

Library Reference 5.3.1

Loading of major water quality parameters to Onondaga Lake, January to December 2009. (see Table 5.2.1 for RSE)

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	157	152	81.2	2.16	36.5	9.6	1.08	1.40	441
Total P	mt	13	10.4	6.5	2.4	3.7	0.88	0.12	0.17	38
SRP	mt	1.3	1.5	0.21	0.33	0.59	0.36	0.03	0.05	4
TKN	mt	89	112	94	22	30	4.6	1.51	0.65	354
Nitrate-N	mt	143	128	912	3.4	13	14	3.7	1.03	1,218
Nitrite-N	mt	4.0	3.0	2.0	0.27	0.84	0.15	1.00	0.03	11
Ammonia-N	mt	10	33	23	12.7	10.3	0.77	0.97	0.21	91
Organic-N	mt	80	84	53	8.5	18.3	3.7	0.50	0.44	249
Ca	mt	17,260	27,310	11,588	245	4,078	1,999	133	196	62,810
Cl	mt	66,414	40,749	40,567	1,330	12,271	2,676	617	492	165,115
Na	mt	43,793	15,629	25,853	902	7,887	1,564	395	247	96,271
TSS	mt	9,896	4,545	450	121	891	277	11	27	16,217
Fecal Coli (annual)	10 ¹⁰ cfu	254,682	331,038	67,319	584,782	69,878	60,306	119	103	1,368,226
Fecal Coli (May-Sept)	10 ¹⁰ cfu	79,953	284,859	6,861	260,782	34,568	50,373	36	83	717,515
BOD -5 day	mt	360	483	303	109	165	26	6	3	1,454
T-Alk	mt	34,436	29,315	11,793	500	7,217	2,172	159	239	85,831
TOC	mt	389	460	490	28	239	20	4	5	1,634
TIC	mt	9,000	7,577	3,343	131	1,905	566	39	61	22,622

NOTES

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

(1) Metro Outfall 001 calculated loads of BOD5, NH3-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.