2006 SUMMARY STATISTICS AT ALL SITES

As sampling at group B stations began fairly recently, there were not enough data to complete loads or trends analyses. Therefore, summary statistics have been calculated for these sites, as well as the long term sites for comparison. Summary statistics are listed in Table 24 and include minimum, maximum, median, mean, and standard deviation values. Table 25 lists annual mean values of all parameters. Table 26 lists seasonal mean values for TN, TP, and TSS at all sites.

Table 24. Enhanced Monitoring Station Concentration Summary Statistics for 2006 in mg/L

Station	Minimum Value			Maximum Value			Median Value			Mean Value			Standard Deviation		
	TN	TP	TSS	TN	TP	TSS	TN	TP	TSS	TN	TP	TSS	TN	TP	TSS
Original Sites (Group A)															
Towanda *	0.58	0.020	3	1.23	0.657	764	0.93	0.110	39	0.92	0.162	119	0.18	0.153	187
Danville *	0.54	0.021	4	1.88	0.599	762	0.95	0.112	31	0.96	0.180	113	0.24	0.160	184
Lewisburg *	0.55	0.012	1	1.52	0.268	310	0.76	0.052	8	0.83	0.064	24	0.24	0.045	53
Newport *	0.98	0.011	1	2.42	0.228	153	1.67	0.047	15	1.63	0.062	27	0.37	0.053	38
Marietta *	0.87	0.015	3	2.93	0.438	493	1.28	0.051	23	1.34	0.098	78	0.38	0.107	121
Conestoga *	3.72	0.027	2	9.65	1.352	699	7.36	0.140	13	7.21	0.254	84	1.70	0.296	157
Enhanced Sites (Groups B)															
Unadilla *	0.70	0.030	2	1.38	1.801	486	0.90	0.077	9	0.95	0.113	61	0.21	0.084	127
Conklin *	0.52	0.029	4	1.77	0.444	747	0.83	0.089	18	0.92	0.128	99	0.32	0.109	188
Smithboro *	0.75	0.025	3	1.78	0.736	697	1.02	0.103	63	1.13	0.186	200	0.33	0.206	279
Cohocton *	1.19	0.020	1	1.84	0.317	170	1.40	0.065	8	1.44	0.095	32	0.22	0.077	48
Chemung *	0.64	0.026	2	2.16	0.753	891	1.03	0.084	20	1.13	0.179	169	0.41	0.211	308
Wilkes-Barre	0.40	0.025	2	1.42	0.635	936	0.85	0.078	22	0.87	0.149	113	0.23	0.171	248
Karthaus	0.21	0.013	2	0.82	0.105	88	0.56	0.049	10	0.56	0.052	19	0.17	0.027	22
Castanea	1.11	0.015	2	1.83	0.102	96	1.47	0.049	3	1.48	0.054	15	0.22	0.031	24
Jersey Shore	0.35	0.013	2	0.78	0.245	42	0.58	0.051	4	0.58	0.058	4	0.12	0.051	13
Penns Creek	0.75	0.013	2	2.10	0.257	116	1.50	0.067	4	1.40	0.100	24	0.40	0.081	38
Saxton	1.17	0.010	2	2.25	0.126	94	1.99	0.023	6	1.86	0.042	23	0.34	0.037	34
Dromgold	1.10	0.012	2	3.89	0.215	114	1.93	0.027	4	1.88	0.073	21	0.64	0.077	31
Hogestown	1.75	0.011	2	5.60	0.257	138	3.80	0.027	4	3.87	0.068	23	0.93	0.077	39
Hershey	2.44	0.013	2	5.80	0.495	310	3.55	0.065	3	3.37	0.115	46	0.82	0.121	76
Manchester	1.19	0.036	2	4.57	0.602	276	2.55	0.146	9	2.64	0.218	55	1.01	0.201	92
Martic Forge	4.76	0.022	2	9.69	2.175	1,092	7.94	0.120	17	7.74	0.452	213	1.46	0.677	379
Octoraro	4.41	0.037	2	8.99	0.829	528	6.06	0.079	3	6.43	0.183	45	1.27	0.212	131

