# Select Committee on the Murray-Darling Basin Plan

# Murray-Darling Basin Authority response to questions on notice

# Public Hearing 9 - Canberra 5th February 2016

### Question 1 - Hansard page 47

**Senator DAY:** To help inform us, pretty soon we will need to make some recommendations as to what this inquiry or committee thinks should happen with the Murray-Darling Basin Plan. It would certainly be helpful to me if the authority could address specifically some of those serious issues that have been raised by a number of witnesses. I would invite the authority to go back and check some of those, address them and test them, and say, 'I understand that particular community or farmer or area has been severely impacted but that was not because of the plan; it was because of this.' That would be very helpful.

#### Answer:

The MDBA has listened to the issues raised through this inquiry, including by witnesses at all of the public hearings, and by individuals and organisations who provided written submissions. The MDBA is aware that some irrigation communities in the Basin are facing hardship for a number of reasons, however it is wrong to assume that the Basin Plan and associated water reforms are the sole reason for this.

It is apparent that many communities have been undergoing significant changes over the last few decades due to a wide variety of economic, climatic and government policy changes. Each community is experiencing their own overall changes in economic and social circumstances. When considering the effects of the Basin Plan, it is necessary to understand how changes in water intersect with these broader, on-going processes of change.

Looking at local circumstances can show why communities might adjust to change in different ways. This may relate to the pace at which adjustment occurs in different communities and how the communities themselves adapt and respond to their changing social and economic circumstances. The way in which the MDBA is seeking to understand how the Basin Plan affects different communities is best described through some examples.

In the northern Basin for example, there were a number of factors that boosted communities such as St George and Dirranbandi through to around mid-2014, but then declined. These included government funding for flood recovery, increased processing of vegetables, table grape production and three record cotton production years in a row. From mid-2014, the local economy suffered from a subsequent drought with limited irrigated cotton production, flood recovery work ceasing, and most recently around half the table grape production coming to an end due to business reasons that were unrelated to water reform. These underlying factors that influence the St George-Dirranbandi economy and community need to be considered and assessed when seeking to understand the impacts of around 58 gigalitres of Basin Plan water recovery across the period 2011 to 2015 in the area, including some water recovery through Commonwealth infrastructure investment.

Those factors driving changes in employment are not limited to the effects of water recovery. Across all Basin communities, there has been a significant reduction in agricultural employment since 2001 associated with improvements in technology. With irrigated cotton production in the north, technological advancements over the last decade has allowed increased cotton production with reduced labour demands. In Dirranbandi for example, particular seasonal jobs on cotton farms have either disappeared or are greatly reduced. Overall, this has led to a reduction of approximately 75 per cent in seasonal labour requirements since 2001.

Employment and age demographics tell us a lot about the structural change going on in Basin communities. Since 2001, jobs in the agriculture, retail and wholesale sectors have fallen considerably in all parts of the Basin, while education and healthcare have generally been improving. In Griffith for example, structural changes within the community reflect these broader changes. However, a positive sign which reflects growth in the local economy around Griffith since the mid-2000s is the performance of the retail sector. Retail jobs in the area have fallen since 2001, similar to the changes observed in other large regional centres such as Albury and Wagga Wagga. However, the difference for Griffith is that the trend in falling retail sector jobs to 2006 did not continue in Griffith as it did elsewhere. In overall terms, this shows part of how the Griffith and wider community are adapting to multiple factors, which includes water recovery under the Basin Plan and significant Commonwealth investment in water infrastructure.

Other areas are experiencing different types of structural changes within their communities and economies. In some cases, they may be moving from predominantly agriculture production and processing to more service-based regional economies. This is evident in places such as the Shepparton area across the period between 2001 and 2011. The decline in jobs in agriculture (-34%), wholesale (-40%) and manufacturing (-19%) have been offset by jobs growth in education (+17%), healthcare (+39%), other services (+36%) and accommodation and food services (+40%).

These changes are in contrast to those observed in areas such as Echuca to Kerang and the Wakool Shire. In Wakool Shire for example, the significant changes to employment in the agriculture sector (-40%) and local economy overall (-25%) between 2001 and 2011 largely preceded water recovery in this area without the offsetting benefits of growth in employment in other sectors.

Rural communities in the Basin are getting older on average. Since 2001 the number of people aged between 25 and 44 has been declining, while those aged between 45 and 74 are generally growing. For example, in Deniliquin those aged between 25 and 44 declined by 32% between 2001 and 2011, while those aged between 45 and 75 grew by 6%. For Griffith, those same cohorts changed by -10% and +18%, respectively. What is relevant to assessing the effects of the Basin Plan is an understanding of why in some communities there are significant shifts from these general trends.

