

**Mass Balance Summary**

**Year: 94**

**Bay Rainfall = 109.5 cm/yr**

| Term                                 | flow<br>hm3 | tp<br>mt/y | orthop<br>mt/y | dip<br>mt/y | dop<br>mt/y | pip<br>mt/y | pop<br>mt/y | tn<br>mt/y | nox<br>mt/y | nh4<br>mt/y | orgn<br>mt/y | don<br>mt/y | pon<br>mt/y | dca<br>mt/y | pca<br>mt/y | poc<br>mt/y | doc<br>mt/y | psio2<br>mt/y | dsio2<br>mt/y | alk<br>mt/y | salin<br>mt/y | tss<br>mt/y | chla<br>mt/y |
|--------------------------------------|-------------|------------|----------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|---------------|-------------|---------------|-------------|--------------|
| <b>Inflows from Mainland</b>         |             |            |                |             |             |             |             |            |             |             |              |             |             |             |             |             |             |               |               |             |               |             |              |
| West                                 | 37.8        | 0.25       | 0.12           | 0.13        | 0.05        | 0.01        | 0.05        | 31.9       | 0.2         | 0.2         | 31.4         | 25.2        | 6.3         | 1573        | 79          | 38          | 568         | 19            | 132           | 6432        | 6880          | 38          | 0.1          |
| Broad                                | 301.3       | 1.96       | 0.96           | 1.06        | 0.39        | 0.09        | 0.39        | 261.7      | 2.0         | 1.7         | 258.0        | 206.4       | 51.6        | 12684       | 634         | 301         | 4520        | 151           | 1055          | 51227       | 55504         | 301         | 0.6          |
| Shark                                | 1174.1      | 9.60       | 4.79           | 5.29        | 1.93        | 0.49        | 1.93        | 1568.7     | 38.9        | 43.5        | 1486.2       | 1189.0      | 297.2       | 53836       | 2692        | 1174        | 17612       | 587           | 4109          | 199599      | 432470        | 1174        | 2.3          |
| Sable                                | 62.3        | 0.21       | 0.19           | 0.19        | 0.01        | 0.00        | 0.01        | 41.2       | 0.6         | 0.6         | 40.0         | 32.0        | 8.0         | 1940        | 97          | 62          | 935         | 31            | 218           | 10597       | 9319          | 62          | 0.1          |
| Taylor                               | 253.4       | 0.84       | 0.77           | 0.77        | 0.03        | 0.00        | 0.03        | 167.2      | 3.1         | 2.5         | 161.7        | 129.3       | 32.3        | 8002        | 400         | 253         | 3801        | 127           | 887           | 43079       | 38441         | 253         | 0.5          |
| Coastal                              | 267.3       | 1.28       | 0.95           | 0.98        | 0.14        | 0.03        | 0.14        | 257.9      | 3.8         | 2.6         | 251.5        | 201.2       | 50.3        | 13770       | 689         | 267         | 4010        | 134           | 936           | 45443       | 104851        | 267         | 0.5          |
| Barnes                               | 14.6        | 0.06       | 0.04           | 0.05        | 0.01        | 0.00        | 0.01        | 11.1       | 0.2         | 0.1         | 10.8         | 8.6         | 2.2         | 735         | 37          | 15          | 219         | 7             | 51            | 2477        | 5188          | 15          | 0.0          |
| S197                                 | 37.2        | 1.47       | 1.17           | 1.20        | 0.12        | 0.03        | 0.12        | 27.3       | 1.9         | 10.5        | 14.9         | 11.9        | 3.0         | 3134        | 157         | 37          | 557         | 19            | 130           | 6318        | 12733         | 37          | 0.1          |
| All                                  | 2148.1      | 15.66      | 8.99           | 9.66        | 2.68        | 0.67        | 2.68        | 2366.9     | 50.7        | 61.8        | 2254.4       | 1803.5      | 450.9       | 95674       | 4784        | 2148        | 32221       | 1074          | 7518          | 365171      | 665386        | 2148        | 4.3          |
| Bay                                  | 520.7       | 2.12       | 1.71           | 1.75        | 0.17        | 0.04        | 0.17        | 425.1      | 6.8         | 5.1         | 413.1        | 330.5       | 82.6        | 21772       | 1089        | 521         | 7811        | 260           | 1822          | 88521       | 143292        | 521         | 1.0          |
| <b>Runoff from Keys</b>              |             |            |                |             |             |             |             |            |             |             |              |             |             |             |             |             |             |               |               |             |               |             |              |
| Upper->Bay                           | 13.3        | 2.54       | 1.53           | 1.78        | 0.25        | 0.25        | 0.25        | 9.1        | 5.9         | 0.3         | 2.9          | 1.5         | 1.5         | 13          | 280         | 67          | 160         | 1             | 23            | 1693        | 3692          | 1700        | 0.0          |
