SUBMISSION

to

Senate Standing Committee on Rural Affairs and Transport

Inquiry into

The Management of the Murray Darling Basin

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The management of the Murray Darling Basin

NARGA represents the independent retail grocery sector comprising over 5000 stores employing more than 225,000 people.

The independent grocery sector now comprises less than 20% of the national grocery market, yet provides essential supplies to thousands of regional, rural and remote communities, particularly those considered too small to be of interest to the major supermarket chains, as well as providing competitive pressure to those chains through larger stores in metropolitan and regional centres.

Many of these stores buy their produce from local suppliers, helping to maintain the viability of rural and regional communities.

Access to these supplies is dependent on a viable and competitive farming sector. We are concerned that proposed changes to water availability to irrigators in the Murray Darling Basin – which produces 40% of Australian food – will have negative consequences throughout the grocery supply chain.

During 2010 NARGA commissioned Accenture Australia to conduct a study[1] of the total 'paddock to plate' supply chain. A copy of this study is attached as an appendix. The main conclusions of this study were as follows:

1. **Food consumption is growing faster than population**

2. **Food consumption is growing faster than food production (which is in decline)**

3. **Food imports are growing faster than food exports.**

The study also concludes that market concentration in the retail grocery sector is leading to concentration further up the supply chain with corresponding negative impacts on farming and the food supply[2].

> Structurally, the "paddock to plate" value chain is showing clear trends of consolidation across the board: from farmers through processors through to the concentrated retail end of the value chain. There is evidence of tension in regards to the balance of power within the value chain between the producers, processors and retailers. The case studies covering the dairy industry and the private label category illustrate and expand on this, and the effects it may have on the local industry.

[1] *The challenge to feed a growing nation* – Accenture Australia for NARGA, November 2010
[2] Ibid P.9

Although independent retailers provide competitive pressure in the sector, maintaining the viability of this sector is an ongoing challenge as the market share data set out below demonstrates[3]:

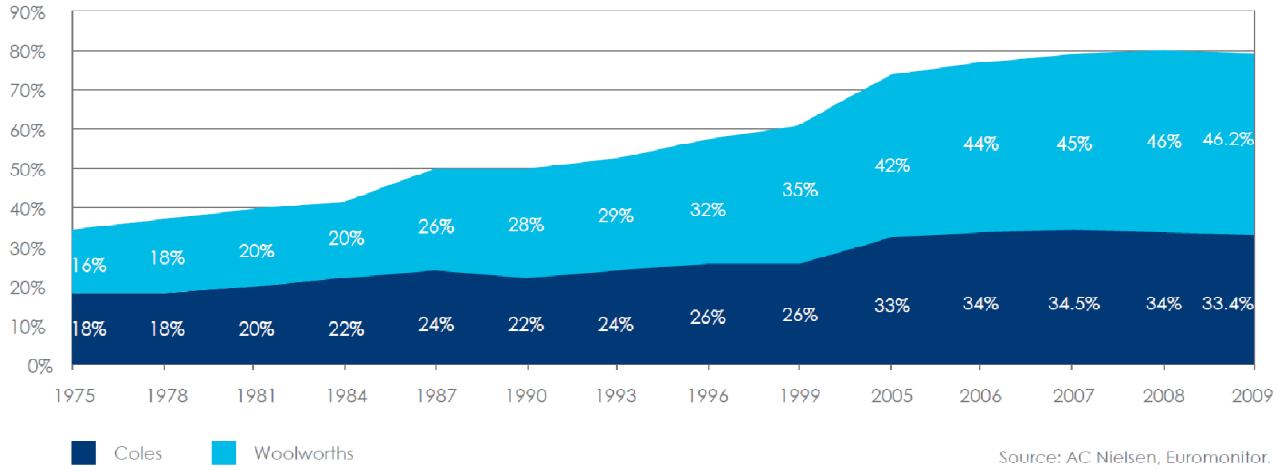
Fig 28. 2009 Turnover by supermarkets players (incl. Liquor sales)

