

Library Reference 5.3

**Loading of major water quality parameters to Onondaga Lake, January to December 2010 (see Library Reference 5.2 for RSE)**

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>	170	149	83.2	1.42	38.3	10.2	1.12	0.91	454
Total P	mt	25	11.8	6.6	1.5	2.8	0.66	0.10	0.09	49
SRP	mt	2.7	2.4	0.30	0.49	0.50	0.30	0.02	0.03	7
TKN	mt	125	105	100	14	27	5.0	1.98	0.45	378
Nitrate-N	mt	157	130	900	1.8	10	13	3.5	0.54	1,216
Nitrite-N	mt	6.9	3.2	2.3	0.12	0.58	0.12	0.97	0.02	14
Ammonia-N	mt	10	25	26	8.4	7.7	0.53	1.25	0.13	80
Organic-N	mt	116	79	74	4.5	19.2	4.5	0.73	0.31	298
Ca	mt	16,464	24,632	11,235	145	3,571	1,949	139	120	58,257
Cl	mt	49,223	33,286	32,169	348	10,583	2,621	774	280	129,282
Na	mt	31,608	14,115	18,293	262	6,643	1,539	493	145	73,098
TSS	mt	13,678	3,234	417	81	502	118	13	13	18,057
Fecal Coli (annual)	10 <sup>10</sup> cfu	439,632	285,073	48,283	193,766	38,431	32,637	333	56	1,038,210
Fecal Coli (May-Sept)	10 <sup>10</sup> cfu	207,642	200,623	7,413	122,389	27,819	23,223	239	49	589,397
BOD -5 day	mt	384	351	249	84	102	21	7	2	1,202
T-Alk	mt	35,575	29,829	13,932	297	6,624	2,502	154	160	89,073
TOC	mt	580	510	524	18	264	21	4	3	1,924
TIC	mt	8,255	7,110	3,580	85	1,628	604	36	38	21,335

**NOTES**

Notes: mt = metric tons; hm<sup>3</sup> = 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.