

8 April 2024

Gwydir Regulated River Water Source

Water allocation update

There is no increase in General Security (GS) allocation in the Gwydir regulated river water source at this time. Cumulative general security allocation for 2023/24 remains at 11% of entitlement.

Water currently available to GS water users totals 456.4 gigalitres (GL), or an average 90% of entitlement. The Environmental Water Allowance (EWA) account balance is 88.6 GL or 197% full. The EWA was formerly known as Environmental Contingency Allowance (ECA) prior to the plan amendment of July 2022.

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 March 2024. Any changes in resources from this date will be captured in the next routine statement in May 2024.

Current allocation

8 April 2024	Allocation Increment	Average Account Balance
General security	0%	90%
EWA	0%	197%

Storage levels (as of 5 April 2024)

- Copeton Dam is about 63% full – holding 864 gigalitres (GL).

Key information

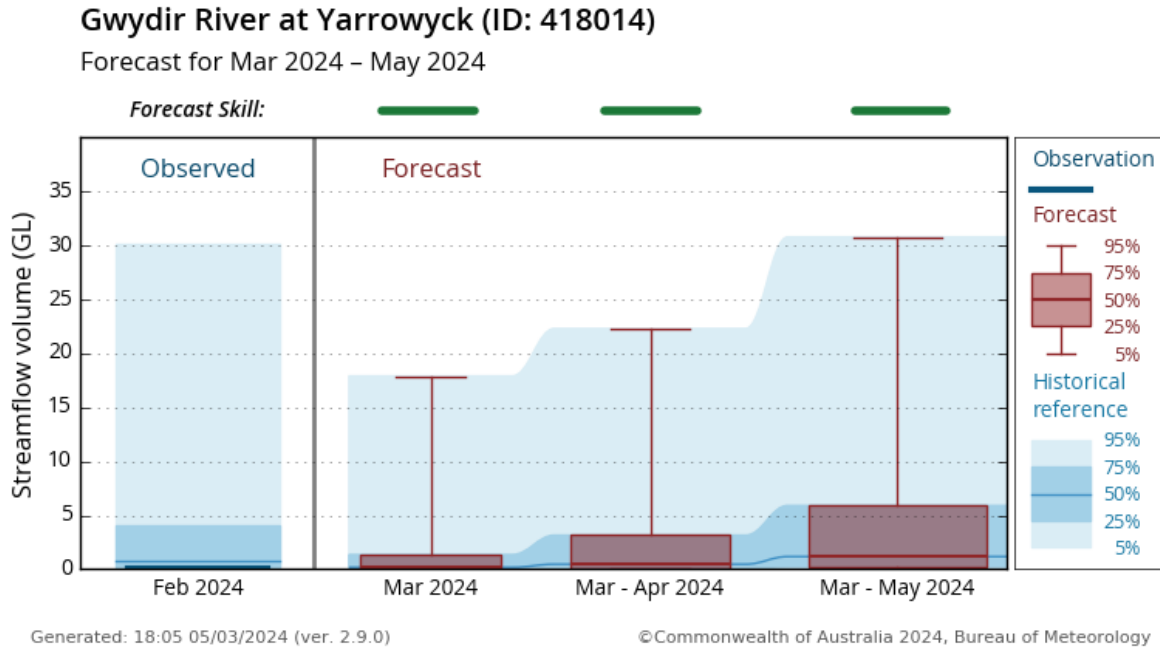
- The inflow to Copeton Dam in March was 1.0 GL and downstream tributary inflows added another 1.0 GL to the system.
- Total essential supply demand was about 2.5 GL, and general security usage was approximately 0.9 GL. The EWA order for the month was about 1.0 GL.
- The general security account balance is currently 456.4 GL, of which 146.7 GL is Held Environmental Water (HEW) and 309.7 GL is other, mostly irrigation, water.

Climate and Streamflow Outlooks

The latest Bureau of Meteorology (BoM) seasonal outlook for April to June 2024 indicates rainfall in the Gwydir valley is likely to be below median. Daytime and overnight temperatures are expected to be hotter than median over this period.

