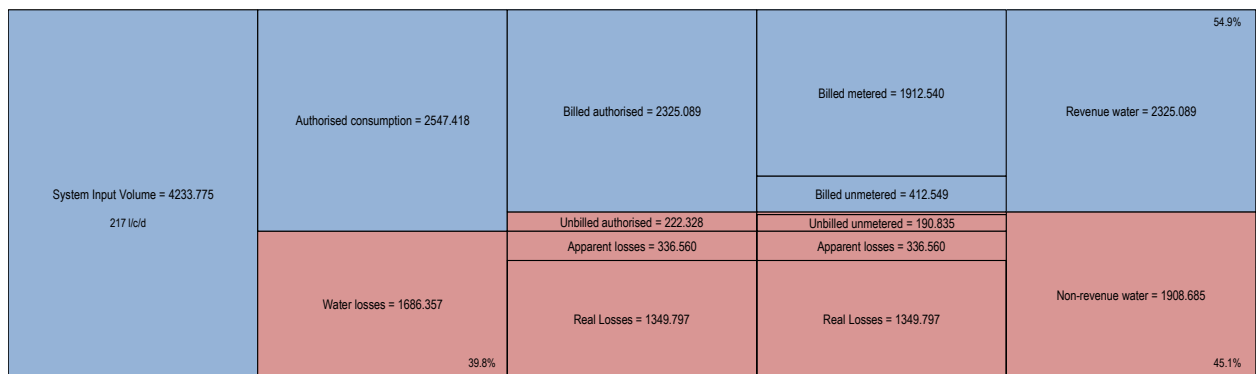


# Municipal IWA Water Balance Information

| Province                   |                              | National |               |               |               |               |               |               |               |               |               |               |               |               |
|----------------------------|------------------------------|----------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Municipal Code             |                              |          |               |               |               |               |               |               |               |               |               |               |               |               |
| District Municipality      |                              |          |               |               |               |               |               |               |               |               |               |               |               |               |
| Municipality               |                              |          |               |               |               |               |               |               |               |               |               |               |               |               |
| Settlements                |                              |          |               |               |               |               |               |               |               |               |               |               |               |               |
| Year ending                |                              | Jun-10   | Jun-11        | Jun-12        | Jun-13        | Jun-14        | Jun-15        | Jun-16        | Jun-17        | Jun-18        | Jun-19        | Jun-20        | Jun-21        |               |
| Input Data                 | Population served            | No       | 41,505,071    | 43,258,970    | 43,784,038    | 44,575,371    | 45,401,128    | 46,146,561    | 46,966,860    | 48,073,518    | 49,479,125    | 50,979,540    | 51,807,622    | 52,593,949    |
|                            | Households served            | No       | 11,877,384    | 12,320,840    | 12,794,095    | 13,469,336    | 13,789,169    | 14,199,215    | 14,689,460    | 15,249,272    | 15,822,680    | 16,327,979    | 16,603,256    | 16,864,202    |
|                            | Connections - total          | No       | 9,304,014     | 9,682,897     | 9,944,927     | 9,653,064     | 10,327,076    | 10,288,627    | 10,569,008    | 10,700,238    | 10,567,827    | 10,847,928    | 10,877,279    | 10,927,561    |
|                            | Connections - metered        | No       | 7,041,548     | 8,109,033     | 8,345,775     | 8,263,583     | 8,653,686     | 8,332,235     | 8,437,183     | 8,549,341     | 8,480,839     | 8,693,936     | 8,579,044     | 8,596,824     |
|                            | Domestic (and non-domestic)  | No       | 6,995,272     | 8,062,775     | 8,292,619     | 8,160,024     | 8,518,035     | 8,216,467     | 8,312,327     | 8,426,266     | 8,327,372     | 8,538,429     | 8,432,944     | 8,449,865     |
|                            | Non-domestic                 | No       | 46,276        | 46,258        | 53,156        | 103,559       | 135,651       | 115,768       | 124,856       | 123,075       | 153,467       | 155,507       | 146,101       | 146,958       |
|                            | Connections - unmetered      | No       | 2,308,743     | 1,620,121     | 1,652,309     | 1,493,039     | 1,809,041     | 2,072,160     | 2,256,681     | 2,273,972     | 2,240,455     | 2,309,499     | 2,444,335     | 2,477,696     |
|                            | Households / connection      | No       | 1.3           | 1.3           | 1.3           | 1.4           | 1.3           | 1.4           | 1.4           | 1.4           | 1.4           | 1.5           | 1.5           | 1.5           |
|                            | Length of mains              | km       | 697,274       | 193,275       | 198,960       | 206,102       | 203,220       | 202,808       | 208,239       | 216,299       | 221,238       | 225,777       | 232,119       | 232,517       |
