



4 October 2016

NSW Murray and Lower Darling

Water allocation update

Allocations

NSW Murray general security allocation has **increased by 11 per cent to 53 per cent** of entitlement with a commensurate increase in allocation to conveyance entitlements. Above average rainfall and wet catchment conditions continue to provide steady system inflows and storage improvements. Average general security carryover in NSW Murray water user accounts is 27 per cent of entitlement, meaning that overall general security water availability is 80 per cent.

With Hume Dam at 97 per cent capacity, it is effectively full and air-space operations are continuing to safely pass inflows. Dartmouth Dam is currently 65 per cent full and rising.

NSW Murray general security allocations will continue to rise as water captured in Dartmouth Dam increases. They will be boosted too when the Menindee system exceeds 640,000 megalitres (ML) and becomes a shared Murray resource, probably next month.

Supplementary access continues to be available in the NSW Murray. Water users should confirm with WaterNSW the times and reaches where access applies. In addition, general security licence holders can divert supplementary water 'without debit' while allocations are less than 60 per cent bearing in mind that diversions will count toward annual usage limits. For further information refer to WaterNSW's website at www.waternsw.com.au/customer-service/news/supplementary

The **Lower Darling** regulated water source continues to steadily improve as the Darling River delivers inflows to the Menindee Lakes system. When the Menindee system reaches 640,000 ML it becomes a shared Murray resource under the control of the Murray Darling Basin Authority.

Lower Darling **general security** allocation is increased by 50 per cent, to now be **100 per cent of entitlement**.

Transfers from Lake Wetherell to Lake Pamamaroo are continuing at about 12,000 ML per day. With at least 500,000 ML of estimated future inflows, transfers to Lake Menindee and Lake Cawndilla are expected to commence in coming weeks.

	High Security	General Security	Average Carryover
Murray	97%	53%	27%
Lower Darling	100%	100%	

Upper Murray storage levels (as at 30 September 2016)

- Dartmouth Dam is currently about 64 per cent full - rising - holding 2,500,000 ML.
- Hume Dam is 97 per cent full, holding 2,900,000 ML.

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www.water.nsw.gov.au

Climate outlook

Significant rainfall in the Murray catchment has continued in September and the catchment remains wet. Further rainfall is forecast and the predicted early start to the northern wet season rains has commenced, with above-average rains over most of northern Australia.

The Bureau of Meteorology (BoM) seasonal outlook continues to indicate that wet conditions in the Murray catchment are highly likely throughout the next three months, particularly in October. Above average October rainfall is also very likely across large parts of the Barwon-Darling catchments. Cooler days and nights are also likely across NSW and large parts of Queensland.

Major drivers of the current outlook include a strong negative Indian Ocean Dipole, combined with a La Niña-like pattern of warm seas around northern Australia.

Trade

In the Murray, trade across the Barmah choke is restricted to 'no net trade downstream'. Downstream trade opens automatically to the extent of the volume of any upstream trade. The trade restriction prevents water trades from placing excessive physical water delivery demand on choke channel capacity during the year, which could affect the water security of existing entitlement holders. Water users are encouraged to monitor the MDBA website at www.mdba.gov.au/managing-water/water-markets-trade/interstate-water-trade/barmah-choke-trade-balance for information about the trade balance and status of trade.

Trade is permitted within the Lower Darling water source, and with forecast significant resource improvements, trade to and from the Lower Darling (inter-valley trade) has now **re-opened**.

Trade **into** (and within) the Murrumbidgee Valley is open, but trade **out** of the Murrumbidgee Valley is closed. Water users are encouraged to monitor the WaterNSW website at www.waternsw.com.au/customer-service/trading/murrumbidgee for information about the Murrumbidgee IVT account balance and the current status of Murrumbidgee trade.

Next announcements

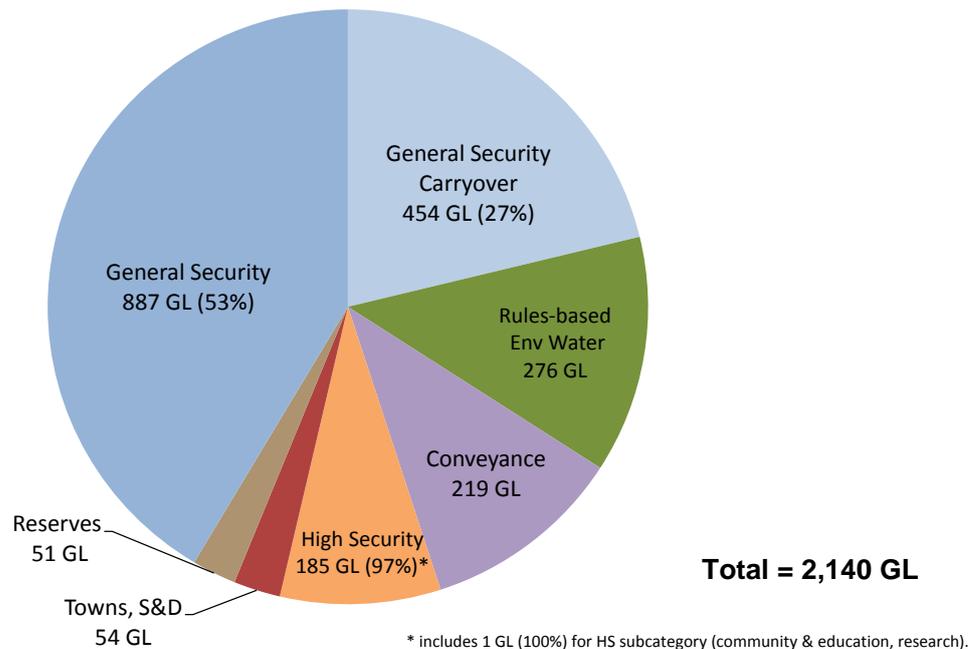
The next resource assessment and allocation update for the NSW Murray and Lower Darling valleys will be on **Monday 17 October 2016**. This mid-month statement will contain additional detailed information including an update of the rocket diagram.

