

4 October 2019

Gwydir Valley

Allocations

There is no change to allocations in the Gwydir regulated river water source. Rainfall in September was very much below average across the Gwydir catchment with no rain falling at Copeton Dam.

Since the last general security allocation 20 months ago in early February 2018 there has been just 31 gigalitres (GL) of inflow into Copeton Dam **This is the lowest 20-month inflow on record**. The previous lowest inflow was 100 years ago, some 46 GL in the 20-months to September 1919.

The system shortfall has grown to 45.7 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 4 October)

Copeton Dam is 8.5 per cent full – steady – currently holding about 133,000 megalitres (ML). This time last year the storage was 22.3 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. With inflows tracking below historical minimums further restrictions may be required in the Gwydir valley to prolong 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 4 GL in September 2019, mostly delivering essential supplies and losses from the reservoir to evaporation.
- Evaporation and transmission losses have remained very high since the last allocation 20 months ago, reflecting the drying river system and contributing to the 46 GL resource shortfall.
- There were no general security or ECA releases in September 2019.
- The general security and ECA delivery loss account is effectively empty.
- 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 the October to December period suggests likely drier and warmer than average conditions

The Bureau's El Niño-Southern Oscillation (ENSO) is at neutral. The positive Indian Ocean Dipole (IOD), which is currently the dominant climate driver for Australia, has strengthened. A positive IOD, typically brings below average winter–spring rainfall and warmer days to the southern and central parts of Australia.

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 on Thursday 7 November 2019.

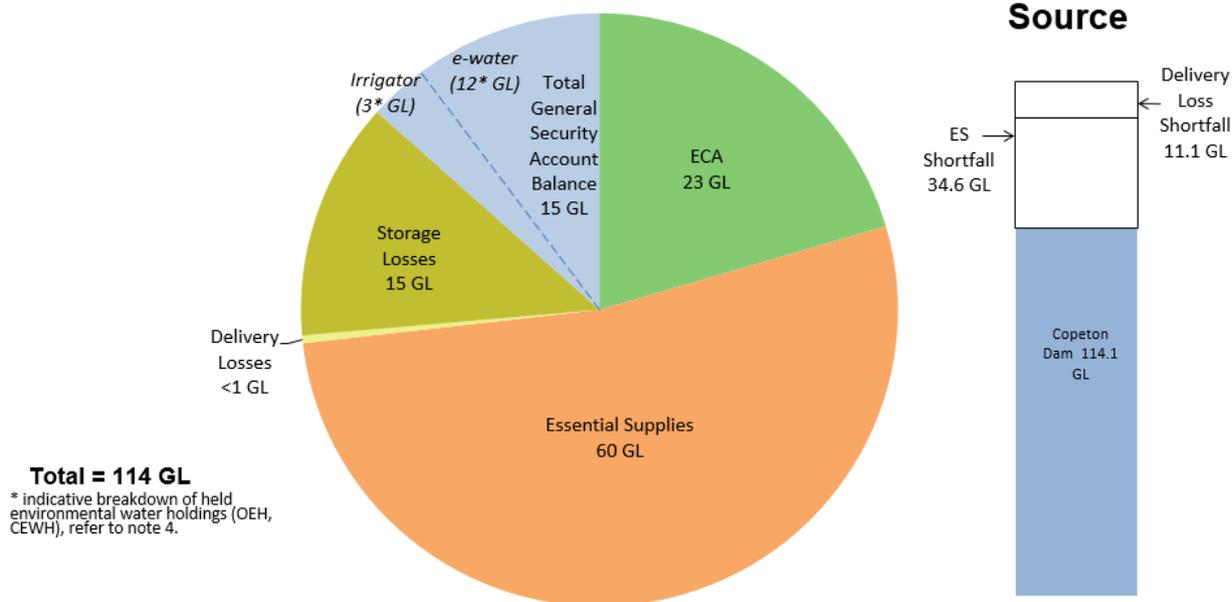
Information on available water determinations and water sharing plans is available on the Department of Industry website: www.industry.nsw.gov.au/water

Resource Assessment Data Sheet

Resource Distribution (as at 30 September 2019)	Volume (GL)	Volume (GL)
Available Resource ⁽¹⁾		114.0
<i>less</i>		
Storage Losses ⁽²⁾	14.8	
Essential Supplies ⁽³⁾	60.2	
ECA	23.3	
Delivery Losses ⁽⁵⁾	0.4	
General Security Account Balance ⁽⁴⁾	15.3	
<i>equals</i>		
Water available for allocation		0.0

See notes below.

Resource Distribution as at 30 September 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 max 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 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 11.6 GL of GS and 5.8 GL of HS. 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. The account balance remains unchanged despite delivering water for GS & ECA since April 2019 due to necessary 'dam wall debit' accounting of the delivery.

Resource Assessment as at 30 September 2019

Volumes in GL	Budget	Current	Additional	Balance
Storage Loss	14.83	15.20	-0.37	14.83
Essential Supplies for next 24 months	94.72	61.27	-1.11	60.16
Delivery Loss (256 GL max)	11.58	0.48	0.00	0.48
ECA (90 GL max)	-	23.33	0.00	23.33
General Security (764.5 GL max)	-	15.26	0.00	15.26
Additional Resources for Sharing	-	-1.48	1.48	0.00
Total	-	114.07	0.00	114.07

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

Copeton Dam released 2.5 GL in September 2019 to meet 1.3 GL of essential supply and associated delivery loss of 1.2 GL.

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