Appendix D-1

Loading of major water quality parameters to Onondaga Lake, January to December 2013.

Parameter	Units	Onondaga Crk at Kirkpatrick[3,4]	Ninemile Creek at Rt. 48[3,4]	Metro[1] Outfall 001	Bypass[2] Outfall 002	Ley Creek at Park[3,4]	Harbor Brook at Hiawatha[3,4]	East Flume[3]	Tributary 5A[3]	Total Monitored
Water	hm^3	169	149	92	1.7	39	10	0.47	0.35	461
Total P	mt	15.50	14.02	5.31	1.94	3.34	0.72	0.08	0.03	41
SRP	mt	1.35	1.35	0.16	0.43	0.53	0.19	0.06	0.01	4
TKN	mt	120.9	128.3	106.9	19.3	31.0	5.8	0.5	0.20	413
Nitrate-N	mt	189	139	1,100	1.9	11.0	14	3.3	0.35	1,458
Nitrite-N	mt	3.8	2.9	3.1	0.17	0.67	0.14	0.9	0.01	12
Ammonia-N	mt	12	27	23	12.2	8.9	0.93	0.19	0.06	84
Organic-N	mt	106	99	73	7.6	22	4.8	0.28	0.15	313
Ca	mt	19,021	27,541	14,236	233	4,118	2,077	75	58	67,360
Cl	mt	58,691	37,603	82,857	1,030	13,246	2,746	221	184	196,578
Na	mt	36,585	14,114	45,264	589	7,987	1,556	143	88	106,326
TSS	mt	14,304	13,146	465	105	868	210	7.5	3.7	29,109
Fecal Coli (annual)	10^{10} cfu	208,771	110,793	21,319	117,799	94,294	18,538	57	21	571,593
Fecal Coli (May-Sept)	10^{10} cfu	106,430	62,649	4,853	58,694	34,859	13,292	36	19	280,833
BOD -5 day	mt	388	390	202	128	112	25	2.3	0.82	1,248
T-Alk	mt	37,633	29,824	11,341	328	7,391	2,359	117	58	89,052
TOC	mt	444	476	539	26	258	21	1.8	1.1	1,768
TIC	mt	9,074	7,031	3,056	80	1,769	545	27	13	21,596

NOTES

Notes: mt = metric tons; hm3 = million cubic meters; cfu = colony forming units

(1) Metro Outfall 001 calculated loads of BOD-5, NH_3-N, TP, TSS are based on daily measurements; METRO TKN based on 5 measurements/2 wks.

(2) Metro Bypass Outfall 002 estimates based on periodic grab samples when outfall is active (high flow events).

(3) Natural tributaries, East Flume and Tributary 5A calculations based on biweekly program, plus high flow events and storms.

(4) Tributary BOD samples include a large percentage of observations reported as less than the minimal reportable limit; for these observations, the minimal reportable limit was used in loading calculations.