

## Macquarie - Cudgegong Valley Water Balance 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			264,012		100%
Volume in storage at end of year			1,242,662		100%
<b>Change in storage</b>			<b>978,650</b>	<b>23%</b>	100%
<b>Storage net evaporation</b>			<b>71,088</b>	<b>2%</b>	100%
<b>Inflows</b>					
Storage inflows	2,901,852	69%			100%
Downstream tributaries (1)	1,324,859	31%			100%
<b>Subtotal</b>	<b>4,226,711</b>	<b>100%</b>			100%
<b>Net water diverted under water rights (2)</b>					
Domestic and stock rights			1,200	0%	0%
Native title rights			0	0%	0%
<b>Subtotal</b>			<b>1,200</b>	<b>0.0%</b>	0%
<b>Net water diverted under access licences</b>					
Domestic and stock			940	0%	100%
High security			5,950	0%	100%
General security			149,262	4%	100%
Local water utility			8,961	0%	100%
Major water utility (3)			0		
Supplementary water			38,033	1%	100%
Conveyance			0		
<b>Subtotal (4)</b>			<b>203,146</b>	<b>5%</b>	100%
<b>Environmental water</b>					
Net diversion to wetlands (5)			871,166	21%	100%
End of system flows (6)			340,887	8%	100%
<b>Subtotal</b>			<b>1,212,053</b>	<b>29%</b>	100%
<b>Other Outflows (7)</b>			<b>0</b>	<b>0%</b>	100%
<b>Unaccounted difference (8)</b>			<b>1,760,574</b>	<b>42%</b>	
<b>TOTAL</b>	<b>4,226,711</b>	<b>100%</b>	<b>4,226,711</b>	<b>100%</b>	

### Notes:

(1) Downstream tributaries include the Bell R, Little R and Talbragar R. Ungauged tributaries were estimated from the increase in mass balance between Burrendong Dam and Barooka.

(2) Water rights are not metered. Values presented are estimated from recommended values as specified in the Water Sharing Plan

(3) There are no Major Water Utility or Conveyance licences in this water source

(4) About 56,870ML of usage by licences held by State and Commonwealth are included in the total extraction. This water

(5) The net diversion to wetlands include delivery of environmental water allowance of 139,101ML and the flows into wetlands

(6) End of system flows measured at Miltara

(7) Other outflows - There has not been any specific deliveries made to meet the stock and domestic flow requirements in Marra Ck, Crooked Ck, Belringar Ck below APC channel, Belringar Ck from off-take to APC, Reddenville Bk, Lower Bogan River and lower Macquarie River. These requirements have met by unregulated and flood flows during the year.

(8) Unaccounted difference is estimated as the difference between inflows, outflows and change in storage. This includes river evaporation, evapotranspiration, seepage, overbank flows and any measurement errors recording other components. In 2010-11 major proportion of this volume is due to overbank and channel breakout flows during floods and airspace operation.

All the above figures are based on operational data used by State Water and are not quality coded. Archived data may differ from the operational data due to changes in the rating tables.

The above water balance for Macquarie Valley includes Burrendong and Windamere storages within the area covered by the Water Sharing Plan for the Macquarie-Cudgegong Regulated Rivers water source.