

Media release

Australia 'needs national groundwater strategy'

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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.

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.

"Though many things have been accomplished under the Groundwater Plan, much still remains to be done to secure the nation's groundwater resources into the future," the scientists say.

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.

"Some of the biggest challenges concern public trust and confidence issues regarding groundwater," Professor Simmons says. "Most Australians are simply not aware that the vast bulk of our fresh water is underground, out of sight, out of mind. They do not realise it supplies much of the water we see in our surface rivers and wetlands, and hence much of our drinking water."

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.

"We also seek to exploit an exceptional opportunity for Australia to store more of its surface water underground, where it avoids evaporation, by deliberately recharging suitable aquifers. But many of the legal, social and public acceptance issues around this remain to be worked out," he adds.

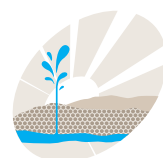
Another vital issue is how climate change will affect Australia's native landscapes through its effect on groundwater, they say. If aquifers contract out of reach of the deep roots of eucalypts, mallees, acacias and other important native species, whole landscapes can die.

A related issue is the intrusion of seawater into coastal aquifers, as they are pumped out for human use. This could affect the viability of many coastal cities and communities which rely on groundwater, they warn.

"Then there is simply the question of whether we understand enough about our hidden groundwaters and are able to model impacts on them with sufficient accuracy to be able to manage them adequately," Professor Cook says.

The National Centre for Groundwater Research and Training is an Australian Government initiative, supported by the Australian Research Council and the National Water Commission.

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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,” he says.

“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.”

Finally the team warn that Australia faces an acute scarcity of skilled water managers and will need to redouble its efforts to train more. “You can’t run the mining industry without geologists or agriculture without farmers. Water is a resource vital to both and to every other facet of Australian life – and needs to be equally well-planned, managed and allocated.”

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 which addresses all these issues, and more.

“Because it has rained across much of Australia and drought issues have receded from the headlines, does not mean we can afford to be complacent,” Professor Simmons says. “We are still on track to more than double our water use by mid-century – and there are no big, new water resources to be found, so we have to address the situation by being far more clever in how we manage what we’ve got.”

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.

“Also, we need to waterproof the nation in preparation for future droughts.”

“We urge all Australian governments, political parties and industry bodies to give strategic water planning absolutely top priority. It is Australia’s future which is at stake.”

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