



11 December 2020

Macquarie and Cudgegong Regulated Rivers Water Source

Water allocation update

Allocations in the Macquarie and Cudgegong regulated rivers water source **remain unchanged** at this time. The cumulative general security allocation is 23% of entitlement for the current water year, while all other licence categories have already reached their full (100%) allocation.

2020-21	High Security	General Security	Drought Stage
Cudgegong	100%	23%	 Stage 1
Macquarie	100%	23%	 Stage 1

Inflows totalling 24,500 megalitres (ML) into Burrendong Dam during November were insufficient to provide a further general security water allocation. Inflows in excess of 29,000ML to Burrendong Dam are required during December to enable a further general security allocation next month. This is subject to river operations and losses remaining as forecast. Indicative inflows required in January 2021 and February for further general security allocation are also provided at the end of this statement.

Although the Burrendong catchment has begun to dry, and temperatures are increasing, the outlook is still favourable for further rainfall and inflows later this summer. This resource assessment shows a small shortfall of 11,000ML in assuming to meet account water and all future commitments to May 2022. It is highly likely that the shortfall will be met in coming months.

The planning outlook for this assessment runs through to May 2022, some 18 months, and aims to ensure that next water year's higher priority needs can be met before further allocating to general security entitlements this water year.

Storage levels (as at 10 December 2020)

- Burrendong Dam is 42.2% full – falling – holding about 522,000ML.
- Windamere Dam is 29.4% full – steady – holding about 109,000ML.

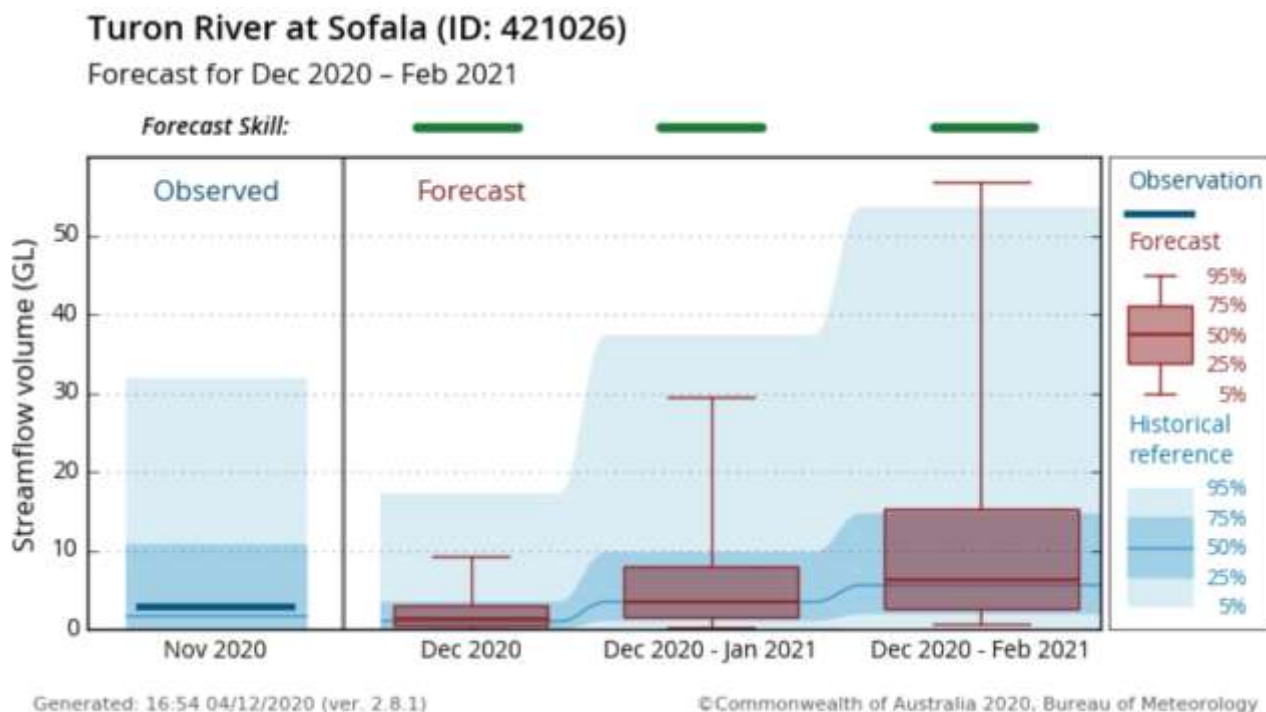
Drought stage

The NSW Extreme Events Policy introduced a staged approach to managing extreme events, such as severe droughts or poor water quality events. The Macquarie and Cudgegong Regulated River

Water Source is currently at Stage 1, meaning normal river operations and water saving contingency measures are not expected to be required in the current water year.

Seasonal inflow and climatic outlooks

The Bureau of Meteorology issues seasonal flow forecasts for the Turon River that drains into Burrendong Dam (see figure below). The forecast total median flow from December 2020 to February 2021 is similar to the historical median flow. This indicates near normal inflow conditions for these months.



For further information: www.bom.gov.au/water/ssf/?ref=fr#id=421026

The Bureau of Meteorology's seasonal outlook for December 2020 to February 2021 indicates likely above average rainfall across the catchment, however; the catchment is entering its drier season. This means that even average rainfall may not be adequate to drive significant runoff and resource improvement, particularly since daytime and night-time temperatures are likely to be above average.

For further details: www.bom.gov.au/climate/outlooks/#/rainfall/summary

Key facts

- All high priority licence categories received full allocations on 1 July 2020.
- Based on historic inflows over 119 years, there is less than a 10% chance that Burrendong Dam may spill by the end of February 2021.
- Should Burrendong Dam physically spill (including pre-release) in coming months, general security and EWA carryover volumes will be protected from forfeiture until 28 February 2021.
- Tributary flows from passing storms downstream of Burrendong Dam will continue to be managed adaptively to meet high priority commitments, including delivery of planned environmental water and effluent replenishments.

