

Water Allocation Plan for the River Murray Prescribed Watercourse

Managing water for ecological outcomes



Background

The Basin Plan was introduced to ensure that the River Murray is managed in a sustainable way, and has started the significant recovery of water for the environment. Management of the river is changing to ensure the needs of the environment are considered, as well as making sure water is available to meet the needs of other water users. Effective management of water for the environment has cultural, social and economic benefits.

Under the *Natural Resources Management Act 2004*, a water allocation plan must ensure that the taking and use of water is sustainable, and must set out how water will be provided to meet environmental water requirements. This fact sheet explains how the Water Allocation Plan for the River Murray Prescribed Watercourse (the Plan) provides water for the environment.

While the Plan sets out arrangements for providing water to the environment, other programs make sure the water gets where it needs to go. There are many initiatives in place that provide water to the environment, such as The Living Murray Program (TLM), and the operations of the

Commonwealth Environmental Water Holder (CEWH). Water is provided to the environment in line with objectives set out in the Basin Plan, and environmental water plans that are developed according to guidelines of the Basin Plan.

Approximately 45 GL of South Australian entitlements were secured as part of TLM and the CEWH currently holds approximately 155 GL of South Australian entitlements. Water recovered through TLM and the Basin Plan can be used within or outside of South Australia, and planning processes by the water holders determine which sites are watered from year to year.

The Minister also holds a small water portfolio for environmental purposes. An agreement between the South Australian Government and the Australian Government, regarding the Adelaide desalination plant, establishes an environmental water reserve of 6 GL of permanent entitlement for use at priority sites along the River Murray in South Australia.



In addition, as part of the original desalination agreement, a maximum of 120 GL is to be provided to the environment over a rolling ten year period of eligible years, when the following conditions are met:

- 1) At least 1,600 GL of River Murray Entitlement is available to South Australia under clause 88 of the Murray Darling Basin Agreement; and
- 2) South Australia's Critical Human Water Needs (204 GL) have been secured for the following water year. This arrangement is currently being reviewed by the Commonwealth and South Australia.

How does the Plan manage water for the environment?

There are a number of ways that the Plan manages water for the environment. The Long Term Environmental Watering Plan for the SA River Murray and Chapter 3 of this Plan sets out environmental water requirements (EWRs) of the River Murray floodplain, channel and the Lower Lakes, Coorong and Murray Mouth, and how water will be provided to these priority assets. The mechanisms for providing water to the environment are set out below.

Sustainable Diversion Limits

South Australia introduced a cap on water use in 1969 to ensure some water was left in the river to maintain river health, but even when South Australia receives 1,850 GL there is still not enough water to meet all the requirements of the environment.

In recognition of the needs of the environment, the Basin Plan introduces new limits on how much water can be used within the Murray-Darling Basin system. This limit then ensures there is enough water remaining in the system to keep the River Murray in a healthy state. As a result of the Basin Plan, water has been recovered in each Basin state to support healthy rivers, wetlands and floodplains.

Sustainable Diversion Limits (SDLs) replace the former Cap on diversions. For more information on SDLs, see the information sheet 'Sustainable Diversion Limits'.

Unregulated flows

The Plan recognises the importance of unregulated flows contributing to the EWRs of the river. When South Australia receives an unregulated flow above Entitlement of 1,850 GL, that can't be used under the Murray-Darling Basin Agreement, the volume cannot be extracted for consumptive purposes but can be used for environmental outcomes. The only exception is if there are emergency circumstances (consistent with the *Water Act 2007 (Cth)*). Positive environmental outcomes can be achieved by leaving the water in the system to flow downstream and into the Lower Lakes and Coorong; by raising weir pool levels to inundate floodplains; and by using environmental regulators to provide water to floodplains and wetlands.

¹ Figure 1 is provided as a guide - the volumes are likely to increase over time as more wetlands become managed. The total volume will remain 200 GL.

Wetlands

The Plan sets aside 200 GL for managed and unmanaged pool connected wetlands, recognising that this volume of water evaporates and is effectively 'taken' from the system. In the 2017 Plan this volume of 200 GL was Class 9 water. This water cannot be allocated for other purposes, because it is leaving the system through evaporation.

Water access entitlements on licence for wetlands that can be managed through regulating infrastructure are contained in either the Wetland Consumptive Pool or the Environmental Consumptive Pool. The remaining water for unmanaged wetlands is not included in the consumptive pools. See Figure 1 for a breakdown of the wetland volumes (as at May 2018)¹.

Major infrastructure projects enable construction of regulating infrastructure on wetlands, which allows them to be managed. Regulators are used to create more natural wetting and drying cycles resulting in better ecological outcomes.

