## 2018-19 Annual Environmental Watering Priorities for the South Australian Murray Region Water Resource Plan Area

The information contained in this document is prepared for the purpose of complying with South Australia's obligations in respect of annual environmental watering priorities for the South Australian Murray Water Resource Plan Area, as set out in Chapter 8 of the Murray-Darling Basin Authority Basin Plan (Environmental Watering Plan).

There is little, if any, active management of environmental water in the South Australian Murray Region Water Resource Plan area (SAMR WRP area). 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. 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.

In the Basin Plan, it is stated (Chapter 8, section 8.24, p65) that:

"The level of detail in annual watering priorities may vary according to local conditions, and statutory and other arrangements prevailing in the water resource plan area".

In the absence of a water allocation plan, statutory arrangements for water resource management default to the Natural Resource Management Plan for each of the three NRM Regions (i.e. South Australian Murray-Darling Basin Natural Resources Management Region; South Australian Arid Lands Natural Resources Management Region; and Northern and Yorke Natural Resources Management Region).

Within that part of the SAMR WRP area located within the SA Murray-Darling Basin Natural Resources Management Region, development is limited to grazing domestic stock (either on native vegetation or introduced pasture) and cereal crops. The main protection to the limited water resources of the SAMR WRP area is the 'capping' of dam developments 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 Northern and Yorke Natural Resources Management Region that overlays the SAMR WRP, the land use is much the same with limited scope for active management of any water for environmental or other purposes.

Table 1 represents the results of an assessment undertaken by the Department of Environment, Water and Natural resources (DEWNR) in May 2013 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 SA Murray Region Water Resource Plan Area

Section	Summary of requirement	Req. Met?	Assessment of annual environmental watering priorities in SA Murray Region Water Resource Plan Area
8.23	Identify annual environmental watering priorities for surface water in each WRP area	Yes	Northern Mount 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	There is no held or planned environmental water that enables active management.

Section	Summary of requirement	Req. Met?	Assessment of annual environmental watering priorities in SA Murray Region Water Resource Plan Area
8.24 (2)(b)	Identify assumptions that priorities are based on, including expected quantities of planned environmental water, and associated rules, and who manages	Not applicable	MDB NRM Plan Section 3.4.1 Water  NRM Act Section 127  Vol 3 Section 5.3.3  Existing dam capacity rules. Also general well drilling principle that requires no adverse impacts on water-dependent ecosystems — not PEW but provides a level of protection. Rules in NRM Plan sufficient to protect them based on low level of risk.  Locally important systems identified. Currently low level of development overall and no significant issues identified — rules that manage new development considered adequate within the Department for Environment and Water (DEW). 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.  Retain existing dam capacity rules and well drilling principles.
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 no scope for cooperative arrangements.
8.24 (4)	Priorities may include a specified instrument or text as part of the priorities	Not applicable	General provisions for natural resources management are listed in the relevant NRM plans.

Section	Summary of requirement	Req. Met?	Assessment of annual environmental watering priorities in SA Murray Region Water Resource Plan Area
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. As above, there is no held or planned environmental water in the area and no environmental watering schedules.
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 MDBA in December 2017.
8.26	Provision of annual watering priorities to MDBA by 31 May	yes	As per this document.