

# Water Balance Report

## Gwydir River 2011 – 2012

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			690,973		
Volume in storage at end of year			1,300,494		
<b>Change in storage</b>			<b>609,521</b>	<b>18%</b>	100%
<b>Storage net evaporation</b>			<b>-8,212</b>	<b>0%</b>	100%
<b>Inflows</b>					
Storage inflows	720,943	21%			100%
Downstream tributaries (1)	2,728,743	79%			85%
<b>Subtotal</b>	<b>3,449,686</b>	<b>100%</b>			95%
<b>Net water diverted under riparian rights</b>					
Domestic and stock rights (2)			6,000	0%	0%
Native title rights (2)			-	0%	0%
<b>Subtotal</b>			<b>6,000</b>	<b>0%</b>	0%
<b>Net Water diverted under access licences</b>					
Domestic and stock			480	0%	100%
High security			5,675	0%	100%
General security			85,720	2%	100%
Local water utility			1,646	0%	100%
Major water utility			-	0%	100%
Supplementary water			107,204	3%	100%
<b>Subtotal</b>			<b>200,725</b>	<b>6%</b>	100%
<b>Environmental water</b>					
ECA ordered water (3)			16,500	0%	100%
Flows to wetlands via Gingham Channel			634,648	18%	
Flows to wetlands via Gwydir River			63,940	2%	
Net diversions to wetlands (4)			698,588	20%	100%
End of system flows (5)			600,222	17%	100%
<b>Subtotal</b>			<b>1,298,810</b>	<b>38%</b>	100%
<b>Other outflows (6)</b>			<b>14,292</b>	<b>0%</b>	100%
<b>Unaccounted difference (7)</b>			<b>1,328,550</b>	<b>39%</b>	n/a
<b>Total</b>	<b>3,449,686</b>	<b>100%</b>	<b>3,449,686</b>	<b>100%</b>	<b>95%</b>

### 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.