

7 December 2023

Gwydir Regulated River Water Source

Water allocation update

General security (GS) licences in the Gwydir regulated river water source have received a further allocation of 1% of entitlement.

Water currently assigned to GS accounts totals 614.4 gigalitres (GL), or an average 119% of entitlement. Environmental Contingency Allowance (ECA) receives the same increase up to its maximum 90 GL account limit.

The inflow to Copeton Dam in November was 9.2 GL and downstream tributary inflows added about 1.9 GL to the system. The forecast storage depletion for Copeton Dam for the assessment horizon is provided toward the end of this statement.

This resource assessment is based on information to 30 November 2023. Any changes in resources from this date will be captured in the next routine statement in January 2024.

Current allocation

7 December 2023	Allocation Increment	Average Account Balance
General security	1%	119%
E C A	1%	100%*

* Maximum allowable

Dam levels (as of 7 December 2023)

Copeton Dam is 80% full, holding about 1,089 GL. This time last year it was 97% full.

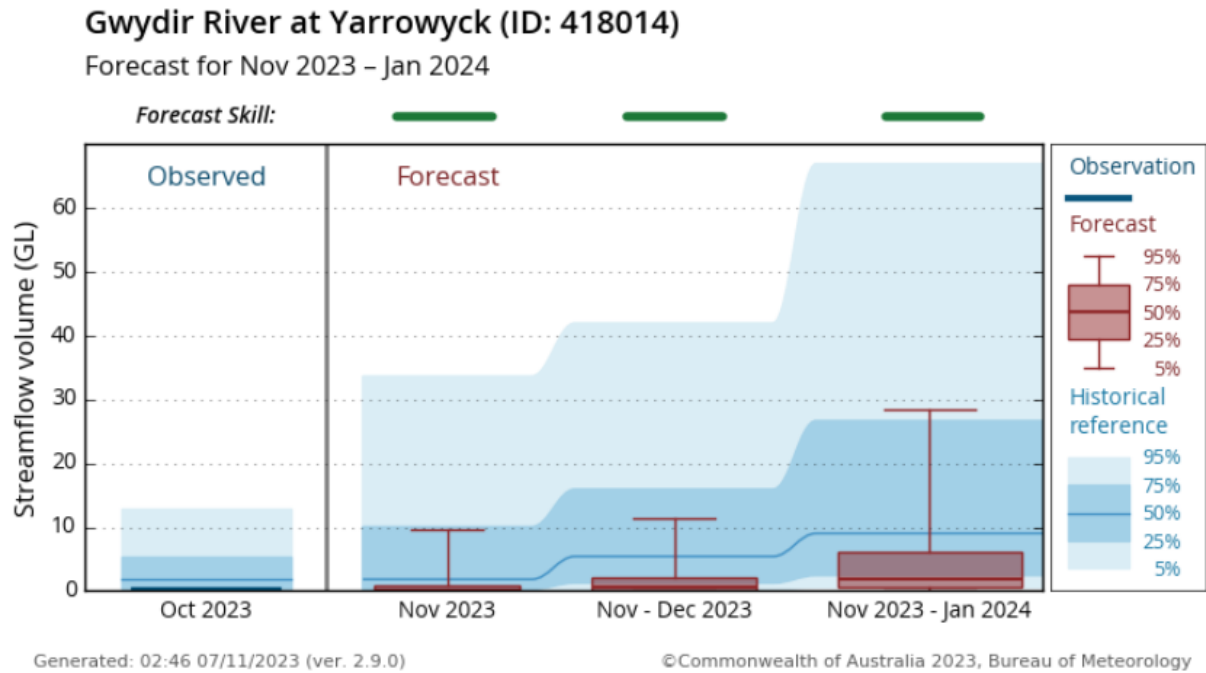
Climate and streamflow outlooks

The Bureau of Meteorology's seasonal outlook for January to March indicates that rainfall is likely to be below average for the Gwydir Rivers region. Both maximum and minimum temperatures are very likely to be above average for the same period.

