

7 November 2023

Gwydir Regulated River Water Source

Water allocation update

There is no increase in allocation to general security (GS) licenses in the regulated Gwydir water source. Water currently assigned to general security accounts totals 652.2 gigalitres (GL), or an average of 128% of entitlement. The Environmental Contingency Allowance (ECA) account balance is currently at 90 GL, its maximum (100%) limit.

The inflow to Copeton Dam in October was 4.3 GL and downstream tributary inflows totalled about 0.5 GL. The storage forecast graph for the assessment horizon is provided at the end of this statement.

This resource assessment is based on information to 31 October 2023. Any changes in resources from this date will be captured in the next routine statement in December.

Current allocation

7 November 2023	Allocation Increment	Average Account Balance
General security	0%	128%
E C A		100%*

* Maximum allowable

Dam levels (as of 6 November 2023)

Copeton Dam is about 83% full, holding about 1,136 GL. This time last year it was 1,305 GL, 96% full.

Climate and streamflow outlooks

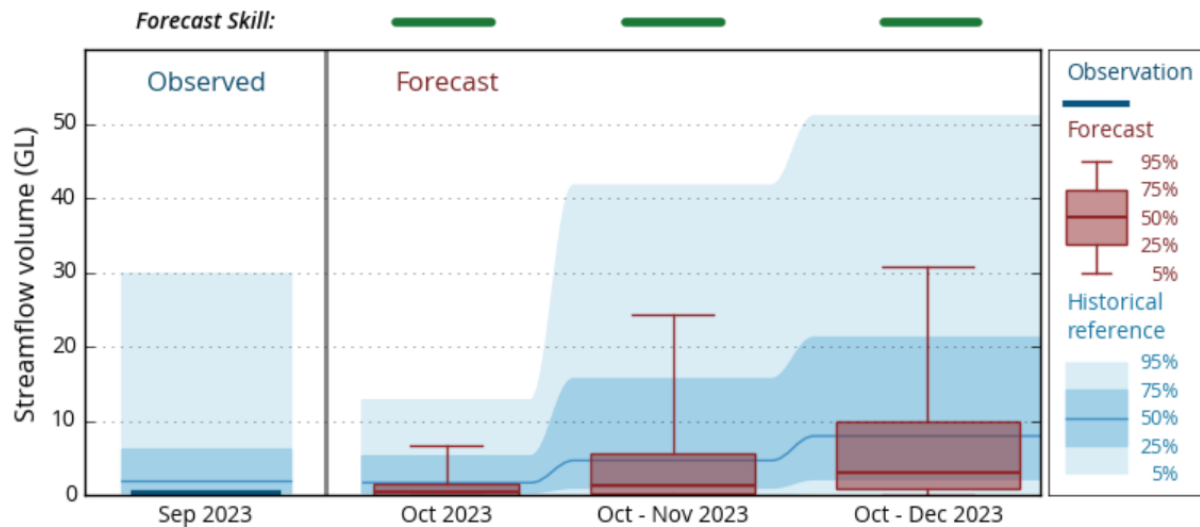
The Bureau of Meteorology's seasonal outlook for December to February indicates that rainfall is likely to be below average for the Gwydir Rivers region. Day and overnight temperatures are likely to be warmer than median over the next three months for the catchment.

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 October to December are lower than the historical flows indicating a likely drier outlook. The graph for October to December 2023 is shown below, and updates can be found at: www.bom.gov.au/water/ssf/#id=418014

Gwydir River at Yarrowyck (ID: 418014)

Forecast for Oct 2023 – Dec 2023



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Resource assessment data sheet

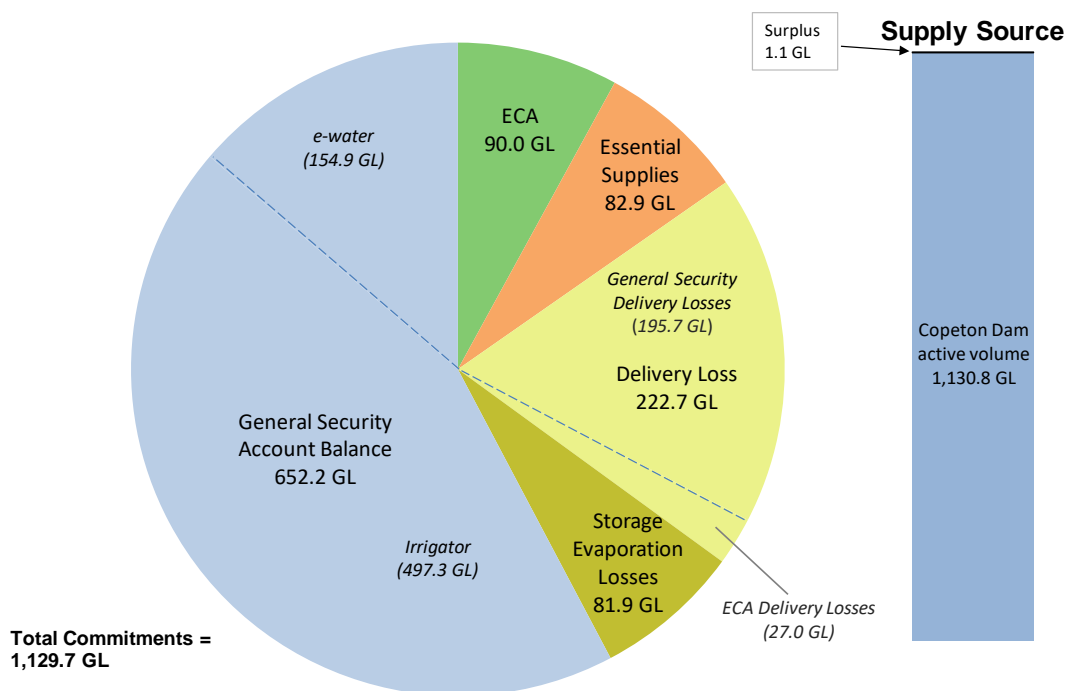
Resource distribution (as of 31 October 2023)	Volume (GL)
Copeton Dam active volume	1,130.8
<i>less</i>	
Storage Evaporation Losses ⁽¹⁾	81.9
Essential Supplies ⁽²⁾	82.9
Environmental Contingency Allowance (ECA)	90.0
Delivery Loss General Security ⁽³⁾	195.7
Delivery Loss ECA ⁽³⁾	27.0
General Security Held Environmental Water Account Balance ⁽⁴⁾	154.9
General Security Irrigator Account Balance	497.3
<i>equals</i>	
Surplus (deficit) ⁽⁵⁾	1.1