NSW Murray Resource Assessment Data Sheet

Resource Distribution (as at 4 October) for 2016-17	Volume (GL)
Total Available Resource ⁽¹⁾	2,140
less	
Carryover	454
Rules based Environmental Water ⁽²⁾	276
Towns, Stock, Domestic ⁽³⁾	54 (100%)
Announced High Security subcategory (community & education, research) ⁽³⁾	1 (100%)
Announced High Security ⁽³⁾	184 (97%)
Conveyance ⁽⁴⁾	233
Reserves ⁽⁵⁾	51
Announced General Security	887 (53%)

**See notes below.*

Resource Distribution 2016-17 NSW Murray - 4 October 2016



Notes:

- (1) NSW is currently in Special Accounting with South Australia but this has no material impact on NSW allocations. Special accounting is triggered when NSW forecast is unable to meet the required reserve of 1,250 GL by the end of the year to supply South Australia (SA) with its entitlement in the following water year. Details can be found in the MDB Agreement Clauses 123-129.
- (2) Rules-based planned environmental water – water required to be set aside under water sharing plans to provide for riverine environments. In the NSW Murray this includes Additional Environmental Allowance (AEA) (6 GL), Wakool system requirements (70 GL), and the Barmah-Millewa Allowance (B-MA). The current B-MA account balance remains at the minimum 200 GL for 2016/17 (does not accrue while Hume Dam is spilling). The borrow by consumptive water users has been fully repaid. Licence-based environmental water is not included in this rules-based environmental water category.
- (3) The *Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016* has subcategories of high security licenses in the Murray Water Source. High security subcategory licences under *Part 7 Division 2 Clause 46(2)* that are present in the Murray include community and education, research, and town water supply. These licences are to receive 100% allocation at the commencement of each water year. Remaining high security licences are to receive 97% allocation. For the purposes of this water allocation statement, the high security town water supply allocation volume has been grouped as “Towns, S&D”.
- (4) Conveyance entitlement – a category of access licence originally issued to Irrigation Corporations to facilitate delivery of water through their channel systems. Allocation to this category is prescribed in the water sharing plan and is a function of current high and general security allocation.
- (5) Reserves – required primarily under statutory plans; used for emergency purposes and critical needs.

Lower Darling – Summary and Update

- The Menindee Lakes storage volume has continued to steadily increase due to upstream rain and wet catchment conditions, and has now exceeded 20 per cent capacity.
- Transfers from Lake Wetherell to Lake Pamamaroo are continuing, with the lakes at 73 per cent and 82 per cent capacity respectively. With at least 500,000 ML estimated to flow into the lakes, transfers to Lake Menindee are also expected to commence in coming weeks.
- Nearly 45,000 ML has been released from Lake Wetherell to the Lower Darling River since releases commenced in late July.
- Flows at Weir 32 are targeting seasonal minimums to protect longevity of supply to the Lower Darling. An environmental water holder order to promote fish spawning has further increased these flows to over 700 ML/day and is expected to be maintained in coming months.
- DPI Water and WaterNSW are continuing to carefully monitor flow rates and water quality. WaterNSW is consulting with its customers in the Lower Darling, and water users are being kept informed of water quality test results as they come to hand.
- Latest water quality results indicate that salinity levels have improved significantly. As the saline plume leaves the Lower Darling, salinity levels above 1,000 EC remain only within the last 8km before the junction with the River Murray. These higher salinity levels are expected to continue to naturally disperse in coming days.
- Levels of pH are also being monitored. The data indicates the emergence of high pH readings, peaking at pH 8.9 at 22 km upstream from the River Murray junction. Alkaline water does occur naturally in the Lower Darling but water managers are looking at what can be done to assist irrigators to deal with these high levels without adversely impacting other water users.
- Periodic rainfall across the Lower Darling districts continues to help reduce irrigation demand and mitigate potential water quality impacts. The Bureau of Meteorology is forecasting that above average October rainfall is likely across large parts of the Barwon-Darling catchments.
- It is likely that the total storage volume of the lakes will soon reach the 640,000 ML threshold which requires the storage to once again be operated as a shared River Murray system storage.
- Under the Murray-Darling Basin Agreement, the Murray Darling Basin Authority (MDBA) will manage the storage to meet downstream needs on behalf of partner governments of NSW, Victoria, South Australia and the Commonwealth. Under the Agreement, water stored in the lakes is shared between NSW and Victoria, and can be used by NSW and Victoria to meet their own users' needs as well as their monthly obligations to South Australia's entitlement flow.
- Information about the Broken Hill pipeline project can be obtained by emailing BrokenHillPipeline@finance.nsw.gov.au or by contacting 1800 992 640.
- This information will be updated in the next water allocation statement on 17 October 2016.