

8 December 2020

Lachlan Regulated River Water Source

Water allocation update

There is **no increase in general security allocation in the Lachlan regulated river water source** this month, with the total allocation this year remaining at 38%.

While rainfall throughout November has continued to provide system inflows into Wyangala Dam and tributary flows, there has not been adequate improvement in resources to enable an increase in allocation to general security licence holders. There was approximately 57 gigalitres (GL) of inflow into Wyangala Dam and a total of 28GL arriving from the Belubula River and other downstream tributaries. This resource assessment returned a small shortfall of 5GL in assuming to meet account water and all future commitments to May 2023. However, it is most likely to be temporary based on seasonal weather outlooks.


The inflows into Wyangala Dam triggered translucent flow conditions between 28 October and 5 November. These flows were delivered from Wyangala Dam. This was the second translucent event this water year. The translucent flow rules ended on 15 November as per the water sharing plan. Licensed environmental water was ordered to provide a gradual recession from translucent releases.

There are concerns about low dissolved oxygen (DO) levels in the lower Lachlan due to high levels of carbon in the system and rising temperatures. Persistent low DO levels are detrimental to fish health and could cause blackwater events. Conditions are being closely monitored, however; as a precaution, approximately 5.5GL of the Lachlan Water Quality Allowance will be utilised to piggyback onto irrigation releases and provide a flow of 100 megalitres (ML)/day at Booligal Weir during January 2021 to March 2021. This may be extended into April if the water quality risk remains high.

This assessment is sharing the prognosis of Wyangala Dam spilling to assist water users. Based on historical inflows over 110 years, there is less than a 10% chance that the dam and the on-route storages will spill by the end of January 2021. Should that occur, general security accounts will be reset and equalised in accordance with the water sharing plan.

Inflows in excess of 50GL will be required in December to enable a further general security allocation next month. This is subject to river operations and losses remaining as forecast. As with prior practice, this month the planning outlook has increased by another year to May 2023. Therefore, we have now commenced to secure essential high priority needs for an additional 12 months into the future before further general security allocations are made. This is the main reason behind the volume of inflow required in December for further general security allocation.

General security water users are advised that the Annual Use Limit that will apply in the 2020-21 water year is a volume equivalent to 100% of entitlement. This is the maximum amount that can be used in the 2020/-water year, plus any adjustments up or down for trade.

2020-21	High Security	General Security	Drought Stage
Lachlan Regulated River Water Source	100%	38%	 Stage 1

Storage levels (as at 7 December 2020)

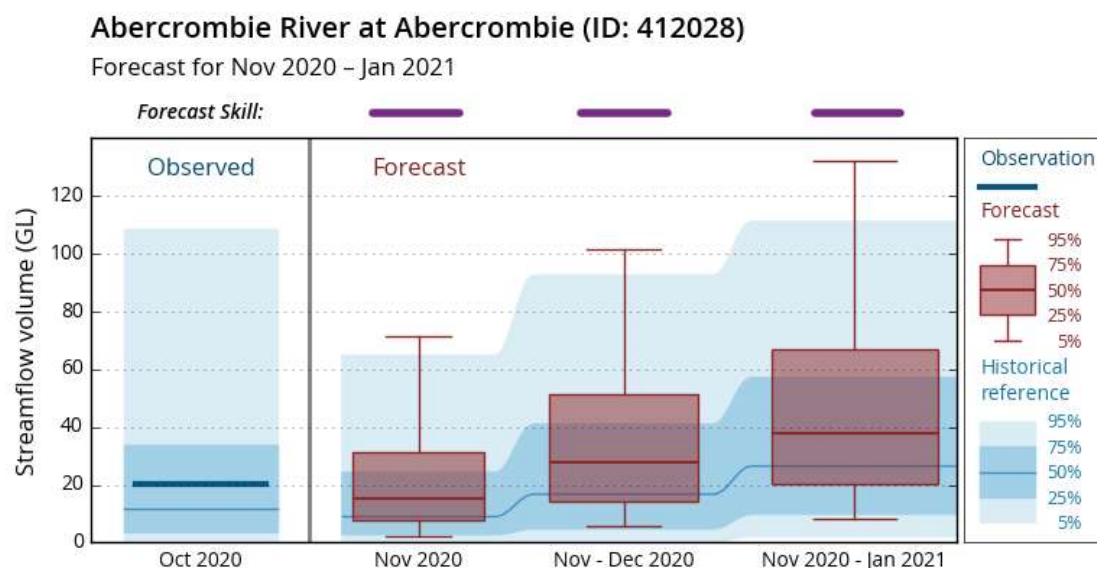
- Wyangala Dam is about 64.6% full – falling – currently at about 786.6GL.
- Lake Cargelligo is nearly 58.5% full – rising – currently at about 24.0GL.
- Lake Brewster is about 24.6% full – steady – at about 37.7GL (as at 30 Nov).

