

Report on Managing for Critical Human Water Needs – MDBA

The Murray-Darling Basin Authority's 2014- 15 annual report on the implementation of Section 11.09 or 11.15 – commencement of Tier 2 or Tier 3 water sharing arrangements respectively (Schedule 12, Item 13)

Reporting context

The millennium drought that affected much of the Murray-Darling Basin in the 1990s to 2010 highlighted the need for arrangements between states to ensure adequate water supplies for all users in very dry periods.

Critical human water needs (CHWN) is the water needed during drought for drinking, food preparation and hygiene, essential community services (including emergency services, hospitals and schools) and commercial and industrial purposes. In the three Basin States where communities depend on the River Murray System for water (New South Wales, Victoria and South Australia), water for CHWN is the highest priority water use. Water for these purposes needs to be of a certain quality, so the Basin Plan (s11.05) sets out water quality and salinity trigger points at which water in the River Murray System becomes unsuitable..

Conveyance water is the amount of water needed to deliver the volume of water to meet CHWN (for each water accounting period). The Basin Plan sets out volumes for CHWN (11.03) and conveyance water (11.04).

Water sharing arrangements in the River Murray System are managed according to a tiered system. The Basin Plan sets triggers for changing tiers under specific circumstances (s11.09 and s11.15). Movement between water sharing tiers depends on the ability to supply water of a suitable quality and/or quantity to meet critical human needs, current conveyance water or the conveyance reserve.

Tier 1 arrangements exist under 'normal' water resources availability where there is no risk to conveyance water and the quality and/or quantity of water for critical human needs.

Tier 2 represents extremely low water resources availability, where there is insufficient water to supply current conveyance and/or for States to make their contribution to the conveyance reserve.

- **Tier 3** arrangements can exist: under 'unprecedented dry' conditions (i.e. drier than the worst recorded drought) where there is a significant risk to the supply of a state's CHWN volume over the next 12 months - even with the use of contingency measures; and/or
- at any time where the quality of water supplied to a Basin State is unusable for CHWN as it breaches - and is forecast to continue to breach agreed salinity and water quality trigger values.

Schedule H to the Murray–Darling Basin Agreement and Chapter 11 of the Basin Plan detail the processes for water sharing tiers in the River Murray System.

Indicators for measuring success

Implementation of Section 11.09 or 11.15, commencement of Tier 2 or Tier 3 water sharing arrangements, is evaluated using the following indicators:

- The number of days in the water accounting period that Tiers 1, 2 and 3 water sharing arrangements have been applied (**13.1**)
- The agreed arrangements for Tier 2 and Tier 3 water sharing have been implemented (**13.2**)

Reporting on this Matter is specific to the River Murray System. The MDBA reports against indicator 13.1. The Basin Officials Committee reports on behalf of Basin States and the Department of the Environment against indicator 13.2, but only under circumstances during which either Tier 2 or Tier 3 water sharing arrangements have been triggered. Until such a time, the Murray-Darling Basin Authority will report against indicator 13.2.

13.1: The number of days in the water accounting period that Tiers 1, 2 and 3 water sharing arrangements have been applied

13.1.1 Provide a summary of the number of days that Tiers 1, 2 and 3 water sharing arrangements have been applied.

Response

There were no extreme events or circumstances which required Tier 2 or Tier 3 water sharing arrangements to be triggered during the 2014-15 water accounting period. Accordingly, Tier 1 water sharing arrangements were applied for 365 days.

13.2: The agreed arrangements for Tier 2 and Tier 3 water sharing have been implemented

13.2.1. Provide documentation of details, process and action/s taken in response to a Tier 2 or 3 event.

Response

Tiers 2 and 3 water sharing arrangements were not applied and therefore reporting on this indicator by the Basin Officials Committee is not applicable.