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Dear Mr Windsor,

I am watching with great interest the debate of proposed water allocation reductions to irrigators in the Murray Darling basin. Earlier in my engineering career I spent a good deal of time amongst cotton irrigators around Goondiwindi, St George and Dirranbandi looking at flooding and related water issues.

I am interested to see that you will be leading a parliamentary inquiry.

More recently in my career I have been very interested in the proposed Coal Seam Gas (CSG) to LNG industries under development in Queensland (and coming in NSW). This industry presents a huge economic opportunity for Queensland and Australia but there are many concerns by farmers and environmentalists. One concern is what to do with the enormous quantities of water produced in obtaining the gas. Even after it is treated to a high standard the quantities are such that how to utilise or dispose of the water is major issue which may cap or indeed halt the development of the wells required to get economic LNG production trains. Local uses for the water in western Queensland towns and agriculture cannot hope to utilise all the water that will be produced from the thousands of production wells. Discharge, even of treated water, to local streams is seen as not an option due to altering the natural stream flow regime, Queensland rivers all reduce to zero flow in dry periods.

A concern I have had is that the solutions have been focussed quite locally. This makes sense from the gas companies' points of view because the lower the distance the water has to be transported the lower the cost to them of what is essentially a waste product. The quantities involved are of the order of well over 100 GL per annum if the 4 main proposed LNG projects are to go ahead. Granted this is small compared with the 3 to 4,000 GL reductions proposed by the MDBA guideline to a draft plan. However the fact that this water is produced "just over the catchment divide" when considered at the scale of the Murray Darling basin means that if it could be collected, treated on a bulk scale and piped to Beardmore Dam near St George for example this would provide the means for some relief via controlled release environmental flows, reducing allocation reductions perhaps. I haven't done any modelling but as Beardmore holds 81.8 GL it may not be of adequate size to hold the water for sufficiently long to be able to be released in some sort of way that replicates a natural regime so perhaps some raising may be required.

The cost / benefit would need to be investigated but if it provides a few even % relief on allocation reductions down the entire basin may make sufficient benefit to justify the costs. If the fact that it releases a Billion dollar industry to go ahead by solving its "waste" water problem is included in the benefits it would seem to be a certainty.

However none of this would happen based on individual gas companies own initiative, or even a collective proponents approach supported by the Queensland Government. I believe a whole of basin approach to the potential benefits would probably be required for the benefits and costs to be appropriately compared.

All the best for your inquiry.

Regards,  
Andrew Keith BE (Hons) MEngSc CPEng