

Submission No:	539
Date Received:	17-1-11
Secretary:	Sc

House Standing Committee on Regional Australia

Inquiry into the impact of the Murray-Darling Basin Plan in Regional Australia

Dear Committee

I have enclosed for your perusal my response to the Guide to the proposed Murray Darling Basin Plan. This is my community voice.

As it appears the ultimate decision about implementation of the Plan rests with the Parliament rather than was the Murray Darling Basin Authority, I urge you to read it carefully.

Those of us whose livelihoods and communities depend on healthy water in the lower reaches of the Murray have serious concerns about the future sustainability of our end of the river. In many cases, relationships with the river have continued for over 150 years -- our own property has been in my husband's family since 1862. We fear should economic and social pressures upstream overhaul the science underpinning river health, "business as usual" will prevail and that will be the end of us.

We have seen first hand what happens when flows are inadequate and the river dies. We have already suffered hardship loss and pain. We too have businesses, families, mortgages. Are our voices any less valid than those upstream?

It is well-known from experiences overseas that rivers die from the bottom up, the rot starts at the estuary. It will continue to creep upstream like a cancer and ultimately it will affect those most angry upstream too, as it has already affected us. We have already had to adjust our businesses and modify our means of production to use much less water. It can be done.

It is absolutely vital for future sustainability of the whole basin that a minimum of 4000 Gigalitres per year be returned to river flows. Compromise this and we are compromising the future prosperity of our grandchildren.

With imagination and flexibility and political will, innovative ways can be found to return this water to the river, while still maintaining vibrant communities. We are beyond "business as usual".

I urge you most strongly to give the suggestions in my following submission to the Murray Darling Basin Plan serious consideration.

Although it was written in response to the Guide to the proposed Plan, all the points made in it are equally valid to this inquiry. We still need improved flows down this end of the river. There still needs to be a more empathetic and considered approach to the many and varied problems and understandable fears of communities. Most importantly, the voices of science must be given equal weight to the many voices of social and economic concerns, if our river is to survive as a healthy waterway underpinning the future of our grandchildren and their grandchildren.

I cannot emphasise this enough.

Yours sincerely,

Liz Yelland B. App. Sc. (SAIT 1974)

As a landholder on the shore of Lake Alexandrina – our property has been in my husband's family for five generations – I support fully the idea behind the Murray Darling Basin Plan.

If we are to have a healthy sustainable river system along the whole of its length to underpin the future livelihood of our grandchildren, we need to have a river which flows. The Murray must flow sufficiently strongly to transport the 2,000,000 tonnes of salt annually (page 119, fig 8.7) and other pollutants and toxins out through the Murray Mouth into the sea.

Living at this end of the system, we have been acutely aware of the detrimental effects of overallocation ever since 1981, when the Murray Mouth closed over for the first time. During the last four years, low water levels below Lock One, increasing salinity, and the drying of Lakes Albert and Alexandrina have been devastating for our communities. We have seen first hand, in front of our eyes, what happens when a river is dying.

The Darling and Victorian floods have brought back life and hope, bought us time.

It is absolutely essential that the minimum amount of water proposed in the Plan for return to the river i.e. 3000 to 4000 Gl/y be achieved. This is already at the very low end of what is required. According to DWLBC and MDBA reports in 2007, a minimum flow of 10,000 Gl/y is required to transport the salt load out to sea. The 3,000 Gl/y savings target gives only an average annual flow of 7,100 Gl/y. Is this enough over the long-term? The answer is unknown.

A prudent businessperson or householder takes out insurance against future disaster. The current Guide to the Plan has acquiesced to anticipated adverse reaction and avoided such insurance. It has instead opted to begin at the very bottom of the extraction reduction range scientifically recommended, rather than higher up towards the upper end of 7,000 Gl/y. This is unfortunate as it leaves no room for negotiation with stakeholders. We are now in the situation, before the Plan proper even begins, where the horse has bolted and it's too late to shut the stable door.

It is therefore imperative that the 3,000 Gl/y savings remains the absolute minimum target to be achieved. Any further reduction of this as an appeasement gesture in response to political pressure is completely out of the question for the sustainable health of the river.

Regarding the Guide to the Plan I have a number of concerns, firstly about analysis methods and management issues, but most importantly about social and economic issues, and their possible impact on the implementation of the Murray Darling Basin Plan.

I. Analysis methods and management issues.

1. The use of long-term averages on which to base future decisions is problematic:

- a. In a situation where we are almost certainly facing a future of reduced rainfall, to

rely on data from our wetter past is inappropriate and decisions based on this will prove unsustainable.