Further details at: www.bom.gov.au/climate/outlooks/#/overview/summary

The Bureau of Meteorology issues a seasonal flow forecast for the Gwydir River at Yarrowyck, upstream of Copeton Dam (see the figure below). This may provide an indication

of potential inflows into the dam in the coming months. All forecast quantiles of total flow volumes from November to January 2024 are lower than the historical flows indicating a likely drier outlook for inflows. The graph for November to January 2024 is shown below, and updates can be found at: www.bom.gov.au/water/ssf/#id=418014



Resource assessment data sheet

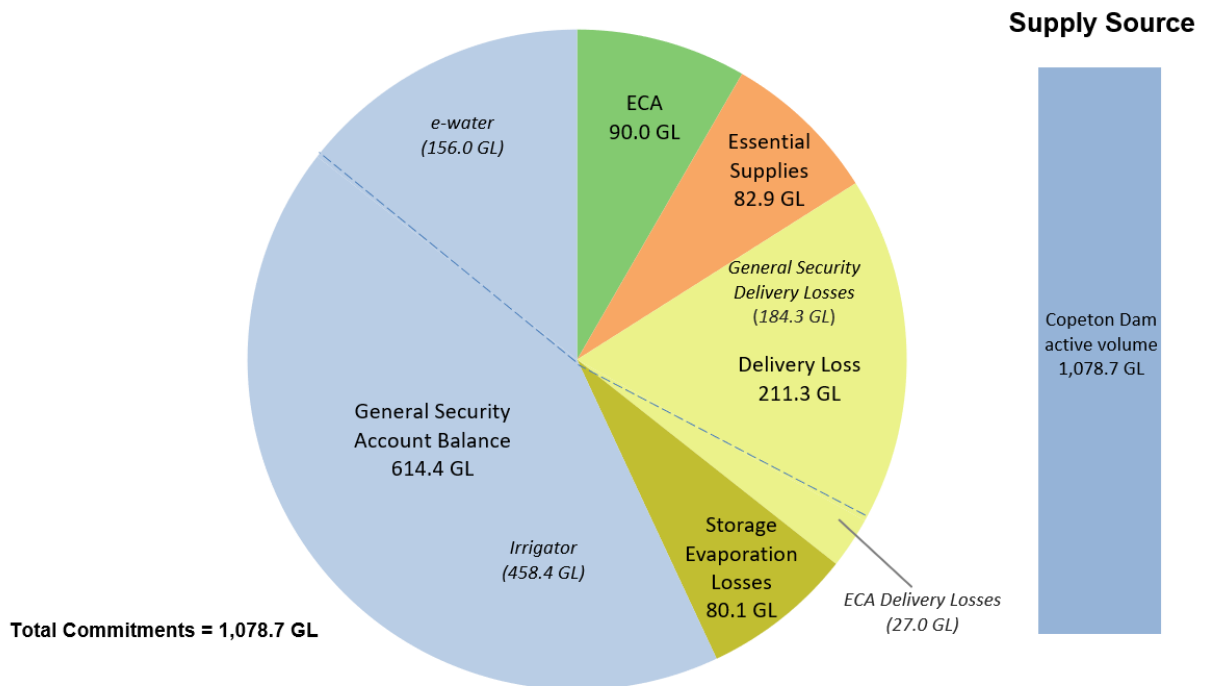
Resource distribution (as of 30 November 2023)	Volume (GL)
Copeton Dam active volume	1, 078.7
<i>less</i>	
Storage Evaporation Losses ⁽¹⁾	80.1
Essential Supplies ⁽²⁾	82.9
Environmental Contingency Allowance (ECA)	90.0
Delivery Loss General Security ⁽³⁾	184.3
Delivery Loss ECA ⁽³⁾	27.0
General Security Held Environmental Water Account Balance ⁽⁴⁾	156.0
General Security Irrigator Account Balance	458.4
<i>equals</i>	
Surplus (deficit) ⁽⁵⁾	0.0

Notes:

⁽¹⁾ Storage evaporation losses are based on forecast surface area and max 24 months historical evaporation.

- (2) This reserve of essential supplies reflects water required under the water sharing plan to provide for local water utility, stock and domestic, high security and riverine environments for the next 24 months. It includes stock and domestic replenishments, delivery loss allowance, and end-of-system flow requirements.
- (3) This volume reflects the water needed to deliver general security and ECA water. Traditionally, a 30% delivery loss has been budgeted for this river system. See the table below for the actual volume remaining in the budget, which may be lower.
- (4) General security held environmental water (HEW) account balance is estimated to be 156 GL, and High Security HEW account balance is estimated to be 5.76 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).
- (5) All available resource is allocated in this assessment producing no resource surplus or deficit.

