1. Introduction
The Australian Institute of Agricultural Science and Technology (AIAST) is pleased to have the opportunity to respond to the Inquiry into the Impact of the Murray Darling Plan in Regional Australia (the “Inquiry”).

The AIAST is the peak body in Australia representing the professions of agricultural science and natural resources management. It has over 1000 members including scientists, advisers, policy managers, consultants, agribusiness and farmers. The majority of our members live and work in rural communities.

We provide strong, independent, balanced and factually based representation and advocacy on a wide range of issues affecting the profession and agriculture generally. In recent times these have included agricultural education, rural communication, farmer response to greenhouse gas policy, and rural research, development and extension (RD&E).

Our main submission will be in response to the Draft Plan itself but we wish to make a number of points which we trust will assist in the Committee providing advice to government.

2. The Guide Itself
We believe that the Guide is well written and a valuable resource document, developed under difficult circumstances in response to what were seen as the requirements of the Act.

In our opinion, the release process for the Guide was seriously flawed. The press chose to ignore that it was a guideline document and in some senses a “discussion document”. The premature flagging of outcomes and directions without firm recommendations as to how to achieve them was always going to lead to anger, ill informed reaction, a media frenzy and the government backing away in the face of “push back” (as governments have a history of doing).

That has resulted in a “shooting the messenger” mentality and left the process in disarray which places the opportunity to improve the Basin for all users in serious jeopardy. Changing this mentality is the most important issue facing this Inquiry, the Authority and Government at present and must be the focus of early action. The greatest risk is that key decisions will be driven by political expediency rather than fact and what is best for the Basin. That must be avoided.

Furthermore, the process has seriously compromised the credibility of the Authority and its staff to the point that they will find it difficult to lead rational debate in future.
formal and the political processes are brought together in the MDBA Draft Plan, in a way which is understood and accepted by the key stakeholders, is the real challenge. It always has been but the recent events have just made it harder.

What the events of recent weeks have highlighted is the need for a balanced approach based on an appreciation with the stakeholders and development of a win–win Plan rather than the win-lose perception we seem to have at present. It is not even clear what the short/long term benefits of the current approach are to the various stakeholders.

The outgoing MDBA chair recently made the comment:

“...a successful plan would require both Commonwealth and States to work together on a comprehensive range of policy, planning and implementation issues in consultation with relevant community, industry and environmental groups. While the Authority has an important part to play, it is neither empowered nor equipped to undertake the entire complex task.”

- Mike Taylor, outgoing chair of the MDBA

So the right **process** from here on is of prime importance. AIAST suggests that this requires the following steps:

- An appreciation that The Water Act 2007 does not deliver a triple bottom line outcome as promised by the National Water Initiative and should be amended. Failure to amend the Act could result in legal challenges against any final plan.
- A resolution by the Government on what the Act needs to achieve and the communication of this to the key stakeholders and the public. As it stands it seems that even the Authority and Government are at cross purposes.
- The formation of a group of experienced and non aligned people who would advise the Authority and Government on a process of engagement, communication and draft policy development from here on. This may include engagement with government(s) where necessary. This group could and should provide the leadership (and statesmanship) required to address the current situation. It does not necessarily need formal power to do so – just a sense of objectivity, engagement and “guts”.

*It is in the process of a revised approach to policy development and communication that the AIAST can best contribute, including possible involvement in the advisory group.*

- Engagement of an appropriate consultancy who are expert in the communication area to work with the advisory group, the Authority and Governments, rather than leave it to “spin”.
- Identification of key stakeholder groups at national and regional level and their being informed on and engaged in developing meaningful, balanced policies to achieve agreed outcomes. Without this ground level support, we will see a continuation of the ill informed, politicised discussion. Because of the process, these stakeholder groups have become part of the problem – they must become part of the solution.

We have always been impressed by the Chinese approach embodied in the saying – *tell me and I will forget; show me and I will remember; involve me and I will understand.* There is a desperate need for the grass roots stakeholders to understand. Therefore they need to be involved early, and not just as recipients of a carefully honed report developed ‘on high’. Rational debate is difficult at the National level as politicians, the environmentalists and the industry groups all have their own agendas. At the local level the boundaries between these groups are not so entrenched, they
have a mutual interest in achieving a solution and are used to working together – and they understand the economic/environmental/social drivers and constraints.

