

South Australia's River Murray Flow and Use 2022-23 Reconciled Report

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.
- The report constitutes the final reconciled report for the 2022-23 water year. The values shown in this version for quarters one to three have been recalculated based on best available and reconciled information as at January 2024 and supersede any previous reported numbers during the water year.
- A total of 23085.1 gigalitres (GL) flowed into SA during the 2022-23 water year. This was made up of 3931.6 GL of regulated flow (including SA Entitlement, consumptive and environmental water trade) and 19153.5 GL of unregulated flow. This water also included 336.0 GL of stored water that spilled from the SA Storage Right.
- Of the 3931.6 GL of regulated delivery, 354.4 GL was used for general consumptive purposes (primarily irrigation) and 125.6 GL to support CHWN and town water supplies. Conveyance and water left in-river (planned environmental water) totalled 2211.0 GL and 1240.6 GL was regulated or held environmental water.
- 2022-23 saw unregulated flows entering SA the entire water year. Connectivity between freshwater, estuarine and marine habitats were maximised, with peak flow through the barrages of approximately 120 GL/d contributing to a temporary expansion of the freshwater zone from the barrages into the Coorong. Barrage releases totalled 16597.3 GL.
- The floodwaters scoured the Murray Mouth, which reached a depth of between 11 and 15 metres following the flood peak which allowed dredging to cease between late October 2022 and late November 2023.

Table 1 – River Murray Flow and Use in South Australia 2022-23 (GL)

	2022-23	Q1	Q2	Q3	Q4	Total
Water Flows (GL)	Flow at the SA border	4440.1	10787.4	6121.5	1736.1	23085.1
	Regulated	930.9	908.7	1244.9	847.1	3931.6
	Unregulated	3509.2	9878.7	4876.6	889.0	19153.5
	Flow at Lock 1	3843.1	8405.9	8703.7	1675.6	22628.3
	Barrage release	3380.8	5520.1	6371.7	1324.7	16597.3
Regulated Water Use / Purpose (GL)	CHWN and town water supply	35.2	40.2	31.8	18.4	125.6
	Consumptive	28.0	75.3	170.8	80.3	354.4
	Environmental water	335.0	110.5	421.4	373.7	1240.6
	Conveyance / remain in-river	532.7	682.7	620.9	374.7	2211.0
	Other	0.0	0.0	0.0	0.0	0.0
	Total Regulated Water Use	930.9	908.7	1244.9	847.1	3931.6
Deferred Water	Into Storage	0.0	0.0	0.0	0.0	0.0
	Delivered	305.0	31.0	0.0	0.0	336.0

