

Summary of Sampling Parameters for Key Pollutants – Nitrogen

Sampling Location	# samples	# months	Months	Year	NH3, ug/L			NOx, ug/L			Dissolved Organic N, ug/L			Particulate N, ug/L			Dissolved Total N, ug/L			Total N, ug/L		
					Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean
Canal and Stormwater Outfall Sampling																						
Storm Outfall PRE, Baseflow	9	5	Aug-Dec	2014	38	1094	258	3	1292	71	125	1107	588	69	605	263	323	1813	1196	489	2244	1521
Storm Outfall PRE, Stormwater	4	5	Aug-Dec	2014	3	408	25	3	97	24	125	313	185	166	193	179	200	749	314	372	942	508
Canal/Ambient Receiving Water, PRE	3	4	Aug-Nov	2014	3	253	47	3	25	6	948	1105	1042	85	511	280				1444	1622	1550
Storm Outfall POST, Stormwater (CB-4/SW-4)	13	11	Aug-Jun	2018/2019	28	681	127	1	621	14	359	3267	946	44	1772	415	1058	3475	1327	1212	5247	1822
Canal/Ambient Receiving Water, POST	11	11	Aug-Jun	2018/2019	5	527	18	1	360	4	439	1193	932	185	462	323	875	1214	1081	1060	1569	1415
Groundwater PRE-Project																						
	# samples	# months	Months	Year	NH3, ug/L			NOx, ug/L			Dissolved Organic N, ug/L						Total N, ug/L					
Groundwater Well, Cedar 1'	6	5	Jul-Nov	2015	479	1471	883	3	74	8	155	1690	644							637	3190	1581
Groundwater Well, Cedar 5'	6	5	Jul-Nov	2015	1888	2836	2295	3	79	14	100	715	265							1997	3049	2654
Groundwater Well, Cedar 10'	6	5	Jul-Nov	2015	2440	3916	3071	3	30	10	91	253	138							2549	4068	3227
Groundwater Well, Woodland 1'	6	5	Jul-Nov	2015	56	707	158	3	103	13	35	433	197							194	1045	446
Groundwater Well, Woodland 5'	6	5	Jul-Nov	2015	3	683	39	1	953	45	47	851	210							189	1435	701
Groundwater Well, Woodland 10'	6	5	Jul-Nov	2015	3	711	59	1	191	19	17	803	149							192	1160	446
Groundwater Well, City Hall 1'	6	5	Jul-Nov	2015	3	131	17	3111	8085	4748	170	633	289							3643	8300	5161
Groundwater Well, City Hall 5'	6	5	Jul-Nov	2015	3	165	26	3	169	15	215	437	310							268	564	422
Groundwater Well, City Hall 10'	6	5	Jul-Nov	2015	3	876	117	3	821	63	85	486	227							636	1362	1011
Groundwater Well, Fire St 1'	6	5	Jul-Nov	2015	3	57	6	166	3126	823	110	403	213							358	3238	1214
Groundwater Well, Fire St 5'	6	5	Jul-Nov	2015	3	49	6	130	3115	593	136	535	275							350	3305	1152
Groundwater Well, Beach 1'	1	5	Jul-Nov	2015			5			39			165									209
BMP Runoff Inflow, POST-Construction																						
	# samples	# months	Months	Year	NH3, ug/L			NOx, ug/L			Dissolved Organic N, ug/L			Particulate N, ug/L			Dissolved Total N, ug/L			Total N, ug/L		
Rain Tank Runoff Inflow (CB-1/SW-1)	12	11	Aug-Jun	2018/2019	5	382	28	7	418	141	108	715	204	20	580	59	340	993	533	396	1573	617
N Rain Garden Runoff Inflow (CB-2/SW-2)	16	11	Aug-Jun	2018/2019	5	252	25	11	1780	174	35	531	203	22	342	149	82	1917	497	212	2097	729
S Rain Garden Runoff Inflow (CB-3/SW-3)	14	11	Aug-Jun	2018/2019	5	320	33	1	502	30	46	1200	174	69	657	212	122	1527	359	246	1792	629
BMP Infiltrate, POST-Construction*																						
	# samples	# months	Months	Year	NH3, ug/L			NOx, ug/L			Dissolved Organic N, ug/L						Total N, ug/L					
N Rain Tanks without BAM (GW-1N)	6	7	Dec-Jun	2018/2019	44	511	114	16	1551	88	16	575	191							383	2170	612
S Rain Tanks with BAM (GW-1S)	7	7	Dec-Jun	2018/2019	5	481	85	12	397	88	18	638	158							301	1166	536
Rain Garden without BAM (GW-2)	7	7	Dec-Jun	2018/2019	5	330	75	1	353	16	671	2011	1071							832	2345	1275
Rain Garden with BAM (GW-3)	7	7	Dec-Jun	2018/2019	5	118	11	20	263	103	193	704	489							482	969	670
Pavers without BAM (GW-4)	7	7	Dec-Jun	2018/2019	5	1328	69	4	779	55	112	676	365							173	2783	634
Pavers with BAM (GW-5)	6	7	Dec-Jun	2018/2019	5	119	19	34	197	74	220	593	318							316	897	443

