

Published: 18 June 2012

Australia 'needs national groundwater strategy'

Australia will not have enough fresh water to meet the combined needs of a rapidly-growing population, expanding industries and conservation of native landscapes in the mid-21st century if it fails to articulate a national groundwater strategy for the future.



Credit: Willem van Aken/scienceimage

The caution comes from two of the nation's most eminent water scientists, Professor Craig Simmons and Professor Peter Cook of the National Centre for Groundwater Research and Training (NGCRT), as the National Groundwater Action Plan winds up and the latest Murray-Darling Plan proposes changes to groundwater rules.

In a discussion paper circulated among water policy and scientific experts they identify twelve issues which need to be addressed to achieve greater national water security in future.

These include understanding and resolving issues surrounding the current brawl over the impact of coal seam gas, geothermal, mining and farming activity on groundwater resources, better understanding of the links between ground-and surface waters, and resolving legal and technical questions over the storage of surplus water in underground aquifers.

The researchers argue there is an urgent need for public education and 'mythbusting' about groundwater – especially the widely held view that it represents a more-or-less unlimited resource for the future.

'Australia is a very old continent, and many of its groundwaters are fossil – meaning they can be tens of thousands, even hundreds of thousands of years old. They take that amount of time to recharge. Any plan to make use of them needs to take their age and recharge rate into account,' says Professor Cook.

Another vital issue is how climate change will affect Australia's native landscapes through its effect on groundwater, they say. If aquifers contract out of reach of the deep roots of eucalypts, mallees, acacias and other important native species, whole landscapes can die.

Professor Simmons adds that governance of Australian groundwater is still far from optimal, including having a common

understanding of terms and of the resource itself.

'We need frameworks that connect high-level national resource management to the interests of local communities, industries and other users, in a way that makes for rational decisions and sound resource use.

'When industries, communities and the environment are competing for the same water resource – as is bound to happen increasingly from now on – we need better ways for allocating the water that meet social, economic and environmental needs. The National Water Initiative provides a good basis – but it is important it is fully adopted.'

The researchers have called for a group of top-level water managers, government departments and water scientists to develop a draft for a National Groundwater Strategic Plan.

Without a such plan major cities, industries such as mining, energy, agriculture and manufacturing and the preservation of the Australian landscape could all run into water scarcity problems within a decade or two, the NCGRT researchers caution.

Source: NGCRT

From ECOS online http://www.ecosmagazine.com/?paper=EC12327