

Submission
No 52

INQUIRY INTO WATER AUGMENTATION

Organisation: NSW Farmers Association

Date received: 12 August 2016



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

AUGUST 2016

**NSW Farmers' Association
Level 6 35 Chandos Street
St Leonards NSW 2065**

Ph: (02) 9478 1000

Fax: (02) 8282 4500

Email: emailus@nswfarmers.org.au

NSW Farmers' Association Background

The NSW Farmers' Association (the Association) is Australia's largest State farmer organisation representing the interests of its farmer members – ranging from broad acre, Livestock, wool and grain producers, to more specialised producers in the horticulture, dairy, egg, poultry, pork, oyster and goat industries.



**Inquiry into the augmentation of water supply for rural and regional NSW
2016 – NSW Farmers Association Submission**

Executive Summary

NSW Farmers appreciates the opportunity to respond to the Inquiry into the augmentation of water supply for rural and regional NSW being conducted by the General Purpose Standing Committee.

NSW Farmers is Australia's largest state farming body, representing the majority of commercial farm businesses in NSW, ranging from broad acre, meat, dairy, wool and grain producers, to more specialised producers in the horticulture, egg, pork, oyster and goat industries.

There are more than 48,266 farm businesses in NSW, employing 65,716 people and contributing \$24,563 million to the NSW economy per annum.

Responsible management of our land and water resources is fundamental to the success of NSW farming enterprises, and the families who own and operate them.

Effective water storage infrastructure and management must ensure that Australian farmers in NSW continue to contribute strongly to the state's social, environmental and economic sustainability.

NSW Farmers Association Branches have also provided their own submissions to the Inquiry.

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.



**Inquiry into the augmentation of water supply for rural and
regional NSW
2016 – NSW Farmers Association Submission**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
TABLE OF CONTENTS	3
1. NSW GOVERNMENT’S RESPONSE TO THE RECOMMENDATIONS OF THE JUNE 2013 REPORT BY THE STANDING COMMITTEE	4
2. RECOMMENDATIONS	5
3. IMPROVED INFORMATION	7
RECOMMENDATION 1	7
4. MEETING COMPETING NEEDS	9
4.1 Water Storage	9
RECOMMENDATION 2	10
RECOMMENDATION 3	10
RECOMMENDATION 4	10
4.2 Fixed water charges	11
4.3 Water Sharing Plans	11
4.4 Stock, urban and domestic water	11
RECOMMENDATION 5	11
RECOMMENDATION 6	11
RECOMMENDATION 7	12
RECOMMENDATION 8	12
5. WATER EFFICIENCY	13
RECOMMENDATION 9	13
RECOMMENDATION 10	13
6. CONCLUSION	14



**Inquiry into the augmentation of water supply for rural and
regional NSW
2016 – NSW Farmers Association Submission**

**1. NSW Government's response to the recommendations
of the June 2013 report by the Standing Committee**

The *Water Management Act 2014*, passed by the NSW Government in late 2014 and commencing on 1 January 2015, changed some sections of the *Water Management Act 2000* and added some new sections.

In August 2012, NSW Farmers made submissions to the Standing Committee on State Development's Inquiry into the adequacy of water storage in NSW. These recommendations included, amongst others:

- a.) That the NSW Government consider the potential for private on-farm storage to augment public supply, thereby reducing flooding impacts;
- b.) That the NSW Government amend the Harvestable Right Policy to allow rural landholders in the eastern fall to capture more than 10 per cent of the average regional rainfall run-off on their property without requiring a licence.

NSW Farmers was pleased that the State Government made amendments and commitments (in terms of eastern fall harvestable rights review) consistent with these recommendations in its reform of *Water Management Act 2000*.



**Inquiry into the augmentation of water supply for rural and
regional NSW
2016 – NSW Farmers Association Submission**

2. 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 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 4

That the State and Federal Governments should conduct studies into the most appropriate ways of storing more water in times of excessive rainfall, having regard for the environment, future population growth and the continued sustainability of agriculture in order to provide triple bottom line outcomes.

RECOMMENDATION 5

That the NSW Government waive fixed water charges when exceptional drought conditions prevail and to review the Exceptional Circumstances criteria for irrigators.

RECOMMENDATION 6

That the Water Sharing Plans be reviewed to address the inflexibility of rules that do not take into account catchment conditions and productivity.

RECOMMENDATION 7

That stock and domestic and urban rights be treated equally in relation to water security issues.

