

Senate Enquiry "Basin Plan"  
Parliament House  
CANBERRA ACT 2600

Mike Erny

Dear Minister, often the case with issues along the Murray-Darling River system is that not only is water an important driver of rural economies and the environment it is also emotive issue. Water is one of the basic necessities of human life and I believe we are hard wired to be emotionally attached to water whether it is the desire to have water views from our house or how the precious resource is best used.

I have been personally involved with water management of the Murray-Darling Rivers for some 30 years both with the NSW water agency for their management, a horticulturist and irrigator.

I have been heavily involved with management of the Menindee lakes, Lower Darling River and Mid Murray River.

Basically the Basin Plan is or should be an exercise in marketing. I will elaborate, first it should be explained what the product is that the investor is buying into, why it is desirable to have this product and the reason why it is so great to invest in and how the community will get a great return, once having convinced the investor why this is a great investment then it should be explained what the price is. In this case what has happened is that the approach has been to say this is the amount you must pay (not invest) without explaining the need or benefit. Let alone if this is the best use of the resource to maximise the outcome for all stakeholder investors.

My second point is that simply buying water entitlements will not necessarily lead to the right environmental outcomes. I say with this some experience as I was the project director for the Darling Anabranch pipeline and Environmental flow project. A project which saved some 47,000 ML of water and returned some 430 km of water course back to a more natural ephemeral system. I am currently the project director of Koondrook-Perricoota flood enhancement works, the single largest environmental project in the Murray-Darling Basin which will water some 17,000 ha of forest.

Unless the water is bought in the same valley's in the same portion as what the flows were naturally and even then the outcome will be different because the river is now highly regulated the outcome to the environment will be quite different to the flooding distribution which occurred naturally.

For example the flow going past Mildura for the past 3 months has been approximately 40,000 ML/day. Now if we call this 100 days x 40,000 ML=4,000 GL or about the

amount proposed to buy in the basin plan, only trouble is that this has not been sufficient to get water on to the floodplain let alone reach minor flood levels. The issue is that from Mildura to the Murray mouth the River is a series of weir pools each back up to the next. Once these weirs are removed we need a flow of approximately 50-55,000 ML/day to maintain the pool heights.

What I am suggesting is that we should be re-designing our weirs for environmental outcomes as well as tourism/social and, irrigation/economic outcomes.

If you look at this way most of the weirs were built in the 1920's-30's so in 20 years time they will be 100 years old and due for replacement. What we should do is now start designing these new environmental weirs as part of the National infrastructure re-building program.

If these weirs were designed so that at key times the water level could be raised by say 1.5 to 2.0 metres above current pool levels, then all of the floodplain for some 1,000 km of river from Euston to the Murray mouth could be watered with a flow of approximately 10,000 ML/day not the current 50-60,000 ML/day. This would result in a massive water saving be more assured that the flood plain of some 1,000 km of the Murray River would be protected from lack of flooding plus insure local communities about the long term replacement of key national infrastructure.

The question which is likely to the fore is how much, my estimate based on previous experience with these costings are a new weir would cost around \$60 million so replace all 12 weirs from Euston to the Lower Lakes would cost \$720 million in a 10 Billion \$ program. The total water saved is much harder to estimate but I would estimate somewhere between 1-2 ,000 GL. But this is dependent on frequency and duration, but in all a massive saving compared to buying entitlements and the environmental outcome is much more targeted to achieve the outcome for 1,000 km of the Murray River.

My third point is that more thought should be put into the type of water product which is needed and what that might look like.

To buy some 4,000 GL of water is a huge investment probably \$4 billion, when many years the water may not need to be actively used eg major flood or drought. And simply leaving the water in the storage as I have pointed out does not target the environmental outcomes; it will simply be another changed water distribution which still does not reflect natural.

Maybe this new water product could be a form of leasing based on storage levels or % irrigation allocation. It is likely that there needs to be a mix of water products, what these products should look like I am unable to conclusively say, but I do know simply buying all the water entitlements is not a good economic outcome for the tax payer to own something which only needs to be used intermittently and is bad social outcome for those communities which lose people as a consequence of poor policy.

If we can reach agreement on what parts of the environment we want to preserve as a priority, determine the water needs of the priority areas are then a suitable product could be devised.

The three points I raise are not the only solution I realise in this complex problem, but in combination with others I am sure will help to devise a more equitable "Basin Plan". Should there be a need to go into more detail with any of the elements of raised please feel free to contact me.

Yours Faithfully

Mike Erny