

10 January 2020

Gwydir Valley

Allocations

There is no change to allocations in the Gwydir regulated river water source. Rainfall in December was very much below average across the Gwydir catchment. Copeton Dam received just 9 mm of rainfall and 720 megalitres (ML) of inflow.

Since the last general security allocation in early February 2018 there has been just 37 gigalitres (GL) of inflow into Copeton Dam. **This is the lowest 23-month inflow volume on record.** The previous lowest inflow was almost a century ago, being 52 GL in the 23-months to December 1919.

The system shortfall has grown to 69 GL meaning that inflows in excess of this volume will be required before normal regulated river operations can resume.

2019-20	High Security	General Security	Drought Stage
Gwydir Valley	100%	0%	 Stage 3

Dam levels (as at 6 January 2020)

Copeton Dam is about 6.1 per cent full – falling – currently holding 100 GL. This time last year the storage was about 16 per cent full.

Drought stage

The NSW Extreme Events Policy introduced a staged approach from one to four to manage extreme circumstances such as severe droughts or poor water quality events. Currently, the Gwydir Valley is at Stage 3 criticality. The need for water restrictions is being closely monitored to protect remaining Gwydir water supplies for critical needs.

Further information on drought stages can be found at: www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/extreme-events

Key facts

- Copeton Dam storage volume decreased by about 7.4 GL in December 2019, mostly in delivering essential supplies and a small amount of held environmental water.
- Evaporation and transmission losses have remained very high since the last allocation 23 months ago, reflecting a drying river system and contributing to the 69 GL resource shortfall.
- The general security and ECA delivery loss account is empty. Therefore deliveries from these accounts must be debited at the dam wall meaning owners 'pay' for their own water delivery.
- If extreme dry conditions continue, tougher drought contingency measures may be needed to secure critical human needs beyond this water year.

Seasonal climate outlook

The Bureau of Meteorology seasonal outlook for January to March indicates that the catchment is likely to experience neither drier nor wetter than average conditions across the catchment. While outlooks for drier than average conditions have eased compared to those issued for late 2019, several months of above average rainfall would be needed to see a recovery from current long-term rainfall deficiencies. Both daytime and night-time temperatures over this period are very likely to be above average.

The Bureau indicates that the El Niño-Southern Oscillation (ENSO) is expected to remain neutral at least till the end of autumn. The positive Indian Ocean Dipole (IOD) has also returned to neutral and is expected to remain neutral in the coming months, meaning it will have little influence on Australian climate. While the IOD has returned to neutral, it was the strongest positive IOD events to impact Australia in recent history, leaving its mark on the Australian landscape for bushfires and heatwaves this summer.

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

Further information

The next monthly water allocation statement for the Gwydir regulated river water source will be available in early-February 2020.

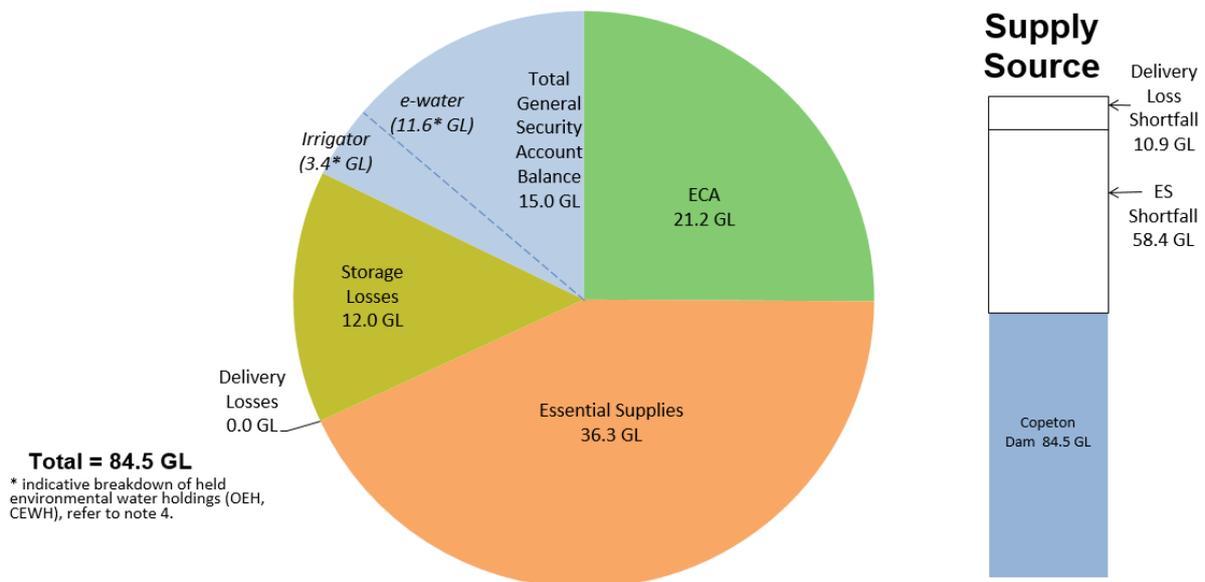
Information on available water determinations and water sharing plans is available on the Department of Industry website: www.industry.nsw.gov.au/water

