

Attachment D - Menindee Lakes Water Saving Project (NSW)

Accounting for evaporative savings

For the purpose of modelling the Menindee Lakes proposal in the SDL adjustment framework in 2017, the MDBA's approach to determining the water savings amount using the benchmark model is outlined below:

- 1) Extract an amount downstream of Hume Dam based on the typical pattern of irrigation demands
- 2) For simplicity, the extracted volume use in NSW and Victoria is based on allocation levels for NSW Murray general security entitlements
- 3) Total extraction in a month is attributed equally between NSW and Victoria
- 4) Adjust the volume of extraction until allocation and use are equivalent to a base case scenario, in which:
 - a) the benchmark is used, with baseline inflows to the Menindee system
 - b) the use of the Tandou inter-valley transfer is assigned to NSW Murray users
 - c) Broken Hill township water needs are supplied from Murray, through a new NSW Murray diversion with the modelled diversion from the River Murray at Wentworth.

Using this methodology, MDBA modelling shows that the project can allow a long term average of 106 GL/y to be extracted downstream of Hume Dam without adversely affecting existing water users.

Representation of the project in the total SDL adjustment project package assessment used assumptions adopted for the SDL benchmark. For modelling purposes, the savings have been distributed equally between NSW and Victoria for the environment as follows:

- **NSW Murray (10:90 high security: general security)**
- **Vic Murray (82:18 high reliability water share: low reliability water share).**

Note:

This modelling does not bind the NSW or Victorian governments and does not represent agreement by the NSW or Victorian governments to create the entitlements as modelled, noting that changes to modelling parameters may change the determination outcome.

The enduring environmental outcomes attainable under the Menindee project (modelled by the MBDA as 106 GL LTAAAY) will be provided by means agreed by all jurisdictions and the MDBA. If entitlement is created it must be based on realistic information, have no impact on reliability of existing water users and comply with all NSW and Victorian statutory requirements for the creation of new entitlement. If entitlements are created the quantum, type and location of entitlement must be reflective of the water saved. Changes to the project may require further notification amendments which would be considered by all jurisdictions via the SDL Implementation Committee and BOC.

The final mechanism used to provide enduring protection of the evaporative and system loss savings from the project will be subject to further detailed investigation including modelling by MDBA plus ongoing discussion and agreement between Basin governments.

Accounting for additional northern Basin environmental inflows

For the purpose of modelling for the determination the increased northern Basin environmental flows were subject to water sharing arrangements in the Murray-Darling Basin Agreement. That is, the 50/50 sharing arrangement between NSW and Victoria that applies to all Menindee inflows.

Note:

The final mechanism used to provide enduring protection of the additional inflows for environmental benefit will be subject to ongoing discussion and agreement between Basin governments.