

**Submission
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INQUIRY INTO ADEQUACY OF WATER STORAGES IN NSW

Organisation: NSW Farmers Association

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**SUBMISSION TO
STANDING COMMITTEE ON STATE DEVELOPMENT**

**INQUIRY INTO THE ADEQUACY OF
WATER STORAGES IN NSW**

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Recommendations

RECOMMENDATION 1

That the NSW government commission a comprehensive climatic, physiographic, hydrological and engineering study to identify risks, opportunities and cost-effective infrastructure solutions to future water demands and the consequences for public water storages.

RECOMMENDATION 2

That consideration of proposals for construction/augmentation of storages be based on current and projected stakeholder demands; seasonal conditions; and the role that storages may play in respect of flood mitigation, water security and the provision of clean energy.

RECOMMENDATION 3

That the NSW government waive fixed water charges when exceptional drought conditions prevail.

RECOMMENDATION 4

That the NSW Government consider the potential for private on-farm storage to augment public supply, thereby reducing flooding impacts.

RECOMMENDATION 5

That the NSW government amend the Harvestable Rights Policy to allow rural landholders in the eastern fall to capture more than 10 percent of the average regional rainfall run-off on their property without requiring a licence.

RECOMMENDATION 6

That the NSW Government develop long-term water strategies for the eastern and western fall, including consideration of the need for greater water storage capacity to support growth.

RECOMMENDATION 7

That the Standing Committee on State Development consider the impacts of the State Plan as part of its inquiry on the adequacy of water storages in NSW.

TABLE OF CONTENTS

Recommendations	2
1. Introduction	4
2. Capacity of Existing Water Storages	5
3. Proposals for Construction/Augmentation of Storages.....	7
3.1 Meeting Competing Needs.....	9

1. Introduction

NSW Farmers appreciates the opportunity to respond to the *Inquiry into the adequacy of water storages in NSW* being conducted by the Standing Committee on State Development.

NSW Farmers is Australia's largest state farming body, representing the majority of commercial farm businesses in NSW, ranging from broadacre, meat, dairy, wool and grain producers, to more specialised producers in the horticulture, egg, pork, oyster and goat industries. Responsible management of our land and water resources is fundamental to the success of these farm businesses, and the families who own and operate them.

There are more than 43 500 farm businesses in NSW contributing more than \$8.3 billion to the NSW economy per annum, representing some 3.4% of the NSW economy.¹² Given that every dollar from on-farm production has a multiplier earning effect across agribusiness pre- and post-farm gate of 1:5, the true value of agriculture to the state is even higher.³

Demand for food is set to increase by 70% by 2050 as the global population rises to around 9.1 billion people.⁴ Already, the Asia-Pacific region is home to nearly two thirds of the world's hungry people.⁵ This makes farmers in NSW well placed to improve the livelihoods of some of our closest neighbours by investing in new infrastructure and technology to produce more food and fibre from the same amount of land. However, as highlighted by the Prime Minister's Science, Engineering and Innovation Council:

"Water is probably the most critical factor affecting food production. Any viable strategy for increasing food production from the limited area of arable land must address the problems of ensuring sustainable access to water for irrigation and human consumption."⁶

The issues being investigated by the Standing Committee are therefore of importance not only at a state level, but also nationally and beyond.

The average Australian farmer grows enough food to feed 600 people every year, 450 of whom live outside Australia.⁷ Australian farmers produce approximately 93 per cent of Australia's daily domestic food supply, and export 60 per cent (in volume) of total

¹ Australian Bureau of Statistics (2011) *Agricultural commodities, National and State 2010-11*, Cat no. 7121.0

² NSW Parliamentary Library Research Service (2012) *Agriculture in NSW (July 2012) Statistical Indicators 4/12* p.i

³ Australian Bankers Association, 2011, *Proposed Plan for Murray Darling Basin submission*

⁴ United Nations (2009) *How to Feed the World in 2050*

http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf

⁵ Food and Agriculture Organisation of the United Nations (2010) *Global Hunger Declining, But Still Unacceptably High*
<http://www.fao.org/docrep/012/al390e/al390e00.pdf>

⁶ Prime Minister's Science, Engineering and Innovation Council (2010) *Australia and Food Security in a Changing World*
<http://www.innovation.gov.au/Science/PMSEIC/Documents/AustraliaandFoodSecurityinaChangingWorld.pdf>

⁷ Australian Farm Institute (2009) *Australia's Response to World Food Security Concerns*
<http://www.nff.org.au/get/2107.pdf>

agricultural production.⁸ Effective water storage infrastructure and management must ensure that Australian farmers can continue to contribute strongly to the global food security challenge.

