

12 January 2023

Gwydir Regulated River Water Source

Water allocation update

There has been enough improvement in the Gwydir regulated resource in December to allow for general security water allocation to increase by 11% of entitlement. The increment tops-up account balances overall to 759 gegalitres (GL), or approximately 149% of entitlement.

Environmental Contingency Allowance (ECA) is also topped-up to its maximum limit requiring just 0.95 GL.

Rainfall in December 2022 was below average across the Gwydir catchment. Copeton Dam received about 25 mm of rainfall in December, and storage inflows totalled about 10 GL.

This resource assessment is based on information to 31 December 2022. Any changes in resources from this date forward will be captured in the next resource assessment.

Current allocation

2022/23	General Security Allocation	General Security Account Balance
Gwydir Regulated River	271%	~149%*

* Maximum allowable is 150%.

Dam levels (as of 12 January 2023)

Copeton Dam is about 93% full, falling, and holding about 1,270 GL. This time last year, Copeton Dam was about 96% full.

Key information

- Inflow volume into Copeton Dam in December 2022 was about 10 GL, and the downstream tributary inflow volume was about 12 GL.
- Releases from Copeton Dam totalled 36 GL in December, comprising mainly irrigation and environmental water delivery.
- No water was transferred from high security to general security accounts in December.
- Supplementary usage for the current water year to the end of December has been about 15 GL, which is 8% of the total allocated to supplementary entitlements in 2022/23.

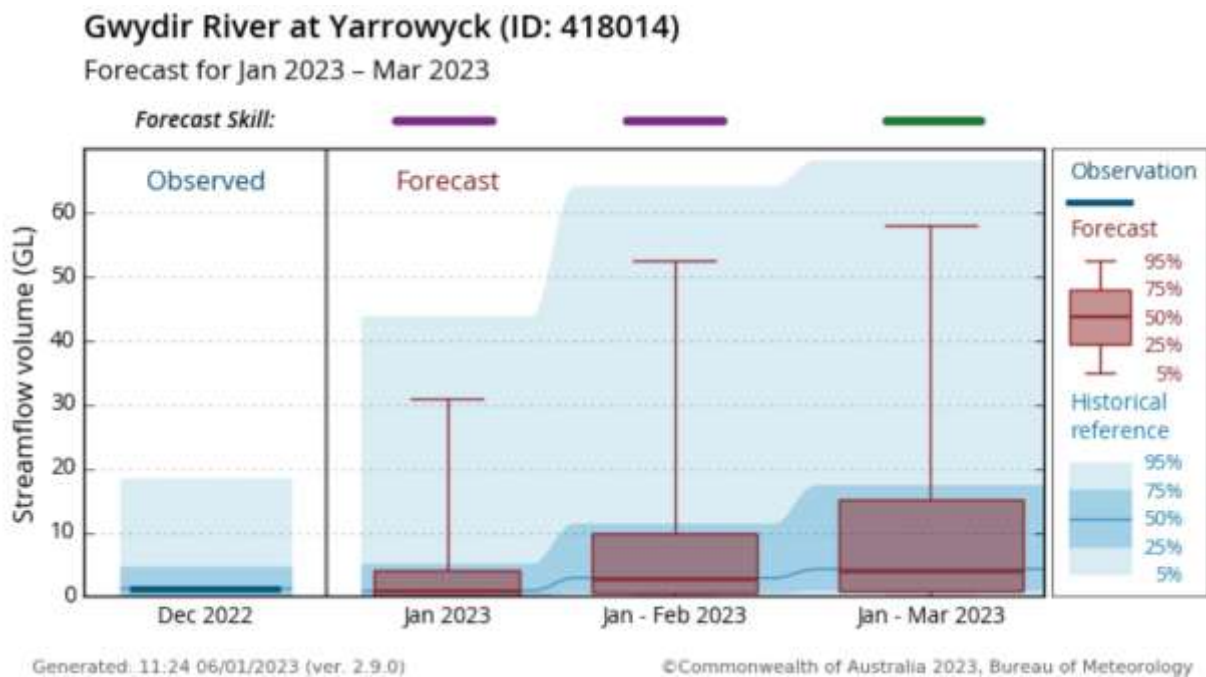
Climate and streamflow outlooks

The Bureau of Meteorology’s seasonal outlook for February to April shows rainfall is equal chance of above or below median for the Gwydir catchment. Maximum and minimum temperatures are likely to be greater than the median temperatures during the next three months.

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 coming months. All forecast quantiles of total flow volumes from January to March is slightly lower than the historical quantile references, indicating a likely shift to lower inflows.

