The Senate

Environment and Communications Legislation Committee

Water Amendment Bill 2015 [Provisions]

September 2015

ISBN 978-1-76010-290-6

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This document was printed by the Senate Printing Unit, Parliament House, Canberra

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Chapter 1

Introduction

1.1 On 16 June 2015, the Senate, on the recommendation of the Selection of Bills Committee, referred the provisions of the Water Amendment Bill 2015 (the bill) to the Senate Environment and Communications Legislation Committee for inquiry and report by 8 September 2015.

Conduct of the inquiry

1.2 In accordance with usual practice, the committee advertised the inquiry on its website and wrote to relevant organisations inviting submissions by 31 July 2015.

1.3 The committee received 30 submissions relating to the bill and these are listed at Appendix 1. The submissions may be accessed through the committee's website at:

http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Water_Amendment_Bill_2015

1.4 The committee held a public hearing in Canberra on 24 August 2015 and in Adelaide on 27 August 2015. A list of witnesses who appeared at the hearings may be found at Appendix 2.

1.5 The committee would like to thank all the organisations and individuals that contributed to the inquiry and the witnesses who attended the public hearing.

Background

1.6 In 1994, the Council of Australian Governments agreed to a water reform framework in recognition that management of Australia's water resources was a national issue that would require cooperation between the Commonwealth and Basin States. The Intergovernmental Agreement on a National Water Initiative was finalised in 2004.

1.7 In response to the millennium drought and the continuing over-allocation of water in the Murray-Darling Basin by the States, in 2007 the then Prime Minister, the Hon John Howard, proposed a $10 billion 10-year *National Plan for Water Security*. The Prime Minister called on the Basin States to transfer their powers to enable the Commonwealth to oversee the management of the Murray-Darling Basin. Following failure to reach agreement with all the States, the Commonwealth sought to achieve its aims through the use of its constitutional powers.[1]

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1 Water Bill 2007, Revised Explanatory Memorandum, p. 1.

1.8 The *Water Act 2007* (Water Act) was passed by both Houses of the Parliament in August 2007. The Act aimed to manage the water resources in the Murray-Darling Basin in the national interest, optimising environmental, economic and social outcomes.[2] The Act established the Murray-Darling Basin Authority (MDBA). The MDBA was to develop and implement a Basin Plan. The Act established mandatory content for the Basin Plan, including:

- long-term annual average sustainable diversion limits (SDLs) for the amount of surface water and groundwater that can be taken from Basin water resources;
- requirements that state water resource plans must comply with if they are to be accredited under the Act;
- an environmental watering plan to optimise environmental outcomes for the Basin;
- a water quality and salinity management plan for the Basin; and
- rules about water trading.[3]

1.9 In 2008, a second intergovernmental agreement on water reform was ratified by the Commonwealth and the Basin States. Under this agreement, all Basin States agreed to refer their powers to the Commonwealth to enact certain measures and the Water Act was amended accordingly.[4]

1.10 The MDBA released a *Guide to the Proposed Basin Plan* in October 2010. The first proposed Basin Plan was released in November 2011, a revised draft was released in May 2012 and a further revision was provided in August 2012. In the August 2012 plan, the MDBA estimated that the long-term annual average sustainable diversion limit for all surface water SDL to be 10,873 gigalitres (GL) per year. This reflected a reduction of 2750 GL per year on the MDBA's estimate of the baseline diversion limit for all surface water SDL resource units. Separate SDLs were set for groundwater resources.[5]

1.11 On 26 October 2012, the then Prime Minister announced a government commitment to recover a further 450 GL per year of environmental water, primarily

2 Water Bill 2007, Revised Explanatory Memorandum, p. 1.

3 *Water Act 2007*, s. 22.

4 Water Amendment Bill 2008, Revised Explanatory Memorandum, p. 1.

5 Senate Environment and Communications Legislation Committee, *Water Amendment (Long-term Average Sustainable Diversion Limit Adjustment) Bill 2012 and Water Amendment (Water for the Environment Special Account) Bill 2012*, November 2012, p. 3.

through farm efficiency projects, on top of the 2750 GL per year environmental water recovery in the proposed Basin Plan.[6]

1.12 The Basin Plan 2012, agreed to by the Australian Parliament in November 2012, specifies the sustainable level of diversions and extractions from surface and ground water resources. These limits represent the maximum long-term annual average quantities of water that can be extracted from surface water and groundwater resources in the Basin while maintaining the health of the Basin environment.[7]

1.13 The Basin Plan requires that diversions and extractions be reduced to sustainable levels by 2019.[8] The Basin-wide long-term average SDLs reflected those contained in the August 2012 draft plan, that is, 10,873 GL per year with 2750 GL per year of water for environmental use recovered by the Commonwealth. This latter amount is referred to as 'the gap' between the 2009 Baseline Diversion Limit (BDL) and the SDL.[9]

1.14 There is flexibility for the size of the gap to be reduced under the Sustainable Diversion Limit Adjustment Mechanism (SDLAM) in the Basin Plan through offsets achieved by supply measures. Supply measures are actions where equivalent environmental outcomes can be achieved with less water.[10]

1.15 The *Water Amendment (Water for the Environment Special Account) Act 2013* amended the Water Act to establish the Water for the Environment Special Account and provided for $1.77 billion to be deposited over ten years from 2014–15 to fund water recovery projects. This funding was designated for projects to acquire the additional 450 GL per year of environmental water as announced by the Government in October 2012.[11]

1.16 On 27 February 2014, the Prime Minister announced that the Premiers of New South Wales and Queensland had signed the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin and an amended National Partnership Agreement. The Prime Minister stated that 'a commitment to cap water purchases at 1500 gigalitres and prioritising water infrastructure programmes were key components in bringing the two states on board'. Victoria, South Australia and the

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6 Prime Minister and Minister for the Environment, 'Returning the Murray-Darling Basin to Health', *Media Release*, 26 October 2012, http://www.mdba.gov.au/media-pubs/mr/returning-murray-darling-basin-health.

7 Department of the Environment, *Submission 24*, p. 2.

8 Department of the Environment, *Water Recovery Strategy for the Murray-Darling Basin*, June 2014, p. 3, http://www.environment.gov.au/system/files/resources/4ccb1c76-655b-4380-8e94-419185d5c777/files/water-recovery-strategy-mdb2.pdf (accessed 29 June 2015).

9 Explanatory Memorandum, p. 2.

10 Department of the Environment, *Submission 24*, p. 2.

11 Water Amendment (Water for the Environment Special Account) Bill 2012, Revised Explanatory Memorandum, p. 1.

Australian Capital Territory also signed the amended National Partnership Agreement.[12]

1.17 On 2 June 2014, the Commonwealth released the *Water Recovery Strategy for the Murray-Darling Basin* (the Strategy). The Strategy outlined the Commonwealth's strategy for the recovery of water necessary to bridge the gap to the SDLs in the Basin Plan. In particular, the Strategy outlined that the Government was prioritising infrastructure investment over water buyback, and announced that a 1500 GL per year limit would be placed on surface water purchases across the Basin. On 10 March 2015, the Commonwealth announced its intention to enshrine in legislation both the 1500 GL per year limit, and the commitment to infrastructure investment.[13]

Sustainable diversion limit adjustment mechanism

1.18 To optimise the outcomes achieved by the Basin Plan, an SDLAM was developed, to make sure all water is used efficiently, and to its full effect. For example, if ways can be found to achieve the Basin Plan's environmental outcomes with less water (actions known as 'supply measures') the volume of water recovery could be reduced. Similarly, if further investment can make water delivery systems for irrigation even more efficient (actions known as 'efficiency measures') more water could be recovered for the environment. The third type of SDLAM investment is for constraints measures, to make environmental water delivery more effective in the future. The MDBA, in conjunction with Basin state governments will assess potential supply measures, and in 2016 adjust the SDL up or down to reflect the net effect of the combined 'package of supply and efficiency measures'.[14]

1.19 Supply measures can mean that equivalent environmental outcomes can be achieved with less than 2750 GL per year, and if social and economic outcomes are the same, the SDL may be increased to reflect this revised amount. Supply measures usually involve building or changing water management structures so environmental water can be delivered more effectively, and improving the way rivers are managed to get the most out of the water available.[15]

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12 The Hon Tony Abbott, Prime Minister, 'States agree to implement Murray-Basin water reform, *Media Release*, 27 February 2014, https://www.pm.gov.au/media/2014-02-27/states-agree-implement-murray-darling-basin-water-reform.

13 Explanatory Memorandum, p. 2. See also, *Water Recovery Strategy for the Murray-Darling Basin*, June 2014, p. 3.

14 Murray-Darling Basin Authority, *The SDL adjustment assessment framework for supply measures*, 2015, p. 2, http://www.mdba.gov.au/sites/default/files/pubs/SDL-adjustment-assessment-framework.pdf (accessed 27 August 2015).

15 Murray-Darling Basin Authority, *The SDL adjustment assessment framework for supply measures*, 2015, p. 2, http://www.mdba.gov.au/sites/default/files/pubs/SDL-adjustment-assessment-framework.pdf (accessed 27 August 2015).

