Big is not necessarily better

In the Eastern Mount Lofty Ranges, water flow across the landscape is impeded by the number of dams that are collecting surface water runoff. In an effort to improve catchment health, the South Australian Murray-Darling Basin Natural Resources Management Board (SAMDB NRM Board) is encouraging landholders to consider how much water they really need and whether they could reduce the size of the dams located on their properties. Financial incentives may be available for dam size reduction or dam removal in the Angas and Bremer catchments – for more information please contact the High Demand Project Officer on 8391 7526 or SAMDB.water@sa.gov.au

There are many reasons why reducing the capacity of a dam might suit a landholder's needs, including putting the land to productive use or reducing pressure on an eroding spillway. The SAMDB NRM Board are seeking to engage with property owners who may have dam capacity in excess of what they require on their properties. This is relatively common in the Mount Lofty Ranges where some large farms that had dams to store water for irrigation are being subdivided into smaller lifestyle blocks. These smaller properties have no need for the retained large irrigation dams.

Reductions in dam capacity will ease some of the pressure on local surface water resources and will make additional water available for downstream users and the environment.

Strathalbyn dam reduction

The 25 megalitre dam near Strathalbyn was modified by lowering the height of the dam wall and spillway, and formation of 'shelves' around the edges of the dam to create a shallow area for reeds to grow. In this case, the landholder wanted to return water to the Angas catchment and create a wetland from an unused and oversized stock dam.

The site was planted out by volunteers, including the owners and their workmates, with a selection of native plants strategically placed to stabilise the soil and reeds to provide filtration while creating habitat for native fish and birds. The works reduced the dam capacity to 4 ML.



The unused and oversized stock dam prior to reduction



The dam after its capacity was reduced



Flaxley dam reduction

In this case, the spillway on a 10.7ML disused dam was eroding, which was causing concern for the landholder. A three part solution was identified where the old spillway was filled in and revegetated, a pipe was placed through the dam wall to take low and medium flows, and a new spillway was built to take high flows. This resulted in a permanent water level drop to about half of the dam's original capacity (5.4ML). The dam remains an attractive part of the landscape and serves as a back-up water supply.



The Flaxley dam after works were completed



Natural Resources Office, Mount Barker
South Australian Murray-Darling Basin

Contact the High Demand Project Officer:

P (08) 8391 7526

E SAMDB.water@sa.gov.au

www.natural resources.sa.gov. au/high-demand-emlr



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