

13 January 2021

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 cumulative allocation this year remaining at 38%.

December 2020 was quite dry, with inflows into Wyangala Dam and tributaries totalling 3.7 gigalitres (GL). This is well below the minimum expected inflow of 39 GL, resulting in no resource improvement for further allocations. Consequently, this resource assessment has returned a small deficit of 14 GL based on minimum inflows to May 2023.

Releases from the Lachlan Water Quality Allowance (WQA) began on 23 December 2020 to mitigate the risk of low dissolved oxygen levels in the lower Lachlan. Releases from the WQA are being used to target a flow of around 100 megalitre (ML)/day at Booligal Weir, and will likely continue until March/April 2021. Deteriorated water quality has been measured between Lake Brewster and Willandra Weir, with WaterNSW indicating red algal alert level. A few other sites in the lower Lachlan are at amber algal alert level.

The WQA is also being used to account for additional evaporative loss from Lake Brewster due to releases stopping while high algal counts are observed within the lake and further testing is undertaken. Water users are encouraged to seek further updates and information from WaterNSW's algae web page: www.waternsw.com.au/water-quality/algae

Based on historical inflows, there is a less than 10% chance that the major storages within the system will spill by the end of March 2021. Should a spill occur, general security accounts will be reset and equalised in accordance with the water sharing plan.

Inflows in excess of 25 GL are required in January to facilitate an increase in general security allocations in the next assessment. The planning outlook runs to May 2023 and ensures that all high priority needs can be met through this period before further allocations to general security are made.

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

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

Storage levels (as at 13 January 2021)

- Wyangala Dam is 61.6% full – falling – currently at about 750,600 ML.
- Lake Cargelligo is 70.3% full – falling – currently at about 27,600 ML.
- Lake Brewster is 5.8% full – falling – at about 8,400 ML.

Seasonal rainfall and inflow forecast

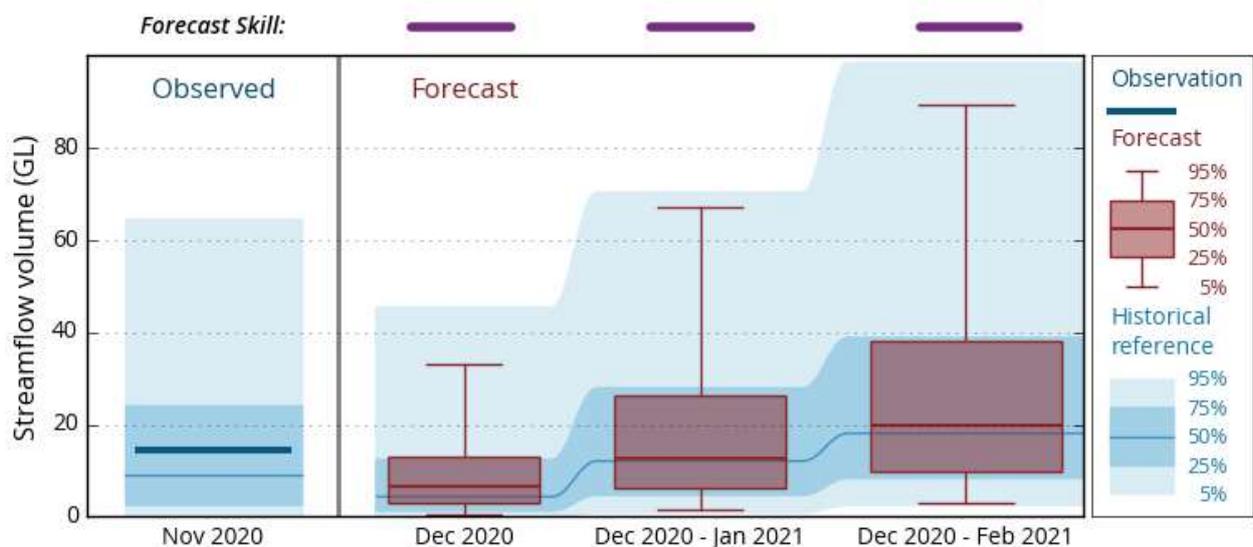
The Bureau of Meteorology's seasonal outlook for February to April indicates that rainfall is likely to be above average. While rainfall is likely to be above average, this period is historically the drier season of the year, therefore average to above average rainfall may not lead to significant runoff and resource improvement unless very wet conditions are experienced. Daytime temperatures are likely to be near average while night-time temperatures are likely to be above average.

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

The Bureau of Meteorology also issues seasonal flow forecast of the Abercrombie River that drains into Wyangala Dam (see figure below). This provides an indicative distribution of potential inflows. Distribution of forecast flows from December to February are very similar to the historical distribution, indicating that there is no clear sign of drier or wetter than average conditions.

Abercrombie River at Abercrombie (ID: 412028)

Forecast for Dec 2020 – Feb 2021



For further details: 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 **Monday 8 February 2021**.

Lachlan resource assessment data sheet

Resource Distribution (January 2021 to May 2023)	Volume (GL)
Available Resource ⁽¹⁾	1,064
<i>less</i>	
General Security account balance ⁽⁶⁾⁽⁸⁾	222
Conveyance	43
Planned Environmental Water ⁽²⁾	29
High Security ^{(3) (6)}	91
Towns, Stock, Domestic ⁽³⁾	57
Evaporation from storage ⁽⁴⁾	98
Essential Requirements and Losses ⁽⁵⁾	521
Inaccessible storage	<u>17</u>
<i>equals</i>	
Water available for allocation (or deficit) ⁽⁷⁾	<u>(14)</u>

Notes:

- (1) Total available resource: End of December 2020 storage volume in Wyangala Dam, Lake Cargelligo and Lake Brewster, plus expected minimum inflows from January 2021 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 29 GL includes 10 GL per year to May 2023 for WQA. Excludes 'licence-based' environmental water. EWA allocation for 2020-21 is zero currently. About 1.2 GL of the WQA was consumed in December from releases beginning 23 December 2020.
- (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 also 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 19 GL of GS, and 9 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 14 GL in addition to budgeted minimum inflow. This is a small deficit that likely will be overcome from loss savings, underuse and likely inflows above budgeted minimums by May 2023.

Water Allocation Statement

Water availability and allocation update



- (8) The GS account balance includes any AWDs made this current water year and GS water carried over from the previous years.