1.20 Similarly, efficiency measures can mean that more than 2750 GL per year is recovered for the environment, without changing the volume of water available for communities. If the social and economic outcomes are neutral or beneficial, then the SDL may be decreased to reflect this additional amount. Efficiency measures are projects involving on-farm efficiencies such as improved irrigation methods, and off-farm projects such as reducing evaporation and seepage from water delivery channels.[16]

1.21 Governments also agreed that the MDBA would perform this calculation using the 'SDL adjustment assessment framework'. This is a model-based framework that includes an independently-developed, science-based and peer-reviewed test for environmental equivalence.[17]

Water recovery through purchase

1.22 Under the Restoring the Balance in the Murray-Darling Basin programme (RtB), the Australian Government has committed $3.2 billion to purchase water for the environment. This program is part of the Sustainable Rural Water Use and Infrastructure Program. The aim of the RtB programme is to provide more water for the environment. Water buybacks obtain water for the environment from irrigators who wish to offer their water entitlement for sale.[18]

1.23 The Commonwealth reported that as at 31 July 2015, 1952.9 GL in long term average annual yield has been contracted to recover towards the overall 2750 GL per year SDL reduction under the Basin Plan. Of the 1952.9 GL recovered, 1164.6 GL has been purchased under the RtB programme.[19]

Overview of the Bill

Schedule 1 – Part 1 – 1500 gigalitres per year limit on water purchases

1.24 Part 1 of Schedule 1 to the bill proposes to amend the Water Act to impose a duty on the Commonwealth not to exceed a 1500 GL per year limit on surface water purchases in the Basin when entering into a water purchase contract.

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16 Murray-Darling Basin Authority, *The SDL adjustment assessment framework for supply measures*, 2015, p. 2, http://www.mdba.gov.au/sites/default/files/pubs/SDL-adjustment-assessment-framework.pdf (accessed 27 August 2015).

17 Murray-Darling Basin Authority, *The SDL adjustment assessment framework for supply measures*, 2015, p. 2, http://www.mdba.gov.au/sites/default/files/pubs/SDL-adjustment-assessment-framework.pdf (accessed 27 August 2015).

18 Murray-Darling Basin Authority, http://www.environment.gov.au/water/rural-water/restoring-balance-murray-darling-basin/progress-water-recovery (accessed 1 September 2015).

19 Murray-Darling Basin Authority, http://www.environment.gov.au/water/rural-water/restoring-balance-murray-darling-basin/progress-water-recovery (accessed 1 September 2015).

1.25 Specifically, the bill proposes to insert new subsection 85C(1) to impose a duty on the Commonwealth which prevents it from entering a water purchase contract if the long-term annual average quantity of water available under the contract, combined with the total of long-term annual average quantities of water purchased under water access entitlements since 2 February 2008, exceeded 1500 GL per year.

1.26 This limit would operate until a report is completed following the first ten-year review of the Basin Plan conducted by the MDBA.[20]

1.27 The criteria for a contract to be considered a 'water purchase contract' are that:

- it must be a contract entered into by the Commonwealth to purchase water access entitlement to surface water; and
- that it must either be a contract that existed prior to the Basin Plan (between 2 February 2008 and 24 November 2012), or if it was entered into post-Basin Plan commencement, it is for the purpose of achieving the Commonwealth's share of sustainable diversion limits.[21]

1.28 Proposed subsection 85(4) details the water purchase contracts that would not be counted towards the limit, including:

- purchases associated or integrated with infrastructure rationalisation and reconfiguration after the commencement of the new section;
- purchases from Basin state governments after the commencement of the new section;
- water recovered through Commonwealth funded activities relating to water infrastructure (for example contracts entered into under the Sustainable Rural Water Use and Infrastructure Program);
- purchases made under Part 6 of the Water Act; or
- water recovered through the Water for the Environment Special Account.[22]

1.29 The limit would not restrict the Commonwealth's ability to purchase water for other purposes, for example by the Department of Defence.[23]

1.30 The Department of the Environment would be accountable for compliance with the limit as required under the *Public Governance Performance and Accountability Act 2013* and the *Public Service Act 1999*. In the event of a breach of the cap, it would be the Department, rather than the sellers of water access entitlements, who are accountable. The bill would provide protection for the sellers of

20 Proposed subsection 85C(2).

21 Proposed subsection 85(3).

22 Proposed subsection 85(4).

23 Explanatory Memorandum, p. 7. See also Department of the Environment, *Submission 24*, p. 5.

water access entitlements and the validity of their contracts could not be challenged in the event of a breach.[24]

Schedule 1 – Part 2 – Amendment of the Basin Plan 2012

1.31 Part 2 of Schedule 1 to the bill proposes to amend the Basin Plan 2012. The amendment would operate in conjunction with Part 2AA of the Water Act to afford greater flexibility in the recovery of 450 GL per year of water for the environment through efficiency measures funded under the Water for the Environment Special Account.[25] The 450 GL per year are provided for with the operation of the SDLAM in 2016, and are in addition to water recovery required to bridge the gap.[26]

1.32 All projects funded from this account are constrained by the requirement that social and economic outcomes for Basin communities are maintained or improved.[27]

1.33 The proposed amendment would allow for the participation of consumptive water users in projects that recover water through works to improve water use efficiency off-farm, as evidence of neutral or improved socio-economic outcomes. This approach is consistent with the approach for on-farm recovery projects.[28]

1.34 Previously, projects that were off-farm needed to be proposed by Basin States for funding by the Commonwealth; however this amendment would allow the Commonwealth to deliver funding across the Basin, and enable the funding of integrated off and on-farm irrigation efficiency projects. [29]

1.35 The types of off-farm efficiency projects that would qualify as efficiency measures under this amendment include: reshaping and lining water delivery channels to reduce water losses through infiltration, or installation of improved irrigation management system and associated telemetry.[30]

1.36 In his second reading speech, the Parliamentary Secretary to the Minister for the Environment, the Hon Bob Baldwin, stated that:

> This legislation delivers a triple bottom line outcome for basin communities. The Abbott government is listening to all stakeholders and there is now an opportunity for the opposition to work with us and support this bill to ensure our basin communities get the win-win outcomes to ensure environmental and community sustainability. We will continue to

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24 Explanatory Memorandum, p. 8. See also Department of the Environment, *Submission 24*, p. 4.

25 Department of the Environment, *Submission 24*, p. 3.

26 Department of the Environment, *Submission 24*, p. 6.

27 Department of the Environment, *Submission 24*, p. 6.

28 Department of the Environment, *Submission 24*, p. 6.

29 Department of the Environment, *Submission 24*, p. 6.

30 Explanatory Memorandum, p. 9.

work with all states to deliver the outcomes of the Basin Plan to the fullest extent possible.

The Abbott government is strongly committed to the Basin Plan and the substantial water reform agenda and we will implement the plan in a manner that ensures we can have healthy communities and productive farms working alongside a healthy river system.

The bill delivers on our commitment to deliver a Basin Plan that addresses the social, economic and environmental needs of the basin.[31]

31 Parliamentary Secretary to the Minister for the Environment, the Hon Bob Baldwin, *House of Representatives Hansard*, 28 May 2015, p. 13.

Chapter 2

Issues raised in evidence

2.1 The committee received a range of views in relation to both the proposed 1500 gigalitre (GL) per year limit on the buyback of surface water, and the amendment to the Basin Plan 2012 to provide increased flexibility in the recovery of the 450 GL per year of water through efficiency measures funded under the Water for the Environment Special Account.

1500 gigalitre per year limit

2.2 Many submitters welcomed the cap on surface water purchases as a means of providing clarity, certainty and assurance to Basin communities and primary producers.[1] However, some submitters raised concerns including a perceived inconsistency with the *Water Act 2007* (Water Act) and the Basin Plan, the impact on obligations to 'bridge the gap', prioritisation of infrastructure projects, calculation of the long-term annual average, sunset provisions and compliance with international obligations. These matters are discussed below.

Certainty for communities

2.3 It was argued by some submitters that there was no requirement for the 1500 GL per year limit to be included in the Water Act. The Australian Conservation Foundation, Environment Victoria and Environmental Justice Australia commented that 'the decision to cap buy backs is a policy and political decision and would not normally be a matter that is included in legislation'.[2] The Conservation Council of South Australia added that the Government could just cease buying water once it had reached the 1500 GL per year level rather than having a legislated limit which may reduce flexibility, for example in a time of drought.[3]

2.4 However, for a range of submitters, the certainty for Basin communities provided by the proposed 1500 GL per year limit was of primary importance. These submitters noted that the reduction in water available for consumptive users in the Basin has had an adverse impact on the farming and irrigator sectors, related industries, and local communities. The New South Wales Irrigators' Council stated that:

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1 See NSW Irrigators' Council, *Submission 10*, p. 3.

2 Australian Conservation Foundation, Environment Victoria and Environmental Justice Australia, *Submission 2*, p. 2.

3 Dr Adam Webster, Member, Conservation Council of South Australia, *Committee Hansard*, 27 August 2015, p. 2.

> We are now starting to see that the impact of taking significant volumes of water out of particular districts are, firstly having an impact on local economies, if not on individual producers and, secondly it is becoming clear that the costs of running large irrigation schemes are going to be significantly impacted for remaining irrigators, going forward.[4]

2.5 In addition, the committee received evidence that farmers and irrigators, though not compulsorily required to sell water to the Commonwealth for the environment, often felt they had no other option. Mr Mark McKenzie, Chief Executive Officer of the New South Wales Irrigators' Council explained:

> There is no doubt that there has not been any compulsory acquisition in direct water purchases across the basin. However, I think the research belies the fact that there were a lot of so-called willing sellers, who, if they had their druthers, would not have been sellers. We know after the millennium drought there were a lot of equity problems with irrigated agriculture operators across the basin, and I am certainly aware…that a lot of people were under pressure from their banks and financial institutions to sell down their water holdings to improve their equity position.[5]

2.6 In light of the concerns within communities, the 1500 GL per year limit was viewed as a positive step to building confidence and certainty. The Queensland Government, for example, commented that:

> A cap on water purchases will provide confidence to Basin communities that social and economic impacts on regional communities resulting from water buyback will be partially mitigated as the Basin Plan moves to full implementation.[6]

2.7 Other submissions also focused on the certainty that will be provided to farming and irrigator communities in the Basin. The Victorian Farmers Federation commented that the cap 'will provide a greater level of certainty to farmers and rural communities, enabling them to get on with their businesses and lives'.[7] Similarly, the Australian Dairy Industry Council commented that certainty was critical for farmers already facing a tough productivity challenge.[8]

2.8 The National Irrigators' Council stated that:

> Securing a legislated cap will help to improve business confidence in the irrigated agriculture sector in the Basin and underpin greater long term

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4 Mr Mark McKenzie, Chief Executive Officer, New South Wales Irrigators' Council, *Committee Hansard*, 24 August 2015, p. 12.

