

Appendix D-2

Annual (January to December) tributary loadings to Onondaga Lake 1994-2013, and comparison of 2013 to long-term average conditions.

Parameter	Units	Annual Load 1994	Annual Load 1995	Annual Load 1996	Annual Load 1997	Annual Load 1998	Annual Load 1999	Annual Load 2000	Annual Load 2001	Annual Load 2002	Annual Load 2003	Annual Load 2004
Annual Precipitation	in	36.6	31.3	39.4	32.6	37.1	30.9	37.0	34.3	40.3	37.6	43.1
5-day BOD	mt	2,928	2,433	3,300	2,134	2,114	1,745	1,981	1,734	2,325	2,696	2,055
Total Alkalinity	mt	92,308	64,728	101,576	75,112	82,998	59,355	90,576	75,898	85,765	102,123	110,618
Total Organic Carbon	mt	2,558	2,369	3,867	2,269	2,072	1,682	2,224	1,895	1,975	2,896	3,143
Total Inorganic Carbon	mt	23,876	16,533	26,113	18,466	22,172	15,203	23,876	19,667	22,533	26,978	29,499
Total Kjeldahl N	mt	1,927	1,883	2,081	1,494	1,274	908	982	831	1,018	934	581
Ammonia-N	mt	1,408	1,541	1,498	1,118	833	614	571	499	643	503	240
Nitrate-N	mt	476	295	534	465	869	625	772	667	463	977	1,389
Nitrite-N	mt	49	46	44	62	46	41	52	38	31	47	31
Organic-N	mt	514	324	580	376	413	276	403	319	330	441	322
Total Phosphorus	mt	83	65	112	50	69	55	55	47	49	69	83
Soluble Reactive P	mt	20	19	24	12	12	9	7.3	7.6	6.8	15.2	30.2
Calcium	mt	67,176	50,443	72,581	57,271	60,840	49,142	64,406	55,498	60,308	68,945	73,784
Sodium	mt	82,787	58,656	77,378	65,721	76,469	76,776	90,648	85,662	88,817	102,078	96,621
Chloride	mt	164,121	119,322	156,452	138,290	156,326	146,756	173,980	166,258	168,895	192,750	187,258
Total Suspended Solids	mt	11,670	5,694	19,230	5,404	10,637	13,308	15,178	9,912	10,101	11,037	16,030
Fecal Coliform	10 ¹⁰ cfu	1,103,861	9,182,161	3,254,615	1,833,174	2,843,720	3,843,900	1,482,063	1,827,517	2,558,724	1,199,702	2,054,213

Annual (January to December) tributary loadings to Onondaga Lake 1994-2013, and comparison of 2013 to long-term average conditions (continued).

Parameter	Units	Annual Load 2005	Annual Load 2006	Annual Load 2007	Annual Load 2008	Annual Load 2009	Annual Load 2010	Annual Load 2011	Annual Load 2012	Annual Load 2013	Average Load 1994-2013	% Change 2013 from Average
Annual Precipitation	in	40.1	47.2	41.6	41.9	35.4	41.5	48.0	35.1	40.4	38.6	5%
5-day BOD	mt	1,496	1,494	1,437	1,382	1,456	1,202	1,758	972	1,248	1,894	-49%
Total Alkalinity	mt	104,315	109,180	97,031	87,329	85,962	89,073	118,669	64,331	89,052	89,300	-28%
Total Organic Carbon	mt	2,190	2,072	1,823	1,735	1,637	1,924	2,037	1,230	1,768	2,168	-43%
Total Inorganic Carbon	mt	27,453	27,445	25,397	21,990	22,655	21,335	27,700	14,957	21,596	22,772	-34%
Total Kjeldahl N	mt	365	405	402	341	355	378	428	298	413	865	-66%
Ammonia-N	mt	94	150	141	105	91	80	99	79	84	520	-85%
Nitrate-N	mt	1,538	1,261	1,244	1,284	1,219	1,216	1,314	1,187	1,458	963	23%
Nitrite-N	mt	13	20	17	15	11	14	16	8	12	31	-74%
Organic-N	mt	255	241	229	219	249	298	330	203	313	332	-39%
Total Phosphorus	mt	49	43	37	37	38	49	51	22	41	55	-60%
Soluble Reactive P	mt	7	4.6	5.1	4.8	4.4	6.7	6.8	2.4	4.1	10.5	-77%
Calcium	mt	77,060	75,663	70,550	65,710	62,917	58,257	78,896	52,552	67,360	64,468	-18%
Sodium	mt	108,992	106,450	109,979	115,942	96,406	73,098	106,803	98,567	106,326	91,209	8%
Chloride	mt	197,612	187,869	204,512	204,590	165,384	129,282	187,616	182,081	196,578	171,297	6%
Total Suspended Solids	mt	14,471	19,358	16,192	15,130	16,232	18,057	20,546	8,134	29,109	14,271	-43%
Fecal Coliform	10 ¹⁰ cfu	827,619	1,336,661	1,710,823	1,462,406	1,368,282	1,040,796	499,213	542,317	571,593	2,027,168	-73%