| Mid -> Bay                           | 6.9         | 1.57       | 0.81           | 1.00        | 0.19        | 0.19        | 0.19        | 6.4        | 4.0         | 0.2         | 2.1          | 1.1         | 1.1         | 7           | 145         | 35          | 83          | 1             | 12            | 876         | 1912          | 876         | 0.0          |
| Lower -> Bay                         | 20.1        | 3.47       | 2.23           | 2.54        | 0.31        | 0.31        | 0.31        | 14.3       | 7.8         | 0.7         | 5.9          | 2.9         | 2.9         | 20          | 421         | 100         | 241         | 2             | 34            | 2547        | 5556          | 2494        | 0.0          |
| Upper ->Reef                         | 13.3        | 2.54       | 1.53           | 1.78        | 0.25        | 0.25        | 0.25        | 9.1        | 5.9         | 0.3         | 2.9          | 1.5         | 1.5         | 13          | 280         | 67          | 160         | 1             | 23            | 1693        | 3692          | 1700        | 0.0          |
| Mid -> Reef                          | 6.9         | 1.57       | 0.81           | 1.00        | 0.19        | 0.19        | 0.19        | 6.4        | 4.0         | 0.2         | 2.1          | 1.1         | 1.1         | 7           | 145         | 35          | 83          | 1             | 12            | 876         | 1912          | 876         | 0.0          |
| Lower -> Reef                        | 20.1        | 3.47       | 2.23           | 2.54        | 0.31        | 0.31        | 0.31        | 14.3       | 7.8         | 0.7         | 5.9          | 2.9         | 2.9         | 20          | 421         | 100         | 241         | 2             | 34            | 2547        | 5556          | 2494        | 0.0          |
| All                                  | 80.6        | 15.15      | 9.12           | 10.63       | 1.51        | 1.51        | 1.51        | 59.6       | 35.4        | 2.4         | 21.8         | 10.9        | 10.9        | 81          | 1692        | 403         | 967         | 8             | 137           | 10233       | 22318         | 10139       | 0.1          |
| Bay                                  | 20.2        | 4.11       | 2.33           | 2.78        | 0.44        | 0.44        | 0.44        | 15.5       | 9.9         | 0.6         | 5.0          | 2.5         | 2.5         | 20          | 425         | 101         | 243         | 2             | 34            | 2569        | 5603          | 2576        | 0.0          |
| <b>Wastewater from Keys</b>          |             |            |                |             |             |             |             |            |             |             |              |             |             |             |             |             |             |               |               |             |               |             |              |
| Upper->Bay                           | 1.9         | 10.24      | 8.05           | 8.60        | 0.55        | 0.55        | 0.55        | 46.1       | 8.1         | 28.9        | 9.1          | 4.6         | 4.6         | 9           | 37          | 9           | 47          | 4             | 4             | 187         | 934           | 61          | 0.0          |
| Mid -> Bay                           | 1.2         | 7.68       | 5.83           | 6.29        | 0.46        | 0.46        | 0.46        | 32.5       | 5.4         | 18.5        | 8.7          | 4.3         | 4.3         | 6           | 24          | 6           | 30          | 2             | 2             | 119         | 595           | 52          | 0.0          |
| Lower -> Bay                         | 1.6         | 8.50       | 6.68           | 7.13        | 0.46        | 0.46        | 0.46        | 38.3       | 7.0         | 23.7        | 7.7          | 3.8         | 3.8         | 8           | 31          | 8           | 39          | 3             | 3             | 155         | 777           | 52          | 0.0          |
| Upper ->Reef                         | 1.9         | 9.34       | 7.50           | 7.96        | 0.46        | 0.46        | 0.46        | 43.6       | 8.1         | 28.5        | 7.0          | 3.5         | 3.5         | 9           | 37          | 9           | 47          | 4             | 4             | 186         | 930           | 52          | 0.0          |
| Mid -> Reef                          | 1.4         | 8.22       | 6.66           | 7.05        | 0.39        | 0.39        | 0.39        | 38.6       | 6.6         | 26.4        | 5.7          | 2.8         | 2.8         | 7           | 28          | 7           | 35          | 3             | 3             | 142         | 710           | 42          | 0.0          |
| Lower -> Reef                        | 1.8         | 9.68       | 7.87           | 8.32        | 0.45        | 0.45        | 0.45        | 45.9       | 8.1         | 31.3        | 6.4          | 3.2         | 3.2         | 9           | 36          | 9           | 44          | 4             | 4             | 178         | 888           | 50          | 0.0          |
| All                                  | 9.7         | 53.65      | 42.59          | 45.36       | 2.77        | 2.77        | 2.77        | 244.9      | 43.2        | 157.2       | 44.5         | 22.2        | 22.2        | 48          | 193         | 48          | 242         | 19            | 19            | 967         | 4834          | 308         | 0.0          |