Where regulators are in place, wetlands are managed in accordance with a wetland management plan and the water needed to support them comes from the Wetland Consumptive Pool, as detailed in the Plan.

Construction of regulating infrastructure results in water savings as less water is needed for a managed wetland compared to a wetland that remains permanently connected to the river. The water savings are transferred to the Commonwealth of Australia. The Environmental Consumptive Pool is the volume of water savings resulting from installing the regulating infrastructure. This volume can be used for any environmental water use within the Murray-Darling Basin except during a drought, and in accordance with Commonwealth legislation (the *Water Act 2007*).

The number of water access entitlements in both the Wetland Consumptive Pool and the Environmental Consumptive Pool are likely to increase as more wetlands are managed with infrastructure. The total of the two consumptive pools and the volume attributable to unmanaged wetlands will remain equal to the original 200 GL volume for evaporative losses from wetlands.

Eastern Mount Lofty Ranges

The boundaries of the River Murray Prescribed Watercourse and the Eastern Mount Lofty Ranges (EMLR) Plan overlap. To make sure that the water in the overlapping area is managed in the same way for both plans, the River Murray Plan aligns with the rules in the EMLR Plan, making sure that an approval to use water from the Finnis River or Tookayerta Creek, where the boundaries overlap is consistent between both Plans.

Monitoring and Evaluation

The Plan includes monitoring and evaluation requirements to assess whether the objectives of the Plan are being met. As the Plan is part of a broader system of river management, many programs collect monitoring data and provide information that can help demonstrate the outcomes of allocations, water availability and water use.

The sources of information are set out in an Evaluation and Reporting table in the Plan (see Section 9.1.1). Monitoring and evaluation allow for adaptive management, and help identify changes that may be required to the Plan over time.

How are decisions made around sharing water between the environment and other users?

When South Australia is receiving Entitlement of 1,850 GL, consumptive water users are generally granted 100 per cent allocations, however the environment may not be receiving enough water to meet its needs – which is why unregulated flows and the water recovered by the Commonwealth government are so important.

In a dry period when inflows are low and South Australia is not likely to receive the full 1,850 GL, allocation decisions need to be made that result in sharing of water between economic, social and environmental needs in a balanced way. How decisions are made in a period of low inflows is outlined in the information sheet '[Allocating water from the River Murray](#)'.

How does the Basin Plan fit into providing water for the environment?

The Basin Plan sets out an environmental management framework for the Murray-Darling Basin region and assists the recovery of water for the environment. Environmental watering plans are required to be prepared by the Murray-Darling Basin Authority (MDBA) and Basin state governments to ensure the river environment is looked after.

A significant volume of water is held for environmental purposes by the Commonwealth of Australia. This water is used in line with environmental management objectives in the Basin Plan, which guide improved environmental outcomes across the Basin, including in South Australia.

Basin Plan objectives for the River Murray in South Australia include maintaining an open Murray Mouth and flows to the Coorong, supporting healthy floodplains and maintaining water levels in the Lower Lakes above 0.0 metres Australian Height Datum (AHD) for 100 per cent of the time, and above 0.4 metres AHD 95 percent of the time.

The recovery of water for the environment through the Basin Plan is complemented by provisions in the Plan. The South Australian Government works closely with the Commonwealth Environmental Water Holder and the MDBA to ensure that environmental water is delivered to South Australia to meet environmental needs.

Environmental water planning for the River Murray

A Basin Wide Environmental Watering Strategy has been prepared by the MDBA to assist environmental water holders and managers to plan and manage environmental watering at a Basin scale.

The South Australian Government sets out environmental watering objectives and priorities annually, through annual environmental watering plans, and through a Long-Term Environmental Watering Plan for the River Murray – a requirement of the Basin Plan.

For more information about the environmental water planning process, visit the DEW environmental water planning page [here](#)

<http://www.environment.sa.gov.au/managing-natural-resources/river-murray/improving-river-health/environmental-water/environmental-water-planning>

I want to find out more about...

How the water allocation plan manages water for the environment, please contact Natural Resources SAMDB on:

T: (08) 8463 6877

E: rmwap.feedback@sa.gov.au

Or visit:

www.naturalresources.sa.gov.au/rivermurraywap

How the environmental watering planning process works, please call DEW on:

T: (08) 8463 7685

or visit:

www.environment.sa.gov.au/managing-natural-resources/river-murray/improving-river-health/environmental-water/environmental-water-planning

The Water Allocation Plan for the River Murray Prescribed Watercourse:

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Figure 1 – Breakdown of wetland volumes