- b. Median average also includes rare very wet years and big flood events which are not typical of the normal amount of water available, and thus skew the statistics to make the average appear wetter than it actually is. These unusually wet years e.g. 1955-6, 1974-5 should therefore be excluded from calculations.

2. Measurement from the "bottom up", rather than "top down."

Historically, catchment management has been based on the amount of water available at the source of each valley ("top down"). This results in a number of problems which accumulate, the further one progresses down the system.

- a. Inadequate end-of-river flows from each tributary at the point of confluence with the main stream of the Murray or Darling.
- b. Changed absorption conditions due to varying soil types along the length of the river.
- c. Evaporation over the whole water surface of the river system, and the many thousands of kilometres of open channels transporting irrigation water.

In order to achieve adequate flows at the Murray Mouth, measurements should begin there, rather than at the headwaters, and management take place accordingly from the "bottom up", rather than from the source down as is currently the case.

3. Water trading.

The "floating" of water allocations as assets, able to be separated from the land to which they were initially attached and traded as a commodity, may have been good for the economy, but is disastrous for the river.

a. "Dry water" — paper water.

Landholders did not always use their whole allocation, but river studies assumed in their data that they did. Caps on extraction, such as those imposed in South Australia in 1968, were based on this assumption.

Water trading allowed landholders to profit by selling their excess unused portions, and suddenly a lot more water was being taken from the river while officially remaining unchanged i.e. under the Cap. See my explanatory poster about "dry water". ([dry_water_liz_yelland.pdf](#))

b. Trades transferring water extraction up-river reduce the flows available for the transport of salt out to sea from the lower reaches e.g:

- (i) A property near the Murray Mouth trades an allocation up to, say, Renmark, then this amount of water no longer flows along the river's length below Renmark contributing to the transporting of salt. It is easy to see that if enough

farmers did this, then the flow continuing to the Mouth would be drastically reduced. Also because less water is allocated for extraction in the lower reaches, this reduces the requirement for delivery flow, thus compounding the problem.

- (ii) As part of the deal when South Australia joined the Federation in 1901, the State was guaranteed a secure allowance of 1800 G1 of Murray water per year crossing the border. Trades up into Victoria and New South Wales have consequently reduced this, again reducing the flow for the transportation of salt and to keep the Murray Mouth open against the constant movement and pressure of the surf from the Southern Ocean.

The “horse” of much “dry water” and up-river water trading has already bolted, but it is still possible to shut the stable door on those horses which may still remain inside. Lower-reach flows can only be guaranteed if there is a clause restricting further trades to either the same geographical area or other locations downstream. Also all “dry water” trades must be restricted from now on to buy-backs by the government to prevent yet more invisible creeps in water extraction. I urge you to enshrine both of these restrictions into any future versions of the Murray Darling Basin Plan.

4. Buy-backs from willing sellers.

I have heard of farmers willing to sell being refused, apparently on the grounds that they have achieved maximum efficiency already and therefore the relative gains in water retrieval won't be as great. e.g. a group in the Wimmera. This is madness. Water allocations from all willing sellers must be purchased in the buy-back programme. It is all water that can be returned to the river. No matter how big or small, it all counts.

5. Metering extractions

All water must be measured at the point where it leaves the river. Now it is commonly only metered at the farm gate. The huge evaporation and absorption losses along thousands of kilometres of open supply channels are unaccounted for. Therefore benefits to the river resulting from improvements in efficiency of supply infrastructure would essentially be unaccounted for under the present system. Hence the burden for reduction in overallocation currently appears to be on the farmers alone rather than shared by the supply companies.

6. Variable extraction capability depending on supply availability due to variations in catchment precipitation.

The sustainable basin diversion limits decided upon in the Plan must be the upper limit, rather than a fixed extraction right. The Murray Darling Basin Authority must be able to set lower percentages — 80%, 50%, etc — applicable throughout the Basin in seasons of low rainfall or drought. These percentages must apply to all extracting stakeholders, irrigators, industrial and urban. Last to be compromised must be the river flow, rather than this being the first casualty, as has been the case in the past.

7. Efficiency rewards

The current Plan appears to impose the same cuts on everybody in a particular district, regardless of their current level of efficiency.

Farmers who have achieved maximum efficiency at their own expense cannot achieve any more water savings except by reducing production. Nor are they eligible for any financial help in other ways e.g. for repairs to existing infrastructure improvement which has lost efficiency due to leaks or aging. Such help appears to be limited to new infrastructure improvement. They naturally feel this is unfair, as they have made improvement by their own effort and enterprise, while their neighbours have continued in the old wasteful ways.

Irrigators in S.A. feel particularly aggrieved as:

- a. They had extraction caps before users in other States.
- b. A great majority of them moved to highly efficient watering methods 30 years ago.