	Turnover ($ billion)		Cumul		Market share	
	incl. Liquor sales	excl. Liquor sales	incl. Liquor sales	excl. Liquor sales	incl. Liquor sales	excl. Liquor sales
Woolworths	$32.8	$27.6	$32.8	$27.6	47.4 %	45.6 %
Coles	$22.5	$20.1	$55.3	$47.7	32.7 %	33.2 %
IGA retail	$8.2	$7.7	$63.5	$55.4	11.9 %	12.7 %
FoodWorks	$1.7	$1.6	$65.2	$57.0	2.5 %	2.6 %
Franklins	$0.9	$0.9	$66.1	$57.9	1.3 %	1.4 %
Aldi	$2.3	$2.3	$68.4	$60.2	3.3 %	3.8 %
Spar	$0.4	$0.4	$68.8	$60.6	0.6 %	0.7 %
Total	$68.8	$60.6				

Sources: Company reports 2009, Euromonitor and other publications.. Convenience & forecourts retailers and specialist grocery retailers are excluded.

The growth in market share of the two major chains is shown in the following graph.

Fig 30. Growth in Market Share of Woolworths & Coles (1975-2009)



Source: AC Nielsen, Euromonitor.

[3] Ibid P.26

The result for the retail grocery sector is a market that is no longer competitive. Symptoms of the lack competition in the market include:[4]

- The disparity between volume and value growth during the last decade (12 per cent versus 42 per cent) that suggests an increase in profit margins taken at the retail level; (see page 13)

- The margin shift from producer to retailer – in the dairy sector, retailers take 80 per cent of the available gross profit, processors 16 per cent and farmers four per cent; (page 43)

- The high degree of concentration of the retail grocery market with Woolworths and Coles identified as having a market share of around 80 per cent between them; (page 27)

- The fact that Australia has a more stable retail growth pattern, less affected by the type of fluctuations that would be expected as a result of greater price competition; (page 21)

- The evidence of a 'waterbed effect' in prices paid by independent retailers, of which the dairy industry is an example. This results in suppliers being forced to charge higher prices to some customers for some products in order to compensate for lower prices being paid by the major chains; private label milk prices offered by the major chains have been offset by significant price increases for cheese, yoghurt and ice cream in the past few years; (page 43)

- Growth in the lower quality private label market suggesting there is insufficient competitive pressure to maintain product quality (pages 16, 46)..

Again, using data from the retail grocery sector, we see that other jurisdictions do not have as acute a problem of market concentration, as the table below demonstrates:[5]

Fig 29. Grocery retailing market shares – country comparison

Country	Market share			Major players
	Top 2	No 3,4,5	Top 5	
Australia	79.6 %	18 %	97 %	Woolworths, Coles, IGA, Foodworks, Franklins
UK	48 %	35.5 %	83.5 %	Tesco, Asda, Sainsbury, Morrissons, Co-op Group
USA	20 %	22 %	42 %	Wallmart, Kroger, Target, Walgreens, Costco

Source: Euromonitor and Planet Retail.

[4] Ibid P. 5 and 6
[5] Ibid P.26

Apart from the fact that market concentration is a problem in the retail grocery sector, the level of concentration in the sector has adverse impacts all the way up the supply chain on food processors, farmers and others in the supply chain, to the extent that the ability of our food production and processing sector to keep up with the growing demand of an expanding Australian population is in question.

The key outtake here is that market concentration is more than an interesting legal and economic concept – it has a wide range of negative and unintended consequences.

The retail grocery sector employs 411,500 people with independents who have less than 20% market share responsible for 47% of employment. This level of employment is augmented by employment in the farming and food processing sector resulting in a 'paddock to plate' employment figure of 912,300 (2008)[6]. This figure excludes services to the sector such as transport, packaging and refrigeration.

The 'paddock to plate' value chain is worth $209 billion, or around ***20% of Australia's GDP.***

Any decline in local food production will therefore have substantial employment impacts.

It should be noted here that an import trend is already apparent. The Accenture study[7] shows a decrease in food exports of 4% in volume and 40% in value between 2000 and 2009, and an increase in imports of 80% in value and 94% in volume in the same period.

The contribution of food exports as a proportion of total exports has dropped from 18% to 8% in that period, during which the worldwide food demand has increased.

Decline in local food production is transferring potential export volumes to local consumption and increasing import volumes to close the consumption gap.

Analysis of sourcing trends suggest that, unless action is taken to reverse them, the solution to the divergence between production and consumption will lie in an increased reliance on imports. We are already reaching the stage where, for some products, overseas sourcing is used as a long term alternative by both the food processing sector and the retail sector in order to maintain supply.