5 Mr Mark McKenzie, Chief Executive Officer, New South Wales Irrigators' Council, *Committee Hansard*, 24 August 2015, p. 12.

6 Queensland Government, *Submission 1*, p. 3.

7 Victorian Farmer Federation, *Submission 16*, p. 4.

8 Australian Dairy Industry Council, *Submission 20*, p. 6.

> certainty for the social and economic benefit of the communities that depend on the Basin's water resources.[9]

2.9 Mr Gavin McMahon, Chair, National Irrigators' Council, explained that:

> Our communities are looking for a little bit of certainty out of this process. They are looking for certainty in knowing where the end point is, how much water our communities will have and that we do not have a big bear buying water in the marketplace called the government. The government is the biggest owner of water and it has been the biggest purchaser of water…Putting a cap on gives us some certainty about the remaining water that will be left for consumptive purposes and allows businesses to make those investments.[10]

2.10 It was also suggested that a legislated cap will also reassure these communities that the Government understands the impact of water buybacks. The submission from the New South Wales Irrigators' Council commented that:

> A cap on surface water purchases…will provide clarity, certainty and assurance to irrigators and Basin communities that the Federal Government is serious about its commitment to prioritise infrastructure funding and also acknowledges the social and economic impacts that the removal of large quantities of productive water from the Basin have caused in Basin communities.[11]

2.11 Coleambally Irrigation was of a similar view and noted that the cap 'prevents the Commonwealth Government from distancing itself from commitments it made to the irrigation industry and the communities that depend on the industry in the name of the Plan'. Coleambally Irrigation went on to suggest that 'in the absence of a cap, there will be no incentive for Commonwealth and State Governments to accept the challenges that irrigators have – to use water in smarter and more efficient ways'.[12]

2.12 The National Farmers' Federation explained that without the cap, the lack of certainty for farmers and irrigators is endangering the viability of local communities. Mr Les Gordon, National Farmers' Federation, told the committee that:

> To know that the government is not buying any further water back does provide a level of certainty…The strength of that really is the collective — to know that no more water is leaving your district. And most of these districts do not exist in isolation. They are joint schemes operated by groups of farmers…Every time you take water out of those, the cost burden of maintaining what is left falls to those who are still there. So, over time, the

9 National Irrigators' Council, *Submission 25*, p. 4.

10 Mr Gavin McMahon, Chair, National Irrigators' Council, *Committee Hansard*, 24 August 2015, p. 10.

11 New South Wales Irrigators' Council, *Submission 10*, p. 3.

12 Coleambally Irrigation, *Submission 27*, p. 3.

> shifting of cost to those who are left increases, because of those who did leave.[13]

2.13 Dr Christine Kershaw from the National Farmers' Federation went on to note that with additional certainty, there is likely to be greater investment which has flow-on effects throughout communities with smaller communities receiving a larger benefit.[14]

2.14 Similarly, the submission from Murray Irrigation stated that:

> A cap on water purchase will not reduce the amount of entitlement to be recovered from the irrigation industry, it will however ensure that sufficient entitlement recovery is achieved through investment to retain regional productivity and contribute to sustaining communities. It effectively acts as a safety net for those communities.[15]

2.15 The Department of Agriculture also commented on the need for certainty and stated that:

> A legislative cap is important for the certainty it provides in the system, because it affects the farmers' planning. If they are selling water, they are losing water. If they are getting efficiency improvements on their farm, they are getting those efficiencies on their farm for their own use. If it is off-farm water use efficiency improvements, the environment gets water but the farmer's potential productivity remains the same. So it is a certainty in their planning horizons, especially as availability of water becomes more and more competitive.[16]

2.16 Mr Ian Thompson, Department of Agriculture, also stated that 'it is critical that an appropriate balance is struck between agricultural production, the vibrancy and resilience of rural communities, and environmental outcomes, and that the Basin Plan is delivered with this triple-bottom-line focus'.[17]

Inconsistency with the Water Act and the Basin Plan

2.17 The committee received a number of submissions detailing concerns that the 1500 GL per year cap has the potential to severely compromise the Commonwealth's

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13 Mr Les Gordon, Chair, Water Taskforce, National Farmers' Federation, *Committee Hansard,* 24 August 2015, p. 33.

14 Dr Christine Kershaw, Manager, Natural Resource Management, National Farmers' Federation, *Committee Hansard,* 24 August 2015, p. 33; see also Mr Les Gordon, Chair, Water Taskforce, National Farmers' Federation, *Committee Hansard,* p. 35.

15 Murray Irrigation, *Submission 15,* p. 4.

16 Mr Ian Thompson, First Assistant Secretary, Sustainable Agriculture and Fisheries Division, Department of Agriculture, *Committee Hansard,* 24 August 2015, p. 27.

17 Mr Ian Thompson, First Assistant Secretary, Sustainable Agriculture and Fisheries Division, Department of Agriculture, *Committee Hansard,* 24 August 2015, p. 25.

ability to 'bridge the gap' to the SDLs, and in doing so, would prove to be inconsistent with the objects of the Water Act.[18]

2.18 EDOs of Australia, for example, noted that the SDLs apply from 1 July 2019. It went on to comment that not all adjustment measures will be completed by 2019. It was suggested that as a consequence, the Commonwealth will need to make sure it has enough held (or purchased) water able to meet the SDLs until all supply measures are operational in 2024. EDOs of Australia went on to state:

> However, the proposed cap (which will remain in place until 2022) may prevent the Commonwealth from purchasing enough water to reduce Basin-wide diversions by the required amount by mid-2019. This would result in an inconsistency between the Act and the Plan, ultimately frustrating the purpose of the latter.[19]

2.19 The Australian Conservation Foundation, Environment Victoria and Environmental Justice also expressed this concern, and stated that as:

> …the Commonwealth is 100% responsible for achieving the SDLs under the current Basin Plan, if it can't meet them via infrastructure upgrades or efficiency measures, because for example, they get prohibitively expensive, or they simply do not deliver the amount of water required, it will not be able to use buy backs to bridge the gap. The cap could therefore prevent the SDLs from being achieved.[20]

2.20 However, the committee received assurances from the Department of the Environment and the Murray-Darling Basin Authority (MDBA) that the amendment would not create inconsistencies with the objects of the Water Act. Furthermore, it was stated that the proposed amendment would not abrogate the Commonwealth's responsibility to achieve the SDLs.

2.21 The Department explained that the 1500 GL per year limit is consistent with the objects of the Water Act and the Commonwealth is committed to the return to environmentally sustainable levels of extraction for the Basin's water resources by bridging the gap to the SDLs through a combination of infrastructure investment and water purchase. The Department went on to comment that:

> The Bill may affect the means to achieve the objectives but does not damage these objectives nor the likelihood of achieving these objectives.

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18 See Inland Rivers Network, *Submission 7*, pp 2–3; Environmental Farmers Network, *Submission 9*, p. 1; Gippsland Environmental Group, *Submission 14*, p. 1; Murray Lower Darling Rivers Indigenous Nations, *Submission 17*, p. 4; River Lakes and Coorong Action Group Inc, *Submission 23*, p. 2.

19 EDOs of Australia, *Submission 22*, p. 2.

20 Australian Conservation Foundation, Environment Victoria and Environmental Justice Australia, *Submission 2*, p. 1.

> The legislated 1500 gigalitre limit deals with how the gap will be bridged not whether the gap will be bridged.[21]

2.22 The Department of the Environment stated that the Commonwealth's obligation to comply with the 1500 GL per year limit in no way reduces the obligation to manage the SDLs, and both obligations are supported by the Water Act.

> The Commonwealth's statutory obligation to manage the reduction to the sustainable diversion limit is set out at section 75 of the Water Act. Section 75 provides that the Basin Plan must specify the Commonwealth's share of reduction in the long term average sustainable diversion limit. In turn, subsection 6.13(6) of the Basin Plan provides that the Commonwealth's share of the reduction is 100 per cent. Section 76 of the Water Act provides that if the Basin Plan specifies the Commonwealth's share of the sustainable diversion limit reduction, then the Commonwealth must manage its share. The amendment does not change the relevant sections of the Water Act or the Basin Plan.[22]

2.23 Ms Mary Colreavy, Department of the Environment, explained to the committee that:

> Once the amendment becomes legislation then [the Commonwealth] will be required to meet the SDL adjustment—so we will need to fulfil that commitment—as well as comply with the 1500 GL limit. Both of these commitments will exist in law.[23]

2.24 Ms Colreavy went on to add that:

> The act makes it clear that the Commonwealth is responsible for meeting the SDLs and 100 per cent of the responsibility lies with the Commonwealth, and that responsibility is maintained despite the 1500 GL limit on purchasing.[24]

2.25 The Department of the Environment also addressed concerns that the 1500 GL per year may stop the Commonwealth from meeting the obligation to bridge the gap. The Department stated that it was 'very confident' that the Commonwealth will be able to fully bridge the gap without engaging the 1500 GL per year limit. It went on to note that:

> As at 31 July 2015, 1952.9 gigalitres (71%) in long term average annual yield terms has been contracted to recover towards the overall 2750 gigalitre sustainable diversion limit reduction under the Basin Plan. This leaves a remaining recovery task of around 797 gigalitres. Of the total

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21 Department of the Environment, *Submission 24 (Supplementary)*, p. 1.

