

Library Reference 5.3

**Loading of major water quality parameters to Onondaga Lake, January to December 2011.**

Parameter	Units	Onondaga Crk at Kirkpatrick <sup>(3,4)</sup>	Ninemile Creek at Rt. 48 <sup>(3,4)</sup>	Metro <sup>(1)</sup> Outfall 001	Bypass <sup>(2)</sup> Outfall 002	Ley Creek at Park <sup>(3,4)</sup>	Harbor Brook at Hiawatha <sup>(3,4)</sup>	East Flume <sup>(3)</sup>	Tributary 5A <sup>(3)</sup>	Total Monitored
Water	hm <sup>3</sup>	223	195	92.2	2.85	48.9	14.6	0.97	0.50	578
Total P	mt	21.1	14.7	7.2	3.0	3.9	1.1	0.15	0.044	51
SRP	mt	1.80	2.67	0.291	0.90	0.61	0.387	0.090	0.013	7
TKN	mt	116	134	106	26	37	8.6	1.1	0.29	428
Nitrate-N	mt	205	174.4	889	5.0	15.83	20	4.5	0.604	1,314
Nitrite-N	mt	6.2	4.33	2.5	0.29	0.79	0.19	1.4	0.02	16
Ammonia-N	mt	11	34	28	14	10	0.9	0.6	0	99
Organic-N	mt	105	97	80	12	27	7.8	0.6	0.2	330
Ca	mt	23,571	33,082	14,028	331	4,811	2,840	154	79	78,896
Cl	mt	82,225	45,890	38,820	762	15,186	3,907	597	229	187,616
Na	mt	52,901	18,161	22,741	558	9,641	2,314	379	107.489	106,803
TSS	mt	13,442	5,456	448	175	733	272	15	5	20,546
Fecal Coli (annual)	10 <sup>10</sup> cfu	162,952	79,149	53,849	120,874	43,656	38,249	459	25	499,213
Fecal Coli (May-Sept)	10 <sup>10</sup> cfu	79,941	22,010	5,569	29,351	31,672	13,613	351	14	182,521
5-day BOD	mt	532	557	246	198	185	34	4.0	1.5	1,758
T-Alk	mt	49,413	39,587	15,589	694	9,503	3,592	212	79	118,669
TOC	mt	520	579	522	41	339	31	3.8	1.7	2,037
TIC	mt	11,427	9,123	3,871	164	2,210	840	47	18	27,700

**NOTES**

Notes: mt = metric tons; hm<sup>3</sup> = cubic hectometer = million cubic meters; cfu = colony forming units

(1) Metro Outfall 001 calculated loads of BOD<sub>5</sub>, NH<sub>3</sub>-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.