

6 March 2020

Gwydir Regulated River Water Source

Allocations

The Gwydir catchment received good rainfall in February, increasing the storage volume by about 50 gigalitres (GL) to a total of 162 GL. Downstream tributary inflows were 60 GL. This improvement is being applied to the deficits in the essential supply account.

The improvements in recent weeks have been welcome but not enough to fully offset the extreme dry conditions experienced over the past 24 months. More sustained rainfall and runoff is required to bring the system back to normal conditions. General security (GS) allocations remain unchanged at zero per cent of entitlement for the 2019-2020 water year.

Since the last general security allocation in early February 2018 there has been around 107 gigalitres (GL) of inflow into Copeton Dam. **This is the second lowest 25-month inflow volume on record.** The lowest inflow was a century ago, with 62 GL in the 25-months to February 1920.

The system shortfall decreased substantially in February 2020 from about 55 GL to about 9 GL; however, it still means that inflows in excess of 9 GL in March are required before normal regulated river operations can resume.

A temporary water restriction was applied to a number of catchments including the Gwydir River and its tributaries from 17 January to 28 February. This restriction has now expired.

2019-20	High Security	General Security	Drought Stage
Gwydir Regulated River Water Source	100%	0%	 Stage 3

Dam levels (as at 6 March 2020)

Copeton Dam is about 10.9 per cent full – steady – currently holding about 165 GL. This time last year the storage was about 12 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 Regulated River Water Source 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 received 146 mm of rainfall in February 2020.
- Inflows into Copeton Dam were 52 GL in February 2020.
- Downstream tributary inflows were 60 GL in February 2020.
- Copeton Dam storage volume increased by about 50 GL in February 2020, as a result of the good inflows into the dam.
- Evaporation and transmission losses have been very high over the last 24 months, reflecting the extreme dry conditions experienced.
- Good inflows into the regulated system in February 2020 have reduced the resource shortfall from 55 GL to 9 GL.
- The general security and ECA delivery loss account is effectively empty but is on its way to recovery as a result of the February 2020 inflows. Deliveries from these accounts currently remain dam-wall-debit meaning owners 'pay' for their own water delivery.
- Essential supply requirements are secure for 2020-21. However, if extreme dry conditions return, drought contingency measures may be needed once again to secure critical human needs beyond this water year.

Seasonal climate outlook

The Bureau of Meteorology seasonal outlook for March to May indicates that the catchment is likely to experience neither drier nor wetter than average conditions. Both daytime and night-time temperatures over this period are likely and very likely (respectively) to be above average.

The Bureau of Meteorology states that the El Niño-Southern Oscillation (ENSO) and the southern Oscillation Index (SOI) are neutral and likely to remain neutral through autumn. With the major climate drivers neutral at this stage, Australia is less likely to see widespread deviation from above average or below average seasonal rainfall.

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 7 April 2020.

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

Water Allocation Statement

Water availability and allocation update

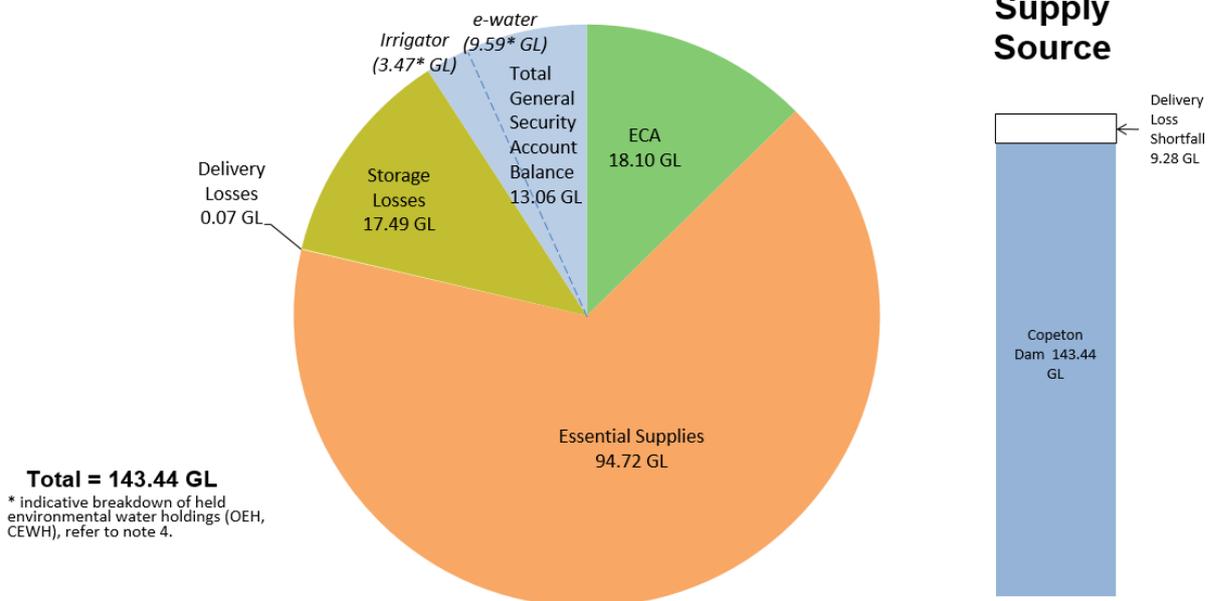


Resource Assessment Data Sheet

Resource Distribution (as at 29 February 2020)	Volume (GL)	Volume (GL)
Available Resource ⁽¹⁾		143.44
<i>less</i>		
Storage Losses ⁽²⁾	17.49	
Essential Supplies ⁽³⁾	94.72	
Environmental Contingency Allowance (ECA)	18.10	
Delivery Losses ⁽⁵⁾	0.07	
General Security Held Environmental Water (HEW) Account Balance ⁽⁴⁾	9.59	
General Security Irrigator Account Balance	3.47	
<i>equals</i>		
Water available for allocation		0.00

See notes below.

**Resource Distribution as at 29 February 2020
Gwydir Regulated River Water Source**



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 9.59 GL and High Security HEW is estimated to be 0.66 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 29 February 2020

Volumes in GL	Budget	Current	Additional	Balance
Storage Loss	17.49	12.84	4.64	17.49
Essential Supplies for next 24 months	94.72	46.74	47.98	94.72
Delivery Loss (256 GL max)	9.35	0.01	0.06	0.07
ECA (90 GL max)	-	18.10	0.00	18.10
General Security (764.5 GL max)	-	13.06	0.00	13.06
Additional Resources for Sharing	-	52.67	-52.68	0.00
Total	-	143.44	0.00	143.44

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

About 1.23 GL was released from Copeton Dam in February 2020. A combination of dam releases and downstream tributary inflows was utilised to meet demand of 2.54 GL of essential supply and 0.1 GL of Environmental Contingency Allowance (ECA).

Essential Supply demand	2.54 GL
Environmental Contingency Allowance (ECA) demand	0.10 GL
Total demand	2.64 GL
Release from Copeton Dam to meet demand	1.23 GL
Downstream tributary flows utilised to meet demand	1.41 GL

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