We are clearly no longer self-sufficient in food production for a wide variety of produce and the gap is widening.

This does not appear to be a good time to act in a manner that impacts the productive capacity of the Murray Darling basin.

We have reviewed both the Water Act 2007 (as amended)(The Act) and the Guide to the proposed Basin Plan prepared by the Murray-Darling basin Authority (the Plan) and offer the following comments.

The Act

Whilst the Act supports the need to 'optimise economic and environmental outcomes' in the way water is managed it appears to assume that the root cause of problems facing the Murray-Darling Basin is excessive extraction.

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[6] Ibid P. 22
[7] Ibid P.16

In response to that assumption the Act requires that the management of the river system ensures 'the return to environmentally sustainable extraction for water resources that are over-allocated or overused...'

Government response to the issue to date appears to have concentrated on the buy-back of water licences to 'return' water to the river.

The Plan

The response outlined by the Murray-Darling Basin Authority as outlined in the Plan appears to concentrate on the 'return' of between 3000 – to 4000Gl/y to river flows, in the main by acquiring those water assets from current users such as irrigators, even though this amount of water represents between 22% and 29% of the water used by farmers in the basin and much higher percentages than those in some catchments in the basin.

The graph below, taken from the Plan illustrates the effect on the farming sector:

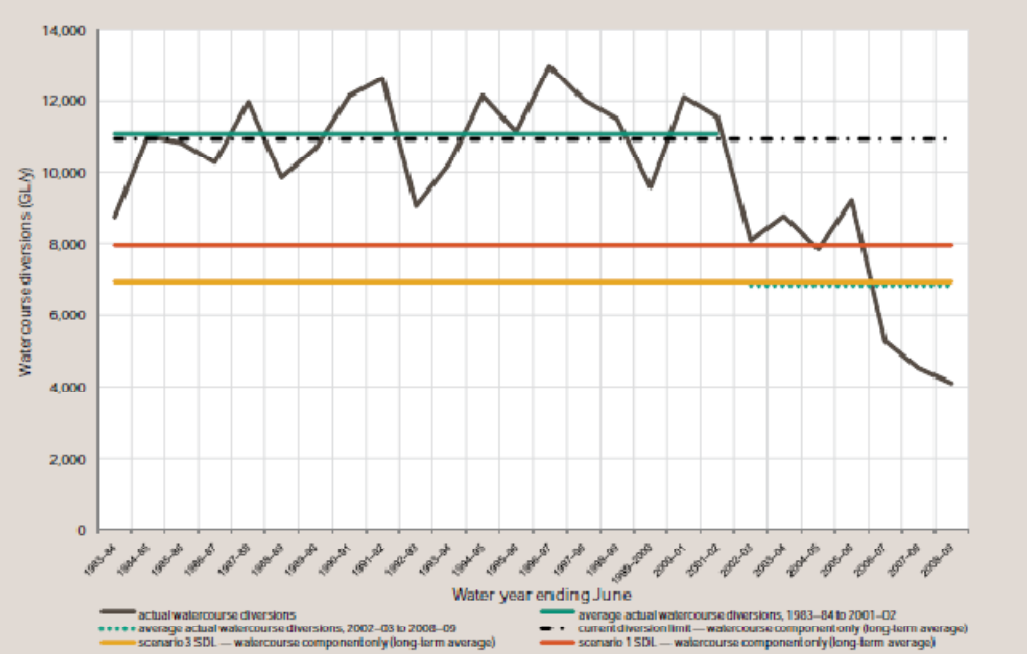

Figure 8.10 Watercourse diversions in the Murray–Darling Basin from 1983–84 to 2008–09

The key point to note here is that the proposed new diversion levels are equivalent to the Basin in drought under the current regime (See the period 2002 – 2009). That is, on average, we would be expecting irrigators to behave as if the system were in drought with a resulting drop in output (and the impact on grocery prices we saw during this period).

It is important to note that the green dotted line in the graph above represents the average watercourse diversions during that period. Obviously diversion rates at the height of the drought would have been lower than that average.