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 154.9 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) There is a small resource surplus that is insufficient for an allocation increase this time.

Resource Distribution as at 31 October 2023 Gwydir Regulated River Water Source



Resource assessment as at 31 October 2023

Volumes in GL	Budget	Current	Additional	Balance
Storage Evaporation Loss	81.9	84.2	-2.4	81.9
Essential Supplies for next 24 months	82.9	80.0	2.9	82.9
Delivery Loss ECA+GS (256 GL max)	222.7	226.7	-4.1	222.7
<i>Delivery Loss GS (229.0 GL max)</i>	<i>195.7</i>	<i>199.7</i>	<i>-4.1</i>	<i>195.7</i>
<i>Delivery Loss ECA (27 GL max)</i>	<i>27.0</i>	<i>27.0</i>	<i>0.0</i>	<i>27.0</i>
ECA (90 GL max)		90.0	0.0	90.0
General Security (764.5 GL max)		652.2	0.0	652.2
Additional Resource for Sharing		-2.3	3.5	1.1
Total		1130.8	0.0	1130.8

General Security	Value	Unit
Incremental Increase CREDITED	0	GL
Available Water Determination	0	ML per unit share

Allocations in 2023/24

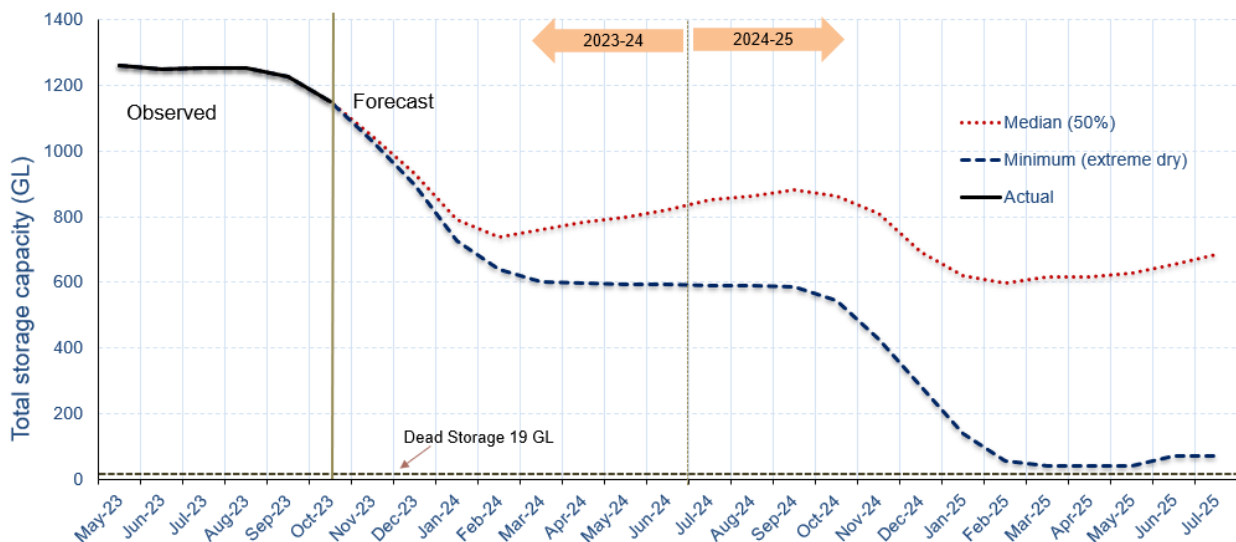
Date	License Category	Increment	Total 2023/24
1-Jul	LWU, Domestic & Stock	100%	100%*
1-Jul	High Security	1.00 ML/unit share	1.00 ML/share*
1-Jul	Supplementary	1.00 ML/unit share	1.00 ML/unit share
1-Jul	Floodplain harvesting	1.00 ML/unit share	1.00 ML/unit share
7-Jul	General Security	0.00 ML/unit share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

* 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 **Thursday, 7 December 2023**.

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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