

Water Balance Report

Gwydir River 2012 – 2013

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	1,300,494				
Volume in storage at end of year	1,010,382				
Change in storage	290,112	32%			100%
Storage net evaporation			21,716	2%	100%
Inflows					
Storage inflows	136,457	15%			100%
Downstream tributaries (1)	484,567	53%			85%
Subtotal	621,024	68%			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			715	0%	100%
High security			9,570	1%	100%
General security			298,679	33%	100%
Local water utility			3,018	0%	100%
Major utility			-	0%	100%
Supplementary water			116,718	13%	100%
Subtotal			428,699	47%	100%
Environmental water					
ECA order water (3)			3,074	0%	100%
Flows to wetlands via Gingham Channel			165,502	18%	
Flow to wetlands via Gwydir River			29,825	3%	
Net diversions to wetlands (4)			195,327	21%	100%
End of system flows (5)			135,510	15%	100%
Subtotal			330,837	36%	100%
Other outflows (6)			8,680	1%	100%
Unaccounted difference (7)			115,205	13%	n/a
Total	911,136	100%	911,136	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 NOW or as specified in Water Sharing Plans.
3. ECA and entitlement 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 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 and any measurement errors recording other components.