| Bay                                  | 3.1         | 17.92      | 13.88          | 14.89       | 1.01        | 1.01        | 1.01        | 78.6       | 13.5        | 47.4        | 17.8         | 8.9         | 8.9         | 15          | 61          | 15          | 76          | 6             | 6             | 306         | 1528          | 113         | 0.0          |
| <b>Summary - All Area = 7636 km2</b> |             |            |                |             |             |             |             |            |             |             |              |             |             |             |             |             |             |               |               |             |               |             |              |
| Mainland                             | 2148.1      | 15.66      | 8.99           | 9.66        | 2.68        | 0.67        | 2.68        | 2366.9     | 50.7        | 61.8        | 2254.4       | 1803.5      | 450.9       | 95674       | 4784        | 2148        | 32221       | 1074          | 7518          | 365171      | 665386        | 2148        | 4.3          |
| Runoff                               | 80.6        | 15.15      | 9.12           | 10.63       | 1.51        | 1.51        | 1.51        | 59.6       | 35.4        | 2.4         | 21.8         | 10.9        | 10.9        | 81          | 1692        | 403         | 967         | 8             | 137           | 10233       | 22318         | 10139       | 0.1          |
| Wastewater                           | 9.7         | 53.65      | 42.59          | 45.36       | 2.77        | 2.77        | 2.77        | 244.9      | 43.2        | 157.2       | 44.5         | 22.2        | 22.2        | 48          | 193         | 48          | 242         | 19            | 19            | 967         | 4834          | 308         | 0.0          |
| Atmospheric                          | 8364.3      | 131.94     | 82.46          | 124.52      | 2.47        | 2.47        | 2.47        | 2465.7     | 1063.8      | 684.4       | 717.4        | 645.7       | 71.7        | 6614        | 0           | 764         | 15271       | 0             | 1527          | 7834        | 132420        | 764         | 7.6          |
| Total                                | 10602.6     | 216.41     | 143.16         | 190.17      | 9.43        | 7.42        | 9.43        | 5137.1     | 1193.1      | 905.9       | 3038.1       | 2482.4      | 555.8       | 102417      | 6669        | 3363        | 48701       | 1101          | 9202          | 384205      | 824959        | 13359       | 12.0         |
| Avg Inflow Conc (ppm)                |             | 0.020      | 0.014          | 0.018       | 0.001       | 0.001       | 0.001       | 0.485      | 0.113       | 0.085       | 0.287        | 0.234       | 0.052       | 9.660       | 0.629       | 0.317       | 4.593       | 0.104         | 0.868         | 36.24       | 77.81         | 1.260       | 0.001        |
| <b>Summary - Bay Area = 1813 km2</b> |             |            |                |             |             |             |             |            |             |             |              |             |             |             |             |             |             |               |               |             |               |             |              |
| Mainland                             | 520.7       | 2.12       | 1.71           | 1.75        | 0.17        | 0.04        | 0.17        | 425.1      | 6.8         | 5.1         | 413.1        | 330.5       | 82.6        | 21772       | 1089        | 521         | 7811        | 260           | 1822          | 88521       | 143292        | 521         | 1.0          |
| Runoff                               | 20.2        | 4.11       | 2.33           | 2.78        | 0.44        | 0.44        | 0.44        | 15.5       | 9.9         | 0.6         | 5.0          | 2.5         | 2.5         | 20          | 425         | 101         | 243         | 2             | 34            | 2569        | 5603          | 2576        | 0.0          |
| Wastewater                           | 3.1         | 17.92      | 13.88          | 14.89       | 1.01        | 1.01        | 1.01        | 78.6       | 13.5        | 47.4        | 17.8         | 8.9         | 8.9         | 15          | 61          | 15          | 76          | 6             | 6             | 306         | 1528          | 113         | 0.0          |
| Atmospheric                          | 1986.4      | 31.33      | 19.58          | 29.57       | 0.59        | 0.59        | 0.59        | 585.5      | 252.6       | 162.5       | 170.4        | 153.3       | 17.0        | 1571        | 0           | 181         | 3627        | 0             | 363           | 1860        | 31447         | 181         | 1.8          |
| Total                                | 2530.4      | 55.48      | 37.51          | 48.99       | 2.21        | 2.08        | 2.21        | 1104.7     | 282.8       | 215.6       | 606.3        | 495.2       | 111.1       | 23378       | 1575        | 818         | 11756       | 268           | 2226          | 93256       | 181870        | 3391        | 2.9          |
| Avg Inflow Conc (ppm)                |             | 0.022      | 0.015          | 0.019       | 0.001       | 0.001       | 0.001       | 0.437      | 0.112       | 0.085       | 0.240        | 0.196       | 0.044       | 9.239       | 0.622       | 0.323       | 4.646       | 0.106         | 0.880         | 36.85       | 71.88         | 1.340       | 0.001        |

Summaries for 'Bay' include mainland inflows from Taylor & Coastal Basins and runoff & wastewater inputs from Upper & Middle Keys