The Plan could consider ways to reward these people, rather than appearing to selectively disadvantage them.

II Social and economic issues

The greatest fear for those of us at the lower end of the Murray is the potential impact which an overriding emphasis on social and economic issues at the expense of science could have on the successful implementation of the Murray Darling Basin Plan.

Our concerns can be summarised as follows:

1. There is little appreciation up-river of the necessity for the minimum flow conditions, and hence the accompanying level of proposed cuts to extraction.
2. The current floods appear to have restored bounty to the river, and a majority of stakeholders throughout the Basin see this as a return to normal rather than a rare gift of nature, a once in 30 years event. They see no reason to change "business as usual".
3. Everybody throughout the Basin has had to live with the effects of drought for many years. Ironically had the drought continued, the Plan would almost certainly have received far more support. As it is, we are all enjoying the return of our livelihoods and the immense relief after protracted hardship and stress. I can understand the anger expressed by many, when some bureaucratic voice from "on high" appears to be ordering cuts in the water they have only just got back.

4. As I see it, there are two main causes for this anger:

- a. Perceived emphasis on “the environment”, at least according to media reports. Even I, and I have a passionate concern for the environment of the Lakes, cringe every time I hear that word “environment” in the context of the Murray Darling Basin Plan. Farmers have immediately interpreted this as a country-city divide thing – taking “their” water and giving it to cute fluffy creatures beloved by city people with no understanding of the land. In their panic, they missed the point entirely – and this is quite understandable – that the water acquired will be returned to the river itself in order to restore healthy flows. Healthy flows are essential for a reliable water supply of appropriate quality to support their enterprises. I suggest it could be more appropriate in upcoming community discussions to cease using the word “environment” altogether, and emphasise instead river health and ongoing water quality underpinning their futures. Sadly, even this may be a hard sell, as humans by nature don't see beyond their own backyards, and most water-quality problems are downstream from the concentrations of anger.

Two approaches may be helpful:

- (i). To explain that rivers die from the bottom up – the death progresses upstream like a cancer. It will ultimately reach them too.
- (ii). Appeal to the iconic tradition of the "Aussie fair go" for their brothers and sisters already affected downstream.

b. Perceived threats to communities.

The message people immediately grabbed onto was “30% of our farmers will leave, take their money with them, our businesses can't survive, our community will die”. Another was “the only willing sellers are those being forced to sell under threat of foreclosure by their banks”.

My contacts upstream give an alternative picture to this dire view. There are many irrigators who would happily sell part of their water allocation, if they could get some assistance to change over from flood irrigation to more water efficient, modern systems such as drippers and sprinklers. There are willing sellers too, particularly among older “blockies” of retirement age whose children have left the industry. They refrain from speaking out publicly, however, as they are intimidated by the bullying tactics of their neighbours.

5. Large-scale community anger is born out of fear. This can only be defused by:

- a. Empathetic listening to these fears.
- b. Presentation of clear explanations of how river health works, what overallocation means, all backed up by un-ambiguous scientific data in everyday language that lay people can understand. See my explanatory poster about overallocation. (*overallocation_liz_yelland.pdf*)

- c. Clear, constructive plans for ensuring the future of communities e.g., the combination of some water buyback accompanied by efficiency assistance as already discussed, and incentives for the establishment of new non-irrigation industries.

Those of us at the end of the Murray live in dread that anger and misunderstanding will prevail. Timidity among politicians fearing loss of votes will force an adverse government response, weakening the Plan to the extent where it becomes ineffective. Essentially, “business as usual” will continue.

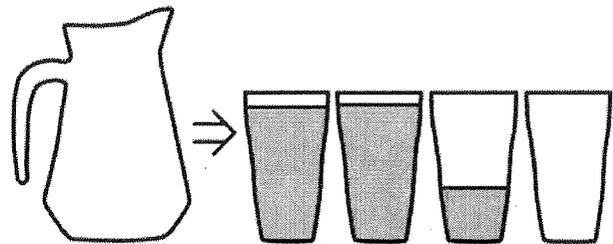
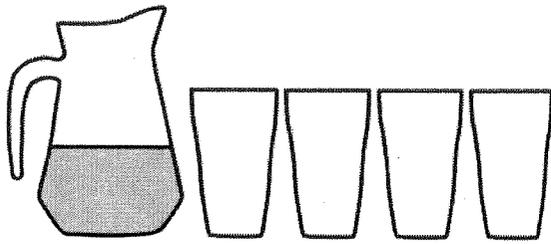
To this end the revised Draft Plan needs to contain a presentation of the “do nothing – business as usual” scenario to show the devastating situation which will result. This is missing in the current Guide to the Plan.