22 Department of the Environment, *Submission 24 (Supplementary)*, p. 1.

23 Ms Mary Colreavy, Assistant Secretary, Water Acquisition and Markets Branch, Department of the Environment, *Committee Hansard*, 24 August 2015, p. 2.

24 Ms Mary Colreavy, Assistant Secretary, Water Acquisition and Markets Branch, Department of the Environment, *Committee Hansard*, 24 August 2015, p. 2.

> 1952.9 gigalitres recovered to date, 1164.6 gigalitres has been purchased, leaving 335.4 gigalitres 'headroom' before the 1500 gigalitre limit would be reached.[25]

2.26 Mr Tony Slatyer, Department of the Environment, commented further that there had been better than initially expected outcomes from infrastructure programs and the likely outcomes from the SDL adjustment mechanisms supply measures.[26] The Department therefore considered that:

> …the more likely scenario is that the gap will be fully bridged through the combination of the supply measures, which have the effect of reducing the gap; the infrastructure work that is in train and any further purchase that will be within the 1,500 gigalitre cap and that we will not, in fact, reach that cap.[27]

Stocktake Report on SDL Adjustment Mechanism

2.27 The Basin Plan includes an adjustment mechanism which provides for flexibility in the size of the SDL reduction through supply measures, which are projects that are capable of delivering Basin Plan environmental outcomes with less water.

2.28 On 29 May 2015, the Murray-Darling Basin Ministerial Council agreed to commission an independent stocktake of projects which will be considered under the SDL Adjustment Mechanism in 2016. The *Stocktake Report on SDL Adjustment Mechanism* (Stocktake Report) was released on 27 August 2015. The Stocktake Report found that a supply contribution of about 500 GL per year is plausible, and that an additional contribution is feasible.[28]

2.29 Basin Ministers agreed that it is reasonable to continue to work towards a supply contribution of up to 650 GL per year. Should an SDL contribution of between 500 and 650 GL per year be achieved when the Adjustment Mechanism operates next year, the remaining gap to be bridged would be between 147 and 297 GL per year. This amount falls well short of the 335.4 GL per year which would trigger the 1500 GL per year limit proposed under this amendment.[29]

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25 Department of the Environment, *Submission 24 (Supplementary),* p. 2

26 Mr Tony Slatyer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard*, 24 August 2015, pp 7–8.

27 Mr Tony Slatyer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard*, 27 August 2015, p. 17.

28 Murray-Darling Basin Authority, *Joint ministerial statement – Stocktake Report on SDL Adjustment Mechanism released,* http://www.mdba.gov.au/media-pubs/lgf-communiques/stocktake-report-on-sdl, (accessed 28 August 2015).

29 Department of the Environment, *Submission 24 (Supplementary),* p. 2.

2.30 The Department of the Environment commented that the Stocktake Report provides further assurance that the Basin Plan gap can be bridged without reaching the 1500 GL per year limit.[30]

Prioritisation of infrastructure projects

2.31 A number of submitters argued that water buybacks are the most cost-effective method of recovering water for the environment. For example, the Nature Conservation Council of NSW commented that 'the most efficient and equitable method of recovering water for the environment (while compensating water licence holders) is through a voluntary buy-back of entitlements'.[31] The view was supported by the Conservation Council of South Australia. Dr Adam Webster stated that 'water buybacks are an incredibly efficient measure' and pointed to a study by the University of South Australia which found that the cost of water-saving infrastructure, between 2009 and 2012, was about three times more expensive than water buybacks. In addition, he argued that over time once inefficient systems have been upgraded, returns from infrastructure investment will diminish.[32]

2.32 EDOs of Australia referred to a 2010 study undertaken by the Productivity Commission, *Market Mechanisms for Recovering Water in the Murray-Darling Basin, Productivity Commission Research Report*, which stated that:

> …the Australian Government may pay up to four times as much for recovering water through infrastructure upgrades than through water purchases. In other words, a premium of up to $7500 ML may be paid for recovering water through infrastructure upgrades…[33]

2.33 EDOs of Australia also argued that there are environmental advantages of purchasing water entitlements as irrigation upgrades do not necessarily mimic environmental outcomes associated with purchasing water.[34]

2.34 The Goulburn Valley Environment Group commented that irrigators are electing to fund their own on-farm efficiency upgrades and retain water saving for permanent sale or trade. With water prices continuing to increase, it was argued that there will be a reduction in irrigator support for efficiency projects and an increase in the cost to the taxpayer of returning water to the environment.[35]

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30 Department of the Environment, *Submission 24 (Supplementary)*, p. 2.

31 Nature Conservation Council of NSW, *Submission 12*, p. 1.

32 Dr Adam Webster, Member, Conservation Council of South Australia, *Committee Hansard*, 27 August 2015, p. 2.

33 EDOs of Australia, *Submission 22*, p. 5.

34 EDOs of Australia, *Submission 22*, p. 6.

35 Goulburn Valley Environment Group, *Submission 6*, p. 1.

2.35 The potential for increased costs to undermine the Government's aims was also raised by the Gippsland Environmental Group which stated:

> Increased demand for infrastructure upgrades or efficiency measures driven by the proposed cap on buybacks will potentially make the cost of works too expensive and/or deliver far less water than anticipated such that it will be impossible for the Commonwealth to obtain the additional water to achieve the SDLs.[36]

2.36 Similarly, the Alexandrina Council commented that the costs of infrastructure projects has been significantly more than purchasing water entitlements from willing sellers. In addition, it was argued that recovering water through infrastructure projects becomes more expensive as 'the low-hanging fruit in terms of achieving efficiency gains has already been picked'.[37]

2.37 However, other submitters did not support reliance on buybacks with Cotton Australia commenting that 'while in the short-term direct "buyback" may appear to be the cheapest option to "bridge-the-gap", it comes at a very significant cost to communities'. However, positive contribution is being made by on-farm and off-farm irrigation efficiency schemes.[38] Murray Irrigation added:

> On the other hand buyback in simplistic terms appears to provide the most value for money but is in fact the most detrimental to communities because it does not implement measures to maintain productivity in a region. So while an individual is compensated for the reduction in water (through sale of entitlement) the community is not compensated for the flow-on impacts of the sale.[39]

2.38 Murray Irrigation concluded that the legislation 'provides a safety net for irrigation businesses and communities by ensuring water recovery efforts are focussed on the more economically sustainable infrastructure and investment venture'.[40]

2.39 The Australian Dairy Industry Council pointed to case studies which show that water buybacks have greater localised social and economic impacts on irrigation dependent communities than investment in water efficiency projects. The Council commented that a 2012 study of dairy farms with irrigation modernisation projects found that buybacks cost the Commonwealth around $2000 per megalitre (ML), but are associated with reduced regional farm productivity. As a consequence, regional economic activity is reduced by around $4300 for every megalitre purchased by the Government. Farm upgrades cost the Commonwealth about $3700 per ML for the environment's share of water savings. However, upgrades also delivered

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36 Gippsland Environmental Group, *Submission 14*, p. 1.

37 Alexandrina Council, *Submission 19*, p. 2.

38 Cotton Australia, *Submission 3*, pp 1–2.

39 Murray Irrigation, *Submission 15*, p. 4.

40 Murray Irrigation, *Submission 15*, p. 7.

$9800 per ML worth of increased farm productivity (annualised capital value). Using this water to increase production generates additional regional economic activity worth $6200 per ML.[41]

2.40 Support for investment directed to upgrading and modernising irrigation systems was provided by the National Irrigators' Council which stated:

> This investment provides short and long term benefits for communities. Short term local stimulus occurs through the construction phase of projects. Water savings from infrastructure projects are shared, and result in water being retained on farm; this contributes to direct employment in irrigated agriculture, fewer job losses on farms and opens opportunities for important downstream processing industries. This employment supports the social and economic underpinnings of many communities in the Basin.[42]

2.41 The Victorian Farmers Federation also submitted that the prioritisation of infrastructure over water buybacks has significant benefits, not just for individual farmers, but for the entire food supply chain. The Federation stated that:

> The benefits of investing in infrastructure go far beyond recovering the water. With more efficient delivery systems and on-farm use then farmers need less water to grow the same volume of produce — the food we all eat…[It] also has positive impacts on the supply chain. Where farmers are able to maintain their productivity this helps to protect on-farm employment and jobs in milk factories, wineries, fruit and nut processing plants as well as sustaining jobs in transport and marketing. Keeping job in small and medium sized towns is critical to the economic and social survival of regional communities.[43]

2.42 Mr Slatyer, Department of the Environment, noted that the Basin Plan was 'enacted on the basis of a policy undertaken that there would be at least 600 gigalitres of waster recovered from infrastructure' and that this 'was part of the triple-bottom-line settlement of the plan'.[44] Mr Slatyer agreed that infrastructure is generally more costly than just purchasing water on the market. He explained that:

> The government has a policy of seeking infrastructure-based water at what we call the market multiple—that is, the additional cost over and above the value of the water of no more than 2.5…Typically it is a lower multiple than that.[45]

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41 Australian Dairy Industry Council, *Submission 20*, p. 6.

