

7 December 2018


Gwydir Valley

Water allocation update

Allocations

Rainfall for November was average in the catchment, with Copeton Dam receiving 82 mm of rain. However, there was no improvement at Copeton Dam due to the dry catchment conditions. As such, the allocations for this year remain **unchanged**.

Apart from general security, all other categories of licence in the regulated river valley have received their maximum allocation for the 2018-19 water year.

2018-19	High Security	General Security	Drought Stage
Gwydir Valley	100%	0%	 Stage 2

Dam levels (as at 7 December)

Copeton Dam is 19 per cent full – falling – currently holding about 267,000 megalitres (ML). This time last year the storage was about 49 per cent full.

Drought stage

NSW extreme events policy has been released for all surface and ground water sources in the NSW Murray Darling Basin. This introduces a staged approach to managing extreme events such as severe droughts or poor water quality events. Incident Response Guides (IRGs) are being developed for each valley as part of water resource plans for each valley to identify triggers and types of actions taken in each stage.

Currently, the Gwydir Valley is assessed to be in Stage 2 drought, as contingency measures are needed to manage the water shortage. For example, block releases are being used to deliver remaining general security account water. The second of the three releases to the Carole Creek and Gil Gil Creek waterways, and the last of the block releases to Moomin Creek, will commence this month.

An explanatory section on drought stages has been provided at the end of this statement.

Key facts

- The volume in Copeton Dam has decreased by about 14,592 ML in November 2018.
- The ongoing dry conditions have resulted in delivery losses contributing 10,920 ML of shortfall to the overall shortfall of 29,490 ML.
- There were no ECA deliveries in November.
- In December, the second of the three block releases to the Carole Creek and Gil Gil Creek and the last of the block releases to the Moomin Creek will commence.
- Furthermore, additional deliveries to the western-most section of the Mehi River will recommence in December.

- Essential requirements are secure for the next two years.

Seasonal climate outlook

The Bureau of Meteorology seasonal outlook for December to February shows no clear indication of drier or wetter conditions for the catchment, though the historical accuracy of the forecast over this region is poor. Daytime and overnight temperatures are very likely above average.

The Bureau's El Niño-Southern Oscillation (ENSO) Outlook (issued 20 November 2018) remains at El Niño ALERT and a positive Indian Ocean Dipole (IOD) event persists. El Niño conditions continue to develop and are expected to remain through the summer months while the current positive IOD will decay by early summer. El Niño conditions are likely to bring warmer than average temperatures for large parts of the continent while a positive IOD typically has very little influence on Australia from December to April.

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

Further information

The next monthly water allocation statement for the Gwydir regulated river will be provided on 10 January 2019.

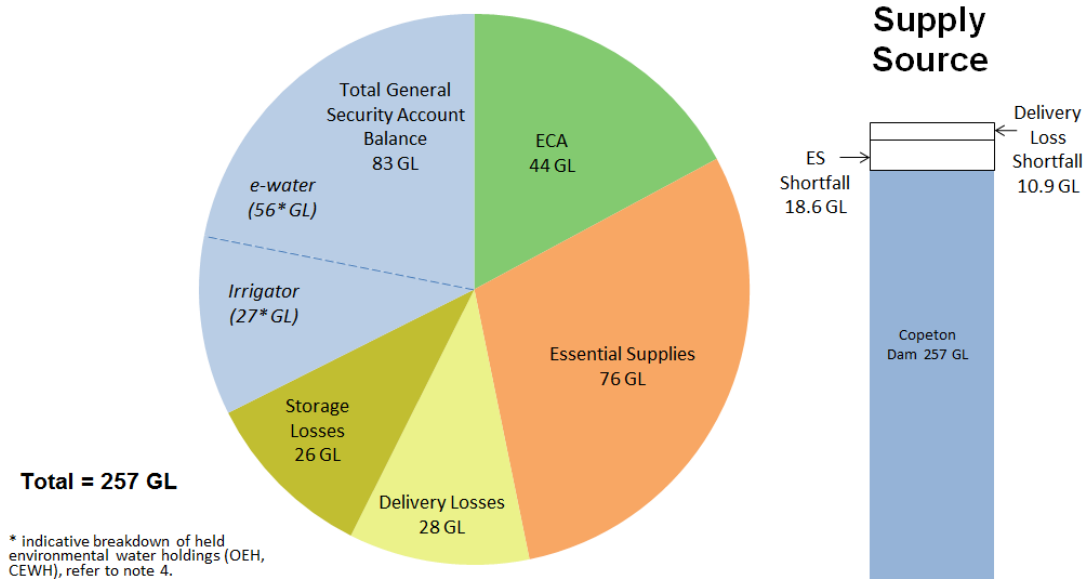
Information on available water determinations and water sharing plans is available on the Department of Industry website - www.industry.nsw.gov.au/water