It is important to note that as a member of the NSW Irrigators Council (NSWIC), NSW Farmers endorses the NSWIC submission on the Adequacy of Water Storages in NSW.

2. Capacity of Existing Water Storages

NSW Farmers does not have the technical expertise to critically review the capacity of existing water storages across the state to meet agricultural, urban, industrial and environmental needs, recognising the number of dams, weirs and barriers across the state (see Figure 1), and the complexity of bulk water delivery functions across the state. For example, as the state’s rural bulk water delivery corporation, State Water alone delivers more than 5 500GL of water to regional NSW on average, along 7 000km of rivers, managing and operating 20 dams and more than 280 weirs and regulators.⁹ Whilst not in a position to conduct a technical analysis, anecdotal evidence from members suggests there has been a lack of upfront, strategic planning in respect of water storages state-wide, and in particular, planning for future stakeholder demands.

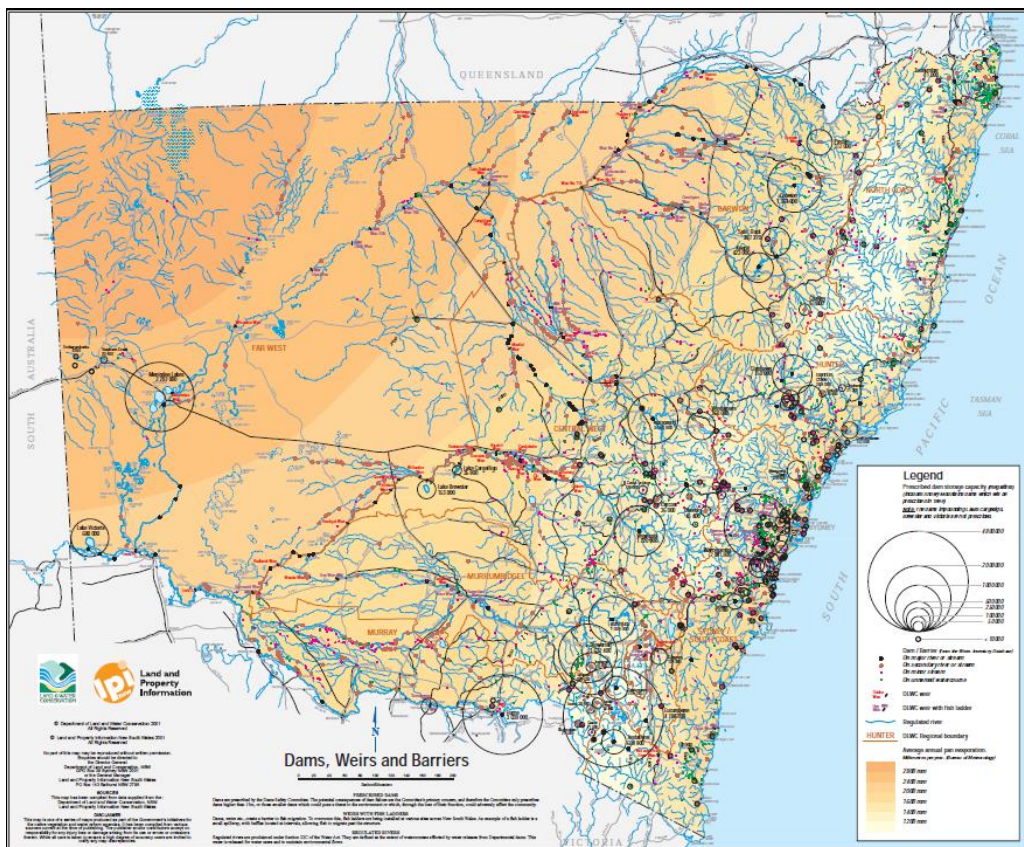


Figure 1 – Dams, Weirs and Barriers, 2001¹⁰

⁸ Prime Minister’s Science, Engineering and Innovation Council (2010) *Australia and Food Security in a Changing World* <http://www.innovation.gov.au/Science/PMSEIC/Documents/AustraliaandFoodSecurityinaChangingWorld.pdf>

⁹ State Water Corporation (2012) <http://www.statewater.com.au/>

¹⁰ NSW Government (2001) *Dams, Weirs and Barriers* <http://waterinfo.nsw.gov.au/historic/doc/dlwc7dam-2001.pdf>

A comprehensive review of existing storage infrastructure and opportunities for extension and improvement is long overdue. While many suggestions have been made regarding potential new and/or augmented storages, NSW Farmers is concerned that NSW – and indeed Australia – is not yet equipped with the knowledge needed to identify and prioritise investment in new major water storage infrastructure. As raised with the Federal Coalition Dams and Water Management Task Group when it commenced its investigations last year, a first step in this regard should be commissioning a comprehensive climatic, physiographic, hydrological and engineering study to identify risks, opportunities and cost-effective infrastructure solutions.

