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# Submission on The Guide to the proposed Basin Plan By Tom Mackerras

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## 1. Introduction

This is a submission to the Murray-Darling Basin Authority (the Authority) in response to the Guide to the proposed Basin Plan (The Guide) that was released to the public on Friday 8 October 2010 The Authority has requested submissions on this document form interested parties.

I am a private citizen who lives in the Riverina city of Griffith. I have lived in the area for the past 30 years and have been employed as an engineer in two organisations that rely directly on irrigated agriculture for their business. I was employed for 20 years at Ricegrowers' Co-operative Limited (now Sunrice) and at A&G Engineering Pty Ltd, a manufacturer of stainless steel wine tanks and equipment to the Australian wine industry.

I am married and have 3 teenage children aged 15 to 18 years old. My wife's parents were rice farmers and her family all continue to live within the Murray-Darling basin.

I am a believer in the rural lifestyle and have chosen to live in the country. I believe that the future of Australia lies in regional communities and not in the overpopulated cities.

The guide to the Plan does not provide a Win:Win:Win solution, it does not even provide a plan.

# 2. The Need for Change – the Scientific Evidence

The Guide is based upon a presumed need to increase water flows to the river for environmental purposes. It presumes that the basin's rivers have become degraded to as a result of irrigation.

There is nothing within The Guide that supports this presumption. No scientific or anecdotal evidence is presented.

#### 2.1 Scientific Evidence and References

Section 4.1 of the plan makes claims with regards to the scientific evidence basis and claims that "the best available science and knowledge" has been used to develop the plan. No such evidence is presented in the document.

There are no references or footnotes within the document that refer the reader to peer reviewed scientific papers. Claims of fact are made without any documented support at all. If these claims can be supported by appropriate scientific knowledge and research, why is this knowledge and research not named within the document? Any school child would be castigated by their teacher for making claims without supporting them by a footnote or reference to the document where the information was obtained.

Why is such a document that is so critical to the future well being of the nation not properly referenced?

The Authority acknowledges that the ecological evidence base is of "mixed" quality (section 15.7, p197), and yet they are recommending major changes based upon this evidence. P38 openly states that much of the evidence base has not even undergone "any significant peer–reviewed scrutiny", and yet major decisions are being based upon this!

Without this evidence being presented, or at the very least referred to, we must conclude that this is not available or, at best, cannot withstand significant scrutiny.

No scientific evidence was presented at the Griffith consultation meeting of 14 October 2010 (a fancy coloured map was, but that is not evidence) and no scientist was even present (to my knowledge) to answer questions.

#### 2.2 Photographic & Anecdotal Evidence

There are dozens of photographs within The Guide. These show rivers in flood, irrigation farms and communities, scientists carrying out their work, a dry river bed or two, native wildlife the mouth of the Murray flowing into the sea,

Only one of these photographs (page 165) shows any significant environmental problems or issues.

Clearly, if there is a major problem with the basin that requires cuts to irrigation of 40%, there would be plenty of opportunities for photographs of significant environmental issues, and yet only one photograph is presented!

Clearly, the photographic evidence does not support the proposition.

#### 2.3 End of River Flows as a Basis

The whole premise of The Plan is stated as being end of basin flows.

Where does this come from? Is this a recognised international measure? No scientific references have been made to support this measure is an indication of good or poor river health, and yet this is stated as being the primary driving measure for the plan.

On what bases are the terms qualifiers poor, moderate and good made? Are these internationally recognised terms and levels? Why is it deemed that a minimum level of 75% is acceptable for the Murrumbidgee valley when a level of 51% is acceptable for the Gwyder valley? This level is already below the current level of 56%.

Who has made this quite arbitrary decision? Where are the references to the scientific documentation that back it up? Why is a level of 60 or 65% not proposed when other valleys are being considered to be acceptable at levels lower than this?

How can the Authority be sure that the river systems can handle the volumes of water that it is proposing to provide overbank flows? How often do these occur naturally (the last floods were 20 years ago!).

# 3. Social & Economic Impacts

The Plan contains a lot of information relating to the social and economic impacts of the proposed Plan and the Authority expresses its concerns about the impacts on the communities within the document. Additionally, the Chairman continually made reference to this in the community meeting at Griffith and constantly distanced himself and the Authority from the impacts of the Plan on the communities.

The Authority is so concerned about the quality of the evidence (rated as being weakest, p197) and the impact on the communities that they have commissioned further research into this (page xxvii).

