

# Water Balance Report



Gwydir Valley (Copeton Dam) 2017-2018

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	668,431				
Volume in storage at end of year	376,559				
<b>Change in storage</b>	<b>291,872</b>	<b>58.4%</b>			100%
<b>Storage net evaporation</b>			<b>21,535</b>	<b>4.3%</b>	100%
<b>Inflows</b>					
Storage Inflows	143,407	28.7%			100%
Downstream tributaries (1)	64,867	13.0%			85%
<b>Subtotal</b>	<b>208,274</b>	<b>41.6%</b>			95%
<b>Net Water diverted under water rights</b>					
Domestic and stock rights (2)			6,000	1.2%	0%
Native title rights (2)			-	0.0%	0%
<b>Subtotal</b>			<b>6,000</b>	<b>1.2%</b>	0%
<b>Net Water diverted under access licences</b>					
Domestic and stock			1,410	0.3%	100%
High security			10,627	2.1%	100%
General security			291,130	58.2%	100%
Local water utility			2,955	0.6%	100%
Major water utility			-	0.0%	100%
Supplementary water			8,862	1.8%	100%
<b>Subtotal</b>			<b>314,984</b>	<b>63.0%</b>	100%
<b>Environmental water</b>					
ECA ordered water (3)			3,000	0.6%	100%
Flows to wetlands via Gingham Channel			14,713	2.9%	
Flow to wetlands via Gwydir River			13,296	2.7%	
Net diversions to wetlands (4)			28,009	5.6%	100%
End of system flows (5)			21,367	4.3%	100%
<b>Subtotal</b>			<b>49,376</b>	<b>9.9%</b>	100%
<b>Other outflows (6)</b>			<b>4,121</b>	<b>0.8%</b>	100%
<b>Unaccounted difference (7)</b>			<b>104,130</b>	<b>20.8%</b>	n/a
<b>TOTAL</b>	<b>500,146</b>	<b>100.0%</b>	<b>500,146</b>	<b>100.0%</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 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 excluding the Commonwealth Environmental orders

(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.