Lachlan Valley Water Inc

Supplementary Submission to the Standing Committee on Regional Australia on the Socio-economic Impact of the Guide to the Basin Plan

by Lachlan Valley Water

23 March 2011

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Opening Statement

1 The current Water Sharing Plan is delivering water for the environment.

- Under the WSP, water shares on a long term basis are 75% environment, 25% productive. (s14)
- Despite severe drought over the last 8 years, with nil general security allocation throughout 2003/04 to 2009/10, (except 19% in 2005/06) the shares of river flow have been 74% environment, 26% productive (LVW analysis of State Water CAIRO data)
- Drought breaking rain in 2010/11 and improved flows have resulted in widespread overland flows in the lower Lachlan and wetlands along the river filling from natural flows (refer photos)

2 Groundwater

- The Lower Lachlan Groundwater Sharing Plan was introduced in 2008, and set an extraction limit of 108 GL, agreed to by both the State and Federal Governments under ASGE process
- Licensed entitlement was halved from 215 GL to 108 GL.
- Hillston irrigators adjusted to the Water Sharing Plan by: (Details in supplementary submission)
    - investing in more water efficient irrigation technology
    - trading water and restructuring businesses
    - moving to high value enterprises based on contracts with major retailers and processors
    - the ability to do this was backed by secure supply of water
- These changes were high cost - irrigators committed to extra debt to make the changes
- There is no capacity to adjust to a further 40% cut to groundwater

3 How robust is the science, and how are the questions about the science resolved?

- Appropriateness of Sustainable Rivers Audit as basis for decisions on river health

4 Infrastructure works and operational measures

- Any further water recovery should be undertaken through on-farm water efficiency or infrastructure programs - Government now owns 17% of licensed entitlement in the Lachlan. Water share for productive use is 21% of long term average annual flow
- Encourage CEWH to use continuous accounting and trading rules to more strategically manage holdings and achieve outcomes
- Utilise local knowledge held within Catchment Management Authorities and State Government
    - Lachlan Environmental Water Management Plan – identifies priorities for environmental watering
    - Scoping study by Lachlan CMA to identify options for improving water delivery to environmental sites in Lower Lachlan wetlands – Lower Gum Swamp, Lake Ita, Lake Merrimajeel and Murrumbidgil Swamp

5 Social and economic impacts – Hillston as a case study

- Hillston is the main town within Carrathool Shire, with a shire population of 3,000, and is highly dependent on irrigated agriculture.
- Diversified and adjusted to groundwater Plan, but all relies on secure supply of water, which has been undermined by MDBA proposed SDL
- Impact of bore water cut exacerbated because majority of environmental water purchases were from lower Lachlan. Approximately one third of surface water entitlement in lower Lachlan is already owned by Government