Water Allocation Statement

Water availability and allocation update



- Any bulk water transfer from Windamere Dam to Burrendong Dam are forecast not to be required until at least February 2022.
- Delivery of stock and domestic replenishment flows in 2021 will largely rely on tributary flows in preference to dam releases.

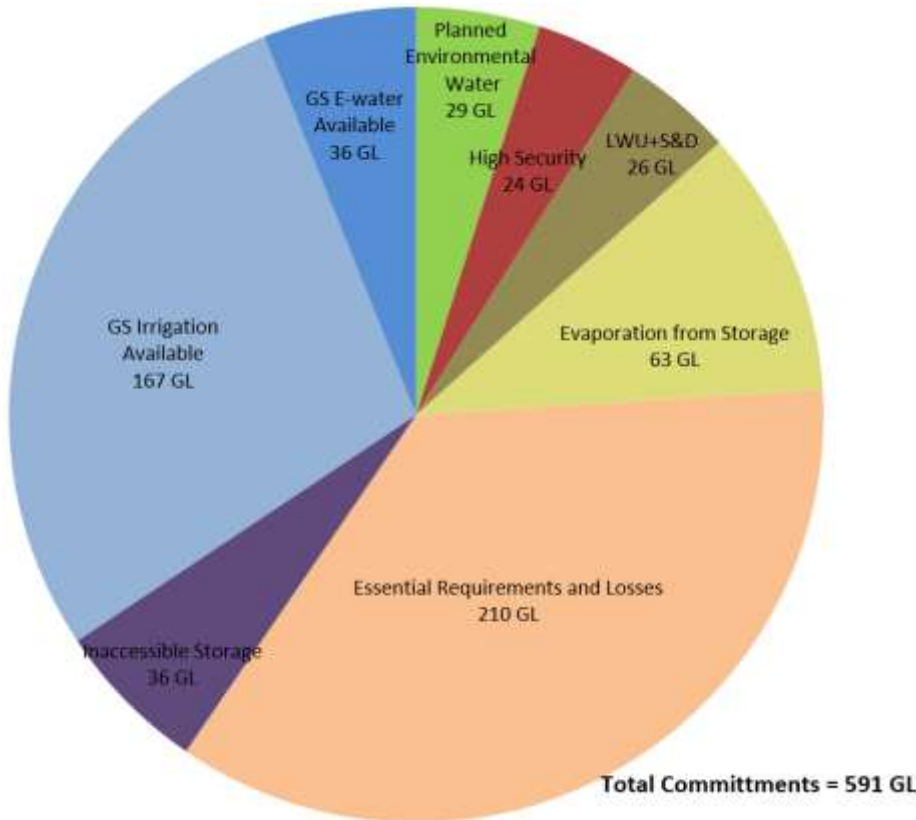
Resource Distribution (December 2020 to May 2022)	Volume (GL)
Total Available Resource ⁽¹⁾	580
<i>less</i>	
Carryover remaining in accounts ^{(2), (7)}	62
Planned Environmental Water ⁽³⁾	29
Domestic, Stock, Town ⁽⁴⁾	26
Inaccessible Storage ⁽⁶⁾	36
High Security ⁽⁴⁾	24
General Security 2020/2021 AWD ⁽⁷⁾	141
Essential Requirements and Losses ⁽⁵⁾	210
Evaporation from Storage	63
<i>equals</i>	
Water available for allocation (or deficit) ⁽⁸⁾	(11)

Notes:

- (1) Total Resources: Storage volume in Burrendong Dam plus minimum budgeted dam inflows from December 2020 to May 2022 plus any planned transfer 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 to provide for the Macquarie Marshes and the riverine environment. Excludes 'licence-based' environmental water.
- (4) Domestic, Stock, Town and High Security: reserves required to meet the projected use by these licence categories below Burrendong Dam over the assessment horizon.
- (5) Essential Requirements and Losses: Replenishments, basic rights and system overheads to run the river under dry conditions over the next 18 months. System overhead includes transmission losses and operational loss. This estimate is regularly refined as the year unfolds.
- (6) Inaccessible storage: Dead storage of 34 GL plus 2 GL to ensure valve operations at very low storage levels.
- (7) This volume may contain held environmental water (HEW). We are reporting HEW administered by the environmental water holders here. The associated portions of general security allocation are identified in the pie chart. This reporting of HEW is indicative only, prior to reconciliation of usage and net trade, and is estimated to be 36 GL of GS and 0 GL of HS. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW DPIE Environment, Energy and Science (EES) and the Commonwealth Environmental Water Holder (CEWH). Details on environmental holdings can be found on individual agency websites
- (8) The delivery of all current account water and essential requirements until May 2022 will require another 11 GL in addition to budgeted minimum inflow. This is a very small deficit that can be overcome from loss savings, underuse and likely inflow above budgeted minimum by May 2022.

Water Allocation Statement

Water availability and allocation update



Inflow required to provide the next general security allocation (estimate as at 9 November 2020)

Inflow period	Inflows (GL)	Inflows (GL)
	Minimum inflow required before AWD can be made	Inflow required for additional 10% allocation
By end of December	29	115
By end of January	32	120
By end of February	32	120

Next announcement

Considering the up-coming holiday season, the next water allocation statement for the Macquarie-Cudgegong regulated rivers water source will be issued on **Friday 15 January 2021**. Nevertheless, staff will be closely monitoring water availability and can issue an interim statement if there are significant changes to the resource.

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