

## Peel Valley Water Users Association

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Opening Comments for House of Representatives Inquiry  
Gunnedah – Monday 14<sup>th</sup> February 2011 – 12.30 – 1.00 pm

Today, we want the members of the panel to focus on the impacts of the Plan on the Peel Valley and the Tamworth region.

We have made considerable efforts, so far unsuccessfully, to demonstrate that the Peel Valley is environmentally completely sustainable, and that the Plan will close down the irrigation industry, (with flow on effects to the business community) – all for the sake of an environmental gain of about 6GL. About half of that amount is due to an error by the MDBA in using the wrong figure for Groundwater, so for about 3GL the irrigation industry in the Peel Valley will be closed down.

But the Panel need to be aware that the irrigators in the Peel Valley *and* the city of Tamworth only use 5% of the long-term average annual flow in the Peel River, so 95% of the long-term average flow is committed to the environment and the downstream users in the Namoi Valley and beyond.

Closing down a long established regional industry for an insignificant gain of about 3GL, when this Valley already contributes 95% of the long term average annual flow to the environment and downstream users simply does not make any sense.

We have repeatedly argued that the Peel Valley should be treated separately from the Namoi Valley, because they are two distinctly different valleys with different irrigation characteristics. A firm of consultants is currently preparing a report for Tamworth Regional Council into the reasons why the Peel Valley is unique and copies of that report will be forwarded to you within 10 days.

We have highlighted that the consultant performing the study into the social and economic impacts cannot possibly complete an exhaustive study into the impacts of the Plan on the Macquarie Valley, the Namoi Valley, the town of Bourke, and the Peel Valley and the Tamworth region within the given timeframe of 4 weeks, so the outcomes of that study will only be superficial at best.

We have demonstrated that there are errors with figures in the Guide, and errors of double counting. The MDBA does not appear to be concerned with the errors, and even though representatives of the MDBA who visited Tamworth agree that the Groundwater figure that they used is incorrect, they will not change it to the correct figure – they merely undertook to “recommend” that the correct figure should be used in the Draft Plan.

We have shown that the MDBA Planning process has caused mental stress and has already contributed, in part, to one suicide in this Valley.

On Page 1 of our submission we stated that Sustainable Diversion Limits should be set for all catchments in the Basin. What we need is a scientifically determined sustainable diversion limit to be established for the Peel Valley – separately from the Namoi Valley. (One that is scientifically established and takes account of Tamworth City’s growing water needs as well as the sustainability of the irrigation industry – not just history of use less a random percentage figure).

If cuts are to be made to the Peel valley for the purpose of “sharing the pain”, then we are willing to share the pain providing that all other valleys contribute 95% of the long term average annual flow to the environment after all irrigation and town use extractions.

NSW REGULATED RIVERS – GENERAL SECURITY ENTITLEMENT –  
ACCESS AND ENVIRONMENTAL IMPACT.

Valley	Entitlement GL	LTAAEL GL per year	LTAAEL as a % of Entitlement **	LTAAEL as a % of Surface water availability *
Murray	2076	1899	91	81
Murrumbidgee	2264	1989	88	53
Gwyndir	510	301	59	41
Namoi	256	235	92	35
Border Rivers	263	191	73	34
Lachlan	633	331	52	28
Macquarie	633	384	60	24
Peel	31	6	20	2

\* The NSW Regulated Rivers are listed in order representing their impact on the local environment using active water use as a function of valley based average surface water availability as the criteria. Reference Water Availability in the Murray-Darling Basin Appendix A page 59 CSIRO October 2008 and pers. com Geoff Podger 9.7.09 CSIRO

\*\* The Long Term Average Annual Extraction Limit (LTAAEL) have been derived from the IQQM computer models. The numbers generated from the model will vary but are considered to be in the right order.

THE IMPACT OF A HIGH ENTITLEMENT / USE RATIO

The General Security users of the Peel Valley have a high entitlement to use (WSP extraction limit) ratio whilst the Namoi has a low ratio.

<u>Water Source</u>	<u>Ent/Use ratio</u>
Peel	5.08
Namoi	1.07

That is to reduce active use in the Peel by one ML, five ML of entitlement have to be taken out of the system compared to about one ML in the Namoi.

MDBA CUTS – Scenario 2 (3500GL) 25% cut in water course diversions for Namoi.

To achieve a uniform reduction of 25% across the Namoi / Peel Valley as recommended by the MDBA the effective Long term allocation for General Security users would be about:

Peel	15%
Namoi	70%

AVAILABLE WATER DETERMINATION

It should be noted that a 25% reduction in active use of the General Security users of the Peel Valley will breach the LTAAEL and will result in a significant reduction in the Available Water Determination (AWD).

This is shown graphically in figure 1 which represents water usage of each entitlement holder as a function of entitlement for the all important 1993/94 water year and is tabulated below.