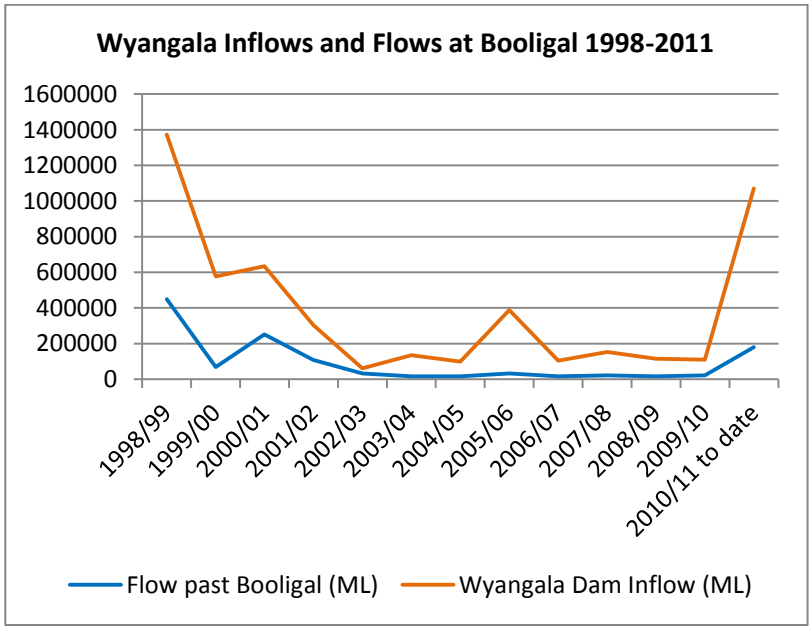
Supplementary Information

1 The current Water Sharing Plan already delivers water for the environment.

The drought was extremely severe in the Lachlan, with annual inflows from 2002/03 to 2009/10 less than 25% of average (State Water Drought Contingency Plan). The 2010/11 rainfall and return to pre-drought flows has produced a remarkable change. Wetlands along the river have filled from natural flows – Lake Cowal and Wilbertroy Wetlands, Lake Cargelligo, Lake Brewster (65%), Willandra Creek, Booligal Wetlands, Lachlan Swamp, Merrimajeel and Muggabah Creeks, Cuba Dam, Great Cumbung Swamp.

The graph below shows the increase in flows in 2010/11 at the Booligal gauge, a reference point for the Lachlan environmental indicator sites, and the following photos show the outcome of such flows.

Figure 1 Flows into Wyangala and at Booligal Gauge



Data sourced from http://realtimedata.water.nsw.gov.au and State Water

Lake Waljeers, Lachlan Swamp, March 2011

Great Cumbung Swamp. March 2011

Great Cumbung Swamp. March 2011

Lake Brewster, October 2010

2 Hillston Groundwater as a case study for social and economic impacts

- The Lower Lachlan Groundwater Sharing Plan was introduced in 2008, and set an extraction limit of 108 GL, agreed to by both the State and Federal Governments

- Licensed entitlement was halved from 215 GL to 108 GL.

- Hillston irrigators adjusted by:
    - investing in more water efficient irrigation technology
        - more than 90 pivots or linear move irrigators and 10,000 ha in Hillston area under spray irrigation
        - lining of channels
        - conversion to sub-surface drip
        - use of Enviroscan moisture monitoring technology.
    - trading water – 36,462 ML traded
    - restructured businesses
    - moving to high value enterprises based on building relationships and contracts with major retailers and processors:
        - cherries – 500 t, exports to Asia, Europe, US
        - garlic – 500 t
        - potatoes - 30,000 t (over half of Coles and Woolworths national supply)
        - water melon – 7,000 t
        - oranges
        - olives
        - sweetcorn - 5,000 t (30% of Edgells Australian supply)
        - beetroot – 7,000 t (100% Edgells Australian supply)
        - almonds (10% Australian crop) $100 M capital cost, $40 M revenue p.a

- 100 permanent jobs and 550 casual jobs in above enterprises

- ALL these changes were based on a secure supply of bore water

- Less than three years later the MDBA proposes a further 40% cut. We cannot restructure again.

- Questions over the robustness of the science behind the SDL's

3 How robust is the science, and how are the questions about the science resolved?

- Overall ecosystem health of the Lachlan River described as 'very poor' based on the Sustainable Rivers Audit (SRA).
    - The SRA relied on one sampling sequence between 2004 and 2007, in the midst of a very severe drought
    - At the same time, the SRA rates the hydrological health of the Lachlan as 'moderate to good', macroinvertebrates as 'poor' and fish as 'extremely poor', suggesting that non-flow factors like riparian and whole-of-catchment land management and controlling carp will do more to improve river health than greater volumes of water.

- For groundwater SDL's, the Guide used groundwater models that were developed for water planning purposes for water management purposes. Differences are appearing between what the model predicts and what has been observed.
    - Hydrographs show levelling off trend but the model predicts continued drawdown
    - Model does not reflect variable usage pattern