Further signs of adaption, and the challenges of responding to multiple influences, are seen in the dairy industry in northern Victoria. In this area, dairy farmers have been adapting to changes in water policy settings made by the state government since the early 2000's and other variable circumstances associated with the climate, shifting commodity prices and new competitors for water such as horticultural producers. The MDBA is aware from our recent consultations that in more recent times post 2012, this includes water recovery for the Basin Plan, significant investment into infrastructure, and how dairy farmers are responding to changes in the behaviour of the temporary water market. Associated with these, and other factors, are observations that the number of dairy farmers in the area has halved with producers partly offsetting this shift through a smaller drop of around 30 per cent in herd size and around 15 per cent in milk production.

A second example of differences in adjustment is in the highly regulated southern Basin. Water users have been adapting and making business decisions to move out of irrigation scheme areas and onto rivers since the late 1990s. Originally, irrigators were selling to other irrigators downstream – now they are also able to sell to the Commonwealth government. This created the so-called 'Swisscheese' effect, which started before the Basin Plan was introduced. This effect is one of many other factors influencing irrigation farmers within the scheme areas over a long period of time, as has been observed in the Lower Murray Water irrigation scheme areas. The challenge being addressed at present is how best to reinvigorate irrigated production within these scheme areas.

In addition to these broad scale changes in the rural economy, the impacts of drought and lack of regular rainfall further complicate the assessment of the impacts of the Basin Plan on the community. For many years state governments have used water allocations and local management plans to share the available water between all users, and states continue to use these water management tools. For example, communities in the Broken Hill area in north western New South Wales raised concern about the current low levels in Menindee Lakes and the dwindling supply of town water for the Broken Hill district. The drought in the northern Basin means that flows into the lakes have been very low, in fact, the last 28 month period has been the lowest on the Basin's historical record. The lakes are only able to hold about three years' worth of supply, and have not received any significant inflows from upstream in recent years to boost supplies.

There are many industries that rely on water in the Basin, not just agriculture. The tourism industry contributes to many communities and is part of the story on how communities adapt to change. In the Goolwa area at the end of the Murray–Darling Basin system in South Australia, the tourism industry has begun to pick up again and provide benefits to the local communities, as indicated by increased boat traffic moving through the barrages over the last few years.

Irrigation based communities continually adjust to many factors, including shifts in local and international markets. In the Renmark area of South Australia for example, producers have been making difficult decisions before, during and after the Basin Plan was introduced. Producers have been rethinking agricultural production to take advantage of changed market conditions. For example, citrus growers in that region are well positioned to take advantage of the expanding overseas market opportunities provided by Australia's recent international trade agreements.

There are many different drivers behind the changes being experienced in Basin communities, and the MDBA's monitoring program is gradually building a picture of what has been influencing these changes. Common trends across all Australian rural communities combine in different ways to generate unique circumstances of change in each local area. The MDBA is working with industries, communities and governments across the Basin to build an understanding of what is changing, in order to draw out how the Basin Plan and associated water reforms are intersecting with the other drivers of change.

While there are many factors affecting irrigated agriculture and surrounding communities it is clear that the Basin Plan and the reforms inherent in it are contributing in both negative and positive ways to economic and social wellbeing. The Basin Plan seeks to strike a balance between competing users in an overallocated river basin. Adjusting to lower, but more certain, levels of water availability increases investment certainty for all river users.

## Question 2 - Hansard page 51

**Senator CANAVAN:** I just wanted to ask about the Water Act. Has the MDBA sought any advice on the Water Act for the past three years?....Can you take that on notice, and also just take on notice when you have asked for any advice in the past three years from the Australian Government Solicitor on the Water Act.

### **Answer:**

The table below lists the legal advice received by the MDBA from the Australian Government Solicitor since 5 February 2013 in relation to the Water Act:

ADVICE TO THE MDBA ON WATER ACT 2007 SINCE 5 FEB 2013		
Date	Subject	Author
23/10/2015	Legal Advice	Australian Government Solicitor
2/12/2014	Legal Advice	Australian Government Solicitor
11/11/2014	Legal Advice	Australian Government Solicitor
7/11/2014	Legal Advice	Australian Government Solicitor
7/11/2014	Legal Advice	Australian Government Solicitor
9/10/2014	Legal Advice	Australian Government Solicitor
5/08/2014	Legal Advice	Australian Government Solicitor
1/07/2014	Legal Advice	Australian Government Solicitor
12/05/2014	Legal Advice	Australian Government Solicitor
24/04/2014	Legal Advice	Australian Government Solicitor
2/04/2014	Legal Advice	Australian Government Solicitor
6/03/2014	Legal Advice	Australian Government Solicitor
5/11/2013	Legal Advice	Australian Government Solicitor
2/09/2013	Legal Advice	Australian Government Solicitor
13/05/2013	Legal Advice	Australian Government Solicitor
18/04/2013	Legal Advice	Australian Government Solicitor

### Question 3 - Hansard page 52

Senator CANAVAN: Can economic or social factors alone allow a change in the SDLs?

