

South Australia's River Murray Flow and Use Report – Quarter One 2023-24

Issued February 2024

Key Messages

- The South Australian government is committed to open and transparent water management and accounting along the length of the River Murray. This report provides a summary of river flows at key locations along the River Murray in South Australia (SA), water used for critical human water needs (CHWN), consumptive purposes and water for the environment.
- A total of 3754.1 gigalitres (GL) flowed into SA during the first quarter of the 2023-24 water year. This was made up of 584.5 GL of regulated flow (including SA Entitlement, consumptive and environmental water trade) and 3169.6 GL of unregulated flow.
- Of the 584.5 GL of regulated delivery, 53.6 GL was used for general consumptive purposes (primarily irrigation) and 28.4 GL to support CHWN and town water supplies. Conveyance and water left in-river (planned environmental water) totalled 322.3 GL and 180.2 GL was regulated or held environmental water.
- The first quarter of the 2023-24 saw unregulated flows continuing but subsiding for the duration of the quarter as upstream tributaries in the southern connected Basin returned to regulated conditions.
- Environmental water accounts were debited to allow water that would have normally been captured in Lake Victoria/ Tar-Ru to flow through to the South Australian border and keep flows above 20 GL/d for longer. This aimed to maintain higher barrage flows to the Coorong in early spring and prevent a rapid reduction in Coorong water levels, a critical time for *Ruppia tuberosa* growth and recruitment.

Table 1 – River Murray Flow and Use in South Australia 2023-24 (GL)

	2023-24	Q1	Q2	Q3	Q4	Year to Date
Water Flows (GL)	Flow at the SA border	3754.1	-	-	-	3754.1
	Regulated	584.5	-	-	-	584.5
	Unregulated	3169.6	-	-	-	3169.6
	Flow at Lock 1	3613.4	-	-	-	3613.4
	Barrage release	3037.8	-	-	-	3037.8
Regulated Water Use / Purpose (GL)	CHWN and town water supply	28.4	-	-	-	28.4
	Consumptive	53.6	-	-	-	53.6
	Environmental water	180.2	-	-	-	180.2
	Conveyance / remain in-river	322.3	-	-	-	322.3
	Other	0.0	-	-	-	0.0
	Total Regulated Water Use	584.5	-	-	-	-
Deferred Water	Into Storage	0.0	-	-	-	0.0
	Delivered	0.0	-	-	-	336.0