RECOMMENDATION 8



**Inquiry into the augmentation of water supply for rural and
regional NSW
2016 – NSW Farmers Association Submission**

That in times of severe water rationing, equal priority should be given firstly to stock (including intensive livestock) and household uses (excluding garden), then at a second level, equal priority be given to irrigation, commercial and industrial uses and where re-allocation of existing entitlements is necessary, should be purchased at full market value.

RECOMMENDATION 9

That NSW Government provide funding for innovative water-saving schemes in country NSW as well as to develop a program to harvest rain water which would otherwise flow out to sea.

RECOMMENDATION 10

That Governments at all levels should legislate for and implement water recycling and conservation in urban areas.

3. Improved Information

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.

A comprehensive review of existing storage infrastructure and opportunities for extension and improvement is long overdue. Whilst not in a position to conduct a technical analysis, anecdotal evidence from NSW Farmers' 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. NSW Farmers submits that this would be particularly beneficial in the context of the Murray Darling Basin Plan, including the social, economic and environmental effects of changing existing water storage shares to give increased priority to the environment and what other infrastructure or management options might be available other than new flows down the Murray River to meet targets set in place by the Murray Darling Basin Authority.

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.

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.

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.

Through proper investigations, water resources can be more efficiently and effectively utilised. This is certainly the case with regards to ground water resources, which is a significant resource with important potential if managed



**Inquiry into the augmentation of water supply for rural and regional NSW
2016 – NSW Farmers Association Submission**

correctly. Anecdotal evidence from our members suggests that ground water has often been poorly managed by State and Federal Governments, with entitlements and allocations being directed without the benefit of social or economic studies, to the detriment of farming communities. Proper studies of ground water reserves would facilitate the proper management of this important resource.

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.

Inquiry into the augmentation of water supply for rural and regional NSW 2016 – NSW Farmers Association Submission

4. Meeting competing needs

The Government must continue industry consultation within each catchment in order that a fair and equitable basis can be determined for the allocation of water within the catchment between all users/beneficiaries including domestic, livestock, environment and irrigation.

NSW Farmers submits that any discussion of new and augmented public water storages and water sharing plans, must consider not only current and projected stakeholder demands, but also the role that these storages and plans 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.

4.1 Water Storage

The construction/augmentation of storages should be based on current and projected stakeholder demands, seasonal conditions and the role that storages could play in respect of flood mitigation, water security and the provision of clean energy.

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 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.

NSW Farmers submits that more can be done to optimise water storage and distribution processes and structures in NSW. For example, Burrendong Dam has a massive sixty percent Flood Mitigation Zone (FMZ) above its one hundred per cent Irrigation Supply Level. Given the dam wall and spillways have just completed one in one thousand year flood upgrades, there is clear potential to increase the consumptive use full level to one hundred and twenty per cent providing greater security of supply to irrigators at very little cost.

Flood planning already assumes a dam level of one hundred and twenty per cent in starting calculations, and the flood risk to Dubbo and downstream towns can be reduced with more automatic river flow gauges on the below dam tributaries (especially the Talbragar, which has only one site) giving better information to Water NSW to manage river levels and releases from FMZ. The gain would be to lift the General Security allocation from the present one hundred and twenty per cent to one hundred and fifty per cent at the higher level, allowing two seasons of irrigation after a dam fill event and giving greater security to the regional economy.

Further, 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,

Inquiry into the augmentation of water supply for rural and regional NSW 2016 – NSW Farmers Association Submission

and even town water supplies at risk. 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. 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.

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.

Greater water storage capacity is required in NSW in order to support growth and to secure the sustainability of food and fibre production. No dams have been built in NSW since 1987. By developing regional water security and supply, regional communities are protected from drought and agricultural productivity is increased, which has consequent social and financial benefits for regional communities.

It is noted that in the eastern fall there is more available resource and remaining dam sites. A Snowy Mountains-like inland diversion scheme with hydro-electric generation capacity in northern NSW may be considered.

RECOMMENDATION 3

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.

NSW Farmers submits that State and Federal Governments should conduct studies into the most appropriate ways of storing more water in times of excessive rainfall, having regard for the environment, future population growth and the continued sustainability of agriculture in order to provide triple bottom line outcomes.

