

Water Balance Report

Gwydir River 2010 – 2011

Water balance component	Sources of water		Distribution of water		% of volume measured
	Volume (ML)	% of total	Volume (ML)	% of total	
Storage Volume					
Volume in storage at start of year			100,588		
Volume in storage at end of year			690,973		
Change in storage			590,385	50%	100%
Storage net evaporation			4,752	0%	100%
Inflows					
Storage inflows	739,090	62%			100%
Downstream tributaries (1)	447,412	38%			85%
Subtotal	1,186,502	100%			95%
Net water diverted under riparian rights					
Domestic and stock rights (2)			6,000	1%	0%
Native title rights (2)			-	0%	0%
Subtotal			6,000	1%	0%
Net Water diverted under access licences					
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%
Subtotal			245,148	21%	100%
Environmental water					
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%
Subtotal			181,610	15%	100%
Other outflows (6)			11,514	1%	100%
Unaccounted difference (7)			147,093	12%	n/a
Total	1,186,502	100%	1,186,502	100%	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.