#### Answer:

The SDLs in the Basin Plan are based on a judgment by the Authority informed by a triple bottom line analysis of information available to the MDBA in 2012. This includes, economic, social and environmental factors. Any new information on any of these factors could inform a proposed change to the SDLs, provided the proposed change was still consistent with the relevant provisions of the Water Act 2007.

### Question 4 - Hansard page 52

Senator CANAVAN: The question intrinsically is: if only economic or social information were to change, could that alone allow for a change? Mr Glyde, I not sure if you are familiar with the ongoing controversy about whether or not the act allows a truly flexible triple bottom line in that respect—that, if any particular information changes that allows for a changed conclusion, certain environmental factors have to be into account first and then economic and social factors second. I am particularly interested in this question of how the reliance on international treaty powers in the act may influence this particular issue. If you have any advice, if we have to receive it in camera, I would like to ask if we could receive the most recent legal advice you have received from the Australian Government Solicitor on that question.

#### Answer:

No advice has been received by the MDBA since commencement of the Basin Plan in November 2012 on how the reliance on international treaty powers in the Water Act may influence the consideration of economic, social and environmental factors.

On 25 October 2010, then Minister for Water the Honourable Tony Burke tabled in parliament a summary of legal advice related to these issues.

### **Question 5 - Hansard page 53**

**Senator MADIGAN:** Does the MDBA regulatory impact statement 2012 cover the potential huge costs of addressing the constraints management strategy—for example, land acquisitions, easements and infrastructure?

#### Answer:

No. The inclusion of the constraints management strategy was sought by Basin governments after the draft Basin Plan and associated Regulation Impact Statement were prepared. Part of the decisions of Basin governments was that the Commonwealth Government created a special account with \$200 million to address constraints management and a further \$1.5 billion for investment in additional water efficient infrastructure.

### **Question 6 - Hansard page 53**

**Senator MADIGAN:** Does the regulatory impact statement cover broader costs to other industries either related to agriculture or perhaps the flow-on effect from reduced productivity from agriculture as less water for irrigated production means fewer dollars in a region?

**Mr Townsend:** The answer is yes to those questions. They looked at the productivity changes and how the recovery of water would impact on communities and whether or not productivity gains would offset some of those effects.

**Senator MADIGAN:** Could you provide the committee with some of this work?

**Mr Townsend:** It is described in the socioeconomic implications of the proposed Basin Plan.

#### Answer:

The MDBA's submission to this inquiry lists on page 22 the socioeconomic assessments used to inform the development of the Basin Plan. This includes work published by the MDBA in May 2012 in *The Socio-economic implications of the proposed Basin Plan*, available on the MDBA's website (<a href="http://www.google.com.au/url?url=http://www.mdba.gov.au/sites/default/files/archived/revised-BP/PBP">http://www.google.com.au/url?url=http://www.mdba.gov.au/sites/default/files/archived/revised-BP/PBP</a> socioeconomic implications.docx&rct=j&frm=1&q=&esrc=s&sa=U&ved=OahUKEwjnzrTFgPv KAhUBMpQKHTdDCtlQFggZMAA&usg=AFQjCNF H 8-Yy CrQGhTGHs0zLl1Z53FA).

### Question 7 - Hansard page 54

**Senator CANAVAN:** Could you provide us now with the assumption you made for productivity growth in agriculture in the Basin in that work?

**Mr Townsend:** The productivity gain that was outlined there, which had been in the preceding years, was around three per cent running through irrigation dependent—

**Senator CANAVAN:** Was this forward-looking modelling, or—

**Mr Townsend:** This was looking backwards. So the best assumptions that we could make around this was how productivity gains of the past would relate to the future.

**Senator CANAVAN:** So you used the three per cent figure as an assumption of what the gains would be going forward?

Mr Townsend: Yes.

**Senator CANAVAN:** And what has the productivity growth between in the interim, between your report and today?

#### Answer:

The document *The Socio-economic implications of the proposed Basin Plan* noted in question 7 above states that between 1985–86 and 2010–11, the total factor productivity in Australia's agriculture, forestry and fisheries sector increased at an average annual rate of around 3 per cent.

The MDBA is not aware of any further work done to assess productivity changes since the Basin Plan, or to suggest it is any different to the rate of production gain being looked at prior to the Basin Plan.