

South Australia's River Murray Flow and Use Report - Quarter One 2020-21

Issued 1 December 2020

Key Messages

- The Government of South Australia 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, water used for critical human water needs (CHWN) and consumptive purposes and water for the environment.
- A total of 890.3 GL flowed into South Australia between July and September 2020, comprising 428.6 GL of regulated water (including SA Entitlement, consumptive and environmental water trade) and 461.7 GL of unregulated flow, which remained in-river for the environment.
- Of the regulated water, 37.2 GL was used for general consumptive purposes (primarily irrigation) and 53.2 GL to support CHWN and town water supplies. Conveyance and water left in-river (planned environmental water) totalled 249.6 GL and there was a forced delivery of 15.2 GL of deferred water from Lake Victoria.
- Environmental watering activities utilised 88.6 GL of held environmental water. This contributed to the first Lock 4 weir pool raising trial, resulting in positive ecological outcomes in the main river channel and in the Katarapko Creek system. This watering has inundated areas of the floodplain and provided low-lying vegetation with a much needed drink. Waterbirds and frogs have responded to the conditions, which is fantastic to see.
- Over 688 GL flowed over the barrages, maintaining connectivity between the Lower Lakes and the Coorong. This connection is a critical pathway for diadromous fish species such as the ancient, eel-like lamprey and the congollis, which breed in South Australia and also travel up the river into Victoria and New South Wales.

Table 1 – River Murray Flow and Use in South Australia 2020-21 (GL)

	2020-21	Q1	Q2	Q3	Q4	Total - Year to Date
Water Flows (GL)	Flow at the SA border	890.3	-	-	-	890.3
	Regulated	428.6	-	-	-	428.6
	Unregulated	461.7	-	-	-	461.7
	Flow at Lock 1	849.0	-	-	-	849.0
	Barrage release	688.1	-	-	-	688.1
Regulated Water Use / Purpose (GL)	CHWN and town water supply	53.2	-	-	-	53.2
	Consumptive	37.2	-	-	-	37.2
	Environmental water	88.6	-	-	-	88.6
	Conveyance / remain in-river	249.6	-	-	-	249.6
	Other	0.0	-	-	-	0.0
	Total Regulated Water Use	428.6	-	-	-	428.6
Deferred Water	Into Storage	0.0	0.0	0.0	0.0	0.0
	Delivered	15.2	0.0	0.0	0.0	15.2