There is an immense responsibility on the part of MDBA spokespersons for the Plan to approach future community consultations with the greatest empathy and constructive support. Highest priority must be given to the effort, patience, wisdom and diplomacy required to achieve a successful outcome.

The sustainable future of our river system hangs on the winning of upstream hearts and minds.

OVER ALLOCATION

Throughout the Murray Darling Basin licences have been granted to extract more water than the system is able to supply in an average (non-drought) year.

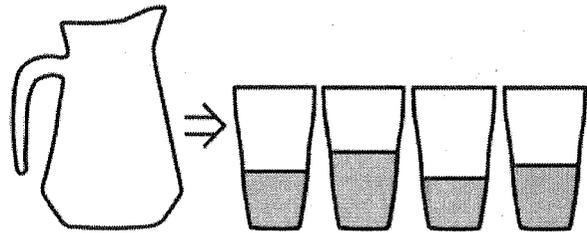


Jug empty
Supply exhausted

Only some glasses able to be filled
i.e. not all licensees needs can be met

WATER TRADING

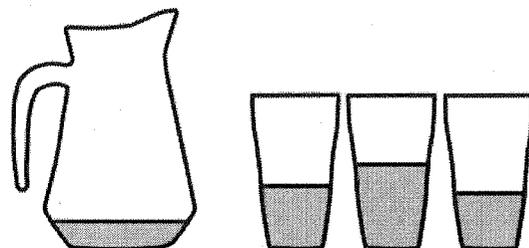
Means: moving water around between licensees—similar to moving the deck chairs on the Titanic. It gives no more water back to the river.



Jug still empty
Supply still exhausted

THE SOLUTION ??

Only if the Government buys back licences through water trading and retires this water to the environment (ie removes it from that available to irrigation or town supply) can any water be returned to the river.



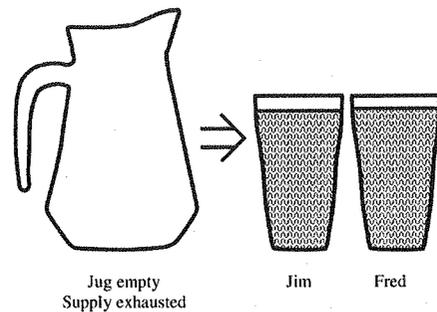
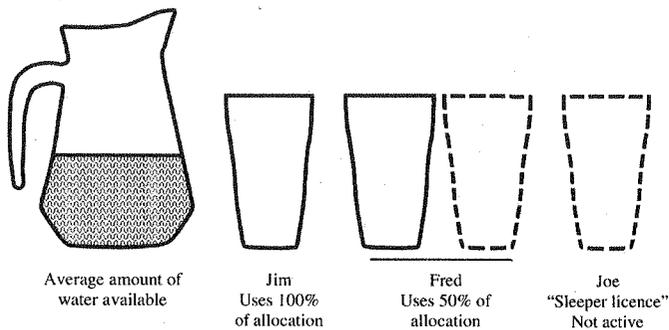
Some water still in the jug
i.e. some environmental flow
remains in the river system.

Less glasses i.e. less licensees,
smaller volume to be pumped.

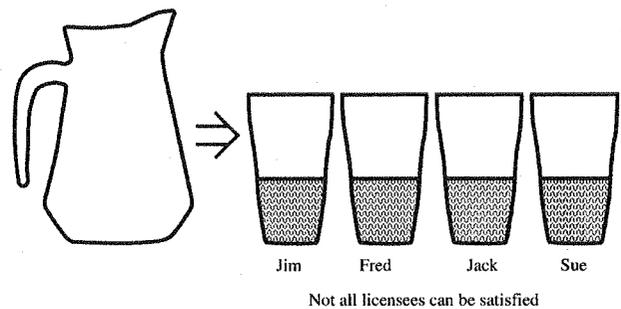
“DRY WATER”

There is an additional complication to over-allocation: Throughout the Murray Darling Basin, a tangible proportion of allocated water is not actually being used. This is called “Dry Water” and is either contained in “Sleeper Licences”, bought for investment but not active, or it is “slumbering” in unused portions of working licences.

Inadvertently, this has helped an over-stretched system. For example, the river in a normal year can just manage to supply the working needs of Jim and Fred.



Water trading allows Fred to sell his “slumbering” portion and Joe to sell his “Sleeper Licence”. This “Dry Water” can now be bought by other users and has the potential to become “active”. Should this happen, there is not enough water in the river to fully service the allocations of either Jim and Fred, nor new users Jack and Sue.



The Solution?

The Government must buy back all “Dry Water” to remove the potential for it to become “active”.

Only then can the issues of inefficiency and the remaining over-allocation of “Wet Water” be addressed, thus returning environmental flows to the river.