For further details: 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 March to May 2024 are about the same as the historical flows indicating no clear trend away from historical conditions over this period. The graph for March to May 2024 is shown below, and updates can be found at: <http://www.bom.gov.au/water/ssf/#id=418014>



Resource Assessment Data Sheet

Resource distribution (as of 31 March 2024)	Volume (GL)
Copeton Dam active volume	843.9
<i>less</i>	
Storage Evaporation Losses ⁽¹⁾	70.2
Essential Supplies ⁽²⁾	75.3
Environmental Water Allowance (EWA)	88.6
Delivery Loss General Security ⁽³⁾	136.9
Delivery Loss EWA ⁽³⁾	26.6
General Security Held Environmental Water Account Balance ⁽⁴⁾	146.7
General Security Irrigator Account Balance	309.7
<i>Equals</i>	
Surplus/(Deficit) ⁽⁵⁾	(10.1)

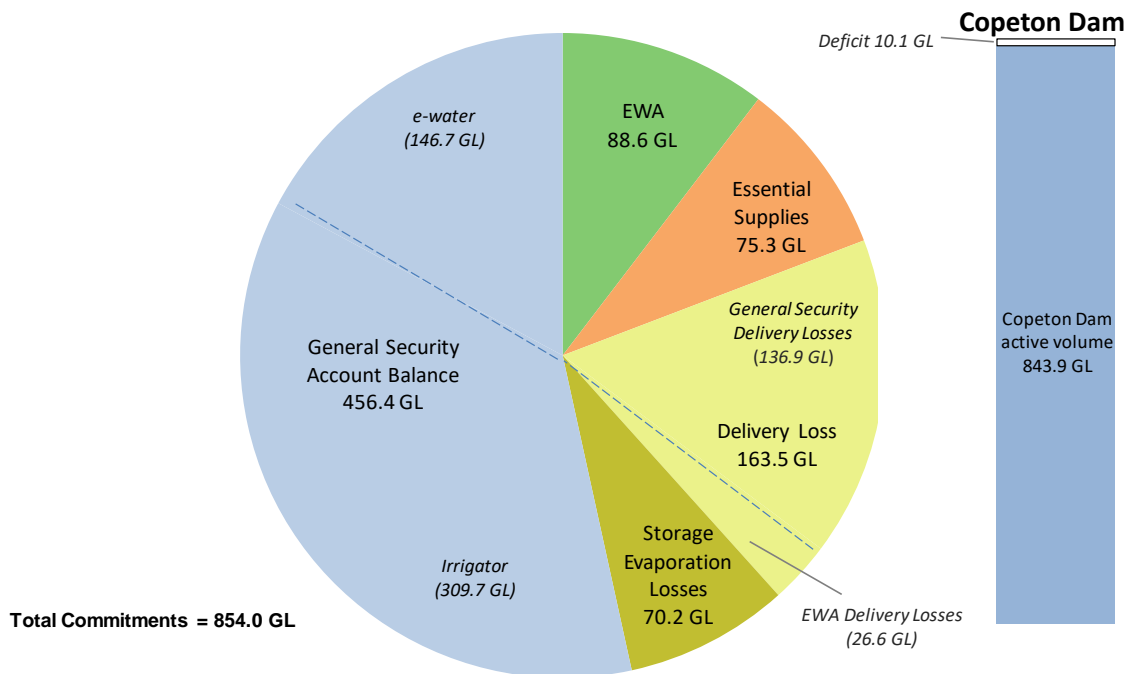
Notes:

- ⁽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. The full reserve is 82.9 GL, of which 7.6 GL is used. Current balance in this assessment is 75.3 GL. The account will be topped up first at the next opportunity. This reserve is for essential supplies for next 24 months.

- (3) This volume reflects the water needed to deliver general security and EWA water. Traditionally, a 30% delivery loss has been budgeted for this river system. See the table below on this statement 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 146.7 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) Surplus or deficit: The general security and EWA delivery loss budget has a small resource deficit, which is currently immaterial and will be closely monitored.

