

17 August 2018

Macquarie and Cudgegong Valleys

Water allocation update and outlook

The system is currently experiencing a **new record low inflow period for Burrendong Dam**. Inflows to the dam since the last water allocation in August 2017 total about 30,000 megalitres (ML). This is only 39 per cent of the previous record low inflow of about 76,000 ML for the 12 months to July and represents a further deterioration over the past month.

Commitments to all high priority entitlements can be met. However, in the absence of future inflows, the resources in Burrendong Dam, plus the planned bulk water transfer of 54,000 ML from Windamere Dam, will only provide 70 per cent of the 1 July 2018 balance of general security and environmental accounts (including EWA). A temporary water restriction will be used to ensure that water usage in 2018-19 is limited to this reduced water availability.

Inflows in excess of 265,000 megalitres (ML) are currently estimated to be required before the next water allocation can be made.

Macquarie regulated river (general security) access licences will be restricted to 70 per cent of the volume of water in the carryover sub-account account as at 1 July 2018. Any water credited to a water allocation account after 1 July 2018 by assignment dealing will not be included in the use restriction.

Cudgegong regulated river access licences, including general security, are not restricted.

In combination with additional drought operation measures in 2018-19, significant inflows to Burrendong Dam are required from now to the end of December 2018 to secure delivery of all remaining carryover allocations and allow the lifting of restrictions.

Currently, sufficient inflow arriving by the end of December appears unlikely and water users should note that the restrictions described above are likely to remain in place throughout the irrigation season. Water users are advised to plan their programs accordingly and to maximise water use efficiency.

Deliveries under drought operations in 2018-19 will incorporate water conservation measures to prolong essential water supplies. This may involve implementation of water order debiting and, where feasible, block releases of irrigation orders, particularly in the lower parts of the Macquarie River and in effluent creeks.

Under dry conditions, the timing of all stock and domestic deliveries in 2018-19 will depend upon rainfall events producing inflows to storage and flows from downstream tributaries. Water users should liaise with WaterNSW for water delivery arrangements.

	High Security	General Security	Average Carryover
Macquarie	100%	0%	51%
Cudgegong	100%	0%	101%

Storage levels (as at 17 August 2018)

- Burrendong Dam is 34 per cent full – falling – currently at 425 GL.
- Windamere Dam is 40 per cent full – steady – currently at 149 GL.

Climatic outlook

The Bureau of Meteorology outlook for September to November indicates likely dry conditions and temperatures likely to be above average for the region, meaning a potential deterioration of drought conditions across the catchment.

The El Niño-Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) are currently neutral. However, current observations and model outlooks indicate El Niño and a positive IOD could develop in spring. This is underpinning the continued dry outlook.

Next announcement

The next water allocation statement for the regulated Macquarie-Cudgegong Valley will be on **Friday 14 September 2018**.

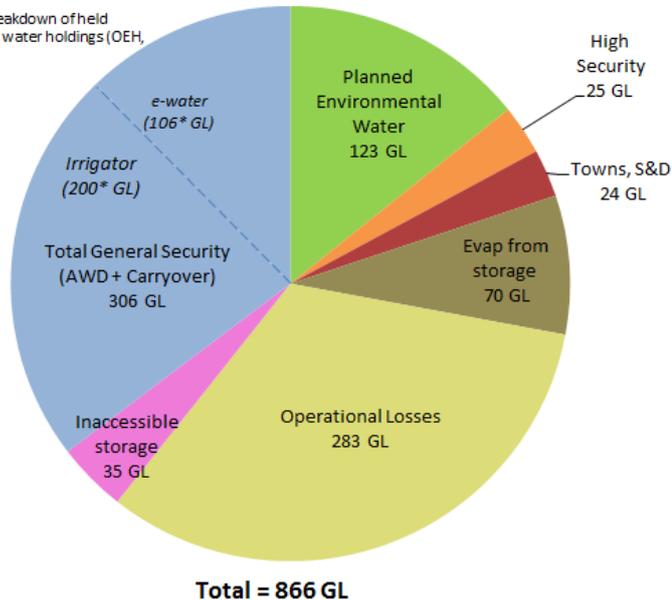
Macquarie-Cudgegong Resource Assessment Data Sheet

Macquarie Resource Distribution (August 2018 to May 2020)	
	Volume (GL)
Total Available Resource ⁽¹⁾	601
less	
Carryover remaining in accounts ^{(2), (7)}	306
Planned Environmental Water ⁽³⁾	123
Towns, Stock, Domestic ⁽⁴⁾	24 (100%)
Inaccessible storage ⁽⁶⁾	35
High Security ⁽⁴⁾	25 (100%)
General Security 2018/2019 AWD ⁽⁷⁾	0 (0%)
Operational Losses (transmission, operations) ⁽⁵⁾	283
Evaporation from storage	70

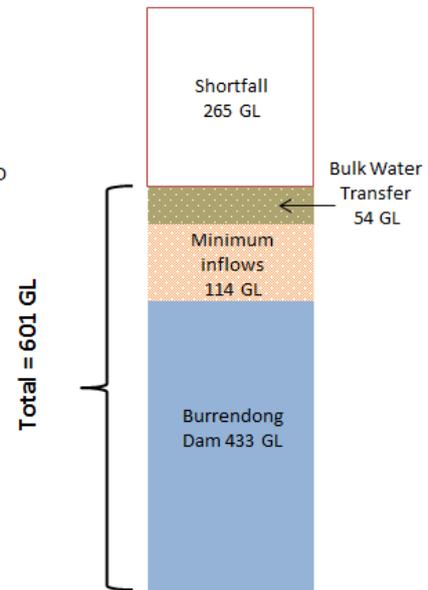
See notes below.

Resource Distribution August 2018 to May 2020 Macquarie

* indicative breakdown of held environmental water holdings (OEH, CEWH).



Supply Source ⁽⁸⁾



Notes:

- (1) Storage volume in Burrendong Dam plus minimum forecast dam inflows plus transfers from Windamere Dam.
- (2) Carryover remaining in accounts: volume remaining in carryover sub-accounts (excludes Cudgegong), discounted for evaporative losses.
- (3) Planned environmental water: water allocated to the Environmental Water Allowance (EWA) under the water sharing plan (WSP) to provide for the Macquarie Marshes and the riverine environment. Excludes 'licence-based' environmental water.
- (4) Towns, Stock, Domestic and High Security: reserves required to meet 100 per cent of entitlement over the assessment horizon. This represents total entitlement below Burrendong Dam.
- (5) Operational Losses: best estimate of the volume required to run the river under dry conditions over the next 21 months to meet all demands. This includes transmission losses, operational loss, and replenishment flows. It is conservatively assumed that forecast inflows correspond to dry conditions. This estimate is regularly refined as the year unfolds.
- (6) Inaccessible storage: Dead storage of 34 GL plus 1 GL to ensure valve operations at very low storage levels.
- (7) Held environmental water (HEW): as a trial, we are reporting held environmental water administered by the environmental water holders, with the associated portions of general security allocation also identified in the above pie chart. This reporting of held environmental water is indicative only, prior to reconciliation of usage and net trade, and is estimated to be 106GL of GS and 0GL of HS. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW Office of Environment and Heritage (OEH) and the Commonwealth Environmental Water Holder (CEWH). Details on environmental holdings can be found on individual agency websites.
- (8) Supply source: we are providing supply source of total available water. It also indicates the current shortfall required for a new GS AWD to be made.