* Suspended-sediment concentrations were substituted for total suspended solids (TSS) at these sites as there were more data points available

Table 25. Enhanced Monitoring Station Average Concentration Data for 2006

Station	Flow cfs	Temp C°	Cond umhos/cm	pH S.U.	TN	DN	TNH_4	DNH_4	TNOx	DNOx	TP	DP	DOP	TOC	TSS
					mg/L										
Original Sites (Group A)															
Towanda *	33,124	12.2	186	7.17	0.92	0.76	0.05	0.04	0.52	0.50	0.162	0.074	0.061	4.58	119
Danville *	49,771	12.5	201	7.09	0.96	0.75	0.05	0.04	0.52	0.51	0.178	0.079	0.067	4.60	112
Lewisburg *	19,117	12.5	162	6.91	0.82	0.74	0.04	0.04	0.57	0.56	0.064	0.039	0.032	2.46	24
Newport *	6,487	14.6	221	8.02	1.63	1.51	0.04	0.04	1.28	1.27	0.062	0.035	0.027	3.50	27
Marietta *	86,822	14.5	187	7.51	1.34	1.13	0.05	0.04	0.93	0.91	0.098	0.024	0.018	3.87	78
Conestoga *	2,245	15.6	494	7.98	7.21	6.96	0.07	0.06	6.35	6.09	0.255	0.140	0.125	5.04	84
Enhanced Sites (Group B)															
Unadilla *	2,151	10.6	226	7.35	0.95	0.87	0.03	0.03	0.58	0.58	0.113	0.070	0.068	2.99	61
Conklin *	7,361	11.4	174	7.40	0.92	0.75	0.03	0.03	0.47	0.42	0.128	0.056	0.051	3.15	99
Smithboro *	25,970	11.9	201	7.34	1.13	0.87	0.04	0.04	0.53	0.54	0.186	0.070	0.053	3.55	183
Cohocton *	880	12.1	437	7.72	1.44	1.38	0.37	0.33	0.96	0.96	0.095	0.051	0.047	4.31	32
Chemung *	5,738	10.4	296	7.60	1.13	0.93	0.03	0.03	0.56	0.59	0.179	0.061	0.043	3.50	169
Wilkes-Barre	35,938	13.0	213	7.15	0.87	0.69	0.04	0.03	0.47	0.46	0.149	0.049	0.040	4.49	113
Karthaus	3,424	12.9	340	6.39	0.56	0.49	0.05	0.04	0.34	0.34	0.052	0.019	0.016	1.90	19
Castanea	-	13.0	262	7.33	1.48	1.42	0.03	0.03	1.24	1.24	0.054	0.033	0.029	2.20	15
Jersey Shore	13,202	13.8	191	6.82	0.58	0.52	0.03	0.03	0.41	0.39	0.058	0.040	0.035	1.87	12
Penns Creek	1,154	12.6	177	7.66	1.40	1.28	0.04	0.03	1.04	1.04	0.100	0.060	0.051	3.72	24
Saxton	2,034	13.7	234	7.70	1.86	1.80	0.04	0.04	1.56	1.54	0.041	0.033	0.024	3.36	23
Dromgold	1,070	13.9	157	7.55	1.88	1.80	0.05	0.04	1.51	1.47	0.073	0.044	0.035	4.36	21
Hogestown	1,191	16.0	358	7.89	3.87	3.78	0.04	0.04	3.44	3.39	0.068	0.032	0.027	3.90	23
Hershey	4,367	14.8	232	7.43	3.67	3.54	0.06	0.05	3.25	3.17	0.115	0.053	0.044	4.27	46
Manchester	2,998	16.4	237	7.80	2.64	2.44	0.05	0.05	2.08	1.94	0.218	0.139	0.122	6.85	55
Martic Forge	469	14.6	397	7.90	7.74	7.26	0.10	0.10	6.32	6.16	0.452	0.174	0.159	6.03	213
Octoraro	472	16.6	224	7.98	6.43	6.23	0.08	0.07	5.60	5.30	0.183	0.108	0.084	3.34	45