|                            | Connections / km             | No / km  | 13            | 50            | 50            | 47            | 51            | 51            | 51            | 49            | 48            | 48            | 47            | 47            |
|                            | Average system pressure      | m        | 48            | 47            | 47            | 45            | 47            | 46            | 47            | 46            | 47            | 47            | 47            | 47            |
|                            | Time system pressurised      | %        | 99%           | 97%           | 97%           | 95%           | 95%           | 95%           | 98%           | 97%           | 97%           | 98%           | 99%           | 100%          |
|                            | Apparent losses              | %        | 21%           | 21%           | 21%           | 20%           | 20%           | 20%           | 21%           | 21%           | 20%           | 21%           | 20%           | 20%           |
|                            | Consumer meter age           | %        | 7%            | 7%            | 7%            | 6%            | 6%            | 7%            | 7%            | 7%            | 7%            | 7%            | 6%            | 7%            |
|                            | Illegal connections          | %        | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            | 6%            |
| Data transfer              | %                            | 8%       | 8%            | 8%            | 8%            | 8%            | 7%            | 8%            | 8%            | 8%            | 8%            | 7%            | 7%            |               |
| Water Balance Calculations | System input volume          | k/annum  | 3,441,752,954 | 3,101,719,999 | 3,209,040,039 | 3,177,710,726 | 3,124,470,860 | 3,451,329,549 | 4,127,353,742 | 3,930,474,956 | 3,878,992,614 | 3,987,068,666 | 4,127,450,527 | 4,233,774,608 |
|                            | Own sources                  | k/annum  | 2,087,698,921 | 1,678,041,367 | 1,795,120,734 | 1,668,812,679 | 1,564,415,668 | 1,856,180,212 | 2,491,545,427 | 2,301,271,511 | 1,879,918,591 | 1,853,227,900 | 1,876,281,556 | 1,942,254,416 |
|                            | Other sources                | k/annum  | 1,354,054,033 | 1,423,678,632 | 1,413,919,305 | 1,508,898,047 | 1,560,055,192 | 1,595,149,338 | 1,635,808,316 | 1,629,203,445 | 1,999,074,024 | 2,133,840,766 | 2,251,168,971 | 2,291,520,192 |
|                            | Authorised Consumption       | k/annum  | 2,196,535,655 | 2,007,296,890 | 2,137,244,144 | 2,248,710,420 | 2,149,911,042 | 2,337,573,662 | 2,623,089,808 | 2,550,090,883 | 2,526,366,600 | 2,523,446,025 | 2,559,839,461 | 2,547,417,511 |
|                            | Billed authorised            | k/annum  | 2,158,661,738 | 1,976,734,455 | 2,042,724,125 | 2,018,040,364 | 1,976,632,166 | 2,146,063,832 | 2,412,932,659 | 2,336,732,323 | 2,285,273,807 | 2,294,375,536 | 2,330,933,345 | 2,325,089,335 |
|                            | Billed metered               | k/annum  | 2,082,096,568 | 1,890,911,702 | 1,985,623,353 | 1,941,066,989 | 1,898,784,025 | 2,002,842,519 | 2,003,965,735 | 1,944,121,752 | 1,888,952,370 | 1,915,402,747 | 1,916,519,240 | 1,912,540,263 |
|                            | Domestic (and non-domestic)  | k/annum  | 2,066,493,056 | 1,858,964,052 | 1,951,597,789 | 1,832,748,958 | 1,611,848,612 | 1,664,226,041 | 1,674,253,377 | 1,701,922,156 | 1,569,402,965 | 1,572,193,610 | 1,531,786,126 | 1,545,023,276 |
|                            | Non-domestic                 | k/annum  | 15,603,512    | 16,152,964    | 16,441,099    | 250,014,290   | 227,706,448   | 274,219,355   | 260,511,281   | 181,153,936   | 269,417,806   | 294,979,855   | 326,577,812   | 304,842,748   |
|                            | Export volume                | k/annum  | 0             | 15,794,685    | 17,584,465    | 58,303,740    | 59,228,965    | 64,397,123    | 69,201,077    | 61,045,659    | 50,131,599    | 48,229,282    | 58,155,303    | 62,674,239    |
