

South Australia's River Murray Flow and Use Report - Quarter Two 2021-22

Issued February 2022

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) and consumptive purposes and water for the environment.
- A total of 2838 gigalitres (GL) flowed into SA between October and December 2021. This was made up of 1130 GL of regulated flow (including SA Entitlement, consumptive and environmental water trade) and 1708 GL of unregulated flow (planned environmental water in South Australia).
- Of the 1130 GL of regulated delivery, 111.7 GL was used for general consumptive purposes (primarily irrigation) and 74 GL to support CHWN and town water supplies. Conveyance and water left in-river (planned environmental water) totalled 568.6 GL and 375.7 GL was regulated or held environmental water.
- Water released from Hume Dam for flood management purposes has been delivered for environmental outcomes. Additionally, environmental allocations have been released from Lake Victoria to boost flows downstream. The delivery of water for the environment maintains connections between the River Murray and its low lying floodplains, wetlands and creeks. It provides improved hydraulic conditions in the Lower Murray to support breeding by large-bodied native fish.
- At the Lower Lakes and Coorong, water for the environment maintained a continuous flow of 1871.4 GL through the barrage fishways to support the upstream migration of native fish such as young-of-year congolli and common galaxias. Freshwater flows also reduced salinity in the Coorong, supporting the Coorong food web including ruppia, estuarine fish and invertebrates.

Table 1 – River Murray Flow and Use in South Australia 2021-22 (GL)

| | 2021-22 | Q1 | Q2 | Q3 | Q4 | Total - Year to Date |
|---|----------------------------------|--------------|---------------|----|----|----------------------|
| Water Flows (GL) | Flow at the SA border | 1509.4 | 2838.0 | - | - | 4347.4 |
| | Regulated | 633.4 | 1130.0 | - | - | 1763.4 |
| | Unregulated | 876.0 | 1708.0 | - | - | 2584.0 |
| | Flow at Lock 1 | 1292.6 | 2720.9 | - | - | 4013.5 |
| | Barrage release | 1097.1 | 1871.4 | - | - | 2968.5 |
| Regulated Water Use / Purpose (GL) | CHWN and town water supply | 36.8 | 74.0 | - | - | 110.8 |
| | Consumptive | 42.4 | 111.7 | - | - | 154.1 |
| | Environmental water | 219.4 | 375.7 | - | - | 595.1 |
| | Conveyance / remain in-river | 334.8 | 568.6 | - | - | 903.4 |
| | Other | 0.0 | 0.0 | - | - | 0.0 |
| | Total Regulated Water Use | 633.4 | 1130.0 | - | - | 1763.4 |
| Deferred Water | Into Storage | 0.0 | 0.0 | - | - | 0.0 |
| | Delivered | 50.0 | 0.0 | - | - | 50.0 |

