

Dear Reviewer.

I believe there is a significant anomaly in the risk analysis model that has been used as the bedrock for the proposed SDL. This anomaly, being lack of knowledge, does great injustice to the way that people manage the risk of their business affairs here in the country. Farmers and the supported economic sections have managed the risk of unpredictable weather conditions to be major contributors to the economic well-being of Australia. And it is worth noting that it is the farming and mining sectors of the Australian economy that are expected to be the major drivers of the Nation's economy in 2011!

What the farmers cannot manage is the unnatural risk of political/ideological/bureaucratic bumbling associated with the science of the Basin Plan. Specifically, it is the acknowledgement throughout section 3.3 that lack of knowledge is the confounding factor in development of a sensitive and realistic working knowledge of water requirements in the Murray-Darling Basin. Table 3.1 on p.79 rates this lack of knowledge as of the highest priority in the areas of environmental assets and ecosystem functions and also in water availability, including inflows and quality of groundwater modelling. Therefore the robustness, accuracy and reproducibility, of MDBA model data is compromised because there simply isn't enough known about the workings of the Basin. As such, it logically derives that the proposed SDL have no scientific basis or, if they do, the lack of knowledge underpinning them indicates that there is the highest risk that these SDLs would not be scientifically accurate and reliable.

The validity of the MDBA science is also highly questionable: It is not based upon peer reviewed data. It is stated on p.87 that the confidence category of the MDBA science is medium. That is, it is data derived by and given meaning in government bureaucracy. Hence, it is tainted by an institution that has total control of data gathering and meaning making.

Perhaps one example of this total control issue is the lack of knowledge associated with the evolutionary robustness of the Murray-Darling basin ecosystems. As the report has a data timeframe of the years 1895 to 2009, this period of time represents just 0.00228% of the 50,000 year time period indicated in the historical perspective of MDBA documents. And given that the basin has been exposed to evolutionary pressures that act over a much longer timeframe, being the geological time of hundreds of thousands of years and longer (and therefore, more diverse environmental conditions), where is the data that factors in the biological robustness of the ecosystem? The Murray River has dried up in the past and it has revived in the past. I am dumbfounded that such knowledge about evolution of the Murray-Darling basin has not made its way into the MDBA data set. How is this piece of data represented in the modelling of the Murray-Darling Basin?

Regarding the Bayesian model, it is quite capable of dealing with all four risk groups identified in section 3.3. And so it is perplexing that one risk group, policy with unintended adverse impacts, was eliminated from the workings of the model. This was founded upon the difficulty of obtaining quantifiable data but should be balanced off against the veracity of medium confidence quantified data. That is, the veracity of both sets of data are more than likely comparable and so the exclusion of one can only be seen as an attempt to cover up an output of the model that shows the model itself has little scientific validity.

Given that the potential socioeconomic impact of the proposed changes, it seems only fair that the validity of the MDBA scientific data meet the category of high. Further, that the model itself be given weightings, assumptions and meanings by all stakeholders, not just those with PhDs who happen to be in the government's pocket, because clearly they are lacking in scientific credibility if this is the best that they can do.

Here's a suggestion: Cut the gang of 58 scientists employed by the government down to 20 and use the financial savings to engage community members in the workings of the MDBA model(s). That way, a truly representative working model of the Murray-Darling Basin will be generated and which will then allow community ownership and stewardship. Who knows, this might even ameliorate the risk of compliance!

What you have done with the MDBA plan is to introduce such enormous risk, risk that is not scientifically substantiated, into the socioeconomic workings of the people living in the Murray-Darling Basin that it is beyond the capacity of these people to manage and prosper. You are driving country people and families into poverty to achieve an ecological ideal that itself has no scientific basis. You are subverting self-sustaining food production to the idiotic ideal of free trade zones and exposing upcoming generations to food imported from overseas whose quality is not fit for human Australian consumption.

On the whole, you should be embarrassed by the intellectual quality of the work you have compiled and ought to, as a matter of decency to country Australia, be informing the stupid people who drafted this legislation that it is based upon faulty reason and needs to be put on the back burners until knowledge of greater scientific veracity about the Murray-Darling system is available.

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