

Water Balance Report

Lachlan River 2013 – 2014

Water balance component	Sources of water		Distribution of water		% of volume measured
	Volume (ML)	% of total	Volume (ML)	% of total	
Storage Volume (1)					
Volume in storage at start of year	871,650				100%
Volume in storage at end of year	589,544				100%
Change in storage	282,106	54%			100%
Storage net evaporation (2)			72,639	14%	100%
Inflows					
Storage inflows	208,772	41%			100%
Downstream tributaries (3)	28,483	5%			100%
Subtotal	237,255	46%			100%
Net water diverted under riparian rights (4)					
Domestic and stock rights			4,211	1%	0%
Native title rights			0	0%	0%
Subtotal			4,211	1%	0%
Net Water diverted under access licences					
Domestic and stock			4,242	1%	100%
High security (5)			101,127	19%	100%
General security			110,867	21%	100%
Local water utility			8,295	2%	100%
Major utility (6)			0	0%	
Supplementary water			0	0%	
Conveyance			17,537	3%	100%
Subtotal			242,068	46%	100%
Environmental water					
Net diversions to wetlands (7)			0	0%	100%
End of system flows (8)			59,470	11%	100%
Subtotal			59,470	11%	100%
Other outflows (9)			38,029	7%	100%
Unaccounted difference (10)			102,944	20%	
Total	519,361	100%	519,361	100%	

Notes:

1. Storage volume includes Wyangala Dam, Lake Cargelligo and Lake Brewster.
2. The evaporation figure includes net evaporation loss from Wyangala Dam, Lake Cargelligo and Lake Brewster.
3. Downstream tributaries include Boorowa R and Belubula R. Contributions from ungauged tributaries were assessed as nil.
4. Water rights are not metered. Values presented are as specified in Water Sharing Plan.
5. Very high usage by high security licences through trading in from general security licences. This includes trading of allocations from Commonwealth environmental licences into state environmental licences.
6. There are no Major Water Utility or Supplementary licences in Lachlan
7. Planned environmental water delivery requirements were met 100% in 2013-14. Translucent environmental releases were not triggered. Delivery of ECA and WQA were not called for. About 23,017ML under high security adaptive environmental licence

held by commonwealth and State environmental agencies was delivered to general riverine health (including Merrimajeel/Muggabah Creeks) and is accounted as net water diverted under access licences

8. Net flows in Willandra Ck at the homestead and at Booligal Weir over and above water extracted downstream (adjusted for the environmental water of 17GL delivered in July 2013 accounted as licenced water) are accounted as end of system flows.
9. Other outflows - Stock and domestic flows monitored into Booberoi Ck (11,293ML), Merrowie Ck (8,834ML), Merrimajeel Ck (883ML), Muggabah Ck (659ML) and Willandra Creek (16,360ML).
10. Unaccounted difference is estimated as the difference between inflows, outflows and change in channel storage. This includes river evaporation, evapotranspiration, seepage, ungauged overbank flows and channel breakouts and any measurement errors recording other components. This also includes the delivery losses in the regulated section of Willandra Ck.