|                            | Billed unmetered             | k/annum  | 76,565,170    | 85,822,753    | 57,100,771    | 76,973,375    | 77,848,141    | 143,221,313   | 408,966,924   | 392,610,570   | 396,321,437   | 378,972,789   | 414,414,105   | 412,549,072   |
|                            | Unbilled authorised          | k/annum  | 37,873,917    | 30,562,435    | 94,520,020    | 230,670,056   | 173,278,875   | 191,509,830   | 210,157,149   | 213,358,561   | 241,092,793   | 229,070,489   | 228,906,115   | 222,328,176   |
|                            | Unbilled metered             | k/annum  | 1,523,709     | 3,639,721     | 38,507,004    | 108,990,302   | 37,470,416    | 39,997,375    | 57,640,949    | 40,289,219    | 48,954,363    | 33,053,939    | 32,070,843    | 31,492,892    |
|                            | Unbilled unmetered           | k/annum  | 36,350,208    | 26,922,714    | 56,013,016    | 121,679,754   | 135,808,459   | 151,512,455   | 152,516,200   | 173,069,342   | 192,138,430   | 196,016,550   | 196,835,272   | 190,835,285   |
|                            | Water Losses                 | k/annum  | 1,245,217,300 | 1,094,423,109 | 1,071,795,895 | 929,000,305   | 974,559,818   | 1,113,755,887 | 1,504,263,934 | 1,380,384,072 | 1,352,626,014 | 1,463,622,641 | 1,567,611,066 | 1,686,357,097 |
|                            | Commercial / Apparent losses | k/annum  | 262,024,082   | 226,173,457   | 220,637,234   | 182,138,634   | 192,283,760   | 221,114,216   | 310,182,204   | 284,694,662   | 276,404,971   | 305,279,417   | 315,597,001   | 336,559,712   |
|                            | Physical / Real losses       | k/annum  | 983,193,218   | 868,249,652   | 851,158,660   | 746,861,671   | 782,276,058   | 892,641,671   | 1,194,081,730 | 1,095,689,410 | 1,076,221,043 | 1,158,343,224 | 1,252,014,065 | 1,349,797,386 |
|                            | UARL                         | k/annum  | 341,789,027   | 186,981,822   | 194,215,629   | 178,548,946   | 194,812,475   | 189,748,737   | 202,882,332   | 205,009,287   | 206,253,522   | 213,321,637   | 217,878,041   | 222,305,419   |
|                            | Potential real loss saving   | k/annum  | 641,404,191   | 681,267,830   | 656,943,031   | 568,312,726   | 587,463,582   | 702,892,934   | 991,199,398   | 890,680,123   | 869,967,521   | 945,021,587   | 1,034,136,024 | 1,127,491,966 |
|                            | Revenue water                | k/annum  | 2,158,661,738 | 1,976,734,455 | 2,042,724,125 | 2,018,040,364 | 1,976,632,166 | 2,146,063,832 | 2,412,932,659 | 2,336,732,323 | 2,285,273,807 | 2,294,375,536 | 2,330,933,345 | 2,325,089,335 |
|                            | Non-Revenue water            | k/annum  | 1,283,091,217 | 1,124,985,544 | 1,166,315,914 | 1,159,670,362 | 1,147,838,693 | 1,305,265,717 | 1,714,421,083 | 1,593,742,633 | 1,593,718,807 | 1,692,693,130 | 1,796,517,182 | 1,908,685,273 |
| Projected SIV without WDM  | k/annum                      |          |               |               |               |               | 3,893,951,792 | 3,988,211,755 | 4,083,715,332 | 4,180,436,707 | 4,278,495,078 | 4,378,020,664 | 4,470,916,099 |               |
| Projected SIV with WDM     | k/annum                      |          |               |               |               |               | 3,599,451,670 | 3,630,368,743 | 3,664,738,816 | 3,733,035,556 | 3,801,896,623 | 3,881,943,760 | 3,960,950,080 |               |
| Source of information      |                              |          |               |               |               |               |               |               |               |               |               |               |               |               |
| Comments                   |                              |          |               |               |               |               |               |               |               |               |               |               |               |               |