Clearly, the proposed plan of 3,000GL/year is going to have a greater impact than stated in The Guide.

The Plan clearly fails to meet the needs of the Australian community

#### 3.1 Economic Impact on Communities

The economic impact on communities is quite simple and does not need major analysis. Put quite simply, a reduction in water to irrigation communities will have the major impacts beyond those being stated in the Guide:

- Table 8.2 identifies communities that are highly reliant upon irrigation for their survival and identifies many of these communities as being at risk.
- On page 21, the Authority states that the Basin is responsible for the \$5.5 billion, and then suggests on page 87 that the reductions in available water of 40% will result in a mere13–17%. This figure, quite simply does not stack up. How will a simple cut in input not result in an equivalent cut in output?
- The Authority also recognises the reliance of local communities upon farmgate income. Section 7.7 states that the ratio of other businesses to farms in the basin is 2:1. The implication is that, on average, every farm in the basin supports 2 other businesses in the boarder community. Some communities some have an even greater reliance upon income from the farmgate (p96).
- The authority recognises that in excess of 75% of the farmgate income is spent in Basin communities (p96). Any economist will be able to estimate the flow-on effects of this level of expenditure on the wealth of the community and the level of employment in it.

- Table 7.1 clearly identifies the difference in irrigated income over dry land farm income. Irrigated income is 18x per hectare! In areas such as the Murrumbidgee valley this is of a major impact.
- With 30,000 people being employed in food product related industries (p21), how can the Authority then claim a basin wide reduction of only 800 jobs, based upon a 13% reduction in income! The region should be a study for economic efficiency if this is the case!

Clearly, a reduction in farm gate income will have a major flow-on effect on the communities of the Basin, the effects are substantially understated and the evidence base is considered to be "poor", even though the country's most eminent economic forecasters have been used.

#### 3.2 Implications on a National Level

The guide completely fails to consider implications of the Plan on the national economy, although stating that the Basin is responsible for 45% of Australia's total irrigated farm production (p21) in the drought years of 2005–6. Section 2.4 of the Guide clearly outlines the reliance that Australia has on production from the MDB. Without increases in production efficiencies, a reduction in irrigation will see a commensurate reduction in volumes of product.

Additionally, a simple thought process identifies taht the cost of good will increases:

- Irrigation suppliers will have less "product" to sell, but the same infrastructure to maintain. Water prices will at least double just to maintain the existing level of maintenance and service.
- This will at increase the cost of food production, even if the existing level of production can be maintained through increased water efficiency.
- Unless rapid increases in water efficiency are found (who is doing the research to achieve this?), a reduction in water availability will have a significant reduction in food production. The lower supply will further increase food prices and make the country reliant upon importing food, rather than being an exporter of food.

The Federal Government is forecasting an major increase in population over the next decade. How is this increasing population going to be fed and clothed?

#### 3.3 Impact of the Drought

At the Griffith meeting (14 October 2010), the Authority claimed that the decisions in the g Guide are not based upon the experiences of the drought,

however The Authority constantly quotes figures in the guide from the past 10 years. The Guide talks of dying red gum forests, loss (who lost them?) of wetlands, the mouth of the Murray River being closed. These are impacts of the extended period of drought. The impacts, of which would have been much worse but for the irrigation schemes and water available from dams. It will be interesting to see the impacts of the current floods!

The Authority knows full well what volumes have been passed down the Murray in order to supply South Australia water for consumption.

The authority recognises that as a consequence of the recent 10 year drought many industries and farms are already in financial difficulties (p124) and recognises that property values in the basin have typically fallen by 20%. This is a clear indication of the results of enforced irrigations cuts.

This is witnessed by the continuing fall in land & property prices and the high level of properties on the market in the MIA. This is as much a consequence of the release of the Plan as anything else. With such uncertainty, why would anyone invest in this region when they can have the sort of property gains seen in the ACT over the recent years!

- Who is going to compensate regional people for their loss in equity?
- How long will it take as a result of the implementation of the Plan to recover this loss?

#### 3.4 Social & Health Issues

The region's medical & mental health professionals are concerned with the mental health of rural people, particularly farmers who have seen years of drought. This is recognised by the Authority on pages 124 & 125 only from a financial point of view.

These people have warned the Authority of the impact of the Guide on the mental health of rural people. To date this has been totally ignored and this needs to be recognised & investigated properly.