42 National Irrigators' Council, *Submission 25*, p. 5.

43 Victorian Farmers Federation, *Submission 16*, p. 4.

44 Mr Tony Slatyer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard*, 24 August 2015, p. 3.

45 Mr Tony Slatyer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard*, 24 August 2015, p. 5.

2.43 However, due to the amounts of water likely to be recovered through supply measures, as detailed in the Stocktake Report:

> The department considers there is sufficient funding to bridge the gap to the sustainable diversion limits while limiting water purchase to 1500 gigalitres and prioritising water recovery through infrastructure investment.[46]

2.44 Mr Slatyer also commented that communities were more supportive of infrastructure programs:

> The type of water recovery which most concerns have been raised about is this open market process, where the Commonwealth will just acquire water from whoever is willing to sell it. In response to that, we are preferencing infrastructure based recovery and the record shows that for the last several years our infrastructure recovery has exceeded our purchase recovery. Our experience is that those sorts of programs are much more welcome and appreciated in the communities.[47]

2.45 Finally, Mr David Parker, Department of the Environment, reminded the committee that the argument for purchasing all the water required for the environment had not been supported by successive governments. He added:

> It is not an argument that we would advise on as policy advisers. In fact the balance here between infrastructure recovery and purchases is, in effect, part of a social compact that goes all the way back to the original conception of the reform—and that is that some recovery would be done through infrastructure and some would be done through purchase. That actually is a critical balance. We have never been in a place of wanting to upset that balance.[48]

Duration of 1500 GL per year limit

2.46 The committee received a number of submissions which raised concern that the inclusion of a time limit on the proposed cap would cause uncertainty for irrigator and farming communities. The New South Wales Irrigators' Council noted that the cap only remains in place until the review of the Basin Plan 2012. It stated that 'such a sunset clause does not provide the certainty and assurances to irrigators and Basin communities that this limit will be a hard cap which will permanently be enshrined into the Water Act…and the Basin Plan 2012'.[49]

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46 Department of the Environment, *Submission 24 (Supplementary),* p. 3.

47 Mr Tony Slatyer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard,* 24 August 2015, p.2.

48 Mr David Parker, Deputy Secretary, Water Division, Department of the Environment, *Committee Hansard,* 24 August 2015, p. 5.

49 New South Wales Irrigators' Council, *Submission 10,* p. 5; see also Riverina and Murray Organisation of Councils, *Submission 30,* p. 2.

2.47 The Murray Darling Association submitted a similar view and stated that the time limit on the cap 'will essentially negate any certainty otherwise provided under the amendment'. The Association concluded:

> It is essential that the cap remains in place in perpetuity, ensuring an ongoing commitment to incentivise the development of more efficient approaches to environmental watering and to protect communities from unnecessary hardship created by the removal of productive water out of productive agriculture.[50]

2.48 The Department of the Environment responded to these concerns by explaining that:

> …the limit will cease when the Basin Plan is first reviewed under section 50 of the Water Act. Expiry at this time will provide certainty that the limit will be in place for the duration of the current Basin Plan.[51]

2.2 The Department also indicated that, while the first review of the Basin Plan is currently scheduled to occur in 2022, it was recommended by the Water Act Review that this be deferred until 2026 to provide more time to consider the outcomes of the Basin Plan. This is particularly important as the SDLs will not be finally reconciled until 2024.[52]

Long-term annual average calculation

2.49 In addition to concerns regarding the operation of the cap, a number of submissions raised concerns that the bill does not clearly define 'long-term annual average quantity of water'.[53] EDOs of Australia noted:

> ..neither the Bill nor the Act define [long-term annual average]. According to the Department of Environment, the current method involves 'using the Department's estimates of long term annual average yields, as advised in the Murray-Darling Basin Ministers' Communiqué of 4 November 2011'.[54]

2.50 As the method of calculation is not prescribed in legislation, nor explicitly stated in the Communiqué, EDOs of Australia argued that:

> Should the Commonwealth exercise its discretion and use a different method to calculate the [long-term annual average] of water, the current recovery figure…and the remaining (unpurchased) quantity of water could

50 Murray Darling Association, *Submission 28*, p. 2.

51 Department of the Environment, *Submission 24 (Supplementary),* p 4.

52 Department of the Environment, *Submission 24 (Supplementary),* pp 4–5.

53 See also Australian Conservation Foundation, Environment Victoria, Environmental Justice Australia, *Submission 2*, p. 3; Inland Rivers Network, *Submission 7*, p. 3; Gippsland Environmental Group, *Submission 14*, p. 2.

54 EDOs of Australia, *Submission 22*, p. 4.

> potentially change. This is problematic insofar as it creates uncertainty, and may be prejudicial to the environment.[55]

2.51 The Department of the Environment explained that 'long-term annual average' has a plain English meaning under the Water Act and that introducing a technical term would add unnecessary complexity.[56]

2.52 The Department also explained that it:

> …calculates the amount of water taken or accessed under purchased entitlements as Long Term Average Annual Yield (LTAAY) volumes at the time of purchase. The term LTAAY is used to translate entitlement volumes into long term diversion limit equivalents. It identifies the long term annual average volume of water permitted to be taken for consumptive use under a water access entitlement. Currently all LTAAY figures published by the Department are calculated using the long-term diversion limit equivalent factors agreed to by the Ministerial Council in November 2011 for all catchments throughout the Basin.[57]

Compliance with international obligations

2.53 There were also concerns raised that in addition to jeopardising compliance with the objects of the Water Act, the cap would endanger compliance with international obligations under the Ramsar Convention (Convention on Wetlands) and the Convention on Biological Diversity. EDOs of Australia stated that:

> …there is considerable doubt as to whether the obligations contained in the Ramsar Convention and the Convention on Biological Diversity will be properly implemented under a 2,750 GL scenario…As such, it is possible that this Bill will further undermine Australia's capacity to meet its obligations under these Conventions, in particular the Ramsar Convention.[58]

2.54 The Murray Lower Darlings Indigenous Nations similarly expressed concern that:

> …in hindering the achievement of the Water Act objects, this Bill also undermines our members' rights and obligations to manage cultural and environmental assets, including Ramsar listed wetlands within native title lands and National Parks under Joint Management.[59]

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55 EDOs of Australia, *Submission 22*, p. 4.

56 Department of the Environment, *Submission 24 (Supplementary)*, p. 5; see also Ms Mary Colreavy, Assistant Secretary, Water Acquisition and Markets Branch, Department of the Environment, *Committee Hansard*, 24 August 2015, p. 4.

57 Department of the Environment, *Submission 24 (Supplementary)*, p. 5.

58 EDOs of Australia, *Submission 22*, p. 3; see also Inland Rivers Network, *Submission 7*, p. 2; River Lakes and Coorong Action Group Inc, *Submission 23*, p. 2.

59 Murray Lower Darling Rivers Indigenous Nations, *Submission 17*, p. 4.

2.55 Mr Slatyer, Department of the Environment, denied that the amendment would affect compliance with international obligations. He stated that the Department:

> …would particularly take issue with the contention that we would in some way be backing off our international responsibilities…We take our responsibilities under the Ramsar Convention very seriously and we will continue to fully observe those.[60]

Additional 450 gigalitres per year for the environment through efficiency measures

2.56 As has already been outlined in chapter 1, the Water Amendment Bill 2015 proposes to amend the Basin Plan to extend the scope of efficiency projects able to be funded under the Water for the Environment Special Account. The following discussion canvasses the implications of this change and concerns raised in evidence in relation to demand for efficiency measure projects and the timing of the recovery an additional 450 GL per year.

Benefits of increased flexibility provisions

2.57 The Department of the Environment explained that for a number of years it has provided funding for off-farm irrigation infrastructure projects, and has been monitoring the outcomes of these projects. The Department stated that this monitoring has shown good outcomes for irrigation infrastructure operators and more broadly, for irrigators in those regions.[61]

2.58 The Department considered that the inclusion of off-farm water use efficiency projects has an array of benefits including improved water delivery systems and greater control at the farm gate which can lead to crop diversity, increased rotations and, in some cases greater yields. The Department also noted that the use of off-farm projects would not detract from the capacity of irrigators to access funding for on-farm irrigation efficiency.[62]

2.59 The inclusion of off-farm projects would enable the development of integrated projects where off-farm irrigation networks are upgraded to operate more efficiently at lower water volumes, while on-farm networks are upgraded to operate effectively with those lower water volumes while maintaining farm production.[63]

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60 Mr Tony Slatyer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard*, 24 August 2015, p. 4.

61 Department of the Environment, *Submission 24*, p. 6.

62 Department of the Environment, *Submission 24*, p. 6.

63 Department of the Environment, *Submission 24*, p. 6.

2.60 The Department of the Environment informed the committee that:

> There are a number of studies that have found social and economic benefits are derived from on and off farm irrigation efficiency projects. These studies have found that socio-economic benefits derive as much from the improved infrastructure and capacity to manage the irrigation infrastructure more effectively as from the benefits of any water retained by an irrigator. Hence efficiency measures projects will continue to benefit irrigation production even when all the saved water is returned to the environment.[64]

2.61 In addition, the Department noted that the broadening of the types of efficiency projects has two distinct advantages:

- it enables the Commonwealth to equitably deliver programmes across the Basin rather than relying on individual states to bring forward separate proposals; and
- it provides for a consistent approach to delivering these programmes as well as collecting information that will enable the social and economic benefits from the projects to be recognised through the MDBA's evaluation of the effectiveness and impacts of the Basin Plan.[65]

2.62 The Department of Agriculture also pointed to benefits of increased flexibility for recovery with projects providing savings for the environment without having an impact on farm allocations. Mr Ian Thompson, Department of Agriculture, went on to state that 'any given farmer can have broadly the same allocation on the farm but it requires less public water to be used because we have got efficiency of getting it there'.[66]

Response to increased flexibility

2.63 Water recovered through projects funded by the Water for the Environment Special Account will be recovered in addition to water recovered for the purpose of bridging the gap. This means that any water recovered under these projects will not be counted towards the proposed 1500 GL per year limit.