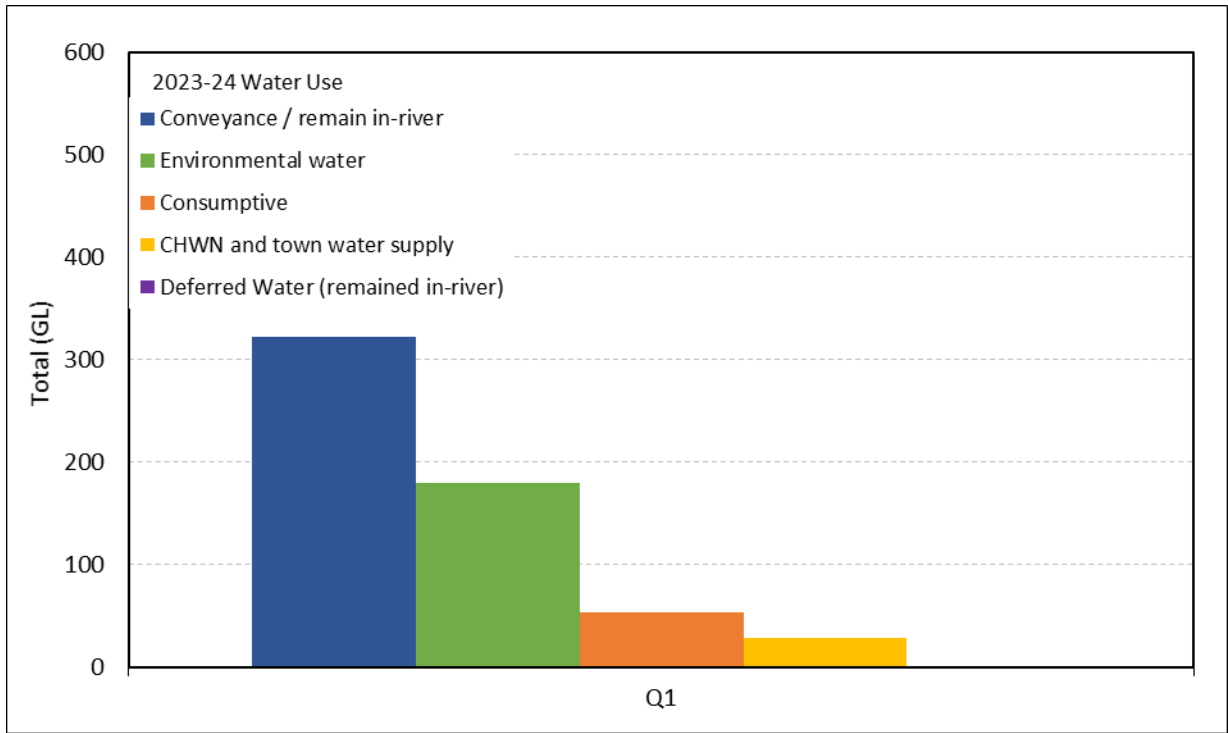


Figure 1 – Regulated River Murray Water Use in South Australia

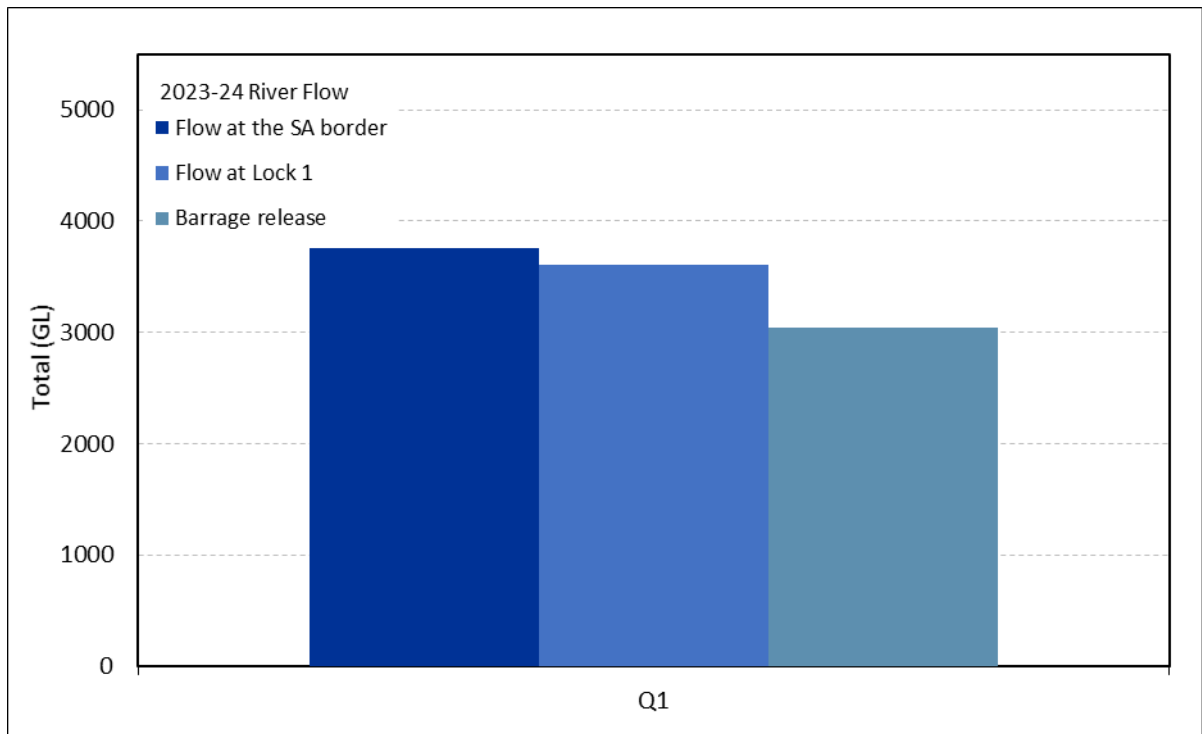


Figure 2 – River Murray Flow in South Australia

Technical Information

Water Flows: Total flow volume passing a specified location

- **Flow at the South Australian Border** – the total volume passing the SA border. This has been separated into its two components.
 - **Regulated Flow** – the total volume of regulated (planned) flow provided to SA. This includes SA Entitlement, consumptive and environmental water trade and the Lindsay River Allowance.
 - **Unregulated Flow** – the additional, uncontrolled volume, above the regulated flow to SA. This is calculated using monthly data provided by the MDBA. Information on unregulated flow events is included in SA's River Murray Flow Reports available at: <https://www.waterconnect.sa.gov.au/River-Murray/SitePages/River%20Murray%20Flow%20Reports.aspx>.
- **Flow at Lock 1** – the total volume passing over Lock 1, as reported by the MDBA and publicly available at <https://riverdata.mdba.gov.au/lock-1-downstream>.
- **Barrage Release** – the total flow over the barrages, as calculated daily by the Department for Environment and Water (DEW) at: <https://water.data.sa.gov.au/Data/Location/Summary/Location/A4261002/Interval/LatestWaterUse/Purpose>
- **Critical Human Water Needs (CHWN) and town water supply** – the total volume extracted from the River Murray for Metropolitan Adelaide, SA Country Towns and stock, domestic and industrial purposes. This includes both metered and estimated use from the quarterly account reconciliation process.
- **Consumptive use** – the total volume used for general consumptive purposes, primarily irrigation use. This includes both metered and estimated use from the quarterly account reconciliation process.
- **Environmental Water** – the total volume of held environmental water that is delivered for environmental outcomes either upstream of Lake Alexandrina or in the Lower Lakes and Coorong. This is calculated and provided monthly by the MDBA to DEW from a combination of metered, estimated and modelled data held by DEW, MDBA and the Commonwealth Environmental Water Holder. It includes all SA-held entitlements held for environmental purposes and environmental allocations traded into SA, either for a direct delivery or from a return flow event. Information on environmental watering activities is included in SA's River Murray Flow Report.
