

Murray–Darling Basin Plan context

The Menindee Lakes Water Saving Project is being developed as one of the sustainable diversion limit (SDL) adjustment mechanism projects under the Murray–Darling Basin Plan (the Basin Plan). The Basin Plan seeks to ensure that water is shared sustainably across the Murray–Darling Basin (the Basin) in a way that provides adequate water to both users and the natural environment.

In developing the Basin Plan, the Murray–Darling Basin Authority (MDBA) assessed the volume of water that could be taken from the Basin for consumptive use while maintaining its health. This volume is called the long-term average SDL and is equal to 10,873 gigalitres per year. To reach this level of water take, the MDBA determined that an additional 2,750 gigalitres of surface water would need to be recovered from the existing level of use through a combination of efficiency projects and licence buy-backs.

The proposed Menindee Lakes Water Saving Project has been put forward as a supply measure proposal under the SDL Adjustment Mechanism. A supply measure is a project that will offset the amount of water that must be recovered under the Basin Plan by providing equivalent or improved environmental outcomes, while using less water.

The Menindee Lakes are located in a semi – arid area and are shallow in nature with a large surface area, resulting in a significant loss of water to evaporation. On average the Menindee Lakes lose 426 gigalitres of water annually to evaporation. Up to 700 gigalitres can be lost to evaporation annually when the lakes are full.

Each lake also contains a percentage of ‘dead storage’ that cannot be accessed for consumptive use, and may therefore also be lost to evaporation. This “dead storage” is estimated at 125 gigalitres for the four main lakes.

If evaporative water loss from the Menindee Lakes could be reduced, significantly more water could be made available for the environment.

Regulation of the lakes has increased sedimentation, reducing accessibility of water, and has also altered the flow regime in the Lower Darling, reducing the frequency of overbank flow events and freshes.

There are a range of ecological targets associated with the flow regime for the Lower Darling floodplain that are currently difficult to meet because of existing operational constraints including regulator capacities and operational policy, and the need to ensure reliability of local town water supply.

Altering the existing operational strategies and constructing new or modified infrastructure has the potential to address many of these issues, while providing water savings to meet NSW’s commitments under the Basin Plan.

The Basin Plan

NSW is a signatory to the Basin Plan, a coordinated approach to water management for the Murray–Darling Basin that came into effect in November 2012. The other signatories are South Australia, Victoria, Queensland and the Australian Capital Territory.

Basin states have collectively agreed to work with the Commonwealth to undertake Basin Plan implementation activities, as agreed under the Intergovernmental Agreement on Implementing Water Reform in the Murray–Darling Basin.

For more information on the Basin Plan, visit mdba.gov.au/basin-plan/plan-murray-darling-basin

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