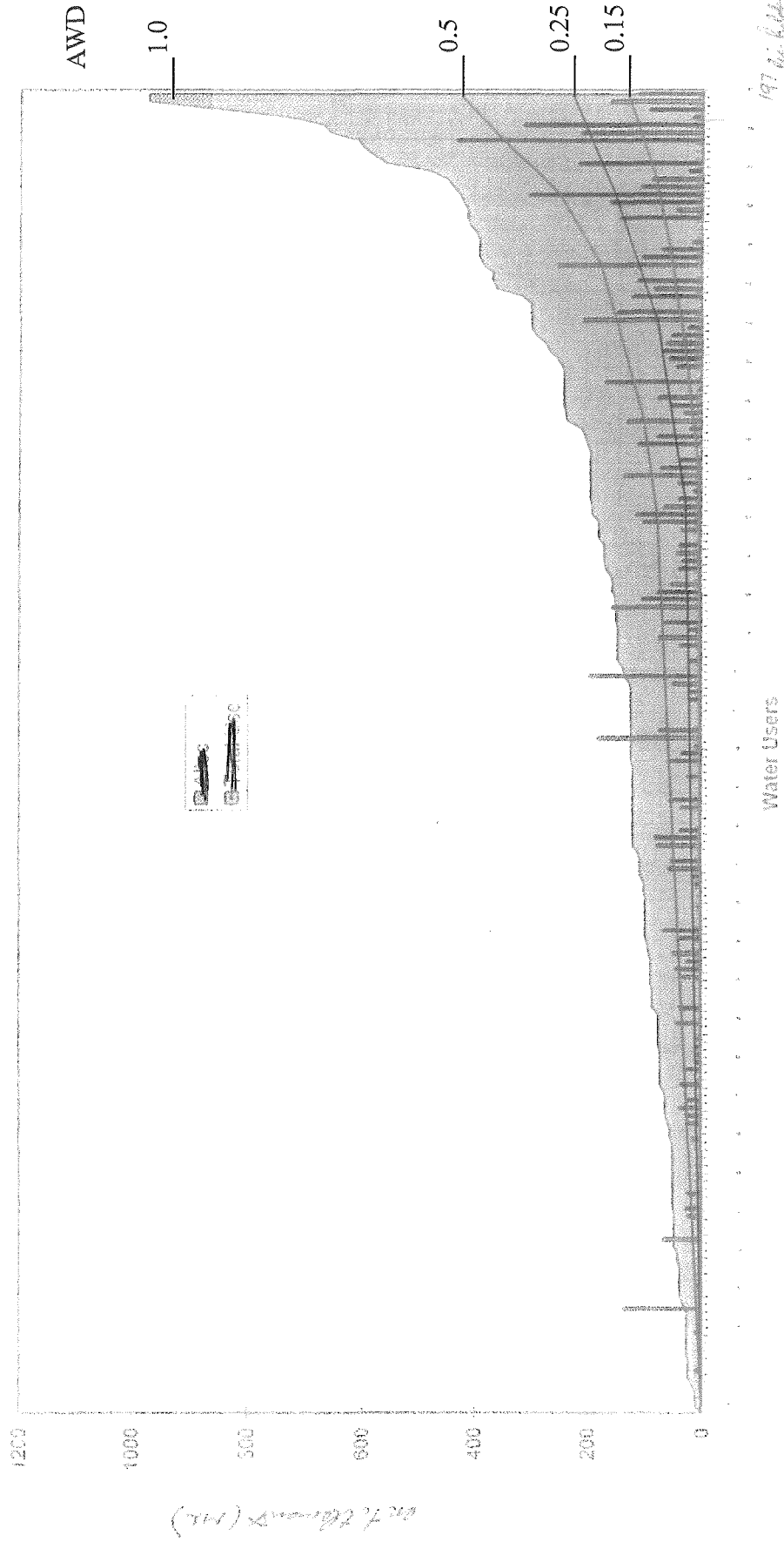
<u>AWD</u>	<u>Reduction in Entitlement</u>	<u>Reduction in Active Use 93/94</u>	<u>Total Use 1993/94 ML</u>
1.0	Nil	Nil	9083
0.9	3100	200	8880
0.5	15500	960	8120
0.25	23250	2240	6840 (6100 current LTAAEL)
0.15	26350	3900	5180 (4575 25% cut MDBA)

The impact of a significant reduction in the AWD severely effects the active users access to entitlement and overhead costs.

For example if an entitlement holder wants to use an average of 100ML per year the entitlement holder will require 670ML of General Security entitlement if the scenario above takes place and the number of users would drop from around 170 down to about 50 assuming the same water use patterns persist and there is a plethora of willing sellers.

Chart 7

Peel Valley 1993/94 . total Water Usage 9,083. Regulated Use vs Entitlement



## LIKELY IMPACT OF SAY AN 8% REDUCTION

### Entitlement

An 8% reduction in entitlement in any of the water sources of the Peel (Ground water – Alluvial and Fractured rock; Surface water - Regulated and Unregulated) would have no adverse socio economic impact providing the reduction in entitlement was by purchase from willing sellers.