Resource Distribution as at 31 March 2024 Gwydir Regulated River Water Source



Resource assessment as at 31 March 2024

Volumes in GL	Budget	Current	Additional	Balance
Storage Evaporation Loss	70.2	70.8	-0.6	70.2
Essential Supplies for next 24 months	82.9	75.3	0.0	75.3
Delivery Loss EWA+GS (256 GL max)	163.5	155.7	-2.2	153.5
Delivery Loss GS (229.0 GL max)	136.9	130.0	-2.2	127.7
Delivery Loss EWA (27 GL max)	26.6	25.7	0.0	25.7
EWA (90 GL max)		88.6	0.0	88.6
General Security (764.5 GL max)		456.4	0.0	456.4

Uncommitted resources	-2.82	2.82	0.0
Total	843.9	0.0	843.9

General Security	Value	Unit
Incremental Increase CREDITED	0.0	GL
Available Water Determination	0.0	ML /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	EWA	0%	0%	90GL*
7-Aug	General Security	0.03 ML/unit share	0.03 ML/unit share	143%
7-Aug	EWA	3%	3%	90GL*
7-Dec	General Security	0.01 ML/unit share	0.04 ML/unit share	119%
7-Dec	EWA	1%	4%	90GL*
8-Jan	General Security	0.04 ML/unit share	0.08 ML/unit share	112%
8-Jan	EWA	4%	8%	90GL*
7-Feb	General Security	0.03 ML/unit share	0.11 ML/unit share	96%
7-Feb	EWA	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 minimum by the end of March 2026 after which recovery would be expected.

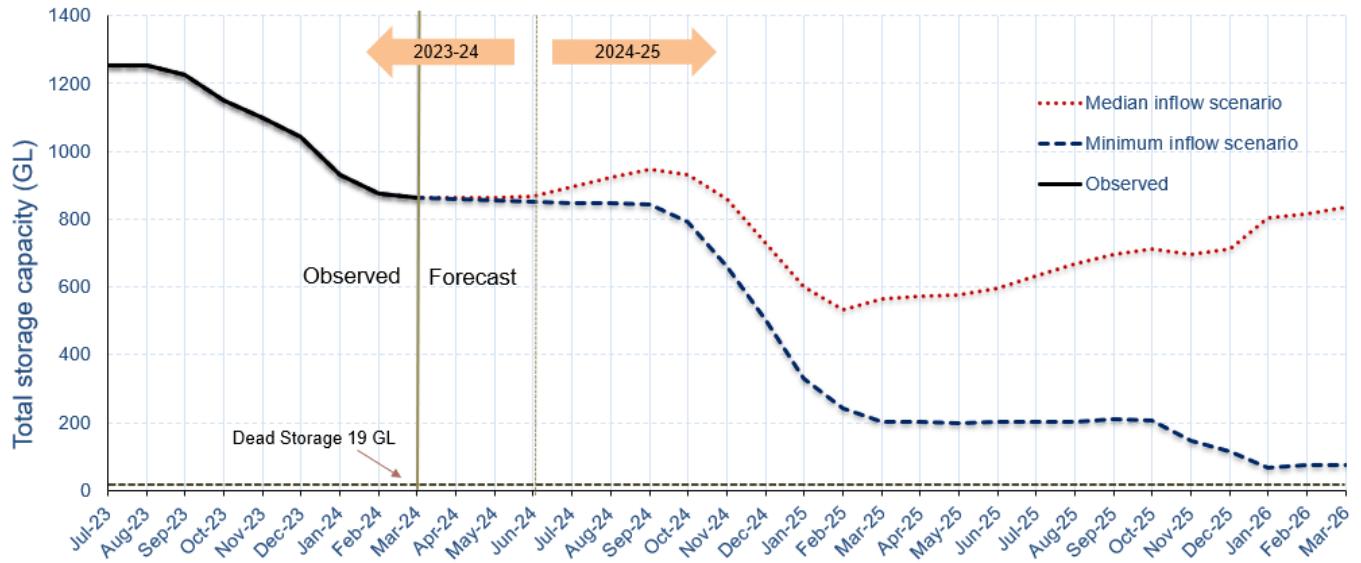


Figure: Simulated depletion of Copeton Dam storage volume

Next announcement

The next routine monthly water allocation statement for this water source will be published on **Tuesday 7 May 2024**.

Information on available water determinations and water sharing plans is available on the department’s website: www.industry.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 the following link: <https://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.

You can also follow the Department on X: @NSWDPIE_Water

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