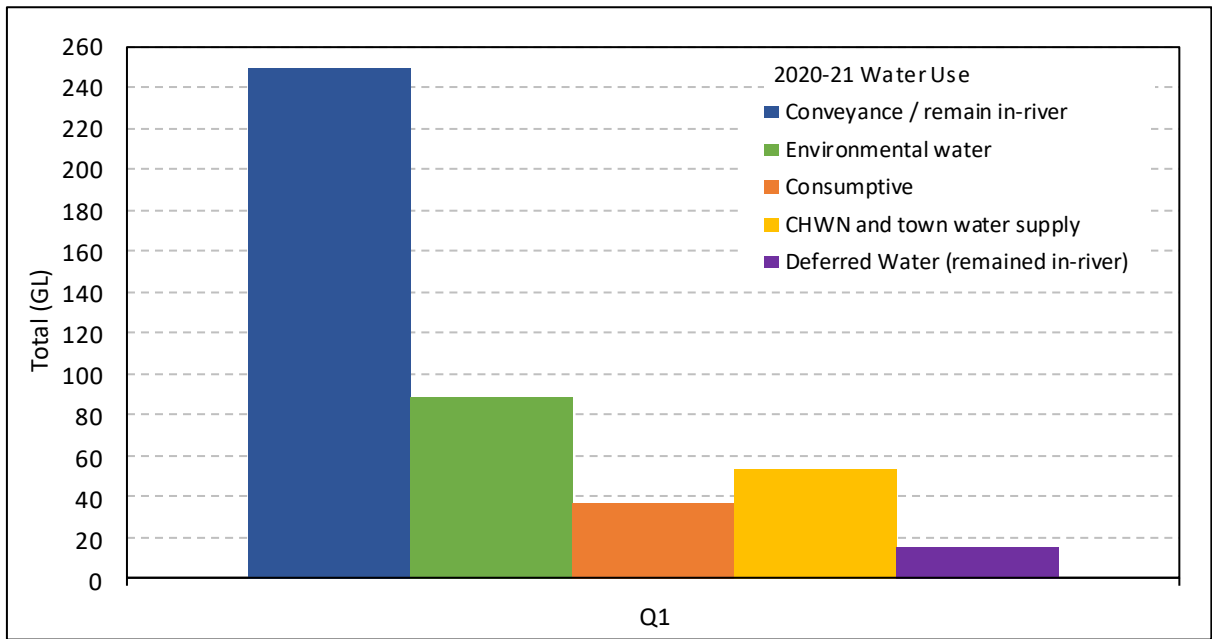


Figure 1 – Regulated River Murray Water Use in South Australia

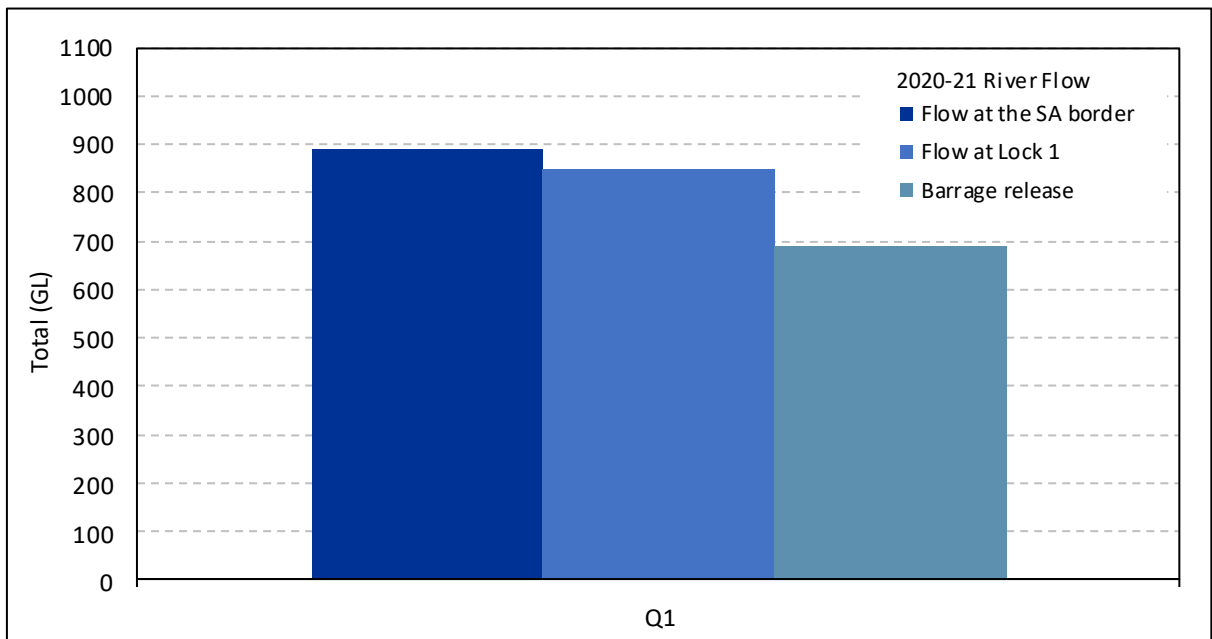


Figure 2 – River Murray Flow in South Australia

Technical Information

Water Flows: Total flow volume passing a specified location

- **Flow at the South Australian Border** – the total volume passing the SA border, as reported by the Murray-Darling Basin Authority (MDBA) and publically available at <https://riverdata.mdba.gov.au/flow-south-australia-calculated>. 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 publically 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) and published weekly in SA's River Murray Flow Report.

Water Use / 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 SA-held entitlements 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.

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/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 South Australia'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](#)