Resource Assessment Data Sheet

Resource Distribution (as at 31 December 2019)	Volume (GL)	Volume (GL)
Available Resource ⁽¹⁾		84.5
<i>less</i>		
Storage Losses ⁽²⁾	12.0	
Essential Supplies ⁽³⁾	36.3	
ECA	21.2	
Delivery Losses ⁽⁵⁾	0.0	
General Security HEW Account Balance ⁽⁴⁾	11.6	
General Security Irrigators Account Balance	3.4	
<i>equals</i>		
Water available for allocation		0.0

See notes below.

Resource Distribution as at 31 December 2019 Gwydir Valley



Notes:

- (1) Available Resource – is the total active storage at Copeton Dam at the time of assessment.
- (2) Storage Losses – evaporation based on forecast storage behaviour over 2 years at maximum historical rates.
- (3) Essential Supplies – water required to be set aside under the water sharing plan to provide for Towns, Stock, Domestic, High Security and riverine environments. Includes stock and domestic replenishments, delivery loss allowance and end-of-system flow requirements. This is offset by minimum forecast inflows to storage.
- (4) Held environmental water (HEW) – water administered by environmental water holders is being reported here, with the associated portion of general security allocation also identified in the above pie chart and table. The reporting of held environmental water is indicative only, prior to reconciliation of usage and net trade. General Security HEW estimated to be 11.6 GL and High Security HEW is estimated to be 0.7 GL. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW environment water holder and the Commonwealth Environmental Water Holder (CEWH). Details on environmental holdings can be found on individual agency websites.
- (5) Delivery Losses - this account reflects the water needed to deliver general security water. Zero balance means that water must be borrowed to continue the delivery of general security water, in accordance with prior practice. The payback of any borrow will occur before further general security allocation. However, in extreme situations as currently, 'dam wall debit' becomes necessary where water users are debited the ordered volume at the dam and a reduced volume is available at the point of off-take. Effectively water users are 'paying' their own delivery costs.

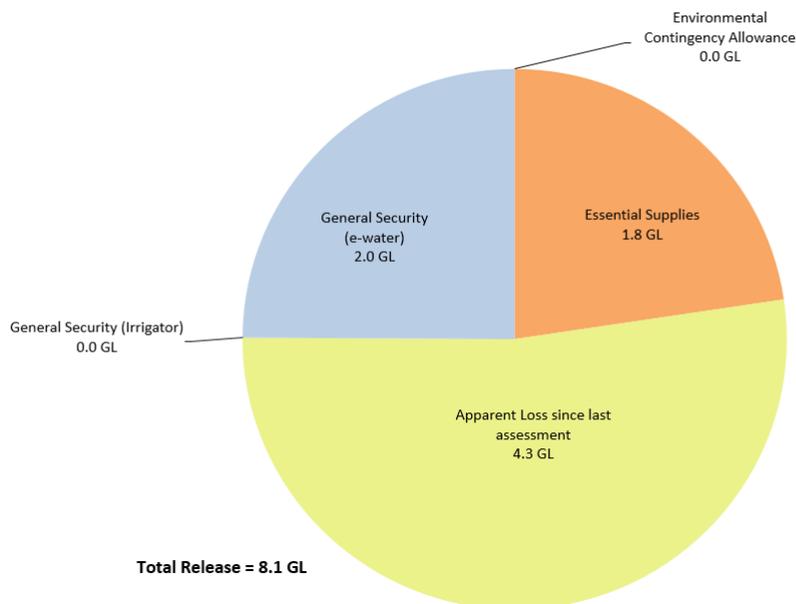
Resource Assessment as at 31 December 2019

Volumes in GL	Budget	Current	Additional	Balance
Storage Loss	11.95	12.70	-0.74	11.95
Essential Supplies for next 24 months	94.72	36.49	-0.18	36.31
Delivery Loss (256 GL max)	10.87	0.00	0.00	0.00
ECA (90 GL max)	-	21.20	0.00	21.20
General Security (764.5 GL max)	-	15.02	0.00	15.02
Additional Resources for Sharing	-	-0.92	0.92	0.00
Total	-	84.49	0.00	84.49

General Security	Value	Unit
Incremental Increase CREDITED	0.00	GL
Available Water Determination	0.0000	ML per unit share

About 8.1 GL was released from Copeton Dam in December 2019 to meet 1.8 GL of essential supply, 2.0 GL of held e-water with an apparent transmission loss of 4.3 GL associated with the release.

Release Distribution for December 2019



Subscribe [here](#) to receive the Department of Planning, Industry and Environment's monthly email update on water planning, management and reform in New South Wales.