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Regional Australia: Impact of MDB Plan

Introduction

Purpose

The purpose of this submission is to comment on the perceived impacts of the "Guide to the proposed Basin Plan" (Guide) on regional communities. The submission is our individual view. However, the comments provided are expected to be representative of other individuals and communities across the Basin.

We do not believe there is anything earth shattering or revolutionary in the submission. To the contrary, we expect that it may be useful in reinforcing the general consensus that has been emerging throughout the enquiry. On some matters it may contrast in particular with the [position adopted by other submissions, or on which they may be silent.

We are confident that the inquiry will be well informed by all the submissions and we are pleased to be able to contribute to this process.

Context, Scope & Credentials

We declare our financial independence from any outcome that the MDB Plan may produce, as we are superannuants and are not reliant on income produced directly or exclusively by the Basin. We are none-the-less concerned about the economy of the Basin, as we operate a small beef cattle grazing property of approximately 90 ha, running about 50 head. We live on our small farm, which is located in the Murrumbidgee catchment in southern NSW. However, our children and grandchildren are currently economically and socially dependent on several industry sectors of the Basin.

In addition to our personal circumstances, we also have reasonable involvement in our local community and have some appreciation of the community's socio-economic drivers, especially those that define the viability of the Basin. We are also interested in the environmental determinants of the Basin's sustainability and we are active Landcare members. We make no claim as to particular expertise, but offer here our lay views.

Problem Definition

The Terms of Reference (TOR) for the inquiry are quite explicit. However, there are some implicit assumptions as to the status of the "Guide to the proposed Basin Plan" and the socio-economic impact of any "Plan" that may eventually result subsequent to the Guide.

The Guide was not well promoted to the community. The violent public controversy surrounding this issue and the role of Parliament and Government to deal with it, has proven to be highly volatile, bordering on riot at times. Unfortunately this has clouded the issues, politicised the debate and forced people into highly subjective positions. Everybody claims to clearly understand the issues however; few can agree what these are!

Given these dynamics, it is appropriate to first make explicit here the basic assumptions we have adopted. These assumptions under-pin the views expressed in this submissions.

There is broad agreement that: clearly something is broken and it needs to be fixed. We take the problem to be defined as: the environment of the MDB is unsustainable at current rates of extraction.

That the Parliament recognised this problem a few years ago has given rise to the Water Act 2007. The act is obviously flawed or ineffective and this is in part why the Parliament is having this inquiry. The Act itself is beyond scope here.

A solution has since been proposed by the MDB Authority pursuant to the Act. The solution outlined in the Guide sets a specific minimum volume of water that is to be permanently allocated as an environmental flow. Each of the 19 regions of the Basin has its own minimum volume. There is much debate about each of these limits. There is also concurrent debate by the scientific experts, including those who have informed the Authority's deliberations and determinations of the minimum environmental requirements published in the "Guide".

The agricultural sector and supporting communities that will bear the brunt of the suggested cuts have been hostile in their reaction to the proposals. This is typified by the recent announcement of the National Farmers Federation (NFF) declaring that the Plan is "full of holes and is dead". Conversely, some conservationists claim that the do-nothing option will soon result in the entire ecology of the Basin collapsing and consequentially all agriculture and its dependent industry and society are also doomed. Some medium position is probably the truth!

In developing this submission we have made the assumption that a Plan will eventually emerge and that the Plan will allocate as a first priority some environmental flow. From this, some water will be re-diverted away from traditional and current purposes throughout the Basin. It is therefore taken as a given, that there will be less water for agriculture and communities. The socio-economic impact of this on Regional Australia is what we are all about!

Hopefully nobody is surprised by any of this – but it still needed to be made explicit here.

Structure

The structure of this submission directly corresponds with the terms of reference for the inquiry. The submission accordingly has 8 parts:

1. Introduction
2. Direct and indirect impact on regional communities
3. Options for water-saving measures
4. Roles of Sectors in developing and delivering water efficiency
5. Cost effective efficiency and reduced consumption
6. Economic growth and diversification within regions
7. Previous reform and structural adjustment
8. Conclusions

Direct and Indirect Impact on regional communities

The direct and indirect impact on regional communities will be dramatic and devastating. The cause and effect mechanism for this is relatively simple. There will be less water for non-environmental purposes i.e. less water for conventional agriculture and other economic activity. There will be less water for conventional social purposes, including general amenity and recreational requirements. While the general concept is relatively straight forward, the specific impact on individual residents, enterprises and communities is complex and extensive.