A graph that appears on the same page of the Plan shows how the Basin water would be allocated under the three scenarios assessed by the Authority:

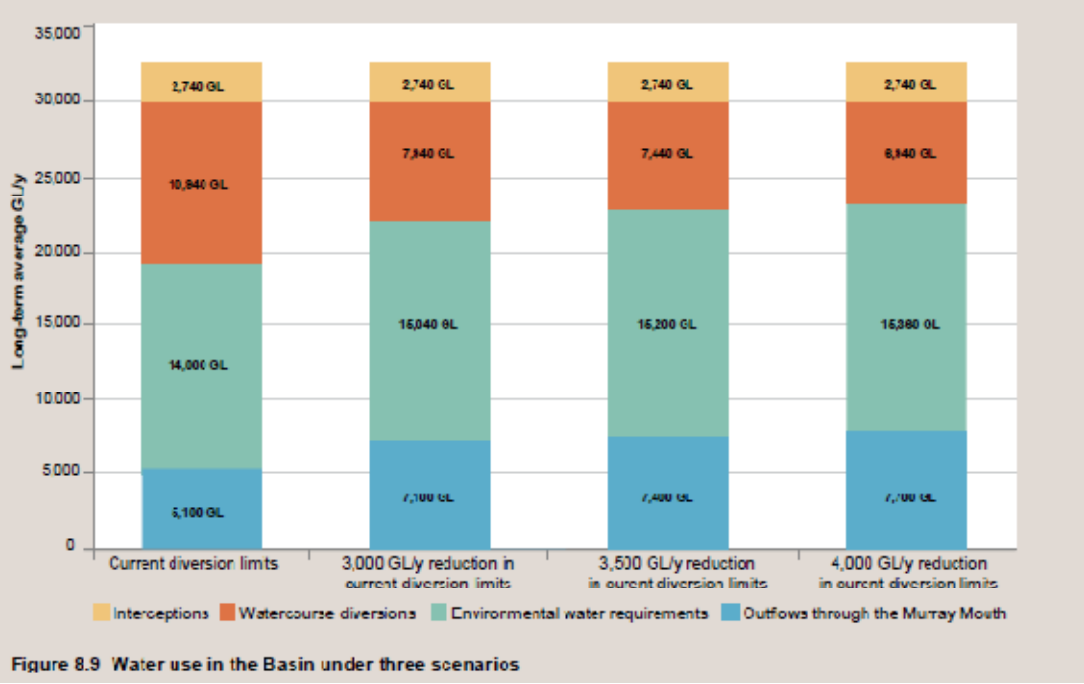

Figure 8.9 Water use in the Basin under three scenarios

Two points to note here are:

1. There is little difference between the amounts of 'environmental water' resulting from each of the three scenarios, and
2. The main difference between the scenarios is the amount of water that, on average, leaves the Murray mouth – an increase of between 2,000 and 2,600 GL/y.

The question that should be asked is what happens if the river gets substantially less, resulting in lower levels of outflow to the ocean?

The other question that needs to be asked is whether these savings could be achieved in a different way? We will come to that matter a little later.

First let us look at the basics as outlined in the Plan.

Key points

- The long-term (1895–2009) average rainfall across the Basin is in the order of 500,000 gigalitres per year (GL/y).
- Average surface-water inflow is 32,800 GL/y and groundwater recharge is 26,500 GL/y.
- An average of 15,400 GL/y is the total of current consumptive use in the Basin — 13,700 GL/y from surface water and 1,700 GL/y from groundwater.
- Surface-water use is made up of 10,940 GL/y taken from watercourses and floodplains, and 2,740 GL/y intercepted by farm dams and forestry plantations.
- The 26,500 GL estimated gross groundwater recharge includes groundwater that discharges to streams, contributing part of the 32,800 GL surface-water inflow. Of the net groundwater recharge, some recharge is saline groundwater.
- Under without-development conditions, an average of 12,500 GL/y would flow out of the Murray Mouth. Some 83% of these outflows would originate from the River Murray system and 17% from the Darling system.
- Under the current diversion baseline, the environment receives an average of 19,100 GL/y (58%) of surface water inflows. Of this, an average of 5,100 GL/y flows out of the Murray Mouth — some 41% of the average outflows under without-development conditions.

Note that it is the 10,940 GL/y surface water component that will be impacted by the Plan proposal to return water to the river. Also note that under the current diversion baseline, the environment receives 19,100 GL/y (58% of the total) of which 5,100 GL/y flows out of the Murray mouth.

