ACF response to the Productivity Commission draft research report 'Market Mechanisms for Recovering Water in the Murray-Darling Basin'

12 February 2010

This paper summarises ACF views on particular elements of the Productivity Commission draft research report published in December 2009 and provides some additional material over and above our original submission. We welcome both the draft research report and the opportunity to provide feedback on it.

Relationship between buy-backs and the Basin Plan

ACF acknowledges that reallocating water to the environment before the Basin Plan and sustainable diversion limits (SDLs) have been established is not ideal but the alternative of waiting until such processes are completed could be catastrophic for many areas Murray-Darling Basin (MDB) and indeed it is already too late for some. Eighty per cent of the original wetlands in the MDB have already disappeared and as a consequence ninety per cent of the birds that once lived and bred there have also gone[1]. Over-extraction should have been dealt with when it was first, formally recognised by COAG in 1994 and having wasted so much time already there is no reason to delay any further.

We also acknowledge the difficulties of conducting cost benefit analyses of environmental watering, but one need look no further than the Lower Lakes in South Australia to see the impact of environmental degradation as a consequence of

[1] http://www.thelivingmurray.mdbc.gov.au/__data/page/1482/snapshot_14septa.pdf Viewed 11.02.10

inadequate environmental water on the socioeconomic wellbeing of communities as well as the natural environment.

We think that the Productivity Commission is overemphasising the risk of buying too much water in any one area and that under the circumstances the existing 'no-regrets' policy driven by existing information from the 'sustainable rivers audit' and CSIRO 'sustainable yields' studies is entirely reasonable.

Complementary land management

There are many threats to the ecological integrity of the MDB but over-extraction of water is acknowledged as by far the most significant[2] and if it is not adequately dealt with, any investment to address other threats, for example, pests, weeds, logging, grazing, etc will be redundant. We agree, however, with the finding that changes in water allocation alone will not optimise outcomes for the environment and that other aspects of land and water management should be addressed. The emphasis on water recovery is right and proper but as the Water for Future and other programs address over-extraction, other land and water management issues will become increasingly important. There is a large gap in investment and policy response to non-flow related matters which should be addressed by all levels of government.

Increasing environmental outcomes per unit environmental water

Recovering adequate volumes of water with the appropriate reliability and other characteristics to meet the needs of the environment on a case by case basis is essential. There are, however, often ways to reduce the amount of water needed to achieve particular outcomes and we feel these are largely overlooked or lack a policy basis or funding source.

In relation to **carry-over provisions** for held environmental water, for example, environmental water holders are subject to exactly the same rules and privileges as other entitlement holders. Whilst we agree with the general premise that all entitlement holders should be treated equally, we would caution against a strict application of this rule as it could create barriers to creative ways of providing for the environment whilst minimising third party impacts. For example, Drew and

[2] http://www.thelivingmurray.mdbc.gov.au/__data/page/1482/ERPreport1.pdf Viewed 11.02.10

Scoccimaro[3] showed that compared to a situation without carry-over, the ability to carry-over water up to a limit of 4.5-times the volume of entitlement held, reduced by 70%, the amount of water needed to meet environmental demands 80% of the time. Preferential carry-over provisions for environmental water need not impact on the security of irrigation water if such arrangements are contingent on equitable 'first to spill' rules. Such arrangements may benefit allocations to all entitlement holders by increasing the volume in storage when carried over and therefore reducing the proportional loss by evaporation.

There are also opportunities to employ **environmental infrastructure** such as regulators or pumps to reduce the volume of water required to achieve particular outcomes. For example, DSE in Victoria calculate that a one-off expenditure of $43 million on works at Lindsay Island would reduce the need for environmental water from around 1,200 GL / month to only 90 GL / month and still inundate 2/3 of the desired area, ie using the infrastructure for water delivery would require less than 1/10 of the water to flood 2/3 of the desired floodplain area[4].

There is no real substitute for large-scale, natural, over-bank flooding, but ACF believes there is a role for limited use of additional infrastructure which will secure environmental outcomes for substantially less water, thus increasing the efficiency of environmental water use and reducing the amount of reallocation required in the MDB. We support further investigation of proposals such as that described above for Lindsay Island on a case by case basis and their funding through the $5.8 billion Commonwealth infrastructure budget.

Reduced return flows as a consequence of irrigation efficiency works

There is some legitimate scientific and community concern that investment in irrigation efficiency works has the effect of 'robbing Peter to pay Paul' in relation to environmental water, since some of the water 'saved' would have seeped back into groundwater and eventually back to rivers or, as is the case in parts of northern Victoria at least, provide flow to significant ecological sites which would otherwise fail to receive adequate water.

[3] Collins and Scoccimaro (2006). Natural resource buybacks and their use to secure environmental flows. Land and Water Australia, Canberra, August.
[4] DSE (2010). Response to the MDBAs Issues Paper: "Development of Sustainable Diversion Limits for the MDB'

The net impact of improved irrigation infrastructure on the environment varies on a case by case basis and the response should likewise be on a case by case basis[5]. In general however, return flows are random by nature and not directed towards any specific ecological outcome. Consequently they are inferior to managed environmental water entitlements - which would be generated by improved irrigation efficiency - which are held by the environmental manager and specifically targeted and managed to secure ecological outcomes. Such seepage to groundwater is also often implicated in recharging salty groundwater aquifers which is environmentally problematic, not beneficial.

In particular cases where it is shown that infrastructure rationalisation would deprive valuable wetlands of their water, the proponents should be obliged to make provisions for those wetlands that includes adequate environmental flow and either maintaining the existing supply channel or providing an alternative. This approach has been adopted by the Northern Victoria Irrigation Renewal Project (NVIRP) as part of the rationalisation of the Goulburn Murray Irrigation District[6].

Buying temporary water for the environment

ACF welcomes the Productivity Commission's support for using funds from the 'Restoring the Balance' program to buy temporary or 'annual allocations' of water but we would emphasis that such purchases should only be contemplated when there is a high risk that refugia, threatened species, threatened ecological communities or other high conservation value assets may be irreversibly damaged or lost. ACF supports focussing expenditure on acquiring water entitlements that will generate long-term benefits but this should not prevent the purchase of real water in the short-term if the alternative is permanent loss of parts of the system. It should also be noted that temporary water is often unavailable when the environment most needs water making it of limited utility to environmental managers.

Integrated investment in infrastructure improvement and water buyback

We understand the Productivity Commission's concerns about using buybacks to achieve distributional changes and system rationalisation but we still think it has a useful role to play in hastening a transition away from unsustainable irrigation

[5] See for information: http://www.clw.csiro.au/publications/waterforahealthycountry/2006/RisksSharedWaterResources.pdf
[6] See Chapter 7 of http://www.nvirp.com.au/planningandenvironment/p_e_r.aspx

practices towards viable land and water management in a way that is acceptable to the local and broader community

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The authors

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