IWA Water Balance Diagram (million m<sup>3</sup>/annum) for Jun-21 (select year)

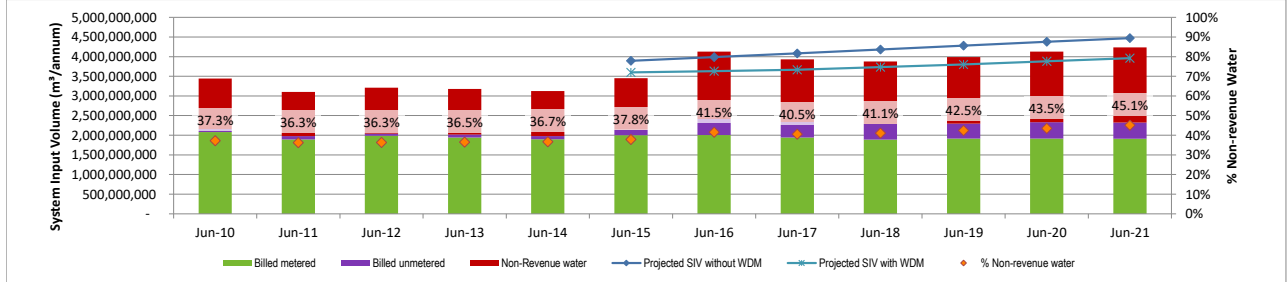


Note : All underlined values have been calculated using trends and / or averages based on previous years.

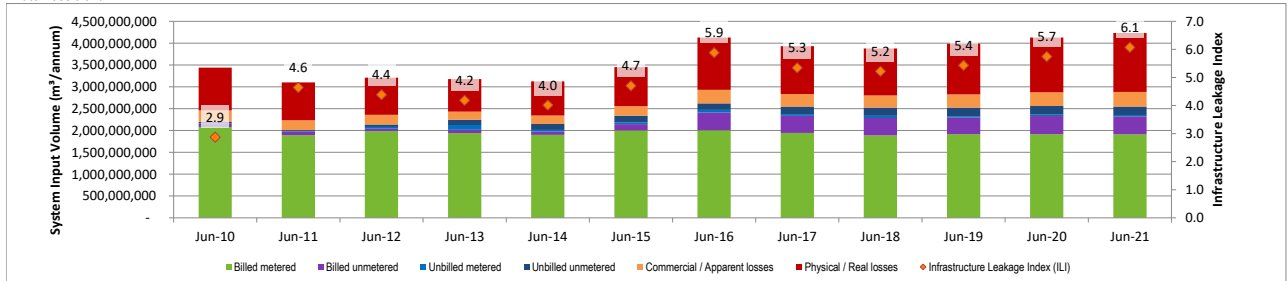
# Municipal IWA Water Balance Information

