

Library Reference 5.4 Annual (January to December) tributary loadings to Onondaga Lake 1992-2011, and comparison of 2011 to long-term average conditions.

| Parameter | Units | Annual Load 1992 | Annual Load 1993 | 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 |
|------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 5-day BOD | mt | 4,059 | 4,226 | 2,928 | 2,433 | 3,300 | 2,134 | 2,114 | 1,745 | 1,981 | 1,734 | 2,325 |
| Total Alkalinity | mt | 104,777 | 107,504 | 92,308 | 64,728 | 101,576 | 75,112 | 82,998 | 59,355 | 90,576 | 75,898 | 85,765 |
| Total Organic Carbon | mt | 3,324 | 4,344 | 2,558 | 2,369 | 3,867 | 2,269 | 2,072 | 1,682 | 2,224 | 1,895 | 1,975 |
| Total Inorganic Carbon | mt | 26,846 | 26,429 | 23,876 | 16,533 | 26,113 | 18,466 | 22,172 | 15,203 | 23,876 | 19,667 | 22,533 |
| Total Kjeldahl N | mt | 1,880 | 2,003 | 1,927 | 1,883 | 2,081 | 1,494 | 1,274 | 908 | 982 | 831 | 1,018 |
| Ammonia-N | mt | 1,287 | 1,321 | 1,408 | 1,541 | 1,498 | 1,118 | 833 | 614 | 571 | 499 | 643 |
| Nitrate-N | mt | 485 | 515 | 476 | 295 | 534 | 465 | 869 | 625 | 772 | 667 | 463 |
| Nitrite-N | mt | 61 | 53 | 49 | 46 | 44 | 62 | 46 | 41 | 52 | 38 | 31 |
| Organic-N | mt | 584 | 666 | 514 | 324 | 580 | 376 | 413 | 276 | 403 | 319 | 330 |
| Total Phosphorus | mt | 126 | 140 | 83 | 65 | 112 | 50 | 69 | 55 | 55 | 47 | 49 |
| Soluble Reactive P | mt | 22 | 30 | 20 | 19 | 24 | 12 | 12 | 9.2 | 7.3 | 7.6 | 6.8 |
| Calcium | mt | 77,957 | 76,011 | 67,176 | 50,443 | 72,581 | 57,271 | 60,840 | 49,142 | 64,406 | 55,498 | 60,308 |
| Sodium | mt | 76,862 | 91,093 | 82,787 | 58,656 | 77,378 | 65,721 | 76,469 | 76,776 | 90,648 | 85,662 | 88,817 |
| Chloride | mt | 180,697 | 196,525 | 164,121 | 119,322 | 156,452 | 138,290 | 156,326 | 146,756 | 173,980 | 166,258 | 168,895 |
| Total Suspended Solids | mt | 22,603 | 15,568 | 11,670 | 5,694 | 19,230 | 5,404 | 10,637 | 13,308 | 15,178 | 9,912 | 10,101 |
| Fecal Coliform | 10 ¹⁰ cfu | 3,040,649 | 5,519,621 | 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 |

Annual (January to December) tributary loadings to Onondaga Lake 1992-2011, and comparison of 2011 to long-term average conditions (continued).

| Parameter | Units | Annual Load 2003 | Annual Load 2004 | Annual Load 2005 | Annual Load 2006 | Annual Load 2007 | Annual Load 2008 | Annual Load 2009 | Annual Load 2010 | Annual Load 2011 | Average Load 1992-2011 | % Change 2011 from Average |
|------------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|----------------------------|
| 5-day BOD | mt | 2,696 | 2,055 | 1,496 | 1,494 | 1,437 | 1,382 | 1,456 | 1,202 | 1,758 | 2,198 | -20% |
| Total Alkalinity | mt | 102,123 | 110,618 | 104,315 | 109,180 | 97,031 | 87,329 | 85,962 | 88,705 | 118,669 | 92,227 | 29% |
| Total Organic Carbon | mt | 2,896 | 3,143 | 2,190 | 2,072 | 1,823 | 1,735 | 1,637 | 1,934 | 2,037 | 2,402 | -15% |
| Total Inorganic Carbon | mt | 26,978 | 29,499 | 27,453 | 27,445 | 25,397 | 21,990 | 22,655 | 21,245 | 27,700 | 23,604 | 17% |
| Total Kjeldahl N | mt | 934 | 581 | 365 | 405 | 402 | 341 | 355 | 378 | 428 | 1,024 | -58% |
| Ammonia-N | mt | 503 | 240 | 94 | 150 | 141 | 105 | 91 | 80 | 99 | 642 | -85% |
| Nitrate-N | mt | 977 | 1,389 | 1,538 | 1,261 | 1,244 | 1,284 | 1,219 | 1,226 | 1,314 | 881 | 49% |
| Nitrite-N | mt | 47 | 31 | 13 | 20 | 17 | 15 | 11 | 14 | 16 | 35 | -55% |
| Organic-N | mt | 441 | 322 | 255 | 241 | 229 | 219 | 249 | 295 | 330 | 368 | -10% |
| Total Phosphorus | mt | 69 | 83 | 49 | 43 | 37 | 37 | 38 | 49 | 51 | 65 | -21% |
| Soluble Reactive P | mt | 15 | 30 | 7.3 | 4.6 | 5.1 | 4.8 | 4.4 | 6.7 | 6.8 | 12.7 | -47% |
| Calcium | mt | 68,945 | 73,784 | 77,060 | 75,663 | 70,550 | 65,710 | 62,917 | 58,462 | 78,896 | 66,181 | 19% |
| Sodium | mt | 102,078 | 96,621 | 108,992 | 106,450 | 109,979 | 115,942 | 96,406 | 72,873 | 106,803 | 89,351 | 20% |
| Chloride | mt | 192,750 | 187,258 | 197,612 | 187,869 | 204,512 | 204,590 | 165,384 | 129,324 | 187,616 | 171,227 | 10% |
| Total Suspended Solids | mt | 11,037 | 16,030 | 14,471 | 19,358 | 16,192 | 15,130 | 16,232 | 18,056 | 20,546 | 14,318 | 43% |
| Fecal Coliform | 10 ¹⁰ cfu | 1,199,702 | 2,054,213 | 827,619 | 1,336,661 | 1,710,823 | 1,462,406 | 1,368,282 | 1,040,449 | 499,213 | 2,399,469 | -79% |