INQUIRY INTO WATER AUGMENTATION

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Lachlan Valley Water Inc

Representing and Uniting Lachlan Valley Water Users

Submission to General Purpose Standing Committee No. 5

Inquiry into the augmentation of water supply for rural and regional New South Wales

May 2017

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EXECUTIVE SUMMARY

Lachlan Valley Water welcomes the opportunity to provide a submission to this Inquiry, and summarises our recommendations as follows:

- a) There has been significant re-structuring of the organisations responsible for water policy, management and delivery in the last two decades. LVW supports the development of a water supply and demand equation out to 2050 as part of the framework for the water policy and planning functions of DPI Water, and recommends that the equation must give equal balance to the social, economic and environmental needs of the population.
- b) LVW supports the implementation of the Lachlan Valley Water Security Project, and recommends that the Government's decision on a new storage on the Belubula River should be based on the findings from this investigation.
- c) LVW supports the following recommendations from the 2013 Standing Committee report on adequacy of water storages as priorities for further action:
 - a. Recommendation 4: That the NSW Government financially supports the agriculture sector to use more water efficient practices, and encourage contributions from industry and the Commonwealth Government to support R&D in this area.
 - b. Recommendation 5: That the NSW Government develops a state-wide policy of waiving fixed water charges during exceptional drought conditions.
 - c. Recommendation 7: That the NSW Government review the environmental flow allocations for all valleys in NSW and make representations to the Commonwealth Government to review environmental flow allocations in relation to the Basin Plan
 - d. Recommendation 17: That the NSW Government ensures that new storage proposals are comprehensively assessed.
- d) Communities are experiencing fatigue with the continuous water reforms and frustration that one policy initiative is not bedded down and evaluated before the next one commences. Lachlan Valley Water recommends that there should be a comprehensive monitoring and assessment of the effectiveness of current water reforms prior to initiating new reforms.
- e) LVW stresses the importance of a full range of measures to improve environmental outcomes in the Basin, including land management and non-flow methods.
- f) LVW recommends that best practice water pricing should recognise that changing community standards and government policy have resulted in increased costs for rural water services, and that these costs should be borne by the Government.
- g) LVW recommends that environmental licence holders bear the costs of any additional services required in excess of the level of service provided to other licence holders.
- h) LVW recommends that the requirement for concurrence by the Minister for the Environment for changes to water sharing plans is removed.
- i) LVW recommends that monitoring and evaluation programs should identify the additional environmental outcomes achieved as a result of the use of held environmental water, over and above the outcomes that occurred as a result of planned environmental water available through state-based water sharing plans.

SUBMISSION TO INQUIRY INTO THE AUGMENTATION OF WATER SUPPLY FOR RURAL AND REGIONAL NSW

1. Introduction

Lachlan Valley Water (LVW) welcomes the opportunity to make a submission to this inquiry. Lachlan Valley Water is an industry organisation representing more than 500 surface water and groundwater entitlement holders in the Lachlan and Belubula valleys. LVW supports sustainable, productive and efficient water use. Irrigated agriculture is an important component of the regional economy, with farm gate value production of \$240 million per year¹ from an irrigated area of around 70,000 ha, and contributing over \$500 million per year to the regional economy including flow-on benefits (based on ABS multiplier).

Membership of LVW is voluntary and our members represent all categories of licences except for those held by environmental water managers. This submission is made on behalf of all members, but individual members also reserve the right to make their own submissions.

Lachlan Valley Water is a member of NSW Irrigators Council.

2. Terms of Reference

The General Purpose Standing Committee is inquiring into the performance or effectiveness of the NSW Government agencies that are responsible for the augmentation of water supply for rural and regional NSW, and in particular:

- a) The requirement for a water equation (demand and supply out to 2050) for rural and regional NSW
- b) The suitability of existing NSW water storages and any future schemes for augmentation of water supply, including the potential for aquifer recharge.
- c) Review the NSW Government's response to the recommendations of the June 2013 report by the Standing Committee on State Development on the adequacy of water storages in NSW
- d) The 50 year flood history in NSW, including the financial and human cost.
- e) Technologies available to mitigate flood damage, including diversion systems and the scope of infrastructure needed to support water augmentation by diversion for rural and regional NSW.
- f) Social, economic and environmental aspects of water management practices in NSW
- g) The efficiency and sustainability of environmental water being managed by different state and Federal Government agencies
- h) The management appropriate and efficiency of reporting of inter-valley transfers, conveyance and loss water, carryover, and the water market.
- i) Any other matter

3. Requirement for a water equation for rural and regional NSW (a)

There have been several re-organisations of the agencies responsible for water policy and management over the last two decades, including significant restructuring of DPI Water within the last two years and accompanying large scale changes in personnel. The

¹ ABS Gross Value of Irrigated Agricultural Production 2013/14

organisation responsible for water delivery, WaterNSW, has also undergone major restructuring with a merger of the urban and rural water supply bodies, Sydney Catchment Authority and State Water.