- **Conveyance / remain in-river** – water delivered for conveyance purposes and any unallocated Entitlement that remains in-river as planned environmental water. It also includes water delivered/allocated for consumptive purposes that was not taken and the forced delivery or spill of deferred water, which is delivered to SA in accordance with Schedule G.

Deferred Water

- **Into Storage** – water that has been deferred in accordance with clause 91 and Schedule G of the *Murray-Darling Basin Agreement*. Information on SA's deferral and water storage plans are available at <https://www.environment.sa.gov.au/topics/river-murray/river-management-information/south-australias-storage-right>. This is not part of the regulated flow and use volumes in the table as it is held back in an upstream storage and not delivered to SA.
- **Delivered** – deferred water delivered to SA (either ordered, forced delivery or spill) is part of the regulated flow and use volumes in the table.

Other Key Information

- **Water Use** – a preliminary assessment based on actual and estimated data and is subject to a final assessment and reconciliation at the end of water year. This data reflects the best data available at the date of issue and replaces any data provided for previous quarters in the water year.
- **Year to Date** – the cumulative flow volume and water use for the quarters reported to date. Historical annual reports on water use in South Australia can be accessed on the Murray-Darling Basin Authority's [website](#).
- **Data** – all values included in this report have been rounded to one decimal place. This may result in minor variations from other reported values.

Further Information

For more information on SA's water allocations or to sign up to receive the weekly River Murray Flow Report:

- Visit the [DEW website](#)
- Email DEW:RiverMurrayOps@sa.gov.au
- Subscribe to the River Murray Flow report [here](#).

To speak with someone about your water allocation or account:

- Call the water licensing office on (08) 8595 2053
- Email water licensing on DEW.WaterLicensingBerri@sa.gov.au

To download daily flow data along the River Murray:

- Visit the [MDBA Website](#)