28	44.9	4.49
APPF	02039500	APPOMATTOX RIVER AT FARMVILLE, VA	2003	TSS	27.2	241.3	2.72	24.1	138,000	261.3	13,800	26.1	177	17.7
DEEP	02041000	DEEP CREEK NEAR MANNBORO, VA	2003	TSS	3.22	50.5	0.322	5.05	4,090	45.4	409	4.54	10	1
APPM	02041650	APPOMATTOX RIVER AT MATOACA, VA	2003	SSC	2.38	31.6	0.238	3.16	5,630	11.4	563	1.14	1.62	0.162
CHIC	02042500	CHICKAHOMINY RIVER NEAR PROVIDENCE FORGE, VA	2003	TSS	1.4	18.3	0.14	1.83	-1,770	-12.6	-177	-1.26	-2.72	-0.272