Resource Assessment Data Sheet

Resource Distribution (as at 30 November 2018)	
	Volume (GL)
Available Resource ⁽¹⁾	256.86
less	
Storage Losses ⁽²⁾	26.20
Essential Supplies ⁽³⁾	76.15
ECA	44.03
Delivery Losses	27.26
General Security Account Balance ⁽⁴⁾	83.23

See notes below.

Resource Distribution as at 30 November 2018 Gwydir Valley



Notes:

- (1) Available Resource – is the total active storage at Copeton Dam at the time of assessment.
- (2) Storage Losses – evaporation loss based on forecast storage behaviour and maximum historical evaporation rates over 2 years.
- (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 commitment 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 56GL of GS and 0GL of HS. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW Office of Environment and Heritage (OEH) and the Commonwealth Environmental Water Holder (CEWH). Details on environmental holdings can be found on individual Agency websites.

Resource Assessment as at 30 November 2018

Volumes in GL	Budget	Current	Additional	Balance
Storage Loss	26.20	27.17	-0.97	26.20
Essential Supplies	94.72	75.51	0.65	76.15
Delivery Loss	38.18	27.26	0.00	27.26
ECA	-	44.03	0.00	44.03
General Security Irrigation	-	83.23	0.00	83.23
Additional Resources for Sharing	-	-0.33	0.33	0.00
Total	-	256.86	0.00	256.86

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




Drought stage trigger levels


The drought stage is determined in accordance with critical trigger levels for this valley as outlined in the Gwydir Valley Incident Response Guide developed by the Department of Industry-Water. A drought stage can range from Stage 1 (normal operations) to Stage 4 (critical drought). It is informed by routine water resource assessment results and is triggered by the degree to which water use priorities can be met within the water source. A summary of each drought stage is provided in the table below.

These drought stages are focused on the ability of the regulated river to deliver existing and high priority commitments within the valley. This is distinct from the drought phases determined by the NSW Department of Primary Industries in their Combined Drought Indicator, which is focused on categorising seasonal conditions based on rainfall, soil water, plant growth and drought direction for individual parishes in NSW.

For further details: <https://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/extreme-events>

Drought stage trigger levels for surface water – general principles

Criticality	Evidence base for surface water	Broad intent of measures
Stage 1 Normal management 	Can deliver all account water under normal river operations practices.	Provide certainty for water use planning. Long term water security and emergency/drought contingency planning.
Stage 2 Drought management 	Unable to deliver 100% of high priority account water and maximum expected use of general security under normal river operations practices.	Operational measures in the current water year to reduce transmission losses and prevent potential future failure to supply water in accounts. Drought response readiness (Local Water Utilities (LWUs)).
Stage 3 Severe drought/water shortage 	Only able to deliver restricted high priority demands and restricted remaining general security account water.	Restricting access to account water, restricting trade, and suspending some WSP rules in addition to increased operational measures to prevent potential future failure to supply water in accounts. Drought management/restrictions (LWUs).

Criticality	Evidence base for surface water	Broad intent of measures
<p>Stage 4</p> <p>Critical drought/water shortage</p> 	<p>Only able to deliver restricted town water supply, stock and domestic and other restricted high priority demands.</p>	<p>Suspension of some WSP rules. Severe restrictions required to prioritise remaining supplies for critical human water needs.</p> <p>Emergency drought management measures/restrictions (LWUs).</p>