

2023-2025 Water for the Environment Priorities for the South Australian Murray Region Water Resource Plan Area



DEW-D0021896

Background

The South Australian Murray Region Water Resource Plan (SAMR WRP) area covers approximately 63,509 km² and incorporates the majority of the Murray-Darling Basin in South Australia from the Victorian border in the east, to the edge of the plains of the Mount Lofty Ranges in the west and south-east to the coast (Department for Environment and Water, 2018). Falling outside of the SAMR WRP area are the Eastern Mount Lofty Ranges and the River Murray and its floodplain to the 1956 flood level (Department for Environment and Water, 2018).

Within the SAMR WRP area there is little, if any, active management of environmental water. Surface water run-off is limited due to the flat terrain, low rainfall and highly permeable soils. The ecosystems are largely terrestrial. There are low risks to water resources due to lack of development.

The SAMR WRP area includes the Coorong and Murray Mouth, however in recognition of the intrinsic connection between the Coorong and the Lower Lakes, South Australia seeks to manage the site as a whole through the South Australian River Murray Long Term Environmental Watering Plan (Department for Environment and Water, 2020). As such, the annual priorities for the Coorong, Lower Lakes and Murray Mouth have been incorporated into the annual priorities for the South Australian River Murray Water Resource Plan area.

Within the part of the SAMR WRP area located in the Murraylands and Riverland Landscape Management Region and the Northern and Yorke Landscape Management Region, development is limited, but includes grazing of domestic stock (either on native vegetation or introduced pasture), intensive animal farming and dryland cropping. The main protection to the limited water resources of the SAMR WRP area is the 'capping' of dam developments within the northern Mount Lofty Ranges under regional Water Affecting Activities Control Policies (Murraylands and Riverland Landscape Board, 2021; Northern and Yorke Landscape Board, 2020). This is to prevent over-harvesting of the limited surface water runoff.

The northern section of the SAMR WRP area overlays the southern-most section of the South Australian Arid Lands Landscape Management region. This region includes some of the driest parts of South Australia. The region's environmental processes are determined by irregular rainfall and other episodic weather events that rarely follow predictable annual cycles. Thus, there are no planned environmental watering activities. The most widespread agricultural activity is pastoralism.

Within the small section of the Limestone Coast Landscape Management Region that overlays the SAMR WRP area, the land use is primarily for grazing with limited scope for active management of any water for environmental or other purposes.

Annual environmental watering priorities for surface water (annual priorities) have been prepared for the SAMR WRP area since 2013 in accordance with Basin Plan requirements. The Basin Plan provides for the level of detail in annual priorities to vary according to local conditions, and statutory and other arrangements prevailing in the water resource plan area (Section 8.24). It also allows for a single instrument to identify annual priorities for greater than one year (s8.23). Due to the nature of the region and minimal, if any, change in annual priorities from year-to-year, the information presented within this document represents the annual priorities for the SAMR WRP area for two water years, being 2023/24 and 2024/25. The development of these annual priorities is in accordance with the principles and methods described in Part 6 of Chapter 8 of the Basin Plan and enables South Australia to meet its obligations under the Basin Plan (Chapter 8 – Environmental Watering Plan).

Identification of priorities

Table 1 represents the results of an assessment of the requirements set out in sections 8.23 to 8.29 of the Basin Plan in relation to identifying the annual priorities for the SAMR WRP Area.

Table 1: Assessment of Annual Priorities for the South Australian Murray Region Water Resource Plan Area

