

2020-21 Annual Water for the Environment Priorities for the South Australian Murray Region WRP



Ref: DEW-D0008414

Background

Annual priorities for the use of surface water for the environment are prepared annually for the South Australian Murray Region Water Resource Plan (SAMR WRP) area. 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).

The Basin Plan allows the level of detail in annual watering priorities to vary according to local conditions, and statutory and other arrangements prevailing in the water resource plan area (Chapter 8, section 8.24, p65).

There is little, if any, active management of environmental water in the SAMR WRP area. Surface water run-off is limited due to 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. For these reasons, surface water resources in the SAMR WRP area are not prescribed and there are no water allocation plans for surface water resources that correspond to the SAMR WRP area. Statutory arrangements for water resource management default to the Natural Resource Management Plan for each of the three Natural Resource Management (NRM) Regions (i.e. South Australian Murray-Darling Basin NRM Region; South Australian Arid Lands NRM Region; and South East NRM Region).¹

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 River Murray Long Term Watering Plan (DEWNR 2015). As such, the annual environmental watering priorities for the Coorong, Lower Lakes and Murray Mouth have been incorporated into the Annual environmental watering priorities for the South Australian River Murray Water Resource Plan area (River Murray WRP) document.

Within that part of the SAMR WRP area located in the SA Murray-Darling Basin NRM 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 the NRM Plan. 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 Natural Resources 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 South East Natural Resources Management Region that overlays the SAMR WRP, the land use is primarily for grazing with limited scope for active management of any water for environmental or other purposes.



¹ The NRM Boards and associated regions will be replaced by Landscape Boards and regions from July 1 2020.

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 environmental watering 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, 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 environmental water	Yes	<p>SAMDB NRM Plan – Volume A, Section 3.4.1, and Volume B, Section 5.2.2 and the SE NRM Plan – Part 4 Section 4.3.1 prevent water-affecting activity permits in ecologically sensitive areas (i.e. Coorong).</p> <p>NRM Act - Section 127(2), 127(3), and 127(5) operate to provide legislation which assist in protecting PEW.</p> <p>SAMDB NRM Plan – Volume B – principles 31 and 32 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>Also the general well drilling principle that requires no adverse impacts on water-dependent ecosystems. Distance buffers from groundwater dependent ecosystems have been established for both allocations and transfers. Ensures that the buffer zone around the wetland is preserved for the benefit of the wetland.</p> <p>Rules in NRM Plan sufficient to protect water-dependent ecosystems based on low level of risk. Locally important systems identified. Low level of development overall and no significant issues identified – rules that manage new development considered adequate.</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>Retain existing dam capacity rules and well drilling principles.</p>

8.24 (3)	Identify cooperative arrangements amongst holders or managers of environmental water and assets	Not applicable	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 (see more information below)
8.24 (4)	Priorities may include a specified instrument or text as part of the priorities	Not applicable	General provision for natural resources management are listed in the relevant NRM plans.
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 long-term watering plan for the region was completed and submitted to the MDBA in December 2017.
8.26	Provision of annual watering priorities to MDBA by 31 May	Yes	As per this document.

Co-operative Watering Arrangements

Within the SA Murray Region Water Resource Planning Area

The SA Murray Region has a boundary that crosses over three NRM Regions within South Australia. These three regions are the South Australian Arid Lands, the South East and the SA Murray-Darling Basin. There is limited opportunity for cooperative arrangements within the WRP area due to the nature of the resources. The Presiding Members of the existing NRM Boards meet regularly to discuss common issues. The Regions have a Memorandum of Understanding for the sharing of dam development capacity that will ensure South Australia is able to meet the sustainable diversion limit in the Basin Plan for the SA non-prescribed area described in Schedule 3 of the Basin Plan.

Between Water Resource Planning Areas

The SA Murray region is adjacent to:

- the Eastern Mount Lofty Ranges WRP
- the SA River Murray WRP
- the NSW Murray and Lower Darling WRP
- the Lachlan and South Western Fractured Rock WRP
- the Western Porous Rock WRP
- the Wimmera-Mallee surface water and groundwater WRP

There is no surface water connection between New South Wales and South Australia except for the River Murray.

Eastern Mount Lofty Ranges Water Resource Plan Area

Cooperative arrangements between the SAMR WRP area and the EMLR WRP area are described in the EMLR WAP in Section 3: Assessment of Effect on Other Water Resources (pp76-80), and also in the Marne Saunders WAP in Section 5: Effects on Other Water Resources (pp90-91).

South Australian River Murray Water Resource Plan Area

The cooperative watering arrangements between the South Australian River Murray Water Resource Area and the Murray Mouth and Coorong are discussed in the River Murray LTWP.

References

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- Southeast Natural Resources Management Board. (2017). *Regional NRM Plan Part 4*. Adelaide, Southeast Natural Resources Management Board .