All values given in ug/L

highly variable; minimum is far more than an order of magnitude lower than maximum

MDL

at or below method detection limit

* sample from just below the BMP base layer i.e. below BAM layer

Summary of Sampling Parameters for Key Pollutants – Phosphorus

Sampling Location	# samples	# months	Months	Year	Soluble Reactive P, ug/L			Dissolved Organic P, ug/L			Particulate P, ug/L			Dissolved Total P, ug/L			Total P, ug/L			TSS, mg/L			Turbidity, NTUs		
					Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean	Min	Max	G-Mean
Canal and Stormwater Outfall Sampling																									
Storm Outfall PRE, Baseflow	9	5	Aug-Dec	2014	3	108	31	5	38	18	49	189	87	8	122	58	99	197	169	4.8	69.6	20.6	3.0	23.8	7.9
Storm Outfall PRE, Stormwater	4	5	Aug-Dec	2014	13	85	37	6	20	14	28	104	52	30	105	53	74	209	111	5.8	71.0	24.8	2.9	13.0	5.6
Canal/Ambient Receiving Water, PRE	3	4	Aug-Nov	2014	10	41	19	21	113	48	33	119	55				95	251	133	4.6	15.2	8.6	2.9	13.4	6.4
Storm Outfall POST, Stormwater (CB-4/SW-4)	13	11	Aug-Jun	2018/2019	9	538	39	8	47	16	21	238	61	17	548	59	69	569	145	3.5	51.8	12.3	2.1	21.0	7.2
Canal/Ambient Receiving Water, POST	11	11	Aug-Jun	2018/2019	21	57	38	2	9	4	24	64	43	29	60	44	69	113	89	4.1	26.0	9.2	3.1	9.3	7.0
Groundwater PRE-Project																									
Groundwater Well, Cedar 1'	6	5	Jul-Nov	2015	137	245	171	6	86	21							157	253	204						
Groundwater Well, Cedar 5'	6	5	Jul-Nov	2015	173	352	245	16	53	24							194	382	270						
Groundwater Well, Cedar 10'	6	5	Jul-Nov	2015	224	501	301	2	51	11							244	513	318						
Groundwater Well, Woodland 1'	6	5	Jul-Nov	2015	340	582	433	13	84	25							356	598	466						
Groundwater Well, Woodland 5'	6	5	Jul-Nov	2015	134	490	226	5	35	17							139	520	245						
Groundwater Well, Woodland 10'	6	5	Jul-Nov	2015	91	483	180	4	38	14							101	521	195						
Groundwater Well, City Hall 1'	6	5	Jul-Nov	2015	327	613	474	5	79	19							381	629	505						
Groundwater Well, City Hall 5'	6	5	Jul-Nov	2015	317	542	452	5	50	11							366	551	470						
Groundwater Well, City Hall 10'	6	5	Jul-Nov	2015	109	260	152	13	50	27							125	278	185						
Groundwater Well, Fire St 1'	6	5	Jul-Nov	2015	215	389	267	9	37	18							240	407	288						
Groundwater Well, Fire St 5'	6	5	Jul-Nov	2015	221	293	256	5	34	14							249	305	273						
Groundwater Well, Beach 1'	1	5	Jul-Nov	2015			37			6								43							
BMP Runoff Inflow, POST-Construction																									
Rain Tank Runoff Inflow (CB-1/SW-1)	12	11	Aug-Jun	2018/2019	33	93	48	2	108	5	4	179	10	35	156	58	40	335	73	0.3	9.1	1.1	0.5	4.5	1.2
N Rain Garden Runoff Inflow (CB-2/SW-2)	16	11	Aug-Jun	2018/2019	21	384	83	2	88	16	22	194	58	30	403	108	68	461	188	1.3	160	15.0	0.9	26.5	7.1
S Rain Garden Runoff Inflow (CB-3/SW-3)	14	11	Aug-Jun	2018/2019	21	201	65	6	187	28	25	223	70	37	292	102	98	419	194	1.2	125	16.1	2.4	31.9	9.2
BMP Infiltrate, POST-Construction																									
N Rain Tanks without BAM (GW-1N)	6	7	Dec-Jun	2018/2019	50	102	66	2	14	6							52	109	73						
S Rain Tanks with BAM (GW-1S)	7	7	Dec-Jun	2018/2019	39	138	61	1	12	5							42	145	67						
Rain Garden without BAM (GW-2)	7	7	Dec-Jun	2018/2019	91	605	199	7	44	20							116	612	225						
Rain Garden with BAM (GW-3)	7	7	Dec-Jun	2018/2019	99	247	188	2	32	13							104	274	205						
Pavers without BAM (GW-4)	7	7	Dec-Jun	2018/2019	8	211	45	1	45	7							29	213	66						
Pavers with BAM (GW-5)	6	7	Dec-Jun	2018/2019	13	73	38	1	33	9							23	87	51						

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