2.64 The committee received a range of views in relation to the provisions. Dr Christine Kershaw, National Farmers' Federation, stated that the Federation:

> …support amendments to the Murray-Darling Basin Plan that provide more flexibility in the recovery of up to 450 gigalitres of water for the

64 Department of the Environment, *Submission 24 (Supplementary),* p. 7.

65 Department of the Environment, *Submission 24*, p. 7.

66 Mr Ian Thompson, First Assistant Secretary, Sustainable Agriculture and Fisheries Division, Department of Agriculture, *Committee Hansard,* 24 August 2015, p. 27.

> environment through efficiency measures funded under the Water for the Environment Special Account, without caveat.[67]

2.65 The Riverina and Murray Regional Organisation of Councils also supported the increase in flexibility to recovery the 450 GL per year and stated that 'this is seen as a good and common sense provision'.[68]

2.66 Other submitters reiterated their long-standing view that the additional 450 GL per year for the environment should not be recovered unless the 2750 GL per year target is met first. For example, Cotton Australia commented that it believed that 'no case has been made that demonstrates the need for this water to be acquired'. However, it went on to comment that, if the 450 GL per year had to be acquired, 'it must only be acquired in a manner that results in no negative social or economic outcomes'.[69]

2.67 The National Irrigators' Council stated that it has long supported the use of infrastructure and efficiency works over other water recovery methods as mechanisms of least harm to communities. However, the Council described the 450 GL per year as:

> …a gigantic amount of water. That still has to come out—it is collected after the Basin Plan—and again, that will have significant impact on the communities.[70]

2.68 The Council went on to state that it was opposed to recovering the additional 450 GL per year until the 2750 GL per year is met.[71] The Department of the Environment responded and stated that:

> Efficiency measure projects are due to roll out from 2015–16 starting with pilot projects. The timely rollout of these projects will support the effective operation of the adjustment mechanism…The Bill does not change this specific element of the Basin Plan…The [Murray-Darling Basin Ministerial Council] Communique also records the Commonwealth's commitment to consult with the states to ensure its efficiency measures programme complements state-led activities to bridge the gap.[72]

2.69 However, despite expressing opposition to the recovery of an additional 450 GL per year, submitters offered support for the increased flexibility as detailed by the bill. For example, the National Irrigators' Council commented:

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67 Dr Christine Kershaw, Manager, Natural Resources Management, National Farmers' Federation, *Committee Hansard*, 24 August 2015, p. 32.

68 Riverina and Murray Regional Organisation of Councils, *Submission 30*, p. 2.

69 Cotton Australia, *Submission 3*, p. 2.

70 Mr Gavin McMahon, Chair, National Irrigators' Council, *Committee Hansard*, 24 August 2015, p. 10.

71 National Irrigators' Council, *Submission 25*, p. 7. See also, Cotton Australia, *Submission 3*, p. 2; Australian Dairy Industry Council, *Submission 20*, p. 6.

72 Department of the Environment, *Submission 24 (Supplementary)*, p. 6

> The [National Irrigators' Council] supports the investment directed to upgrading and modernising irrigation systems producing some of the most efficient systems in the world. This investment provides short and long term benefits for communities. Short term local stimulus occurs through the construction phrase of projects. Water savings from infrastructure projects are shared, and result in water being retained on farm; this contributes to direct employment in irrigated agriculture, fewer job losses on farms and opens opportunities for important downstream processing industries. This employment supports the social and economic underpinnings of many communities in the Basin.[73]

2.70 An additional matter raised by the New South Wales Irrigators' Council was the inclusion of the words 'up to' 450 GL per year to provide flexibility. It stated:

> …'up to' must be included to provide some degree of flexibility to the federal government in their target and also ensure that projects under the 450 gigalitres provides value for money. In addition we hold the strong view that the 2750 gigalitre target must be achieved before any attempts are made for the 450 gigalitres of water.[74]

2.71 The Australian Dairy Industry Council also recommended that the words 'up to' be inserted and commented that:

> Our concern is that this does not, legally speaking, provide any flexibility to reduce the volume recovered in the face of negative socio-economic impacts. Rather, the Act tends to suggest any impacts will be addressed after all the water has been recovered.[75]

2.72 The Department of the Environment responded to the New South Wales Irrigators' Council's suggestion by explaining that:

> The delivery of an additional 450 gigalitres with neutral or improved social and economic outcomes was included in the Water Act as part of settling of the sustainable diversion limit adjustment mechanism in the Basin Plan…This arrangement was a specific element of the inter-jurisdictional policy settlement of the Basin Plan. The Bill does not re-open that settlement.[76]

2.73 The Victorian Farmers Federation also supported the amendment to enable the funding available to be used for off-farm projects, but commented that it was concerned about the impact on funding for on-farm programs.[77]

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73 National Irrigators' Council, *Submission 25*, p. 5. See also Cotton Australia, *Submission 3,* p. 2.

74 Ms Stefanie Schulte, Policy Manager, New South Wales Irrigators' Council, *Committee Hansard,* 24 August 2015, p. 11.

75 Australian Dairy Industry Council, *Submission 20,* p. 9.

76 Department of the Environment, *Submission 24 (Supplementary),* p. 6.

77 Victorian Farmers Federation, *Submission 16*, p. 7.

Concerns regarding demand for efficiency measure projects

2.74 The committee received submissions detailing concern that there is a reduced demand for funding for efficiency programs, and that this will affect the Commonwealth's ability to recover water for the environment. For example, the Australian Conservation Foundation, Environment Victoria and Environmental Justice Australia stated that:

> Future programs funded by the Special Account will require irrigators to surrender all water savings to the Commonwealth. While this is highly desirable from environmental and value for money perspectives, we understand from irrigators that demand for such programs is likely to be much lower than under current arrangements. Due to the rising value of water, demand for government funded efficiency programs is already falling as it becomes more cost-effective for irrigators to fund their own efficiency projects.[78]

2.75 However, the Department of the Environment provided evidence that there is sufficient demand to deliver 450 GL per year through efficiency measures. The Department stated:

> For example, the On Farm Infrastructure Efficiency Programme (OFIEP) has been substantially over-subscribed in each of its five rounds. In the most recent round, where $125 million was the proposed amount of funding, applications were over four times the proposed amount.[79]

2.76 The Department has also undertaken consultation with industry members regarding interest in funding for efficiency projects and informed the committee that:

> Industry participants have expressed the view that irrigation efficiency upgrades are now of general industry interest. The OFIEP programme has proven increasingly popular over its 8 year (to date) life with increased participation and value for money.[80]

Indigenous concerns

2.77 The focus on infrastructure investment and efficiency upgrades was criticised by the Murray Lower Darling Rivers Indigenous Nations. It was stated that infrastructure investments and efficiency upgrades often entail significant disturbance and impacts on Aboriginal cultural heritage and important cultural landscapes. The Murray Lower Darling Rivers Indigenous Nations explained that:

> Our members have noted a number of instances of direct impacts on cultural heritage sites as a result of irrigation infrastructure upgrades and

78 Australian Conservation Foundation, Environment Victoria and Environmental Justice Australia, *Submission 2*, p. 3; see also, Victorian Farmers Federation, *Submission 16*, p. 7.

79 Department of the Environment, *Submission 24 (Supplementary)*, p. 6.

80 Department of the Environment, *Submission 24 (Supplementary)*, pp 6–7.

> developments, including disturbance of burial sites. The large and dense historical Indigenous populations of the central Murray region in particular, mean that there is a high concentration of heritage sites, often located in close proximity to water-courses. Construction, excavation and earth-moving activities undertaken as part of the infrastructure upgrades are highly likely to impact on cultural heritage sites. Experience with the development of environmental works and measures in NSW, for example in the Koondrook/Perricoota forest, has demonstrated the significant time delays and increased costs associated with management of cultural heritage.[81]

2.78 Mr Darren Perry, Murray Lower Darling Rivers Indigenous Nations, commented that there was a lack of resources to address Indigenous concerns in project plans and concluded that 'the fact that they are under-resourced suggests to me that adequate weight has not been given to the concerns relating to the cultural heritage issues around these major projects'.[82]

2.79 Both the Department of the Environment and the MDBA responded to these concerns and noted that the proponents of projects must address all relevant state and Commonwealth requirements including Indigenous heritage concerns. Dr Dickson, MDBA, stated that:

> …all projects have to go through a very thorough approval process before they can be submitted for the other jurisdictions to agree to, and part of that is making sure they have worked through all the Aboriginal heritage requirements.[83]

2.80 Mr Alan Dreverman, MDBA, outlined to the committee the work undertaken by the MDBA with Indigenous communities and concluded that:

> My view is that we certainly have worked very diligently with Aboriginal people to respect their cultural heritage and to make sure they are very actively involved in the development of the works…it is a very, very strong commitment, and it is not just for the Murray-Darling. We work with major state constructing authorities, and each of them has processes in place to make sure there is total respect.[84]

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81 Murray Lower Darling Rivers Indigenous Nations, *Submission 17,* p. 5.