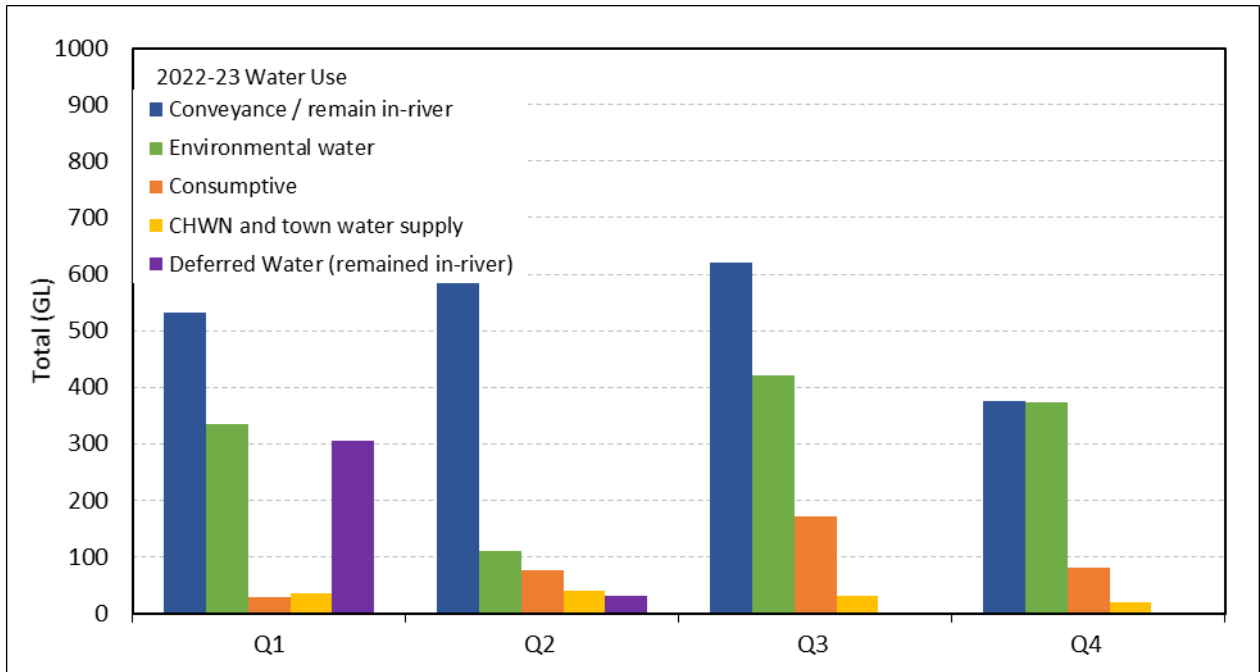


Figure 1 – Regulated River Murray Water Use in South Australia

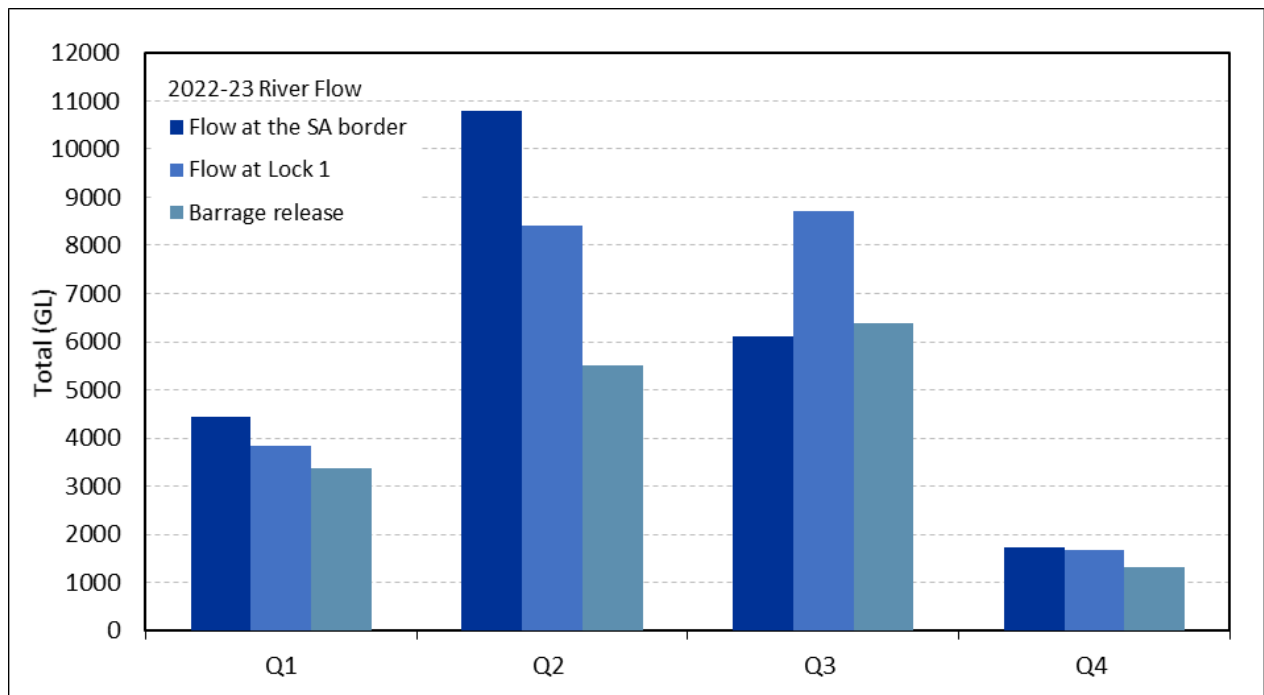


Figure 2 – River Murray Flow in South Australia

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](#)