Seasonal inflow and rainfall forecast

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 derive significant runoff and resource improvement. Daytime and night-time temperatures are likely to be above average.

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

The Bureau of Meteorology issues seasonal flow forecast of the Abercrombie River that drains into Wyangala Dam (see figure below). This may provide an indication of potential inflows. All four forecast quartiles of total flow from November 2020 to January 2021 are higher than the historical quartiles. This indicates potential wetter inflow conditions for these months.



For further details: <http://www.bom.gov.au/water/ssf/?ref=ftr#id=412028>

Next announcement

The next water allocation announcement for the Lachlan Regulated River Water Source will be issued on **Wednesday 13 January 2021**.

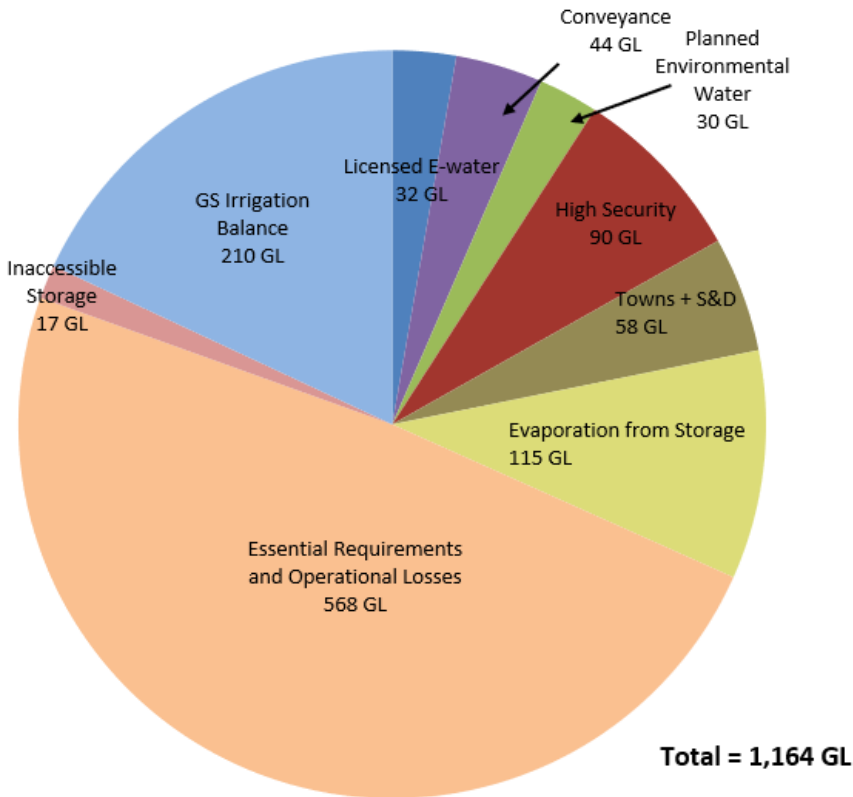
Lachlan resource assessment data sheet

Resource Distribution (December 2020 to May 2023)	Volume (GL)
Available Resource ⁽¹⁾	1159
<i>less</i>	
General Security account balance ⁽⁶⁾⁽⁸⁾	239
Conveyance	44
Planned Environmental Water ⁽²⁾	30
High Security ^{(3) (6)}	93
Towns, Stock, Domestic ⁽³⁾	58
Evaporation from storage ⁽⁴⁾	115
Essential Requirements and Losses ⁽⁵⁾	568
Inaccessible storage	<u>17</u>
<i>equals</i>	
Water available for allocation (or deficit) ⁽⁷⁾	<u>(5)</u>

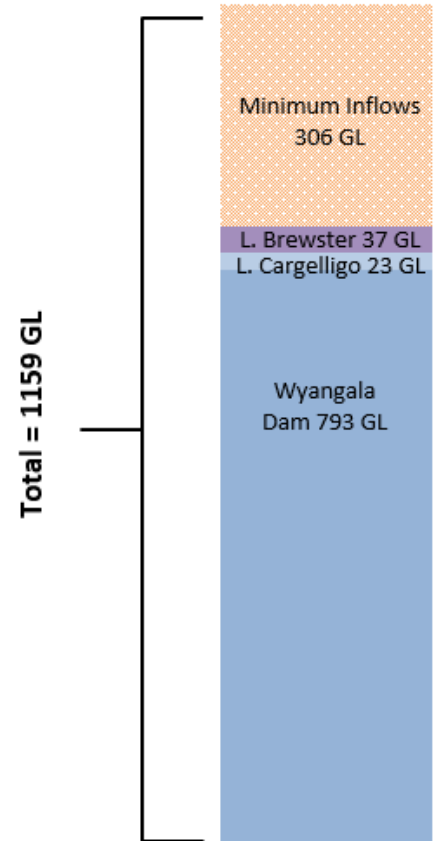
Notes:

- (1) Total available resource: End of November 2020 storage volume in Wyangala Dam, Lake Cargelligo and Lake Brewster, plus expected minimum inflows from December 2020 to May 2023.
- (2) Planned environmental water: water allocated to the Water Quality Allowance and/or the Environmental Water Allowances (EWA) under the water sharing plan. The total 30 GL includes 10 GL per year to May 2023 for WQA. Excludes 'licence-based' environmental water. EWA allocation for 2020-21 is zero currently.
