Submission to the Great Artesian Basin Draft Strategic Management Plan

Ms Bronwyn Vost

I am a seventh generation Australian with many ties to rural communities in NSW, Queensland and South Australia. I am acutely aware of the crucial role that the Great Artesian Basin plays in many of these communities such that they would not exist without it. I am also acutely aware that if these communities ceased to exist as a result of the destruction of the GAB, Australia’s food security and its whole economy would be greatly damaged. I am appalled that the huge improvement in water conservation made by the capping and piping of the bores in the GAB is now being put at risk by the unfettered demands of the coal and CSG mining industries.

I believe that this draft strategic management plan (SMP) for the GAB in its present form has been a missed opportunity to deal with the real and grave challenges facing the GAB from expanded mining and unconventional gas. Lack of Commonwealth oversight means that different state jurisdictions have different water regulations. The CSG mining industry has unfettered access to unlimited volumes of GAB water in Queensland, fatally undermining water planning and sharing strategies.

Recent research by CSIRO determined that the GAB is a declining resource and not in a 'steady state' as had apparently been previously assumed. It is imperative that the risk to the GAB posed by mining and unconventional gas be tackled now. The 2015 review of the previous SMP noted that ‘It is crucial that water extractions for mining and unconventional gas related activities is transparent and accountable, does not compromise the long-term sustainability of the resource, does not erode the water rights of other users and minimises any potential third party impacts.’ However, this current draft SMP does not provide any analysis of the risks posed by mining and does nothing to address these major issues.

Therefore, I would like to see major additions to the SMP to:

1. Require full transparency and accountability of all mining and gas water take
2. Ensure that mining and gas activities are subject to the same water management rules, caps and licensing regimes as other industries, and that these rules are consistent across state jurisdictions
3. Prevent impacts from mining and gas water take on existing businesses and industries
4. Implement special measures to strictly protect recharge areas from any proposed mining and gas impacts
5. Provide full protection for GAB springs from any proposed mining and gas activities that are known or likely to have any impact on them
6. Establish an independent body to advise on any mining and gas projects which may threaten the GAB. Such a body will set strict standards for environmental assessments.

In particular, I am extremely concerned about the situation in NSW, where the proposed Narrabri gas project threatens the Pilliga Sandstone Southern Recharge area of the GAB. The 850 well gas project puts at risk the reliability, quality and pressure of GAB water. The Environment Impact Statement for the project was vastly inadequate, and experts have identified major weaknesses with water modelling, monitoring and assessment.

I have made myself familiar with the working of the GAB by study of published material. My diagram below is based on the GISERA study “Impacts of CSG depressurisation on GAB flux”, and the light blue and dark blue arrows show, respectively, the normal flow of water through the Pilliga Sandstone, and the flow of water diverted out of reach of farmers’ bores by CSG depressurisation.

This is an unacceptable outcome and must be prevented from happening, not simply noted. If recommendations 3 and 4 above were implemented, then such a situation would not arise.

I have read with alarm the submission by the Lock the Gate Alliance. I note that there are many other instances of damage or potential damage to the GAB by CSG or other mining in NSW, Queensland, South Australia and the Northern Territory. I seriously recommend that points 1 – 6 be adopted into a future Strategic Management Plan for our precious Great Artesian Basin.