The State Infrastructure Strategy identified that long term planning for new investment is a key challenge for the water sector² and that over the next 20 years the most important change is likely to be a significant reduction in the availability of water for productive use, and in security of supply for some communities.

Against this background of ongoing structural change and major externalities LVW considers that the development of a water supply and demand assessment out to 2050 is an essential part of the planning framework for the NSW Government, and in particular as a basis for the water policy and planning functions of DPI Water.

We recognise that Government objectives in water policy have also changed over the years. From the 1930's to the 1970's, when many of the existing storages and other infrastructure were built, the focus was on growth and regional development. From the 1980's onwards there has been an increasing priority on environmental needs, particularly in the last decade with the development of the Murray Darling Basin Plan which prioritises environmental objectives above the community's social and economic outcomes. LVW believes it is important that water policy strives to deliver a genuine triple bottom line, and that any water equation to be developed must ensure an equitable balance between the social, economic and environmental needs of the population.

LVW supports the development of a water supply and demand equation out to 2050 as part of the framework for the water policy and planning functions of DPI Water. The equation should give equal balance to the social, economic and environmental needs of the population.

4. Suitability of existing water storages and any future schemes for augmentation of water supply for NSW, including aquifer recharge (b)

Water security and reliability is a major issue in the Lachlan catchment, with the State Infrastructure Strategy identifying the Lachlan, Gwydir and Macquarie catchments as the highest priority inland river catchments in terms of drought risk³, due to low/variable rainfall, high evaporation and limited storages. Flood management was also identified as a priority in the Lachlan, due to the limited airspace in storages.

The water security problem in the Lachlan is highlighted by the experience of the 2002 – 2010 drought, when there were historically low inflows over several years, and major difficulty in maintaining supply of water to towns and stock and domestic users during the latter part of the drought. Annual usage by all licence holders (including towns, industry, stock and domestic, and irrigation) fell as low as 9,200 ML in 2009/10, and over the 8 years from 2002 to 2010 averaged 63,200 ML/year, 80% below the extraction limit of 305,000 ML/year in the Water Sharing Plan. Water security for towns and high value crops is now significantly but not fully supported by groundwater.

WaterNSW has established the Lachlan Valley Water Security Project to investigate ways to improve water security in the Lachlan catchment. The options include a potential dam at the Cranky Rock site on the Belubula River, which would have benefits for both water security and flood mitigation.

² P81, State Infrastructure Strategy Update 2014

³ P86, State Infrastructure Strategy Update 2014

While there is already a dam on the Belubula River – Carcoar Dam, it has a small capacity at only 36,000 ML, and is located at the top of the catchment, so captures only 10% of the inflows to the catchment. This makes it relatively ineffective for both water security and flood mitigation. Graph 1 below is sourced from the DPI Water real time data⁴ and shows the extreme fluctuations in the volume held in Carcoar Dam over the past 15 years.



Graph 1. Volume in Carcoar Dam 2002 - 2017

The NSW Government is currently undertaking feasibility studies, site investigations and cost-benefit analysis of the proposed new Cranky Rock storage at on the Belubula River as part of the Lachlan Valley Water Security Project. It is essential that these investigations are completed and that the Government make an informed decision on the new storage on the basis of those findings, rather than making a decision before receiving the results of the study, as some submissions to this Inquiry have suggested.

LVW supports the implementation of the Lachlan Valley Water Security Project, and recommends that the Government's decision on a new storage on the Belubula River must be guided by the findings of the investigation.

5. Review NSW Government's response to the June 2013 Standing Committee report on adequacy of water storages (c)

The Standing Committee on State Development undertook a detailed investigation into adequacy of water storages and made a wide-ranging list of recommendations, many of which have not been implemented yet. LVW recommends that the following recommendations be supported by this Inquiry as priorities for action:

a) Recommendation 4: That the NSW Government financially support the agriculture sector to use more water efficient practices, and encourage contributions from industry and the Commonwealth Government to support R&D in this area.

This is also consistent with the objectives in the NSW DPI Strategic Plan to maximise the productive use of water, and to achieve 30% growth in the value of NSW primary industries by 2020.

⁴ http://realtimedata.water nsw.gov.au/water.stm?ppbm=SURFACE_WATER&rs&3&rskm_org

b) Recommendation 5: That the NSW Government develops a statewide policy of waiving fixed water charges during exceptional drought conditions.

The Lachlan experience is an example of the need for this policy. The 2002 – 2010 drought was exceptionally severe in the Lachlan catchment, and general security irrigators received zero water allocation in 6 of the 8 years of the drought, and only 22% allocation in total over 8 years, ie, 2.75% allocation per year on average. The NSW Government waived the fixed charges in 3 of the 8 years, for which we are appreciative, but licence holders were required to pay the charges in the other 5 years, a heavy financial impost when the river was being managed largely to meet base flows for the environment, town water requirements, and stock and domestic needs. A standardised, statewide policy would be a significant step towards equitable sharing of the costs for river management under exceptional circumstances.

c) Recommendation 7: That the NSW Government review the environmental flow allocations for all valleys in NSW and make representations to the Commonwealth Government to review environmental flow allocations in relation to the Basin Plan.