The impact of the Plan is difficult to model in any deterministic and complete form because this is an extremely complex relationship. It is certainly not linear and there are unknown discontinuities. As the amount of water available is reduced, a tipping point will be reached where some farms and other industries become unviable. The communities that support these farmers or businesses and their families will collapse and towns will be abandoned.

If climate change resulted in continuing long-term reduced rainfall for the Basin, then irrespective whether or not and the first 3,000 Giga-litres per year went to the environment, the limiting case would ultimately be reached where the entire agricultural basis of the MDB will collapse. The end point is the MDB would become uninhabitable.

The less dramatic scenario and more detached argument is that while this is a terrifying prospect for those involved, depending on ones timeframe and vantage point, this is simply the market or economy at work. As such, adaptive structural change is going on anyway. This happens continuously and is irrespective of anything the Plan might do. We might blame Adam Smith and his invisible hand – however he talks about the greatest good for the great number (of people). While it sure doesn't sound good, it probably won't be the end of the earth, or even the Basin and some people may even be better off!

Ongoing community engagement is clearly needed to help develop any effective solution to the socio economic impact of the Plan. Organisations like Landcare and other established community groups should routinely be engaged to contribute to the dialogue, development and implementation of the Plan. The capacity of such organisations has of course been depleted (exhausted in many cases) over the past decade or so of drought – and now floods. There needs to be more public resources allocated to sustain these organisations, to maintain them and realise their contributions, as critical to the solution.

Options for Water-Saving Measures

There are some options available for water-saving. It may be appropriate to invest in capital infrastructure. Especially where it can prevent or reduce evaporation or eliminate other non-productive losses (leaks) and non-essential uses of water.

There are however, limits to the cost effectiveness of some of these investments. Evaporation and transpiration occur naturally, directly from the rivers and water courses. Some "loss" is desirable and even necessary, such as for micro-climates or localised eco-systems. Other losses may be unintended, but are beneficial recharge mechanisms for subterranean aquifers. There some currently open irrigation channels and water storage systems that might be able to be covered to reduce evaporation; however this all needs a critical case-by-case study to establish their respective cost effectiveness.

The simple effectiveness of such measures is currently unknown by us, but it is unlikely that they will make a dramatic difference, particularly at the scale of the entire Basin. The investment in such infrastructure, on a national scale, is very expensive. Such allocation of taxpayer funds may not be the best use of these public resources.

While such projects might initially also soak up some local unemployment, their long term benefits may be elusive. The cost effectiveness of such measures needs to be critically and robustly proven, before more taxpayer funded white elephants are built.

There may be some cost effective and worthwhile water saving options identified by other submissions and further studies. However, we are ignorant about this and can't comment further. Similarly, we are not irrigators and accordingly can not comment on the issue of: "actual usage versus licence entitlement over the preceding fifteen years".

We would like to suggest an unconventional option. It might be possible to divert water into the Basin from external sources. These might include: coastal, tropical or other monsoonal watersheds. The feasibility of capturing such water and pumping it into the upper reaches of the Basin needs to be investigated. This may be analogous to bringing the mountain to Mohamed, but its feasibility needs to be tested. After all it may only be money that is needed! The socio-economic benefits are huge. Would it be cost effective?

Roles in Developing and Delivering Water Efficiency

Australia is the driest continent on earth and as such we should be "the pre-eminent international centre of excellence in delivering infrastructure and technologies aimed at supporting water efficiency". Government, industry and the research sectors are reasonably well developed in Australia, but much more needs to be done.

Israel for example has developed international expertise in dry-land irrigation science and technology. The Israelis have been very effective in marketing these services and products world wide. Australia should do more to establish our own flagship of this nature. We can learn from what has been achieved by others and leverage our own skills and domestic requirements.

The CSIRO for example is currently doing great work in this regard, but this national effort should be better resourced and more critically focussed. The public purse should not become a milche cow for the CSIRO or any other monopoly for this technology. Some competitive market based reality check is needed. This will ensure resources are only allocated where they are most likely to produce the outcomes that fix the problem.