|                                | Year ending   | Jun-10 | Jun-11 | Jun-12 | Jun-13 | Jun-14 | Jun-15 | Jun-16 | Jun-17 | Jun-18 | Jun-19 | Jun-20 | Jun-21 |  |
|--------------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| Key performance indicators     | Indicator as % of system input volume               |        |        |        |        |        |        |        |        |        |        |        |        |  |
|                                | % Revenue water                                     | 62.7%  | 63.7%  | 63.7%  | 63.5%  | 63.3%  | 62.2%  | 58.5%  | 59.5%  | 58.9%  | 57.5%  | 56.5%  | 54.9%  |  |
|                                | % Non-revenue water                                 | 37.3%  | 36.3%  | 36.3%  | 36.5%  | 36.7%  | 37.8%  | 41.5%  | 40.5%  | 41.1%  | 42.5%  | 43.5%  | 45.1%  |  |
|                                | % Water Losses                                      | 36.2%  | 35.3%  | 33.4%  | 29.2%  | 31.2%  | 32.3%  | 36.4%  | 35.1%  | 34.9%  | 36.7%  | 38.0%  | 39.8%  |  |
|                                | System input volume unit consumption                |        |        |        |        |        |        |        |        |        |        |        |        |  |
|                                | Litres / capita / day                               | 227    | 195    | 200    | 192    | 185    | 201    | 237    | 221    | 212    | 212    | 215    | 217    |  |
|                                | m <sup>3</sup> / household / month                  | 24     | 21     | 21     | 19     | 19     | 20     | 23     | 21     | 20     | 20     | 20     | 21     |  |
|                                | m <sup>3</sup> / connection / month                 | 31     | 27     | 27     | 27     | 25     | 27     | 32     | 30     | 30     | 30     | 31     | 32     |  |
|                                | Authorised Unit Consumption                         |        |        |        |        |        |        |        |        |        |        |        |        |  |
|                                | Litres / capita / day                               | 145    | 126    | 133    | 135    | 126    | 135    | 149    | 142    | 137    | 133    | 132    | 129    |  |
|                                | m <sup>3</sup> / household / month                  | 15     | 13     | 14     | 14     | 13     | 13     | 14     | 14     | 13     | 13     | 13     | 12     |  |
|                                | m <sup>3</sup> / connection / month                 | 20     | 17     | 18     | 19     | 17     | 18     | 20     | 19     | 20     | 19     | 19     | 19     |  |
|                                | Domestic (& ND) m <sup>3</sup> / connection / month | 20     | 17     | 18     | 17     | 15     | 16     | 18     | 18     | 17     | 17     | 17     | 17     |  |
|                                | Non-domestic m <sup>3</sup> / connection / month    | 28     | 29     | 26     | 201    | 140    | 197    | 174    | 123    | 146    | 158    | 186    | 173    |  |
|                                | Water loss indicators                               |        |        |        |        |        |        |        |        |        |        |        |        |  |
|                                | Litres / capita / day                               | 82     | 69     | 67     | 57     | 59     | 66     | 88     | 79     | 75     | 79     | 83     | 88     |  |
|                                | m <sup>3</sup> / household / month                  | 9      | 7      | 7      | 6      | 6      | 7      | 9      | 8      | 7      | 7      | 8      | 8      |  |
|                                | m <sup>3</sup> / connection / month                 | 11     | 9      | 9      | 8      | 8      | 9      | 12     | 11     | 11     | 11     | 12     | 13     |  |
|                                | UARL : Losses (litres / connection / day)           | 101    | 53     | 54     | 51     | 52     | 51     | 53     | 52     | 53     | 54     | 55     | 56     |  |
|                                | CARL : Losses (litres / connection / day)           | 290    | 246    | 234    | 212    | 208    | 238    | 310    | 281    | 279    | 293    | 315    | 338    |  |
|                                | Infrastructure Leakage Index (ILI)                  | 2.9    | 4.6    | 4.4    | 4.2    | 4.0    | 4.7    | 5.9    | 5.3    | 5.2    | 5.4    | 5.7    | 6.1    |  |
|                                | CARL : Losses (m <sup>3</sup> / km mains / day)     | 4      | 12     | 12     | 10     | 11     | 12     | 16     | 14     | 13     | 14     | 15     | 16     |  |
|                                | % Population growth                                 | 4.07%  | 4.23%  | 1.21%  | 1.81%  | 1.85%  | 1.64%  | 1.81%  | 2.07%  | 2.64%  | 2.98%  | 2.33%  | 1.57%  |  |
|                                | % Water demand growth                               | 0.51%  | -9.88% | 3.46%  | -0.98% | -1.68% | 10.46% | 31.63% | -2.41% | -3.06% | 0.72%  | 3.15%  | 3.05%  |  |
|                                | % Water demand growth without WDM                   |        |        |        |        |        |        | 1.45%  | 2.41%  | 2.38%  | 2.36%  | 2.34%  | 2.22%  |  |
|                                | % Water demand growth with WDM                      |        |        |        |        |        |        | 6.46%  | 0.90%  | 1.40%  | 1.85%  | 1.97%  | 2.07%  |  |
|                                | 5 Year Annualised Population Growth                 | 3.16%  | 3.32%  | 3.03%  | 2.75%  | 2.63%  | 2.14%  | 1.66%  | 1.89%  | 2.11%  | 2.34%  | 2.34%  | 2.29%  |  |
| 5 Year Annualised Water Growth | 4.18%   | 4.01%  | 3.90%  | 4.11%  | 3.77%  | 3.64%  | 3.58%  | 3.57%  | 3.27%  | 3.44%  | 3.18%  | 2.80%  |        |  |

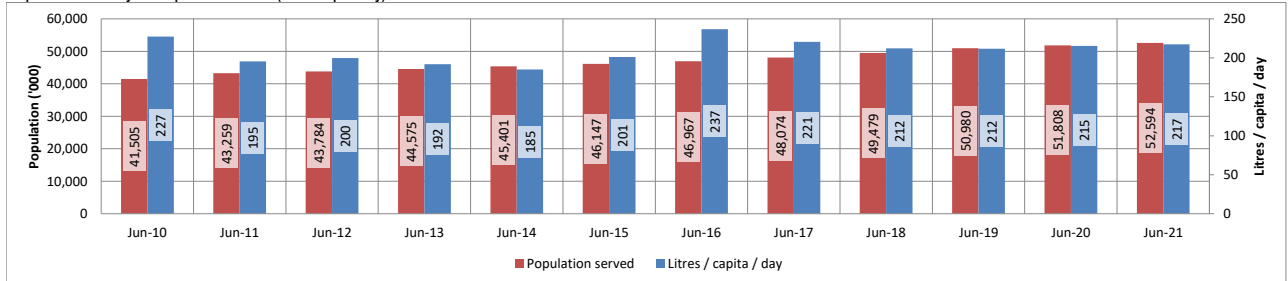
Non-revenue water trend



Water loss trend



Population versus System Input Volume trend (litres / capita / day)



# Municipal IWA Water Balance Information

# Municipal IWA Water Balance Information