82 Mr Darren Perry, Chair, Murray Lower Darling Rivers Indigenous Nations, *Committee Hansard,* 24 August 2015, p. 30.

83 Dr Rhondda Dickson, Chief Executive, Murray-Darling Basin Authority, *Committee Hansard,* 24 August 2015, p. 40; see also Mr Tony Slayer, First Assistant Secretary, Water Division, Department of the Environment, *Committee Hansard,* 24 August 2015, p. 5.

84 Mr Alan Dreverman, Executive Director, River Management, Murray-Darling Basin Authority, *Committee Hansard,* 24 August 2015, p. 41.

Committee view

2.81 The committee considers that the inclusion of the 1500 GL per year limit in the Water Act will be of significant benefit to farming and irrigator communities in the Murray-Darling Basin. It is integral in delivering the triple bottom line outcomes of the Basin Plan, that is, social, economic and environmental benefits.

2.82 The limit will provide clarity and flexibility, and allow for certainty in future planning and investment opportunities by farmers and irrigators. The committee notes the view of some environmental groups that amendment to the Water Act to include the 1500 GL per year limit was not required to achieve the Government's aims. However, the well-being and future of Basin communities requires certainty, and the committee considers that the best way to achieve this is by legislating a water buyback limit.

2.83 The committee is of the view that the amendment does not compromise the Commonwealth's ability to bridge the gap. While environmental groups raised concerns that the cap may compromise the achievement of the SDL, the committee considers that there is no evidence to support this view. The committee notes that the proposed amendments do not remove the Commonwealth's obligation to bridge the gap to the SDL. Rather, the proposed amendments go to how the gap is bridged; not whether the gap will be bridged.

2.84 In addition, the committee notes that the recently released Stocktake Report supports the view that the 2570 GL per year target will be achieved without the 1500 GL per year limit being triggered. The Stocktake Report noted that enhanced environmental outcomes can be delivered through the efficiency measure program and in consultation with Basin States, industry and community groups.

2.85 The committee supports the Government's prioritisation of infrastructure projects. Evidence was received that these projects are delivering positive outcomes for both farmers and the environment and are less disruptive for Basin communities.

2.86 In relation to the proposed amendments to extend the scope of efficiency projects that can be funded under the Water for the Environment Special Account, the committee strongly supports this change. The committee is of the view that the increased flexibility provided by this amendment will give greater certainty to Basin communities. The committee further notes that this will improve the environmental outcomes under the Basin Plan through the recovery of additional water for the environment, in line with the requirement to achieve neutral or beneficial socio-economic outcomes.

2.87 The inclusion of off-farm efficiency projects will ensure that water can be recovered for the environment without affecting farmers' ability to access water for consumptive use. This means that productivity and economic well-being in farming communities is assured while environmental outcomes are being achieved.

2.88 Finally, the committee acknowledges the concerns of Indigenous Basin communities. The committee considers that it is essential the Commonwealth continues to engage with Indigenous representatives as implementation of the Basin Plan occurs.

Recommendation 1

2.89 The Committee recommends that the Water Amendment Bill 2015 be passed.

Senator Anne Ruston
Chair

Australian Greens' Dissenting Report

Need for certainty

1.1 The Australian Greens recognise that in an increasingly uncertain climate-changed world, the need for long-term certainties around water in the Murray Darling Basin is paramount.

1.2 The Water Amendment Bill 2015 is a sloppy piece of legislation that creates uncertainty.

1.3 It undermines the very Act it seeks to amend by overriding the Commonwealth's obligations to achieve the Sustainable Diversion Limits mandated in the Murray-Darling Basin Plan by limiting how much water it may buy back from willing sellers.

1.4 It removes flexibility to achieve the aims of the Murray-Darling Basin Plan.

1.5 In a political budget-constrained environment and into the future, the responsibility for Government to invest wisely in cost-efficient and proven effective outcomes should also be a given.

1.6 It risks substantial expenditure of public monies on projects that may further reduce the net amount of water available to groundwater or downstream water users across the Basin.

1.7 With this in mind, the Australian Greens do not support the passing of this bill.

Requirement for certainty

1.8 The health of the Murray and Darling River and their protected wetlands and environmental values require certainty of water flow. The agricultural soils and Basin communities that depend on the health of the rivers and the Basin require certainty of water flow. This is particularly so for the downstream ecosystems and communities which the *River Lakes and Coorong Action Group Inc* (*RLCAG*) reminds us 'bear a great deal of the risk if the Murray-Darling Basin Plan fails to restore the health of the River system and achieve the objects of the Water Act 2007'.

1.9 The water licensees who wish to sell water entitlements surplus to their requirements need the certainty of a guaranteed buyer in the Commonwealth, especially when times are tough.

1.10 The Commonwealth itself needs to be certain it has flexibility to meet its legislated and ethical obligations to achieve Sustainable Diversion Limits through the purchase of environmental water licenses from willing sellers when needed.

1.11 And the bill itself needs to provide certainty in its aims, definitions and outcomes.

1.12 This bill contains no such certainties.

Background

1.13 The 2007 Murray-Darling Basin Plan, with its supporting legislation, was written in response to what was then one of the worst droughts in Australia's written history.

1.14 It is recognised that the over-allocation of water from the Murray-Darling Basin has affected not only the ecological wellbeing of the rivers, but also the long-term sustainability of the communities that run the length of those waterways and their water catchments.

1.15 Without healthy flowing water the Murray Darling rivers and their tributaries, their irreplaceable environmental values and the communities depending on the health of the Basin's water will wither and die.

1.16 The current Murray-Darling Basin Plan is informed by a shared recognition that a nationally coordinated approach to water reform is vital to addressing the over-allocation of water out of the Murray-Darling Basin.

1.17 As noted by the *RLCAG* the Plan represents well over 20 years of planning and negotiation between many competing stakeholders' interests, and it should be 'implemented and evaluated as it was designed to achieve the agreed objectives of the Water Act 2007'.

1.18 Central to the Plan is the reduction of water extracted and diverted from the Basin to sustainable limits by 2019, stated in the 2012 Plan to be 10,873 GL pa. 2,750 GL of environmental water must be recovered each year, with the option of offsetting this volume by supply measures.

1.19 The ability for the Commonwealth to purchase water licenses to meet the mandated recovery of 2750 GL pa of environmental water is the safety-net of the whole Plan and thus a central plank to achieving the Objects of the *Water Act 2007*, and minimal health of the river systems. The Commonwealth is responsible for ensuring the Sustainable Diversion Limits are achieved. Retaining the ability to purchase environmental water if any shortfall in water recovery responsibilities occurs is essential to the Plan.

The Cap

1.20 Incredibly, this bill imposes a limit of 1500 GL on the volume of environmental water the Commonwealth may purchase to meet its obligations under the Murray-Darling Basin Plan (the Cap). As noted by a number of submissions 'by placing additional costs and restraints on the Commonwealth's ability to recover water for the environment, the Bill will severely hamper its ability to meet Water Act objects' (*Murray Lower Darling Rivers Indigenous Nations*).

1.21 The *Australia Conservation Foundation, Environment Victoria and Environmental Justice Australia* (ACF et al) observes that '…the cap will be in the Water Act itself. Since the Water Act takes precedence as a legal instrument over the Basin Plan, honouring the cap will take precedence over honouring the SDLs'. That is, if the Commonwealth can't meet the SDLs 'via infrastructure upgrades or efficiency measures because, for example, they get prohibitively expensive, or they simply do not deliver the amount of water required, it will not be able to use buy backs the bridge the gap'.

1.22 There is no indication in the bill as to what would happen if the Commonwealth finds itself in this position, because as further noted by *ACF et al* and by *EDOs of Australia* if the Commonwealth cannot meet its obligations to bridge 100% of the gap to meet the SDLs, the Cap would then become the 'reasonable excuse' trigger in the Basin Plan that would allow the states to exceed the SDLs.

1.23 This bill creates a framework that effectively allows governments to walk away from their commitments to the Murray-Darling Basin Plan with no remaining liability to meet the SDLs. This is unacceptable.

Confusing Definitions

1.24 The bill also creates confusion with regard to foundational definitions. What constitutes 'long term annual average quantities of water' included in the cap is lacking. There is no certainty as to whether the 1,500 GL limit is on entitlements or on long-term annual average yield of entitlements.

1.25 We refer to submissions by *EDOs of Australia, ACF et al* raising this question, and refer to *Inland Rivers Network's (IRN)* summary: 'There is no definition of what it means or how it is to be calculated, over what period of time'.

Flexibility for farmers to sell and diversify

1.26 Only willing water entitlement sellers will sell their licenses. Indeed the unbundling of water from land has created a new asset that many irrigators have chosen to sell to create new wealth.

1.27 However, this bill creates risk regarding this asset in a number of ways. It removes the current surety businesses have that a guaranteed buyer – the

Commonwealth – will be available should they wish to sell water entitlements surplus to their requirements.

1.28 *Nature Conservation Council of NSW* further notes that if a farmer has achieved required water efficiency and seeks to sell their any part of their water entitlements as a positive investment, the 'constraints on the purchase of water for the environment through the market will reduce demand and therefore market prices, reducing the potential for financially viable investments'.

1.29 It is anachronistic to the notion of open markets that this government would seek to remove the choice for farmers to sell surface water entitlements in the open water trading market. A number of submissions, including the *EDOs of Australia* and *IRN*, reminds us that a 2012 Marsden Jacob Associates survey of MDB water entitlement sellers found that 80% of irrigators concerned considered that the sale of their water had been a positive or very positive outcome and that a large number of those sellers remained in the region and continued farming.