**Resource Distribution as at 30 November 2023
Gwydir Regulated River Water Source**



Resource assessment as at 30 November 2023

Volumes in GL	Budget	Current	Additional	Balance
Storage Evaporation Loss	80.1	81.9	-1.8	80.1
Essential Supplies for next 24 months	82.9	80.8	2.1	82.9
Delivery Loss ECA+GS (256 GL max)	211.3	209.1	2.2	211.3
<i>Delivery Loss GS (229.0 GL max)</i>	<i>184.3</i>	<i>182.1</i>	<i>2.2</i>	<i>184.3</i>
<i>Delivery Loss ECA (27 GL max)</i>	<i>27.0</i>	<i>26.9</i>	<i>0.1</i>	<i>27.0</i>
ECA (90 GL max)		87.8	0.2	90.0
General Security (764.5 GL max)		612.0	2.9	614.4
Additional Resource for Sharing		5.7	-5.7	0.0
Total		1078.7	0.0	1078.7

General Security	Value	Unit
Incremental Increase CREDITED	2.9	GL
Available Water Determination	0.01	ML per unit share

Allocations in 2023/24

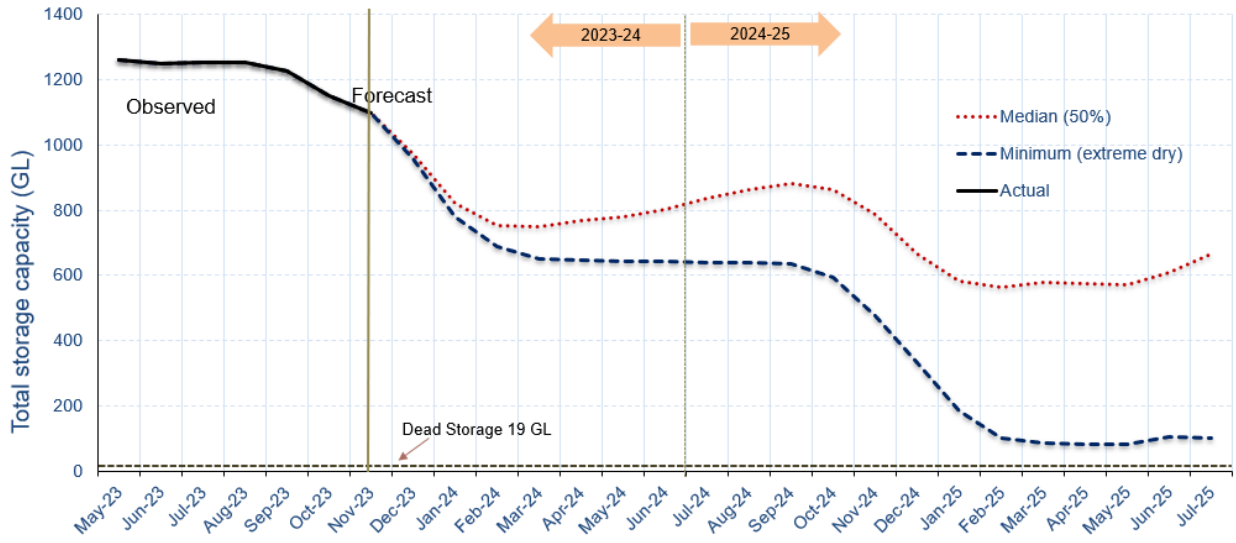
Date	License Category	Increment	Total 2023/24
1-Jul	LWU, Domestic & Stock	100%	100%*
1-Jul	High Security	1.00 ML/unit share	1.00 ML/share*
1-Jul	Supplementary	1.00 ML/unit share	1.00 ML/unit share
1-Jul	Floodplain harvesting	1.00 ML/unit share	1.00 ML/unit share
7-Jul	General Security	0.00 ML/unit share	0.00 ML/unit share
7-Aug	General Security	0.03 ML/unit share	0.03 ML/unit share
7-Dec	General Security	0.01 ML/unit share	0.04 ML/unit share

* Maximum allowable.

Storage volume prediction

Storage outlook for the assessment horizon is provided below. It shows that with current commitments and an assumed repeat of historical minimum inflows together with forecast demands, the volume in Copeton Dam will reduce to a minimum by the end of May 2025 then begin to recover.

Figure: Forecast depletion of Copeton Dam storage volume



Water allocation guide

The NSW Department of Planning and Environment – Water produced a series of guides to describe the water allocation methods for most NSW regulated river systems.

The guide for the Gwydir regulated system is available at: water.dpie.nsw.gov.au/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process

Further information

The next water allocation information for this water source will be published on **Monday, 8 January 2024**.

Information on available water determinations and water sharing plans is available on the department's website: water.dpie.nsw.gov.au

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