- The real need is to involve the communities at a local level in joint discussion between the protagonists of the issues with a remit to develop an agreed plan for their locality/district/region. It may be slower than some would like but we are talking of winding back almost 100 years of mismanagement. It would be expensive but not as expensive as doing the wrong thing or doing nothing. It would require leadership and facilitation and a clear requirement to reach consensus – continued division is not an option.

- A clear program of communication specifically targeted at sectors and regions and based on simple messages.

- If this approach is adopted we question whether further “open” public consultation is either necessary or desirable until the draft Plan, which includes firm, defendable recommendations, is released. To do so will continue to fuel ill informed comment and increase even further the risk of further Government intervention based on expediency rather than fact. Having attended two country meetings of this Inquiry it is clear that this can hardly be regarded as effective, well informed consultation but rather an opportunity for further breast beating. Unfortunately such meetings are often seen as a political exercise which is unlikely to have an effective impact on the overall outcome.

- What we do suggest is that having “done the rounds” and received more than 500 hundred submissions, the Committee clearly target the issues it wishes to explore further and concentrate on these in later public hearings. This will require a short issues paper to be provided to those attending those hearings.

4. Some Issues.

- The cost of “doing nothing”

  Whilst most people would agree that action on the Basin is necessary, the impacts on the environment, industry, communities and the economy of doing nothing have not been clearly articulated to the community, although we appreciate that the impacts are addressed in the Guide, albeit from a limited data base. This leaves the Guide open to emotional, self-interested statements of dire outcomes (often with pictures to suit) leading to biased judgements at all levels. Where is the clear statement of “this is what happens if we do nothing”? The process to date has not engendered an appreciation by the community of the overall science.

- Socio-economic factors

  Regardless of what the Act requires, the outcomes of the MDBA work were always going to be implemented by people, who themselves are driven by socio-economic imperatives, which in turn drive the political decisions. With the restructuring of the MBD management in the 1980’s, greater attention was given to integrating land, water and the environment including agricultural factors. The same cannot be said for socio-economic issues on which there appears to have been little previous research. This is not because the management didn’t recognise the need, but because it is a difficult area in which there are limited skills and published information. The MDBA sought to address this with a regional program of visits and some commissioned Basin-wide studies but the extent of these seems to have been inadequate or at least under-appreciated by the press and the community. This is a deficiency which now must be further addressed as a matter of urgency. Policies which are developed by government without having an understanding of the work thus-far undertaken and the
full extent of impacts on people and regions will be hijacked and at risk of not being adopted. Even if a Plan is put in place, it is unlikely to be effectively implemented without community recognition for its need and commitment to getting the job done.

- **Irrigation infrastructure and on-farm use**

  We question whether the benefit/costs of both off and on-farm irrigation infrastructure and their potential to save water and improve water use efficiency have been adequately researched and considered. Surely this should be an important component of any program. This would also provide a basis for giving “credit” to those industries, regions and individuals who had already made substantial investments to improve the efficiency of water delivery and on-farm use. It is clear that South Australia has performed far better than other States in this regard and this should be recognised. Any Plan needs to reward “good” water use practices of the past.

  The issue of further investment (especially public) in improved irrigation efficiency on farms and in water supply systems is a double edged sword. There is no question that further improvements in water use efficiency are achievable. Apart from the issue of reduction of return flows, such investment is worthwhile if driven by market realities. However, it may be a very expensive way to secure environmental water (assuming that the water saved is quarantined for this purpose) and runs the danger of producing gold plated redundant assets in the future. Whilst there is overall support for works which minimise water delivery losses and improve water use efficiency on farms, government support should be based on a careful consideration of overall regional, industry and environmental benefits. The potential for “horse trading” between governments needs to be recognised, and avoided.

- **Research, Development and Extension**

  The Inquiry should not underestimate the improvements in irrigation technology and their contribution to productivity and river health over the past 25 years in particular.

  The future prosperity of the basin and the system itself will depend largely on continuous improvement being made in technology, its validation at a local level, and its adoption by farmers.

  AIASS is concerned that the research, development and extension capacity in irrigation industries has seriously diminished in recent years.

  This takes two forms:

  - A shortage of graduates in agriculture overall, but particularly in irrigation and horticulture. Because of the issues with irrigation allocations, it is almost as if these are seen by many as sunset industries and don’t attract people to them. The end result is that training capacity at Universities and elsewhere is in a parlous state.