Why? Because around 30% of entitlement is not activated in any year and produces negligible socio economic benefit and of course has no environmental impact – the water is not used.

### Active Use (LTAAEL)

An 8% reduction in the LTAAEL will have a significant impact on the Peel Valley because of our high Entitlement / Use ratio and its disproportionate impact on active users if the extraction limit is breached. Consider.....

### Groundwater Peel Alluvium

Entitlement 51381ML                      Current LTAAEL 9344ML   - 18.2% of entitlement

A breach of the extraction limit will occur if the five year rolling average of metered use exceeds 9344 by more than 15% or 10746ML. (Buffer 1402ML)

If the extraction limit is reduced by 8% to 8596ML a breach of the LTAAEL will occur if the rolling average is exceeded by 9885ML (861ML less)

In other words the buffer between the LTAAEL and a breach of the extraction limit has been reduced by 861:- 1402 or 61% that is a breach of the extraction limit is highly likely to occur for what would appear to be at face value a relatively low water cut compared to those proposed in the guide to the MDB plan.

The groundwater users of the Peel alluvium cannot breach the extraction limit and survive as an industry due to the large reduction in AWD that will be required to meet the extraction limit (the AWD will drop from 1.0ML per unit share down to around 0.2ML per unit share)

This will put the active users out of business unless the Commonwealth purchases a significant portion of the groundwater entitlement.

A Commonwealth purchase of around 30,000ML to 35,000ML (60 %– 70%) of entitlement would be required from willing sellers to achieve an 8% reduction in active use and keep the active users still in business as this will allow around 60% – 70% of entitlement to be consistently used without breaching the extraction limit. Most valleys would think that this access to entitlement is not unreasonable.

### Regulated General Security

The Long Term Average Annual Extraction Limit for the Regulated Peel is 15.1GL and includes High Security Town water and General Security components. Should an 8% reduction be applied then any reduction can only come off the access to General Security water use.

General Security Ent. 30,335ML Effective LTAAEL 6,100ML – 20% of entitlement

(a) Based on an LTAAEL of 15.1GL an 8% reduction equates to 1.2GL which reduces the General Security access from 6.1GL to 4.9GL or a 20% reduction.

A breach of the LTAAEL in the regulated system occurs *if the average of total extractions for the preceding 10 years exceeds the average modeled total annual extractions for the same period by more than 20%.*

Therefore an 8% reduction in the Peel,s LTAAEL for the regulated system would be highly likely to cause a breach of the extraction limit.

(b) If the 8% reduction in active use is only going to apply to the General Security users, this will reduce the effective extraction limit to 5.6GL compared to our average use over the last 17 years of 7.5GL or 25% below our average use. That is we are being kept in business by a computer model and any reduction in the LTAAEL will upset the computer model and have serious consequences for the General Security users of the Peel.

Like the Peel Alluvial water source users the General Security users cannot breach the LTAAEL without destroying the regulated irrigation industry as a breach will drop the AWD down to around 0.2ML per unit share and put the active users out of business.

The Commonwealth could improve this situation by purchasing entitlement from the general Security users of the Peel. The Peel's Water Sharing Plan allows up to 15GL to be traded downstream to the lower Namoi. It would be a better end result if the Commonwealth purchased this water from willing sellers.

**THE SALE OF PEEL VALLEY ENTITLEMENT TO THE COMMONWEALTH**

All water sources in the Peel Valley have a high entitlement to use ratio. This means that a significant portion of entitlement 50% to 70 % could be purchased from the Peel Valley with little or no social or economic disadvantage. The environment would be advantaged as the Commonwealth could either use it for environmental purposes or effectively retire the entitlement from use thereby preventing entitlement purchased being activated in the Peel Valley or elsewhere in the Murray Darling Basin.

The Peel Alluvium Groundwater water source and the Peel Regulated General Security water source would be the most beneficial for the Commonwealth to buy as these water sources are the major irrigation water users in the Peel Valley and the environmental gain would be maximized due to the high level of connectivity between surface water and ground water in the Peel Valley. The details of these two water sources are listed below.

	<u>Peel Alluvium</u>	<u>Regulated General Security</u>
Entitlement	51381ML	30335ML
LTADEL	18.2% of entitlement	20% of entitlement

Amount Commonwealth could purchase with little or no negative socio economic impact.

30-35000ML	15-18000ML
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Reliability of Supply to irrigators after the above amounts are purchased is 50-70% which is on par with most other water resources.

Conditions that would need to be applied to any purchase of Peel Valley entitlement by the Commonwealth

- Purchases to be from willing sellers
- State Water and or NSW Office of Water charges to be met by the Commonwealth
- Groundwater entitlement purchased cannot be extracted
- Purchase and use of entitlement is to be classified as environmental water and NOT deducted from the LTADEL
- The Commonwealth purchase of Regulated General Security entitlement can only be accessed when the Peel River is in high flow, that is when the General Security water users have access to no debit (off allocation) water