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

Issued April 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 2013.2 gigalitres (GL) flowed into SA during the second quarter of the 2023-24 water year. This was made up of 1497.3 GL of regulated flow (including SA Entitlement, consumptive and environmental water trade) and 515.9 GL of unregulated flow.
- Of the 1497.3 GL of regulated delivery, 160.7 GL was used for general consumptive purposes (primarily irrigation) and 51.3 GL to support CHWN and town water supplies. Conveyance and water left in-river (planned environmental water) totalled 365.1 GL and 920.2 GL was regulated or held environmental water.
- The second quarter of the 2023-24 saw unregulated flows subsiding by the end of the quarter as upstream tributaries in the southern connected Basin returned to regulated conditions. South Australia deferred a total of 15 GL of Entitlement in November and December 2023 as storage space became available in Lake Victoria. However, this water spilled in early quarter three when inflows to Lake Victoria increased and the lake reached its full supply level.

	2023-24	Q1	Q2	Q3	Q4	Year to Date
Water Flows (GL)	Flow at the SA border	3754.1	2013.2	-	-	5767.3
	Regulated	584.1	1497.3	-	-	2081.4
	Unregulated	3170.0	515.9	-	-	3685.9
	Flow at Lock 1	3613.4	1891.2	-	-	5504.6
	Barrage release	3037.8	1494.4	-	-	4532.2
Regulated Water Use / Purpose (GL)	CHWN and town water supply	28.4	51.3	-	-	79.7
	Consumptive	53.6	160.7	-	-	214.3
	Environmental water	180.2	920.2	-	-	1096.1
	Convoyance / romain in river	322.3	365.1	-	-	691.3
	Other	0.0	0.0	-	-	0.0
	Total Regulated Water Use	584.5	1497.3	-	-	2081.4
Deferred	Into Storage	0.0	15.0	-	-	15.0
Water	Delivered	0.0	0.0	-	-	0.0

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



River Murray flow and use in South Australia

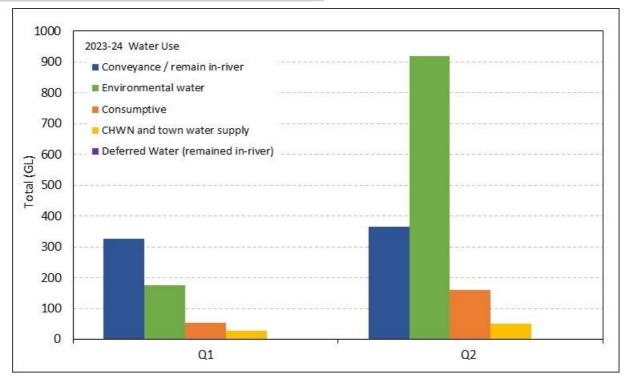


Figure 1 – Regulated River Murray Water Use in South Australia

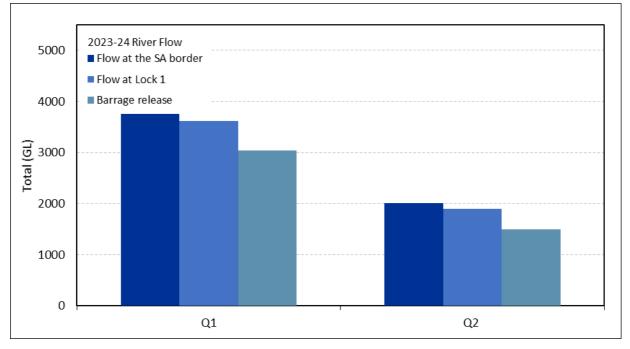


Figure 2 - River Murray Flow in South Australia



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: <u>https://www.waterconnect.sa.gov.au/River-Murray/SitePages/River%20Murray%20Flow%20Reports.aspx</u>.
- 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: <u>https://water.data.sa.gov.au/Data/Location/Summary/Location/A4261002/Interval/Latest</u> <u>Water Use / Purpose</u>
- 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 <u>https://www.environment.sa.gov.au/topics/river-murray/river-management-information/south-australias-</u> <u>storage-right</u>. 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 <u>website</u>.
- 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:

- o Visit the <u>DEW website</u>
- o Email <u>DEW:RiverMurrayOps@sa.gov.au</u>
- Subscribe to the River Murray Flow report here.

To speak with someone about your water allocation or account:

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

To download daily flow data along the River Murray:

• Visit the MDBA Website