NSW Farmers submits that one of the greatest barriers to planning for future water needs is the limited information systems currently in place across the country. Better information systems for water management, ordering, delivery and so-on via telemetry, automation and the like would assist real-time analysis of current water demands and consequently, planning for the future. Improved real-time water information is needed to support more precise river management and to ensure accurate water accounting and an open and transparent water market. While significant funding is available from the Federal Government to achieve water savings, it is critical that State and Territory governments give close consideration to how they can make the most of the available funding. By making strategic investments in water infrastructure and information systems, the NSW Government can continue to position itself as a leader in sustainable water use. Significant savings may also be achieved via investment in augmenting storages and upgrading supply infrastructure, for example replacing delivery channels with piping.

RECOMMENDATION 1

That the NSW government commission a comprehensive climatic, physiographic, hydrological and engineering study to identify risks, opportunities and cost-effective infrastructure solutions to future water demands and the consequences for public water storages.

The completion of such a study would assist stakeholders in making informed decisions about the proposed development of new or expanded dams on the basis of whether their viability is supported by the analysis, and whether social, economic and environmental benefits significantly outweigh any negative impacts. Given the complexity of water management and licensing issues, it is essential that significant triple bottom benefits can be demonstrated and communicated. It is also critical that, where existing water users experience adverse impacts, adequate compensation be paid to balance those impacts.

3. Proposals for Construction/Augmentation of Storages

NSW Farmers submits that any discussion of new and augmented public water storages must consider not only current and projected stakeholder demands, but also the role that these storages may play in respect of flood mitigation, water security and the provision of clean energy. There must also be consideration of the vagaries of seasonal conditions. The decade-long drought that ended in October 2010, which, at its worst in April 2003, affected 99.5% of NSW, saw public water storages at record lows, and even town water supplies at risk, as highlighted in Case Study 1. This devastating drought was broken by a La Nina event resulting in serious flooding across much of the state, with water storages filling and spilling in a number of valleys over the last 12 months.

RECOMMENDATION 2

That consideration of proposals for construction/augmentation of storages be based on current and projected stakeholder demands; seasonal conditions; and the role that storages may play in respect of flood mitigation, water security and the provision of clean energy.

RECOMMENDATION 3

That the NSW government waive fixed water charges when exceptional drought conditions prevail.

NSW Farmers submits that in discussing the impacts of climate variability on water storages, consideration be given to the potential for private on-farm storage to augment public supply, and thereby reduce flooding impacts. Public policy should encourage the careful consideration of the construction of additional stock and domestic dams by introducing appropriate tax incentives, grants, subsidies and the immediate removal of any artificial, administrative restrictions.

RECOMMENDATION 4

That the NSW Government consider the potential for private on-farm storage to augment public supply, thereby reducing flooding impacts.

The construction of additional storages would entail sophisticated topographic analysis, as well as changes to current planning constraints and harvestable rights rules. Harvestable rights allow landholders in most rural areas to collect a proportion of the runoff on their property and store it in one or more farm dams up to a certain size. Currently, rural landholders can build dams on minor streams that capture up to 10 percent of the average regional rainfall run-off on their property without requiring a licence. Whilst this 10 percent limit is appropriate for some parts of the state, NSW Farmers believes the limit should be raised in coastal areas.

