



## Gwydir Valley Water Balances - 2010/11

| Water balance component                         | Sources of water |             | Distribution of water |             | % of volume measured |
|---|------------------|-------------|-----------------------|-------------|----------------------|
|   | Volume (ML)      | % of total  | Volume (ML)           | % of total  |                      |
| <b>Storage volume</b>                           |                  |             |                       |             |                      |
| Volume in storage at start of year              |                  |             | 100,588               |             |                      |
| Volume in storage at end of year                |                  |             | 690,973               |             |                      |
| <b>Change in storage</b>                        |                  |             | <b>590,385</b>        | <b>50%</b>  | 100%                 |
| <b>Storage net evaporation</b>                  |                  |             | <b>4,752</b>          | <b>0%</b>   | 100%                 |
| <b>Inflows</b>                                  |                  |             |                       |             |                      |
| Storage Inflows                                 | 739,090          | 62%         |                       |             | 100%                 |
| Downstream tributaries (1)                      | 447,412          | 38%         |                       |             | 85%                  |
| <b>Subtotal</b>                                 | <b>1,186,502</b> | <b>100%</b> |                       |             | 95%                  |
| <b>Net Water diverted under water rights</b>    |                  |             |                       |             |                      |
| Domestic and stock rights (2)                   |                  |             | 6,000                 | 1%          | 0%                   |
| Native title rights (2)                         |                  |             | -                     | 0%          | 0%                   |
| <b>Subtotal</b>                                 |                  |             | <b>6,000</b>          | <b>1%</b>   | 0%                   |
| <b>Net Water diverted under access licences</b> |                  |             |                       |             |                      |
| Domestic and stock                              |                  |             | 1,125                 | 0%          | 100%                 |
| High security                                   |                  |             | 7,347                 | 1%          | 100%                 |
| General security                                |                  |             | 97,153                | 8%          | 100%                 |
| Local water utility                             |                  |             | 2,084                 | 0%          | 100%                 |
| Major water utility                             |                  |             | -                     | 0%          | 100%                 |
| Supplementary water                             |                  |             | 137,440               | 12%         | 100%                 |
| <b>Subtotal</b>                                 |                  |             | <b>245,148</b>        | <b>21%</b>  | 100%                 |
| <b>Environmental water</b>                      |                  |             |                       |             |                      |
| ECA ordered water (3)                           |                  |             | 5,000                 | 0%          | 100%                 |
| Flows to wetlands via Gingham Channel           |                  |             | 104,125               | 9%          |                      |
| Flow to wetlands via Gwydir River               |                  |             | 41,651                | 4%          |                      |
| Net diversions to wetlands (4)                  |                  |             | 145,776               | 12%         | 100%                 |
| End of system flows (5)                         |                  |             | 35,834                | 3%          | 100%                 |
| <b>Subtotal</b>                                 |                  |             | <b>181,610</b>        | <b>15%</b>  | 100%                 |
| <b>Other outflows (6)</b>                       |                  |             | <b>11,514</b>         | <b>1%</b>   | 100%                 |
| <b>Unaccounted difference (7)</b>               |                  |             | <b>147,093</b>        | <b>12%</b>  | n/a                  |
| <b>TOTAL</b>                                    | <b>1,186,502</b> | <b>100%</b> | <b>1,186,502</b>      | <b>100%</b> | 95%                  |

### Notes

(1) Tributary inflow consists of 3t inflow (Myall, Molroy and Horton), Gil Gil inflow measured at Boolataroo and positive AUD's from major inflow sections in CAIRO

(2) Water rights are not metered. Values presented are estimated from recommended values provided by DNR or as specified in Water Sharing Plans.

(3) ECA ordered water is not included in the flows to wetlands totals

(4) Net diversions to wetlands do not include any ordered environmental water from ECA, general security or supplementary access licences. Commonwealth and state environmental orders are included under Net Water diverted under access licences.

(5) End of system flows are measured at the Mehi River at Collarenebri and Gil Gil Creek at Galloway

(6) Other outflows consist of replenishment flows to Thalaba Creek, Ballinboora Creek, the Gingham Channel, the Lower Gwydir and Mallowa Creek

(7) Unaccounted difference is estimated as the difference between inflows, outflows and change in storage. This includes river evaporation, seepage, overbank flows, theft and any measurement errors recording other components.