

7 February 2024

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 3% of their entitlement. Since the last assessment, intermittent rainfall has continued to elevate inflows above minimums and reduce losses, yielding additional resources to support the allocation improvements announced today. Cumulative general security allocation for 2023/24 has increased to 11% of entitlement.

Water currently available to GS water users totals 491.1 gigalitres (GL), or an average 96% of entitlement. Environmental Contingency Allowance (ECA) receives the same increase up to its maximum 90 GL account limit.

The inflow to Copeton Dam in December was 12.3 GL and downstream tributary inflows added about another 1.0 GL to the system. Depletion scenarios for Copeton Dam for the assessment horizon are provided toward the end of this statement.

This resource assessment is based on information to 31 January 2024. Any changes in resources from this date will be captured in the next routine statement in March 2024.

Current allocation

7 February 2024	Allocation Increment	Average Account Balance
General security	3%	96% (491.1 GL)
E C A	3%	90 GL*

* Maximum allowable

Storage levels (as of 7 February 2024)

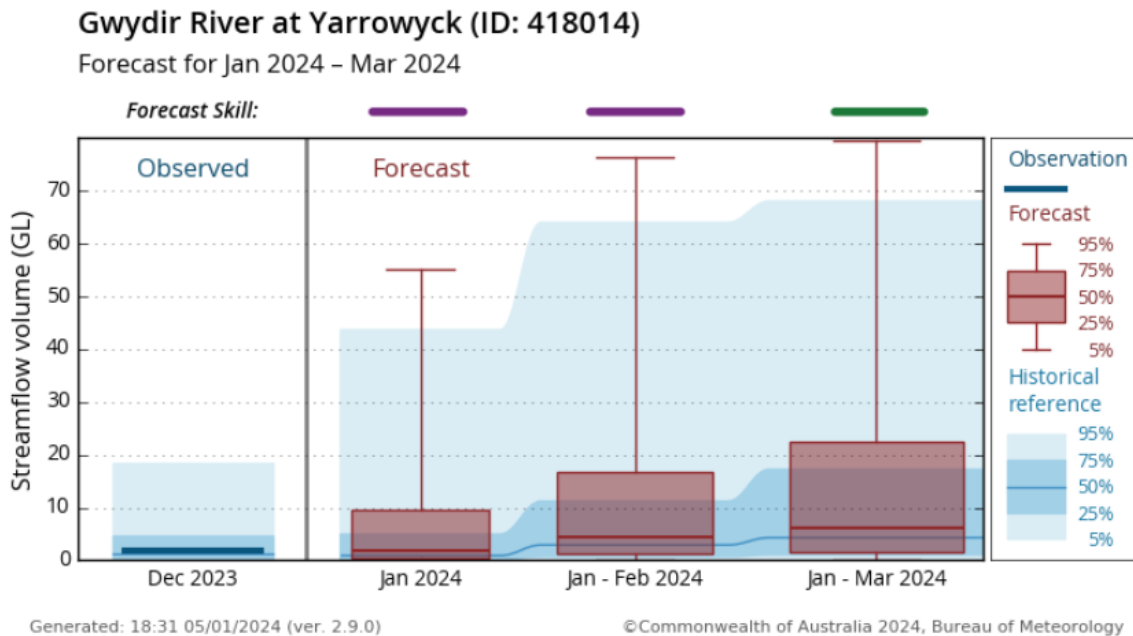
- Copeton Dam is about 66% full – holding about 911 gigalitres (GL).

Climate and streamflow outlooks

The latest Bureau of Meteorology (BoM) seasonal outlook for February to April 2024 indicates rainfall in the Gwydir valley is likely to be median to above median. Daytime and overnight temperatures are expected to be hotter than median over this 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 January to March 2024 are higher than the historical flows indicating a likely wetter outlook for inflows over this period. The graph for January to March 2024 is shown below, and updates can be found at: www.bom.gov.au/water/ssf/#id=418014



