

Murray-Darling Basin Plan: Five-year assessment

Not so much a plan as an idea, and not a very good idea at that.

(Notes on Productivity Commission Issues Paper)

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1. Rather than the traditional concerns with economic efficiency and resource allocation of the Productivity Commission and its predecessor agencies, the tone of the Issues Paper reflects the special nature of this Inquiry, which has its origins in the previous responsibilities of the now defunct National Water Commission.
2. The scope of the Inquiry is restrictive given the importance of the Murray-Darling Basin Plan. At page 2 it is stated that 'the scope of the Inquiry does not extend to considering changes to the water recovery and other targets set by governments as part of the Basin Plan.' A root and branch investigation of the MDBP is justified. \$13 billion is a massive commitment to deal with environmental problems that were already being tackled with some success under earlier arrangements.
3. The Issues Paper is notably deficient in its limited discussion of the importance of infrastructure investment in the MDBP, and its pros and cons vis-à-vis buyback. The predominant off-farm and on-farm infrastructure component of the MDBP is indefensible on standard criteria of public finance, as usually applied by the PC. In summary, most claimed savings from infrastructure investment cost much more than the prices of water revealed in well-established water markets; subsidised infrastructure distorts choice of irrigation technique, which also depends on labour and energy costs; and, subsidised investment discriminates against individual irrigators, industries and regions that have already adopted modern irrigation methods.
4. This PC Inquiry should also consider the possibility (probability?) that a comprehensive Basin Plan was inappropriate in the first instance. There was nothing wrong in principle with the concept of 'a healthy working river' or the forward-looking project-by-project approach implied by the 'icon sites' of the Living Murray programme. The Basin States and the Commonwealth managed to cooperate under previous institutional arrangements. Far better results might have been achieved with changing emphasis and an increase in the resources devoted to existing programmes.
5. The PC is in an unenviable position. The MDBP exists because of environmental damage brought about by too much irrigation in the MDB. Over investment in irrigation was caused by past government (and public) enthusiasm for irrigation. Nevertheless, there is a lot of successful irrigation in the MDB whatever its chequered history. The regulated river system provides abundant recreation and tourism opportunities for locals and visitors alike.

6. The MDBP is problematic because detailed planning is a costly and inadequate way of dealing with risk and uncertainty. The most obvious sources of uncertainty are climatic and economic (commodity markets and farm technology). Less obviously, conceptual and empirical uncertainty surrounds environmental policy for the MDB. There are multiple economic and environmental possibilities for the MDB. Path dependency is of the essence. The PC, in effect, is put in the position of accepting the false precision of the MDBP.
7. The PC has the resources to investigate some technical issues concerning the MDBP.
8. First of these concerns the meaning, calculation and application of sustainable diversion limits. There are gross differences in the variability of rainfall and runoff across the MDB. Should the same statistical methods be applied in calculating SDLs in vastly different regions? Once calculated, can these estimates be sensibly added up across the MDB? Does it matter that some parts of the MDB have a vastly modified environment as a result of irrigation development?
9. A first check might be to determine the relationship between calculated SDLs and existing diversions. If these were to prove to be more or less uniform across the MDB, it would suggest that rules of thumb have been used and also that linearity between reduced extractions and environmental benefit has been assumed in situations where thresholds and discontinuities might apply.
10. Another technical issue worth exploring is the empirics of return flows. Is water actually being saved in aggregate per medium of infrastructure investment or merely being shifted in the landscape? Not just empirics, second and third round effects need to be considered. Risk management, water trading, entitlement systems, irrigation technology and farm management are intertwined. Arguably, the high tech irrigation industry envisaged by the MDBP is inconsistent with low reliability water shares and other nebulous entitlements.
11. Relatedly, a weakness of the MDBP is the lack of clarity in distinguishing between flow-related environmental objectives, end of system flows at the Lower Lakes and Murray Mouth, and non-flow related environmental objectives that are sought upstream for riparian zones and wetlands. Engineering works and measures can achieve equivalent environmental outcomes with a lower volume of environmental water for the latter, and have done so already in many commendable instances, but are not relevant to the former. Supply measures will not resolve end-of-system issues. It follows that the adjustment mechanisms permitted in the MDBP are a recipe for further conflict between the states, adding even more to the already burdensome administrative costs of the MDBP.
12. The Issues Paper refers to slow progress in the implementation of the MDBP. Removing 'constraints' to the programme of water recovery and tardy accreditation of water resource plans are mentioned. The PC needs to consider whether slow progress is the result of administrative and institutional failures or because what is being sought in the MDBP is actually unrealistic. Put another way, cognoscenti of economic ideas like opportunity cost, sunk costs and path dependency might regard such problems as policy-induced, and not worth treating seriously – the hydraulic equivalent of an iatrogenic disease.