  - A lack of investment by governments and industry. In fact the capacity is being wound back as is evidenced by the closure in recent years of major facilities by CSIRO at Merbein in Vic, and by Vic and NSW Depts of Agriculture. Similarly facilities at Loxton in SA, once the national leader in irrigation and horticultural technologies are now a shadow of their former state.

  Irrigation is a “generic” issue which applies to all industries and tends to be under resourced by most industry research funds and the private sector.
There is clearly “market failure” in irrigation R, D &E investment, which if not urgently addressed by governments will impact on the future of the basin and those dependent on it. It is certainly an area which this Inquiry can and should highlight, and from which investment would bring early and substantial gains.

AIAST is able to provide further information on the need for and returns from greater investment in irrigation and irrigated industries if required.

- **Rural Adjustment**
  
  That the Draft Plan will require a cogent program of adjustment goes without saying. There is a need to consider interdependent policies and their implementation in terms of an overall process of adjustment in which the opportunities and needs of all sectors and stakeholders are taken into account. These needs must be targeted to achieve defined outcomes in defined areas, defined industries and defined end users, and include the opportunities for economic growth and diversification within regional communities and industries.

  It may not require government financial intervention as has often occurred in the past with rural adjustment schemes. It will require further research and recognition of opportunities to adjust in regions and industries. It may be done on a catchment basis. For example, regions with poorer soil types or inefficient infrastructure and plantings may present scope and opportunity for change. Similarly, industries with long term potential over-supply (such as grapes) or being based on low-value water uses such as irrigated pasture might need to be considered for adjustment. We would certainly urge a balance of technical and socio-economic factors, rather than just target some industries such as rice and cotton which seem to be the “bad boys” in the public perception. An integrated program, fully researched, properly negotiated with the stakeholders and involving all levels of government should be developed.

  *This is an area where the AIAST can certainly make a valuable contribution. Many of our members live and work in rural communities and have had years of involvement with structural adjustment both in policy development and program management on the ground.*

- **The Role of Government in Adjustment.** The big issue is what opportunities exist for governments to facilitate and expedite autonomous change.

  When adjustment in *impeeded*, the most significant adverse impacts are often on the capacity of the most talented in a district or an industry to innovate. It often keeps farmers remain in farming who would otherwise move out of it and take the opportunities provided to retrain for a new career - which often leads not only to greater productive efficiency but to associated benefits to the management of the natural resource.

  Adverse impacts on people and on the environment are most effectively managed using separate policy processes and instruments. History suggests that most attempts to impede autonomous adjustment backfire on people, regions, resource productivity, industries and the national economy. There is frequent confusion between social welfare and adjustment. Social welfare issues should be handled separately outside the rural adjustment policy.

- **Environmental Water (E-water).** There is obviously substantial support for greater allocations for the environment. Whilst this is supported in principle it raises a number of issues:
- How the E-water Holder will allocate water amongst various environmental uses is unclear. There is a risk of the politics within the environment “industry”, being no less complex than elsewhere, having an impact on decision-making.

- How will effectiveness of the E-water Holder be measured? As the Guide indicates there will be a need for government and implicitly community acceptance of an Environmental Water Plan with clear and objective measurable outcomes with regular reporting against those expectations. The desirable environmental flow regime may well diverge significantly from the reliability profile of entitlements. The E-water Holder may have to trade or carry over allocations which may influence the reliability of consumptive use entitlements.

- The E-water Holder and consumptive use sectors such as agriculture will be expected to manage the resource effectively, and the interaction between the needs of those sectors needs further modelling and much negotiation.

- The boundary between consumption water and E-water will in fact be flexible with carry forward and counter-cyclical trading of allocations.

- Have opportunities to obtain water other than purchasing entitlements been fully explored? Savings through improved water delivery and use efficiency come to mind.

- What opportunities are there for investment in environmental management infrastructure to improve the efficiency of use of E-water, and even reduce the volumes needs to achieve the desired outcomes. One should not expect sectors such as agriculture to use water efficiently without the same requirement being placed on environmental mangers. Little has been said about how this will be done or by whom.

- What other associated “non water” investments are required to improve the environment. We need to avoid the “just add water” mentality but look at the bigger picture, including current and potential future programs and investments. Environmental works and projects developed largely by State Governments or local authorities and supported by the Commonwealth and the MDBA must form part of any final plans.

The AIAST seeks the opportunity to discuss these points further at a public hearing, possibly in Canberra.

Geoff Thomas

National President