Section	Summary of requirement	Requirement met?	Assessment
8.23	Identify annual environmental watering priorities for surface water	Yes	Northern Mt Lofty watercourses (include Burra, Baldina, Logan's, Hopkins, and Brady Creeks and permanent pools surface water and ground water). Level of water resource development is low and hence risks to ecosystems are low.
8.24 (1)	Identify priorities for watering priority assets and functions	Yes	As above.
8.24 (2)(a)	Identify assumptions that priorities are based on including expected holdings and characteristics of held environmental water	Not applicable	No held or planned environmental water that enables active management.
8.24 (2)(b)	Identify assumptions that priorities are based on, including expected quantities of planned environmental water, and associated rules, and who manages	Yes	<p>Regional Water Affecting Activities Control Policies contain provisions to prevent water-affecting activity permits being issued in ecologically sensitive areas.</p> <p><i>Landscape South Australia Act 2019</i> - Sections 102 and 104 operate to provide legislation which assists in protecting planned environmental water (PEW).</p> <p>Murraylands and Riverland Landscape Board and Northern and Yorke Landscape Board Water Affecting Activities Control Policy – principles 31 to 34 outline sub-catchment dam development limits in the Northern Mount Lofty Ranges. Dam capacity limits preserve the remaining water for system and environmental provisions.</p> <p>Unreliable water availability (low variable rainfall and fractured rock groundwater) and generally poor water quality means use is limited to stock and domestic requirements so demand expected to remain low – considered sufficient to manage dam and well construction (via WAA permits) without managing volume taken from them.</p> <p>Existing dam capacity rules and well drilling principles provide protection.</p>
8.24 (3)	Identify cooperative arrangements amongst holders or managers of environmental water and assets, and for delivery within and between water resource plan areas	Not applicable	<p>No active environmental watering or specific delivery of environmental water occurs within the region or to connected regions, so there is little scope for cooperative arrangements.</p> <p>To ensure that development is managed within the previously negotiated limit of 38,600ML for the non-prescribed surface water management zone (a planning unit within the SAMR WRP area), the Landscape Boards now responsible for the management of the non-prescribed surface water management zone plan to establish a database to track and manage development against the available limit (Murraylands and Riverland Landscape Board, 2021; Northern and Yorke Landscape Board, 2020).</p> <p>Cooperative arrangements between the SAMR WRP area and the EMLR WRP area are described in the EMLR WAP in Section 3:</p>

			Assessment of Effect on Other Water Resources, and also in the Marne Saunders WAP in Section 5: Effects on Other Water Resources. The cooperative watering arrangements between the South Australian River Murray Water Resource Plan Area and the Murray Mouth and Coorong are discussed in the SA River Murray Long-Term Environmental Watering Plan.
8.24 (4)	Priorities may include a specified instrument or text as part of the priorities	Yes	Regional Water Affecting Activities Control Policies contain provisions to prevent water-affecting activity permits being issued in ecologically sensitive areas.
8.25 (1)	Must apply principles and methods in part 6 to identify annual priorities	Not applicable	The principles and method have been considered and are not relevant to the particular circumstances in this water resource plan area. It is not possible to apply environmental water.
8.25 (2)	Matters to have regard to when determining priorities	Not applicable	Regard was had to the matters listed but these are not relevant to the circumstances of this water resource plan area.
8.25 (4)	Holders of environmental water to provide information to basin states	Not applicable	Not applicable.
8.25 (5)	Holders of environmental water to provide information to basin states, including use of water in other water resource plan areas	Not applicable	Not applicable.
8.25 (6)	Annual watering priorities must be consistent with long-term watering plan	Not applicable	The first long-term watering plan for the region was completed and submitted to the MDBA in December 2017, then reviewed and updated in 2020.
8.26	Provision of annual watering priorities to MDBA by 31 May	Yes	As per this document.



Photo: Bimbowrie Conservation Park (Olary Ranges) by Vincent van Uitregt

References

- Department for Environment and Water. (2018). *South Australian Murray Region Water Resource Plan*. Adelaide: Government of South Australia.
- Department for Environment and Water. (2020). *Long-Term Environmental Watering Plan for the South Australian Murray Region Water Resource Plan Area*. Adelaide: Government of South Australia.
- Department for Environment and Water. (2020). *Long-Term Environmental Watering Plan for the South Australian River Murray Water Resource Plan Area*. Adelaide: Government of South Australia.
- Murraylands and Riverland Landscape Board. (2021). *Water Affecting Activities Control Policy. Effective from 19 April 2021*. Murray Bridge: Murraylands and Riverland Landscape Board.
- Natural Resources SA Murray-Darling Basin. (2019). *Water Allocation Plan for the Eastern Mount Lofty Ranges*. Adelaide: Government of South Australia, through the Department for Environment and Water.
- Northern and Yorke Landscape Board. (2020). *Water-Affecting Activities Control Policy. Effective from 6th December 2020*. Clare: Northern and Yorke Landscape Board.
- South Australian Murray-Darling Basin Natural Resources Management Board. (2019). *Water Allocation Plan for the Marne Saunders Prescribed Water Resources Area*. Adelaide: Government of South Australia.