RECOMMENDATION 4

That the State and Federal Governments should conduct studies into the most appropriate ways of storing more water in times of excessive rainfall, having regard for the environment, future population growth and the continued sustainability of agriculture in order to provide triple bottom line outcomes.

**Inquiry into the augmentation of water supply for rural and regional NSW
2016 – NSW Farmers Association Submission**

4.2 Fixed water charges

Having regard to the fact that NSW Farmers previously raised the importance of the Government waiving fixed water charges when exceptional drought conditions prevail, and that this recommendation was supported by the Standing Committee on State Development's Report on the Adequacy of Water Storages in New South Wales June 2013, describing it as "a sensible and fair approach", it is extremely disappointing that Government has not sought to introduce this reform.

RECOMMENDATION 5

That the NSW Government waive fixed water charges when exceptional drought conditions prevail and to review the Exceptional Circumstances criteria for irrigators.

4.3 Water Sharing Plans

Of further concern, outdated and unbalanced Water Sharing Plans fail to reflect increased knowledge about both environmental requirements and how and when translucent flows occur. Changes must be made to the flow rules to restore the balance between environmental and productive shares. For example, in August 2015 a significant rainfall event triggered the translucent environmental flow in the Lachlan River, which saw 74,000 mega litres released down the river system, representing a loss of water from productive use and a real cost to the community in foregone farm income, notwithstanding the fact that the environment, had also received significant water from the rain event.

It is submitted that existing water sharing plans should be urgently reviewed to avoid situations where water is released for the environment, despite the environment already having received plentiful water, storages being low and water allocations being impacted as a result.

RECOMMENDATION 6

That the Water Sharing Plans be reviewed to address the inflexibility of rules that do not take into account catchment conditions and productivity.

4.4 Stock, urban and domestic water

In relation to the competing interests of stock, urban and domestic water rights, NSW Farmers submits that it is appropriate that stock and domestic and urban rights be treated equally in relation to water security issues.



**Inquiry into the augmentation of water supply for rural and regional NSW
2016 – NSW Farmers Association Submission**

NSW Farmers further submits that Irrigators' "carry over" water should be recognised as "above" high security water but below stock and domestic water. Access to water is critical to all sectors of agriculture and in times of severe water rationing, it is the view of NSW Farmers that equal priority should be given firstly to stock (including intensive livestock) and household uses (excluding garden), then at a second level, equal priority be given to irrigation, commercial and industrial uses and where re-allocation of existing entitlements is necessary, should be purchased at full market value.

RECOMMENDATION 7

That stock and domestic and urban rights be treated equally in relation to water security issues.

RECOMMENDATION 8

That in times of severe water rationing, equal priority should be given firstly to stock (including intensive livestock) and household uses (excluding garden), then at a second level, equal priority be given to irrigation, commercial and industrial uses and where re-allocation of existing entitlements is necessary, should be purchased at full market value.



**Inquiry into the augmentation of water supply for rural and regional NSW
2016 – NSW Farmers Association Submission**

5. Water efficiency

Over eighty per cent of water use in NSW is for the purpose of agriculture.ⁱ Accordingly, it is imperative that the NSW Government should continue to support and facilitate demand management practices and urban water conservation measures.

The NSW Government should provide funding for innovative water-saving schemes in country NSW as well as to develop a program to harvest rain water which would otherwise flow out to sea.

The production of more waste water recycling could further support agriculture and industry. Governments at all levels should legislate for and implement water recycling and conservation in urban areas.

Efficient water practices are essential for the sustainability of the agricultural sector in NSW and funding NSW Government is critical in achieving this.

RECOMMENDATION 9

That NSW Government provide funding for innovative water-saving schemes in country NSW as well as to develop a program to harvest rain water which would otherwise flow out to sea.

RECOMMENDATION 10

That Governments at all levels should legislate for and implement water recycling and conservation in urban areas.



**Inquiry into the augmentation of water supply for rural and
regional NSW
2016 – NSW Farmers Association Submission**

6. Conclusion

Whilst NSW Government has introduced reform in regard to a few of the recommendations previously made by NSW Farmers in 2012, there remain many areas where reform is crucial for the continued productivity and sustainability of farming in NSW, this is particularly in respect to improving available information, meeting competing needs and water efficiency.

Effective water storage infrastructure and management must ensure that Australian farmers in NSW continue to contribute strongly to the state's social, environmental and economic sustainability.

ⁱ *Adequacy of Water Storages in NSW Report 37*, Legislative Council, June 2013, p61.