Case Study 1. – Wyangala Dam

Wyangala Dam in the Lachlan Valley, reached record lows in late 2009, with zero in-flows causing the dam to drop to less than 5% of capacity. Wyangala Dam is the only dam on the Lachlan River system to feed the Murrumbidgee River, which in turn feeds the Murray River¹. By December 2009, the NSW Office of Water reported that:

*“There is not enough water to provide flows for the full length of the Lachlan River for the rest of the water year. To do this would mean Wyangala Dam would be dry by February 2010. It is estimated that a total of 60 gigalitres is required to run the river for the rest of the 2009/10 water year and only 57 gigalitres remain in Wyangala Dam”.*¹

Given the dire situation, drought contingency planning measures were implemented to ensure that no towns in the valley would run out of water. Water supply to the town of Lake Cargelligo was provided from the Lake Cargelligo Weir through an emergency channel system. Emergency bores were investigated for town water supplies for towns such as Forbes and Condobolin. A pipeline from the Central Tablelands Waters supply system was constructed to supplement Cowra’s town water supplies. Villages such as Fifield, Eubalong and Eubalong West were forced to cart water, with residents receiving up to 150 litres per day.

NSW Farmers members along tributaries saw their waterways reduce to a trickle, or stop flowing altogether in some instances. Aside from the immediate concerns of animal welfare, landholders reported a perceived lack of clarity as to the rationale for redirecting waterways, and were enormously frustrated by being asked to pay fixed water charges despite having received no water. By 2009, general security water users had received zero allocations for five of the prior six years. Fixed water charges are applied irrespective of the level of water allocation received, meaning that irrigators were still expected to pay in full the fixed charge of their tariff, even without a drop of water being delivered. NSW Farmers was successful in lobbying for these charges to be waived, with Lachlan Valley general security licence holders’ fixed water charges waived, and fees also waived for general security regulated licence holders across the state that receive a zero water allocation for three consecutive years. As part of planning for future droughts, NSW Farmers believes a permanent, statewide policy must be implemented to waive fixed water charges when exceptional drought conditions prevail.

With the 2010-11 La Nina event putting an end to “the worst since first European settlement”¹, and the Wyangala Dam filling and spilling earlier this year for the first time in more than a decade, it is hoped that communities within the Lachlan Valley will now have the chance to plan for the future, particularly in respect of the placement and management of water storages and related infrastructure.



Figure 1 – Wyangala Dam May 2005
Source: Sydney Morning Herald



Figure 2 – Wyangala Dam March 2012
Source: ABC Rural

RECOMMENDATION 5

That the NSW government amend the Harvestable Rights Policy to allow rural landholders in the eastern fall to capture more than 10 percent of the average regional rainfall run-off on their property without requiring a licence.

With coastal areas bearing the brunt of the majority of existing population growth, NSW Farmers submits that a separate, long-term water strategy for coastal areas is required to address urban, industrial and rural residential pressures on coastal water; saline and other water quality issues; and the need for greater water storage capacity to support growth.

RECOMMENDATION 6

That the NSW Government develop long-term water strategies for the eastern and western fall, including consideration of the need for greater water storage capacity to support growth.

3.1 Meeting Competing Needs

Water is a scarce and valuable resource that must be planned for and managed efficiently and effectively. There are a range of policy reforms taking place at present – from the Murray Darling Basin Plan at a national level to the *Strategic Regional Land Use Policy* at a state level – that will have a bearing on the way in which competing water needs are managed into the future.

The NSW Government submission in response to the Proposed Murray Darling Basin Plan states that “Water should be recovered through a combination of infrastructure, environmental works and measures, rules review and strategic buyback” and submits that this should be the priority order for recovery and investment.¹¹ This position continues to be strongly supported by NSW Farmers. Identification of priorities for infrastructure investment must consider the construction of new water storages, or improvements to existing key storages, to minimise infrastructure damage and maximise opportunities presented by flood events, as well as to achieve water storage efficiencies.

At a state level, one of the primary goals of the new State Plan is to drive economic growth in NSW.¹² NSW Farmers submits that water is fundamental to the success or otherwise of this goal. The State Plan sets a target of increasing the population in regional NSW by 470 000 by 2036. It must be recognised that population growth of this magnitude will place unprecedented demands on urban, industrial and agricultural water, as we try to house and feed a growing population. Additional urban water requirements resulting from urban expansion should not be to the detriment of existing agricultural landholders’ entitlements/allocations. As such, it is critically important that

¹¹ NSW Government (2011) *NSW Government submission on the proposed Murray Darling Basin Plan*

¹² NSW Government (2011) *NSW 2021 – A Plan to Make NSW Number One*
http://2021.nsw.gov.au/sites/default/files/NSW2021_Economy_3.pdf

this inquiry consider the impacts of the State Plan on future water needs, and consequently, public water storages.

RECOMMENDATION 7

That the Standing Committee on State Development consider the impacts of the State Plan as part of its inquiry on the adequacy of water storages in NSW.

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