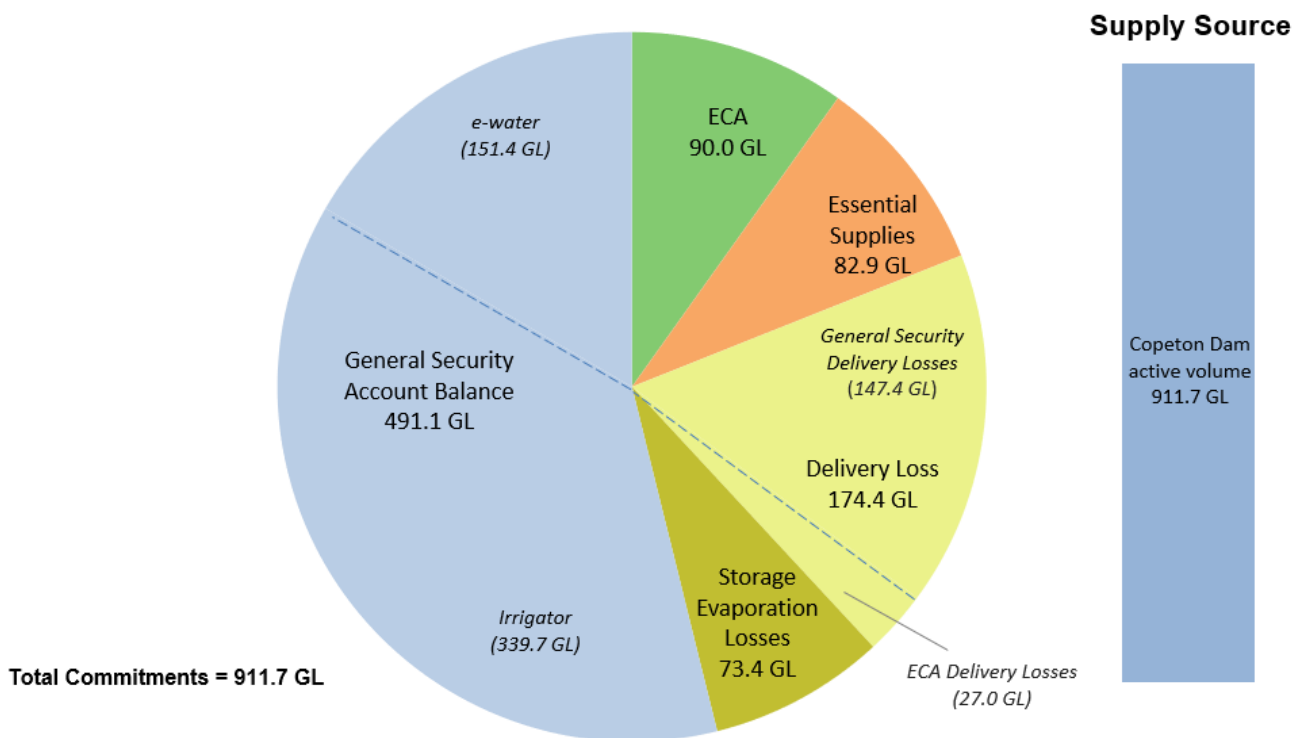
Resource assessment data sheet

Resource distribution (as of 31 January 2024)	Volume (GL)
Copeton Dam active volume	911.7
<i>less</i>	
Storage Evaporation Losses ⁽¹⁾	73.4
Essential Supplies ⁽²⁾	82.9
Environmental Contingency Allowance (ECA)	90.0
Delivery Loss General Security ⁽³⁾	147.4
Delivery Loss ECA ⁽³⁾	27.0
General Security Held Environmental Water Account Balance ⁽⁴⁾	151.4
General Security Irrigator Account Balance	339.7
<i>Equals</i>	
Surplus (deficit) ⁽⁵⁾	0.0

Notes:

- (1) Storage evaporation loss is based on projected storage depletion over the next 24 month and experiencing high evaporation of February 1918 to January 1920.
- (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. This is offset by the minimum inflow into Copeton recorded over February 1918 to January 1920.
- (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 151.4 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 31 January 2024
Gwydir Regulated River Water Source**



Resource assessment as at 31 January 2024

Volumes in GL	Budget	Current	Additional	Balance
Storage Evaporation Loss	73.4	78.0	-4.6	73.4
Essential Supplies for next 24 months	82.9	76.9	6.0	82.9
Delivery Loss ECA+GS (256 GL max)	174.4	157.7	-10.3	174.4
Delivery Loss GS (229.0 GL max)	147.4	157.7	-10.4	147.4
Delivery Loss ECA (27 GL max)	27.0	27.0	0.0	27.0
ECA (90 GL max)		89.8	0.2	90.0
General Security (764.5 GL max)		476.1	15.0	491.1
Additional Resource for Sharing		6.3	-6.3	0.0
Total		911.7	0.0	911.7