* Suspended-sediment concentrations were substituted for total suspended solids (TSS) at these sites as there were more data points available

Table 26. Enhanced Monitoring Station Average Seasonal Concentration Data for 2006 in mg/L

Station	Winter				Spring				Summer				Fall			
	Flow	TN	TP	TSS	Flow	TN	TP	TSS	Flow	TN	TP	TSS	Flow	TN	TP	TSS
	cfs	mg/L			cfs	mg/L			cfs	mg/L			cfs	mg/L		
Original Sites (Group A)																
Towanda *	33,304	1.04	0.103	103	40,865	0.90	0.279	214	28,412	0.88	0.117	49	25,052	0.86	0.091	50
Danville *	46,328	0.99	0.104	65	60,727	0.97	0.218	170	46,222	0.87	0.165	90	40,857	0.97	0.232	109
Lewisburg *	25,593	0.90	0.040	26	15,566	0.82	0.090	36	8,680	0.64	0.060	6	23,002	0.86	0.600	14
Newport *	9,450	1.82	0.043	24	7,013	1.56	0.088	46	1,333	1.32	0.055	10	3,142	1.71	0.066	24
Marietta *	98,806	1.38	0.068	44	117,490	1.45	0.155	153	46,909	1.12	0.066	34	67,128	1.36	0.086	61
Conestoga *	1,149	8.30	0.142	48	4,393	5.65	0.420	170	685	7.84	0.205	42	2,387	7.11	0.247	60
Enhanced Sites (Group B)																
Unadilla *	943	1.13	0.076	6	1,465	0.89	0.101	109	1,511	0.95	0.094	32	3,945	0.89	0.157	53
Conklin *	3,690	1.03	0.056	7	7,512	1.00	0.163	176	5,463	0.91	0.149	58	10,337	0.79	0.119	93
Smithboro *	10,234	1.21	0.134	6	32,179	1.18	0.251	467	14,926	1.06	0.106	14	34,589	1.06	0.189	155
Cohocton *	867	1.67	0.045	11	706	1.36	0.107	33	569	1.46	0.159	62	1,249	1.36	0.073	23
Chemung *	3,847	1.13	0.057	11	5,316	1.14	0.204	333	730	0.92	0.092	15	10,294	1.21	0.278	163
Wilkes-Barre	16,900	1.01	0.033	6	46,350	0.78	0.182	146	31,791	0.85	0.161	44	41,281	0.88	0.179	190
Karthaus	5,438	0.68	0.044	20	2,578	0.54	0.047	25	903	0.41	0.052	9	3,769	0.54	0.063	17
Castanea	-	1.46	0.025	3	-	1.45	0.062	19	-	1.70	0.082	2	-	1.43	0.046	24
Jersey Shore	11,227	0.61	0.026	18	11,538	0.55	0.079	14	3,562	0.59	0.069	3	20,673	0.60	0.047	11
Penns Creek	1,522	1.58	0.065	26	1,254	1.25	0.120	33	300	1.10	0.065	3	1,183	1.58	0.130	23
Saxton	4,544	2.07	0.045	26	1,088	1.63	0.058	38	182	1.78	0.022	6	440	1.90	0.025	5
Dromgold	921	2.54	0.075	2	1,978	1.73	0.110	38	107	1.47	0.023	2	767	1.70	0.061	767
Hogestown	680	3.64	0.038	9	2,028	3.28	0.120	42	306	5.01	0.027	4	1,053	4.02	0.052	20
Hershey	1,860	3.84	0.077	40	8,888	3.16	0.170	78	582	4.70	0.059	4	2,815	3.60	0.110	31
Manchester	625	3.35	0.073	7	5,032	2.93	0.295	101	156	1.53	0.125	6	3,273	2.56	0.261	58
Martic Forge	346	9.16	0.218	106	1,185	6.62	0.736	420	121	8.09	0.118	17	331	7.22	0.603	232
Octoraro	193	8.35	0.104	3	856	5.55	0.321	108	109	5.67	0.072	6	475	6.44	0.186	31

* Suspended-sediment concentrations were substituted for total suspended solids (TSS) at these sites as there were more data points available