Incentivising the arrangement, such that generating the solution will produce big profits and benefits to those doing the work, should be made a robust part of such systems.

Cost Effective Efficiency and Reduced Consumption

The market is a proven robust solution to finding the most cost effective distributive process for a scarce good (water is good – without it we die – more is preferred – but maybe not during floods). Price signals will robustly achieve water being allocated to its highest valued use.

How this works for the environment is a problem of course as it is a social good and results is classic market failure. But we note that the requirements of this inquiry are primarily to determine the socio economic impact of the Plan on communities and as such the environmental aspects are excluded. In this limited context the classic free market equilibrium between availability (supply) of water and the demand for it is achieved at the optimum price and this is the Pareto Efficient optimum allocation. The simplicity of this will not be popularly embraced even by those claiming to be pro-markets anti-bureaucracies and regulation. Silence in the TOR on the environmental needs may be a future problem, but this is out of scope for now.

We do of course acknowledge here, that in the limit, when the environment and ecology of the Basin collapse, as the best science tells us it will, then the Basin ultimately becomes uninhabitable and fairly dramatic socio-economic effects will certainly have been played out. Fortunately, we are dealing with scenarios far less dramatic of course and with the current flooding throughout the Basin, we might even prefer denial and hope there is no problem to be solved. Some now say this is the case.

The requirement of this TOR is simply to consider allocation efficiency and optimum levels of consumption. Accordingly, if the price of water is allowed to reach its true equilibrium

and if there are no gross distortions of the market, then reduced or cost-effective consumption levels of water will be realised and robustly maintained. However, the transitional arrangements are non-trivial and will not be generated by any market!

Economic Growth and Diversity within Regions

There is some scope for economic growth and diversification for regions across the Basin, but these are definitely limited. Tourism is inevitably the first option to be considered and there may be some scope for this across the Basin.

Renewable (or even nuclear) energy for adjacent (coastal) cities is another possibility. Similarly, other industries that have zero or minimal water consumption requirements need to be identified and further investigated.

Some existing water intensive industries, currently situated within the Basin, might have to be modified for relocation outside the Basin. It may be feasible to move some activities to more water abundant sites, such as the Ord River or other high rainfall regions. This would be expensive, difficult and socially disruptive. But relocation needs to be critically considered. Again, appropriate support and adjustment schemes need to be devised. If supported relocation was adopted, as part of any desired outcome, it would have to be appropriately resourced.

Previous Reform and Structural Adjustment

Previous reforms and structural adjustments have been implemented throughout Australia and in other similar countries overseas. Examples, like the Murrumbidgee Irrigation Scheme (MIA), various goldfields' water supplies and major dams for large cities, may be germane. The Dairy Industry Adjustment scheme and others, also provide models to consider in devising any reform and adjustment scheme for the MDB.

These relatively obvious examples may be of some application. We are unable to identify other more directly related consideration for this point of reference. However, we believe that comprehensive previous reforms and adjustments should also be further explored. This research should be done as a specialist commissioned task.

Conclusions

The direct and indirect impact of the Proposed Basin Plan on regional communities will be dramatic and long term. The impact will fundamentally and adversely change the nature of agricultural industries, local business activity and community wellbeing.

There are some options for water-saving measures across the Basin but these each need to be critically reviewed and may be quite limited. Meaningful analysis of actual usage versus licence entitlement over the preceding fifteen years is currently not available and may ultimately be limited to some subjectivity.

There are discrete roles for governments, the agricultural industry and the research sector in developing and delivering infrastructure and technologies aimed at supporting water efficiency. The CSIRO for example is currently doing good work in these disciplines, but a fundamental refocussing of Australia's programs needs to be done.

There is expected community resistance to change and hostile reaction to measures to increase water efficiency and reduce consumption and their relative cost effectiveness.

These measures need to be more effectively communicated to communities and their ownership of them needs to be achieved.

Some opportunities exist for economic growth and diversification within regional communities, but these are limited and should not be relied on as any fundamental amelioration of the socio economic impact of the proposed Plan.

There are some previous relevant reform and structural adjustment programs that have differing degrees of application to the Plan's impact on communities and regions. However none provide a good match or are directly scalable to the Basin.