

Appendix 4B-3: STA-1W Water Quality Summary Statistics, Water Year 2003

Table 1. Geometric means and standard errors for water quality parameters monitored at Stormwater Treatment Area 1 West (STA-1W) interior sampling stations during WY2003.

		Sampling Stations				
		Cell 3	ENR002	ENR012	G253	G254
Sample size		33	33	31	34	34
TP ($\mu\text{g/L}$)	Mean	22	27	34	60	112
	SE	1	1	2	4	11
SRP ($\mu\text{g/L}$)	Mean	10	6	14	38	61
	SE	1	< 1	2	4	11
TDP ($\mu\text{g/L}$)	Mean	15	7	19	46	71
	SE	1	< 1	2	4	10
TKN (mg/L)	Mean	1.352	3.737	2.107	1.436	1.680
	SE	0.115	0.034	0.143	0.072	0.142
$\text{NH}_4\text{-N}$ (mg/L)	Mean	0.012	1.660	0.055	0.069	0.204
	SE	0.002	0.048	0.010	0.024	0.125
$\text{NO}_x\text{-N}$ (mg/L)	Mean	0.039	0.005	0.024	0.087	0.350
	SE	0.019	< 0.001	0.005	0.054	0.132
Ca (mg/L)	Mean	72.4	95.5	72.0	69.1	75.2
	SE	3.0	1.1	3.5	2.8	4.2
Alkalinity (mg $\text{CaCO}_3\text{/L}$)	Mean	229.2	316.8	228.4	212.5	224.3
	SE	9.8	4.4	9.8	7.9	13.7
Cl (mg/L)	Mean	147.2	175.9	154.8	158.0	154.0
	SE	12.0	3.6	14.4	19.3	16.5

Note:

TP = total phosphorus; SRP = soluble reactive phosphorus; TDP = total dissolved phosphorus; TKN = total Kjeldahl nitrogen; $\text{NH}_4\text{-N}$ = ammonia nitrogen; $\text{NO}_x\text{-N}$ = nitrite+nitrate nitrogen; Ca = calcium; and Cl = chloride.

Table 1. Continued.

		Sampling Stations				
		G255	G256	G302	G303	G305
Sample size		34	34	16	15	15
TP ($\mu\text{g/L}$)	Mean	131	36	151	134	111
	SE	10	3	21	13	8
SRP ($\mu\text{g/L}$)	Mean	59	17	67	73	77
	SE	7	2	11	12	9
TDP ($\mu\text{g/L}$)	Mean	65	25	76	82	87
	SE	7	3	11	12	8
TKN (mg/L)	Mean	2.255	1.305	1.823	1.930	1.753
	SE	0.177	0.076	0.304	0.295	0.1540
$\text{NH}_4\text{-N}$ (mg/L)	Mean	0.352	0.030	0.140	0.194	0.135
	SE	0.139	0.010	0.059	0.065	0.014
$\text{NO}_x\text{-N}$ (mg/L)	Mean	0.414	0.111	0.325	0.326	0.315
	SE	0.170	0.040	0.119	0.077	0.165
Ca (mg/L)	Mean	77.8	62.8	69.6	69.3	68.3
	SE	5.7	4.9	5.3	6.2	5.3
Alkalinity (mg $\text{CaCO}_3\text{/L}$)	Mean	228.1	191.2	191.6	191.9	191.6
	SE	18.4	12.9	15.7	18.0	16.5
Cl (mg/L)	Mean	134.7	160.9	115.0	111.1	111.2
	SE	11.0	21.1	7.7	8.0	8.4

Note:

TP = total phosphorus; SRP = soluble reactive phosphorus; TDP = total dissolved phosphorus; TKN = total Kjeldahl nitrogen; $\text{NH}_4\text{-N}$ = ammonia nitrogen; $\text{NO}_x\text{-N}$ = nitrite+nitrate nitrogen; Ca = calcium; and Cl = chloride.

Table 1. Continued.

		Sampling Stations				
		G306	G308	G309	G310	S5A
Sample size		16	33	33	31	31
TP ($\mu\text{g/L}$)	Mean	61	32	69	49	139
	SE	11	1	4	5	7
SRP ($\mu\text{g/L}$)	Mean	36	14	32	27	79
	SE	9	2	4	3	6
TDP ($\mu\text{g/L}$)	Mean	45	21	42	35	86
	SE	9	2	4	3	7
TKN (mg/L)	Mean	1.807	1.443	1.600	2.044	2.326
	SE	0.117	0.046	0.054	0.154	0.150
$\text{NH}_4\text{-N}$ (mg/L)	Mean	0.188	0.024	0.060	0.075	0.150
	SE	0.024	0.004	0.011	0.011	0.027
$\text{NO}_x\text{-N}$ (mg/L)	Mean	0.146	0.074	0.209	0.065	0.315
	SE	0.140	0.026	0.063	0.029	0.058
Ca (mg/L)	Mean	66.0	na	na	69.2	73.4
	SE	3.8	na	na	4.4	9.2
Alkalinity (mg $\text{CaCO}_3\text{/L}$)	Mean	187.8	na	na	205.6	199.3
	SE	13.4	na	na	13.1	25.5
Cl (mg/L)	Mean	130.7	na	na	134.8	115.5
	SE	12.2	na	na	12.2	13.1

Note:

TP = total phosphorus; SRP = soluble reactive phosphorus; TDP = total dissolved phosphorus; TKN = total Kjeldahl nitrogen; $\text{NH}_4\text{-N}$ = ammonia nitrogen; $\text{NO}_x\text{-N}$ = nitrite+nitrate nitrogen; Ca = calcium; and Cl = chloride.