

Farmers want water 'banked' for future droughts

A survey of farmers in the Namoi catchment area in the Murray Darling Basin (MDB) shows they are generally supportive of 'banking' water from floods by storing the surplus water underground.



Credit: Floybix/Wikimedia Commons under CC BY-SA 3.0 licence

The [survey](#) was carried out by the National Centre for Groundwater Research and Training (NCGRT).

Professor Allan Curtis of the NCGRT and Charles Sturt University says the farmers' positive response is a big step towards providing rural and agricultural communities with additional water without drawing more from the over-extracted rivers of the Basin.

'Australia's farmers manage around 65 per cent of the continent and have access to large volumes of surface and groundwater,' says Prof. Curtis. 'With scientists predicting less rainfall and runoff in the southern MDB over the next 60 years, we urgently need to help them address the growing threat of water scarcity.'

Water banking, also known as managed aquifer recharge (MAR), should be the next step in water management in the MDB, Prof. Curtis says.

'Storing water underground is more efficient than saving it in the surface dams, on which Australia currently relies. This is because large volumes of water are lost from surface storage by evaporation.

'Every year, the evaporative loss from farm dams in the Basin alone amounts to more than 1000 gigalitres (GL) – which is enough to supply Melbourne, Sydney and Adelaide for a year.'

As more places around Australia turn to water banking for later industrial or recreational use, researchers at NCGRT are exploring the possibility of re-charging depleted aquifers in farming landscapes using excess water from large floods. The survey of 210 farmers in the Namoi region reveals that two-thirds support the concept.

‘The Namoi is one of Australia’s prime agricultural regions and extracts the largest volume of groundwater for irrigation in the MDB,’ says Prof. Curtis.

‘It’s an ideal location for implementing water banking using excess flood water, as large floods occur regularly in the lower Namoi, and researchers predict that this will continue to happen in the future.’

‘We found that the supporters of water banking are more business-like and more interested in fostering equal opportunities for all community members,’ says Prof. Curtis. ‘They generally have larger areas for irrigation, buy water more frequently, own larger entitlements and spend more time on their land.’

‘There is clearly strong support for water banking, but we need to address the other views as well, because their concerns are valid and deeply felt.’

‘We also need to explore issues such as how water banking fits with existing water sharing plans and allocations both locally and along the MDB, who pays for the infrastructure where there are private benefits, and how to secure rights to water which has been stored in aquifers.’

Providing that it is carefully managed, water banking using water from large floods offers a largely ignored opportunity to achieve significant environmental, economic and social benefits, Prof. Curtis says.

‘It can help sustain the region’s agriculture, which is highly profitable. It can also replenish depleted aquifers and reduce evaporative losses from surface storages. This is potentially a win-win situation for all.’

Source: NCGRT

From ECOS online <http://www.ecosmagazine.com/?paper=EC13115>