- (3) Towns, Stock, Domestic and High Security: reserves are set aside to meet projected use of these users to 31 May 2023. Balances in high security accounts include water traded in from general security licences, if any.
- (4) The assessment assumes that the lakes will be drawn down slowly over the assessment period, increasing storage evaporation.
- (5) Essential Requirements and Losses: Essential requirement includes basic rights and any replenishment deliveries required. The assessment assumes that any current tributary inflows will return to dry conditions going forward. The loss budget (transmission and operation) is based on the best estimate of the volume required to run the river under dry conditions through to May 2023. This mostly comprises of natural transmission losses as water soaks into riverbed sands. The loss allowance is updated regularly.
- (6) This may include held environmental water (HEW) as shown in the pie chart. The reporting of HEW is indicative only, prior to reconciliation of usage and net trade, and is estimated to be 29 GL of GS, and 3 GL of HS. These reported entitlements are managed by environmental water holder groups, including the NSW DPIE - Environment, Energy and Science (EES) and the Commonwealth Environmental Water Holder (CEWH). Details on e-water holdings can be found on individual agency websites.
- (7) The delivery of all current account water and essential requirements till May 2023 will require another 5 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 2023.
- (8) The GS account balance includes any AWDs made this current water year and GS water carried over from the previous years.

Resource Distribution: December 2020 Lachlan Regulated River Water Source



Supply Source



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