Water sharing plans (WSP) for all NSW water sources have been developed over the past 15 years, and have established the shares of water reserved for the environment and the share available for extraction. LVW believes the Lachlan Regulated WSP would have operated effectively to meet environmental needs, but there was no opportunity to evaluate this before the advent of another cycle of reform following the *Water Act 2007*, and the Commonwealth commenced untargeted buyback of water in 2008/09 in advance of the Basin Plan. In the Lachlan, the MDBA set the water recovery target for the Lachlan at the volume of water already recovered, indicating the buyback was not informed by science.

LVW considers that the review of environmental flow allocations as provided in Recommendation 7 would help address the gaps in the science and the overlaps between State and Commonwealth policy.

d) Recommendation 17: That the NSW Government ensures that new storage proposals are comprehensively assessed.

Refer to our comments under (4) above.

6. Social, economic and environmental aspects of water management practices (f)

Social

There have been successive waves of water management reform in NSW over the last 30 years, increasingly being driven by environmental demands and objectives, and not all of it based on well-researched and tested science.

The Murray Darling Basin Cap in 1995 was an extremely blunt policy instrument because it capped extraction in all valleys at the 1993/94 level of development, regardless of the level of water utilisation in individual valleys at that point. The 1990's also saw state-based water reforms with environmental contingency allowances (100,000 ML in the Lachlan) and other environmental flow rules introduced, culminating in the NSW Water Sharing Plans in 2004.

The Lachlan Regulated Water Sharing Plan (WSP) established the water shares at 75% of average annual flow for the environment and 25% for productive use. The WSP also provided for translucent flows of up to 350,000 ML/year, plus a water quality allowance of 20,000 ML and an environmental contingency allowance of 20,000 ML.

However, the water sharing plans had no opportunity to really start working before the next reform hit in the form of the *Water Act 2007* and the Murray Darling Basin Plan. This led to hasty, untargeted buyback of water in some valleys, including the Lachlan, and significant social and economic impacts on communities. The Commonwealth and NSW Governments now own 124,300 ML of water entitlement in the Lachlan Valley, resulting in a further reduction in the share of river flow available for productive water use to only 20%, as shown in Graph 2 below.



Graph 2: Lachlan water shares by category, as % of average annual flow

Licence holders and communities are feeling not only the effect of the loss of economic activity and loss of jobs, but fatigue at the continuous reforms and frustration that one policy initiative is not bedded down and evaluated before the next one commences.

In the Murray Darling Basin Plan we have also seen an over-riding focus on volumes of flow, increasing the environmental share of flow and reducing the productive share. It is clear that the environmental problems in the Basin are not going to be solved simply by adding more water, and would benefit from a more comprehensive approach through combined land and water management, as well as non-flow measures, eg, curtains on dam intakes to reduce cold water pollution, release of the carp herpes virus, the construction of fish ladders and so on.

Lachlan Valley Water recommends that there should be a comprehensive monitoring and assessment of the effectiveness of current water reforms. LVW also supports implementing a full range of measures to improve environmental outcomes in the Basin, incorporating land management and non-flow methods rather than relying simply on flow volumes.

Economic

A feature of the current water policy and management framework is the move to full cost recovery for rural and regional water supplies, as required under the National Water Initiative. Under the current 'impactor pays' model a majority of costs are borne by licence holders, however, changing community expectations and government policy impose additional demands on WaterNSW's water management and delivery services, effectively making the policy or the community standards the impactor, and the costs of meeting those demands should be borne by the Government.

In addition, environmental managers may have different delivery requirements from other licence holders, which require a higher level of input from WaterNSW, e.g, the delivery of environmental water may involve diversion through regulators and require WaterNSW staff to operate specific infrastructure. The additional costs of providing these services should be met by the environmental licence holder.

LVW recommends that best practice water pricing should recognise that changing community standards and government policy have resulted in increased costs for rural water services, and that these costs should be borne by the Government.

Environmental licence holders should bear the costs of any additional services required over and above the level of service provided to other licence holders.

7. Efficiency and sustainability of environmental water management

The NSW Government now owns significant holdings of water entitlement in many NSW valleys, with these holdings being managed by the Office of Environment and Heritage (OEH). There is an inherent conflict of interest in that the owner of the licence at the same time has a regulatory role because any changes to NSW Water Sharing Plans require the concurrence of the Minister for the Environment. No other licence holder has that decision making role in the planning process.

LVW recommends that the requirement for concurrence by the Minister for the Environment for changes to water sharing plans is removed.

Efficiency and accountability of environmental water management will be facilitated through regular, transparent reporting of environmental outcomes, and in particular, distinguishing between the outcomes resulting from the use of purchased environmental water from the outcomes that were already being achieved under existing state-based water sharing plans.

LVW recommends that monitoring and evaluation programs should identify and report the additional environmental outcomes achieved as a result of the use of held environmental water, over and above the outcomes that occurred as a result of planned environmental water available through state-based water sharing plans.