General Security	Value	Unit
Incremental Increase CREDITED	15.0	GL
Available Water Determination	0.03	ML per unit share

Allocations in 2023/24

Date	License Category	Increment	Total 2023/24	Account Balance
1-Jul	LWU, Domestic & Stock	100%	100%*	100%*
1-Jul	High Security	1.00 ML/unit share	1.00 ML/share*	100%*
1-Jul	Supplementary	1.00 ML/unit share	1.00 ML/unit share*	100%*
1-Jul	Floodplain harvesting	1.00 ML/unit share	1.00 ML/unit share*	100%*
7-Jul	General Security	0.00 ML/unit share	0.00 ML/unit share	142.5%
7-Jul	ECA	0%	0%	90GL*
7-Aug	General Security	0.03 ML/unit share	0.03 ML/unit share	143%
7-Aug	ECA	3%	3%	90GL*
7-Dec	General Security	0.01 ML/unit share	0.04 ML/unit share	119%
7-Dec	ECA	1%	4%	90GL*
8-Jan	General Security	0.04 ML/unit share	0.08 ML/unit share	112%
8-Jan	ECA	4%	8%	90GL*
7-Feb	General Security	0.03 ML/unit share	0.11 ML/unit share	96%
7-Feb	ECA	3%	11%	90GL*

* 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 close to a minimum by the end of May 2025 then begin to recover.

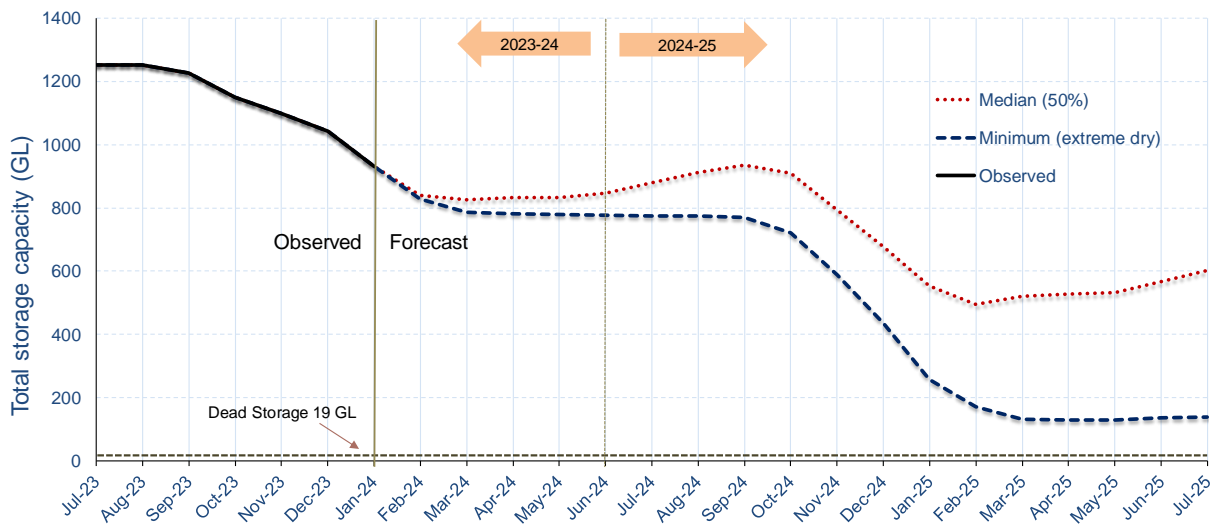


Figure: Simulated depletion of Copeton Dam storage volume

Next announcement

The next Gwydir water allocation statement will be published on **Thursday 7 March 2024**. It will update current conditions and any improvements in water availability.

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

Water allocation guide

The NSW Department of Climate Change, Energy, the Environment and 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

Subscribe [here](#) to receive the Department of Climate Change, Energy, the Environment and Water's monthly email update on water planning, management and reform in New South Wales.

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Feedback on this work or any aspect of the Department's service can be provided using the widget at: www.dpie.nsw.gov.au/contact