However, we believe that 'averages' do not tell the full story.

As shown in Fig. 8.10 reproduced above the amount of water available to irrigators, declines substantially during periods of drought – on average to a level similar to that proposed in the Plan. When water flows or water availability is low, farmers do not get the full quantity of water indicated by their licence – they receive a reduced allocation. In a severe drought, that allocation can drop to zero – even though it was during this last drought that farmers were being blamed for damaging the river system through 'over-allocation' and 'overuse' of water.

It is clear that low river flows are not primarily due to irrigator off-take but due to drought. It also means that during periods of drought the amount of water 'returned' to the river primarily through proposed water buybacks is significantly less than the modelled amounts of 3,000 – 4,000 GL/y suggesting that this mechanism will do little to increase flows during periods of drought. Water buybacks will return their full allocation to the river only when the river least needs it – when water flow is plentiful and when farmers get their full allocation.

Whilst, as indicated above, the average surface water inflow is 32,800 GL/y, in flood years the amount can be considerably higher.

The Plan indicates that the 1956 season saw a Basin flow in excess of 116,000 GL/y – more than three and a half times higher than the average flow. Unless captured by storage facilities, the excess flows through to the ocean.

This year has also seen extensive flooding. Although some of this water will replenish storages, groundwater and wetlands, a substantial portion will flow out through the Murray mouth through lack of storage capacity.

The Plan makes minimal mention of the role of water storage, even though these have been able to maintain river flow and farmer access to some water throughout the drought, through releases of stored water.

The value of water storages capacity to maintain flow is referred to obliquely in the 'Climate variability and climate change' section of the plan which states:

'The climate of the Basin is highly variable from year to year, which means that flows in the rivers of the Basin are highly variable and unpredictable, ***although mitigated to some extent by water storages'.*** (P.32)

Plan reliability

Analysis of river flows and in particular 'environmental flows' is a relatively new science (described as an 'emerging science' in some technical papers), and like other sciences based on measurement of natural systems is subject to uncertainty of measurement and of interpretation and subject to a range of assumptions and hypotheses in order to arrive at an assessment of the total system.

A report prepared by the CSIRO suggests that: 'The project identified ecological data which might inform managers of ecological flow relationships. The project collated 187 hypotheses that are used in 100 management plans and known to ecosystem science.'[8]

Further a 2003 paper[9] reporting on the state of flow assessment science identified some 207 methodologies in 44 different countries within six world regions.

Whilst the reports prepared throughout the Murray-Darling planning process contain a substantial body of data and the Plan makes recommendations based on what appear to be 'hard' figures but are in fact less certain.

It important to recognise the underlying uncertainties in the data and in the methods used to collect and assess that data before difficult decisions are made at the political level re water use.

Another approach

Given the important role of water storages in the Basin and especially the ability to use stored water to maintain river flows in times of drought, we believe that more attention needs to be paid to an extension of the Basin's water storage capacity.

Additional storage capacity would have the following advantages:

[8] Overton I.C. et al. December 2009. Ecological Outcomes of flow regimes in the Murray-Darling Basin, CSIRO.

[9] Tharme R.E. A Global perspective on environmental flow assessment: emerging trends in the development and application of environmental flow methodologies for rivers. River Res. Applic. 19: 397-441 (2003).

- It would allow storage of a larger proportion of water which flows when the river systems are in flood.

- It would help reduce the damage attributed to floods.

- It would increase the level of water reserves available for release into the Basin's rivers during times of drought.

- It would reduce the need to take water from irrigators to return water to the river (a need which is most acute in times of drought.)

- It may allow the farming sector in the Basin to expand and be better placed to fill both local and export food demands.

Conclusion

We believe that current proposals to reduce the amount of water available to farmers in the Murray-Darling Basin are not soundly based and damage the ability of the farming sector to meet the food supply needs of a growing nation.

We recommend that a greater emphasis be placed on improving irrigation infrastructure and the water storage capacity in the Basin.

We are concerned that a policy/regulatory emphasis on water buy-backs will not provide the guarantee of a 'healthy river', given that these buy-backs have little value in periods of drought when the true volume of water 'returned' to the river is insignificant or zero. The inherent risk of such an approach is that the next period of extended low flow or drought will be used as an excuse to take more water from farmers on the basis that this first tranche has not worked.