#### 4. Where is the Plan?

Section 12, 13 & 14 of the Guide are dedicated to putting the Basin Plan into effect and measures for the effectiveness of the Plan. However, none of these sections actually present any management strategies to achieve the outcomes.

Clearly this is a plan without a plan!

How can a body charged with the management of the Basin completely ignore the process? Surely the MDBA should have a better understanding of what needs to be done that anyone else.

Surely a Plan needs to consider the following:

- Water saving initiatives in existing infrastructure such as dams, supply and drainage channels. The Victorian government have been converting open channel systems to pipe systems. What savings can be made here?
- On-farm efficiency improvements. These have been ongoing for many years and have already delivered many improvements. What further improvements can be made? Government schemes need to continue to support this work, rather than a negative buy-back.
- There are a total of 5 pipelines taking water from the Murray River to communities away from and outside of the Basin. What projects can be put in place to reduce these communities' reliance upon the Murray River for water? What water recycling projects can be implements? Can effluent be treated and returned to the Murray, rather than going directly to the sea?
- What changes in river management practices can be made to reduce transmission losses within the systems, or to provide the necessary fresher flows without using massive quantities of water?
- Research into improved agriculture and varieties so that greater quantities of food can be produced using less water.
- What infrastructure needs to be put into place to provide water to wetlands without flooding the system? What engineering solutions can be initiated to achieve the outcome without reducing allocations to irrigation?
- Diversion of water from floods in other regions to productive use within the MDB, either for environmental purposes of production; i.e. the Clarence River Scheme.

As an engineer I am firmly of the opinion that investment in solutions will create employment, rather than put communities at risk.

The only thing that has been presented in the Guide is problems. It is completely devoid of solutions. This is completely irresponsible.

# 5. Looking to the Future

The Guide not only is devoid of solutions, it completely ignores the needs of Australia in the future. The two major challenges that are being identified by governments are Climate Change and an increasing population.

#### **5.1** Climate Change

The Authority recognises in section 3.6 that the predicted impacts of climate change being:

- · Greater climate variability
- 10% predicted decline in rainfall
- Larger & stronger storms
- Longer & drier droughts

If these are accepted, then the following strategies are indicated:

- Increase the capture of rainfall during the wetter conditions; i.e. the construction of more storage reservoirs
- A greater reliance on irrigated agriculture during the dry periods.
- Greater reliance upon stored water for the maintenance of environmental assets during these dry periods.

The Plan (or lack thereof) does not even attempt to provide solutions for this.

#### 5.2 Increasing Population

The Federal Government predicts a population in excess of 30 million people by the time the Plan is supposed to take effect (end of the next decade).

Regional areas must become a part of the solution for managing this increase in population through:

- Providing increasing volumes of food and fibre
- Providing communities for people to live in so that the burden of overpopulation of cities is not exacerbated.

The guide only identifies reducing rural communities (placing greater burdens on existing capital cities) and reducing capacity to produce food and fibre.

The Guide is clearly not going to provide long term solutions for Australia.

## **6.** Consultation Process

The consultation process to date has been shameful.

- No scientific evidence has been presented at the community meetings, no answers given to questions raised.
- There was no register at the community meeting for attendees to sign to indicate their presence. This is standard practice for meetings, so why was this ignored at these meetings?
- The MDBA claims a 16 week consultation period, however submissions were originally scheduled to close at the end of November 2010, barely 8 weeks after the Guide was released. How can this be a 16 week consultation period?
- NO actual and clear notice has been given regarding the date for closure of submissions. The date was lost within a paragraph on the MDBA website, as "end of November". No clear date was stated in simple form. There was no date given in any e-mail from the MEBA engagement section until the extension was advised on 30 November 2010.

#### 7. Conclusions

The Guide to the proposed Basin Plan provides no solutions, only problems. It is completely one sided and while it might be a win for the environment, the Authority is clearly stating that it is a loss for regional communities and the Australian economy.

The Murray-Darling Basin Authority has completely failed to provide a plan that will lead to a Win (environment), Win (communities), Win (economy) proposal.

All it has succeeded in doing is alienating the people who it most needs to engage and get on board for the significant and sustainable changes to the management of the Murray-Darling Basin.

It needs to engage these people by being open about the scientific and economic data. I suggest forums/conferences conducted by the scientists in the major regional communities.

How can the Authority manage to achieve Sustainable Diversions (sustainable to whom, irrigators, the community of the Basin and Australia or the environment?) if the Guide that it has presented cannot itself sustain even the simplest scrutiny?

The process needs to the thrown out and completely reviewed.