Further details at: www.bom.gov.au/water/ssf/#id=418014



Resource assessment data sheet

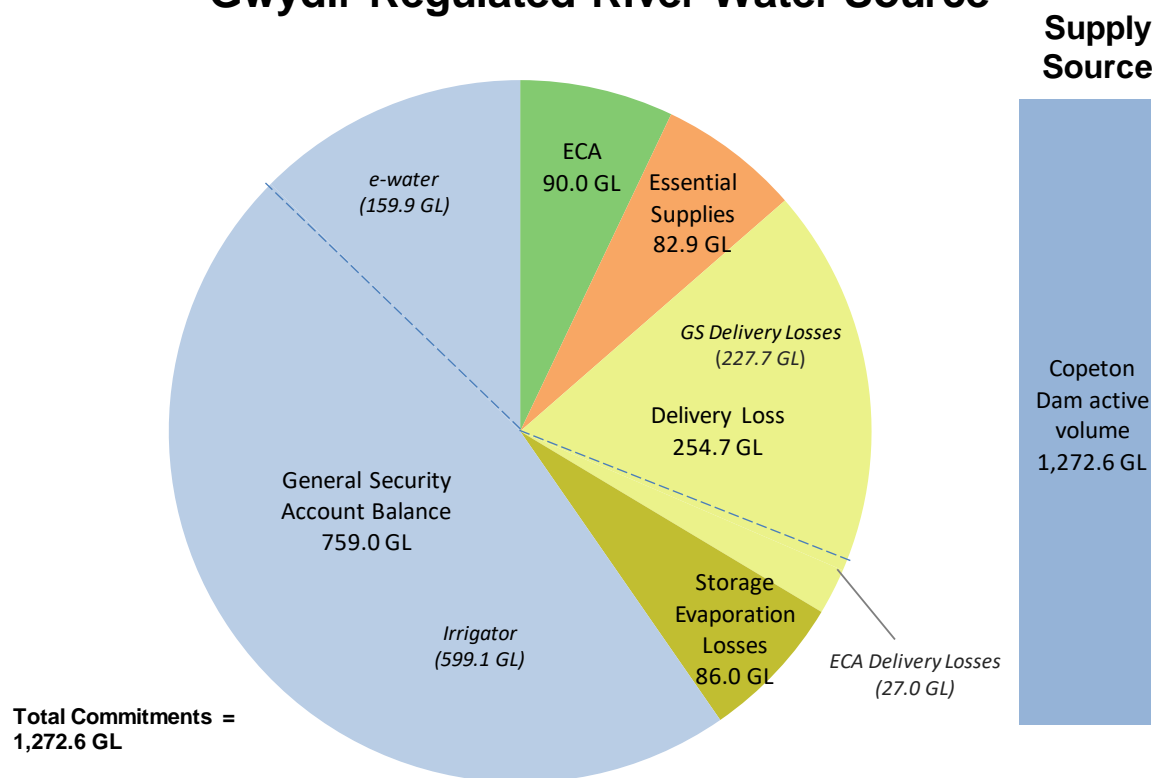
Resource distribution (as of 31 December 2022)	Volume (GL)
Copeton Dam active volume	1,272.6
<i>less</i>	
Storage Evaporation Losses ⁽¹⁾	86.0
Essential Supplies ⁽²⁾	82.9
Environmental Contingency Allowance (ECA)	90.0
Delivery Loss GS ⁽³⁾	227.7
Delivery Loss ECA ⁽³⁾	27.0
General Security Held Environmental Water Account Balance ⁽⁴⁾	159.9
General Security Irrigator Account Balance	599.1
<i>equals</i>	
Surplus (deficit) ⁽⁵⁾	0.0

Notes:

- ⁽¹⁾ Storage evaporation losses is based on maximum historical rates for the next 24 months.
- ⁽²⁾ Essential Supplies: water required to be set aside 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 minimum forecast inflows into the storage.
- ⁽³⁾ Delivery Losses: this account reflects the water needed to deliver general security and ECA water. Traditionally, a 30% delivery loss has been budgeted for this river system. Note: airspace releases for flood mitigation purposes are accounted as losses.
- ⁽⁴⁾ Held environmental water (HEW): the reporting of held environmental water is indicative only. General security HEW account balance is estimated to be 159.9 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 no resource deficit. The system is secure for the next 24 months and beyond.

Resource Distribution as at 31 December 2022

Gwydir Regulated River Water Source



Resource assessment as at 31 December 2022

Volumes in GL	Budget	Current	Additional	Balance
Storage Evaporation Loss	86.01	86.79	-0.79	86.01
Essential Supplies for next 24 months	82.90	79.30	3.60	82.90
Delivery Loss GS (229.3 GL max)	227.70	220.16	7.54	227.70
Delivery Loss ECA (27 GL max)	27.00	26.60	0.40	27.00
ECA (90 GL max)		89.05	0.95	90.00
General Security (764.5 GL max)		742.45	16.54	758.99
Additional Resource for Sharing		28.25	-28.25	0.00
Total		1,272.60	0.00	1,272.60

General Security	Value	Unit
Incremental Increase CREDITED	16.54	GL
Available Water Determination	0.11	ML per unit share

Allocations in 2022/23

Date	License Category	Increment	Total 2022/23	Average Account Balance
1-Jul	Domestic & Stock	100%	100%*	100%*
1-Jul	Local Water Utility	100%	100%*	100%*
1-Jul	High Security	1.00 ML/unit share	1.00 ML/share*	100%*
1-Jul	Supplementary	0.21 ML/unit share	0.21 ML/unit share	
7-Jul	General Security	1.03 ML/unit share	1.03 ML/unit share	150%*
5-Aug	General Security	0.58 ML/unit share	1.61 ML/unit share	~150%*
15-Aug	Floodplain harvesting	1.00 ML/unit share	1.00 ML/unit share	100%*
15-Aug	Supplementary	0.79 ML/unit share	1.00 ML/unit share*	
7-Sep	General Security	0.54 ML/unit share	2.15 ML/unit share	150%*
10-Oct	General Security	0.29 ML/unit share	2.44 ML/unit share	150%*
7-Dec	General Security	0.16 ML/unit share	2.60 ML/unit share	~150%*
12-Jan	General Security	0.11 ML/unit share	2.71 ML/unit share	~149%

* Maximum allowable.

Water allocation guide

The NSW Department of Planning and Environment – Water has 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:

www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process

Further information

The next routine monthly water allocation statement for the Gwydir Regulated River Water Source will be published on **Tuesday 7 February 2023**.

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

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