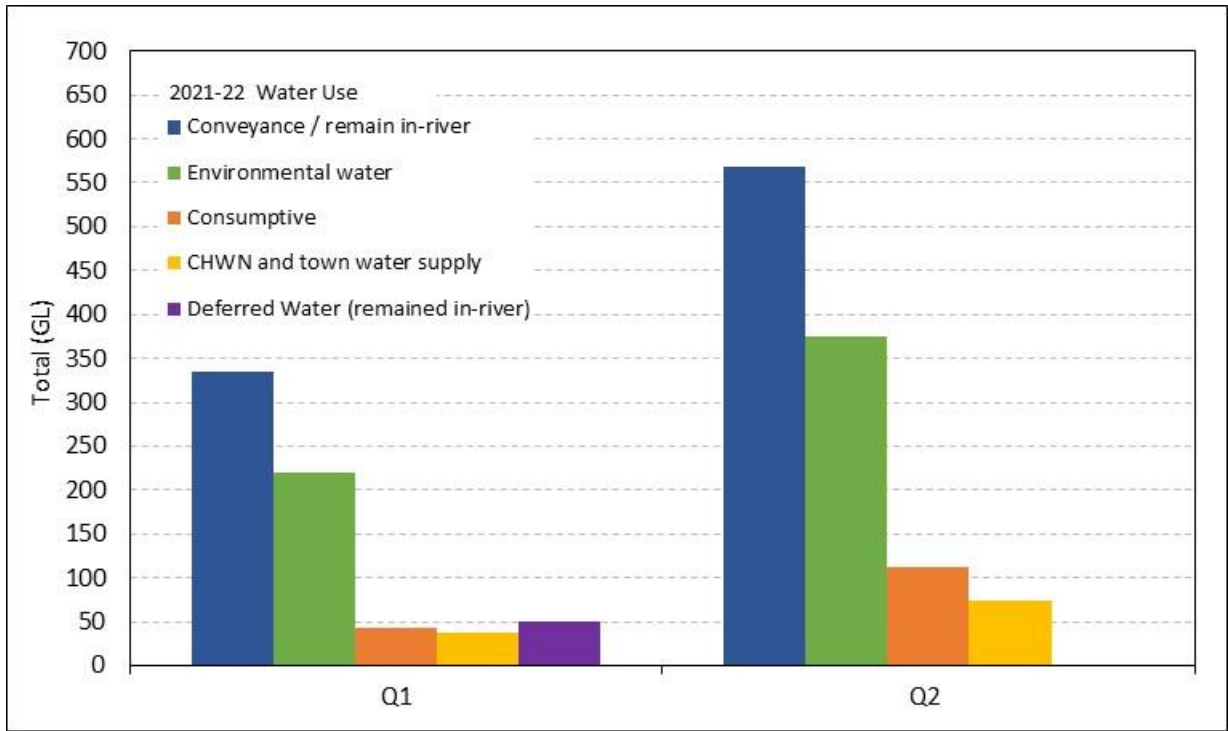


Figure 1 – Regulated River Murray Water Use in South Australia

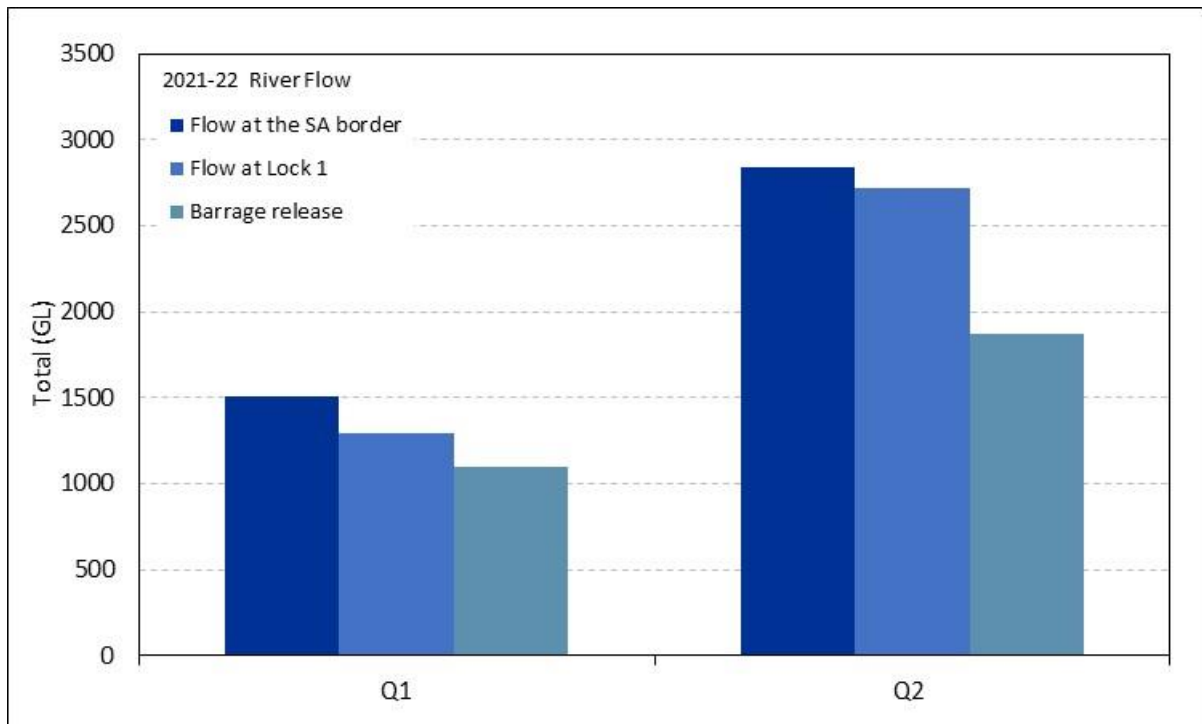


Figure 2 – River Murray Flow in South Australia

Technical Information

Water Flows: Total flow volume passing a specified location

- **Flow at the South Australian Border** – the total volume passing the SA border, as reported by the Murray-Darling Basin Authority (MDBA) and publicly 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 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/Latest>

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 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.

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. Data is correct at the time of report issue.

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](#)