1.30 *EDOs of Australia* note that contrary to assertions that 'banks directly forced irrigators to sell water, the survey results suggest that at irrigators made the decision to sell by themselves, in consultation with family and advisors taking into account their assets and liabilities, uncertainty about future water availability, and other factors'.

1.31 *IRN* reminds us that regions heavily dependent on the irrigation industry survive at the behest of many complex economics issues: commodity prices, exchange rates, terms of trade and increasingly uncertain weather conditions. This bill adds further uncertainty to those vagaries, and exposes water entitlement sellers to greater risk in not achieving a certain return on sale of their water assets. This in turn limits opportunities for unsustainable businesses to exit the market while retaining income from the sale of their water licenses, or for farmers to fund diversification of agricultural production as climate change shifts agricultural planning.

1.32 The opportunity for farmers to trade water to the Commonwealth should not be removed by this arbitrary and political 1,500 GL cap.

Financially irresponsible

1.33 It is widely understood by experts and peer-reviewed studies that market-based purchases of water from willing sellers is the most cost-efficient means to achieve environmental water recovery. Yet Prime Minister Abbott is quoted as stating the funding of water infrastructure programmes is a priority of his government. Further, as noted by the *Murray Lower Darling Rivers Indigenous Nations (MLDRIN)* submission, government members have been quoted as stating that the Commonwealth Environmental Water Holder purchase of environmental water should not impose a cost on taxpayers.

1.34 However it would seem that this bill, with its shift of public monies towards infrastructure investment ignores the expert economic advice.

1.35 *The Conservation Council of South Australia, MLDRIN and EDOs of Australia* reiterate that the Government's own Productivity Commission has found that recovering water via infrastructure investment is up to four times more expensive than purchase of water entitlements.

1.36 The Government's own Commission of Audit has also issued an unambiguous warning about financially irresponsible policy in this regard:

> The Commission considers that the Government should focus on maximising public benefits and achieving value for money in its water recovery, not on providing industry assistance. This means moving away from infrastructure funding, which is significantly more expensive and which provides substantial private benefits to landholders.

1.37 *MLDRN* elucidates: '[The government] will endorse unnecessary public spending on expensive infrastructure subsidies … [to] provide direct benefits to select individuals and businesses. To acquire equivalent volumes of water (managed for the public good), taxpayers now have to subsidize expensive infrastructure upgrades which creates a private benefit for a limited group'.

1.38 *EDOs of Australia* explains further that 'this means that the Federal Government's recent decision to reduce funding for the purchase of water entitlements by $22.7 million over two years could cost the taxpayer up to $88 million in any infrastructure projects required to recover the equivalent volume of water'.

1.39 The *RLCAG* submission succinctly explains that the bill leaves the government's only alternative to buying water to achieve the SDLs 'will be to acquire water through infrastructure subsidies … and this does not make economic sense'.

Extension of Water for Environment Special Account funding

1.40 The Greens support increased flexibility in water-efficiency measures that are proven to achieve the outcomes for which they’re funded, that are cost-efficient, and that will achieve the aims of more environmental water remaining in the Basin system.

1.41 There is little doubt that irrigators need to be more efficient, however the extension of funding from the Water for Environment Special Account to fund off-farm infrastructure raised a number of concerns that the Greens believe remained unanswered.

1.42 In the first instance we refer to the points already made above regarding the most cost-efficient means of returning environmental water to the Basin. The Greens continue to be concerned about the increasing reliance on recovery of environmental water through infrastructure projects and ask the question as to how much of the targeted 450GL of water per year is returned to the Basin in real water.

1.43 We share the following concerns raised by submitters to this inquiry.

1.44 The *ACF et al* and *Nature Conservation Council of NSW* submissions note that future programs funded by the Special Account will require irrigators to surrender all water saving to the Commonwealth. However the rising value of water is likely to see irrigators fund their own efficiency projects as it becomes more cost-effective to do so. Those submissions note:

- Real evidence is lacking in the cost-efficiency or effectiveness of such projects to provide the return of 450GL into the system.
- With the imposition of the Cap, what happens if these efficiency projects do not in fact deliver enough water to the environment within the current budget?
- The *Nature Conservation Council of New South Wales* notes that 'Government subsidies for water efficiency have operated in one form or another for the past twenty years and there is no "low hanging fruit" left. Many previous funding programs 'ended up funding ancillary farm management activities rather than core water savings'.
- Water efficiency investments that are not exclusively focused on reducing evaporation (including any involving reduced infiltration, run-off or return flows) will simply reduce the volume of water subsequently available to groundwater or down-stream water uses and have no effect on the net supply of water across the Basin. Off-farm infrastructure projects have the potential to divert even more water being taken out of the system by irrigation businesses.

1.45 The Greens also share the concerns of the *MLDRIN* and *RLCAG* submissions that the significant construction, excavation and earth-moving activities carried out in irrigation infrastructure upgrades and developments directly disturbs Aboriginal cultural heritage and cultural landscapes, with disturbance of burial sites already recorded – particularly in the central Murray region. The referral to state responsibilities in ameliorating such risks is insufficient.

1.46 The Murray-Darling Basin is already suffering deep decline. Further development, extractions, diversions and drying of the system – with the effects of climate change yet to come – will spell the death knell of this major river system. Its ecosystems and biodiversity, including internationally listed Ramsar wetlands are already at major risk.

1.47 With the death of the rivers comes the long decline of the communities and businesses that rely on its water.

1.48 This bill does nothing to promote or guarantee the return of actual water to the system. It promises to in fact subvert that aim and creates a framework for governments to walk away from their commitments to meet the SDLs.

1.49 The further diversion of public monies into infrastructure projects that do not benefit the natural system or the public good raises questions of the bill's intention in an upcoming election year.

Recommendation

The Australian Greens recommend the bill be not passed.

Senator Lee Rhiannon
Senator for New South Wales

Appendix 1

Submissions, tabled documents and answers to questions taken on notice

Submissions

1	Queensland Government
2	Australian Conservation Foundation, Environment Victoria and Environmental Justice Australia
3	Cotton Australia
4	Mr Jonathan Peter
5	Victorian Farmers Federation, Sunraysia Branch
6	Goulburn Valley Environment Group
7	Inland Rivers Network
8	Murray-Darling Basin Authority
9	Environmental Farmers Network
10	NSW Irrigators' Council
11	New South Wales Government
12	Nature Conservation Council of NSW
13	Conservation Council SA
14	Gippsland Environment Group Inc
15	Murray Irrigation
16	Victorian Farmers Federation
17	Murray Lower Darling Rivers Indigenous Nations
18	National Farmers' Federation
19	Alexandrina Council
20	Australian Dairy Industry Council
21	Australian Government Department of Agriculture
22	EDOs of Australia
23	River Lakes and Coorong Action Group
24	Department of the Environment
25	National Irrigators' Council
26	Victorian Government
27	Coleambally Irrigation Co-operative Limited
28	Murray Darling Association
29	The Murray Darling Basin Consortia
30	Riverina and Murray Region Organisation of Councils

Tabled documents

Murray Lower Darling Rivers Indigenous Nations – S Jackson et al, 'Meeting Indigenous peoples' objectives in environmental flow assessments: Case studies from an Australian multi-jurisdictional water sharing initiative', *Journal of Hydrology*, 522, 2015 (public hearing, 24 August 2015, Canberra)

Murray Lower Darling Rivers Indigenous Nations – D Adamson and A Loch, 'Agricultural Water Management: Possible negative feedbacks from "gold plating" irrigation infrastructure', *Agricultural Water Management*, 145, 2014 (public hearing, 24 August 2015, Canberra)

Murray Lower Darling Rivers Indigenous Nations – MLDRIN Briefing Paper: Cultural Flows and Aboriginal Environmental Outcomes (public hearing, 24 August 2015, Canberra)

Department of the Environment – W Martin and G Turner, *SDL Adjustment Stocktake Report*, August 2015 (public hearing, 27 August 2015, Adelaide)

Department of the Environment – *Studies of the socio-economic effects of on farm and off farm irrigation efficiency projects* (public hearing, 27 August 2015, Adelaide)

Answers to questions taken on notice

EDOs of Australia – Answers to questions taken on notice (public hearing, 24 August 2015, Canberra)

Appendix 2

Public hearings

Monday, 24 August 2015 – Canberra

Department of the Environment

Mr David Parker, Deputy Secretary, Water and Parks Group
Mr Tony Slatyer, First Assistant Secretary, Water Division
Ms Mary Colreavy, Assistant Secretary, Water Acquisition and Markets Branch
Ms Tara Oliver, Director, Water Regulation

National Irrigators' Council

Mr Gavin McMahon, Chair
Mr Tom Chesson, Chief Executive Officer

NSW Irrigators' Council

Mr Mark McKenzie, Chief Executive Officer
Ms Stefanie Schulte, Policy Manager

EDOs of Australia *via teleconference*

Mr Jeff Smith, Executive Director
Dr Emma Carmody, Policy and Law Reform Solicitor

Australian Conservation Foundation *via teleconference*

Mr Jonathan La Nauze, Healthy Ecosystems Program Manager

Environment Victoria *via teleconference*

Ms Juliet Le Feuvre, Healthy Rivers Campaign Manager
Mr John Pettigrew, Member

Department of Agriculture

Mr Ian Thompson, First Assistant Secretary, Sustainable Agriculture and Fisheries Division
Ms Michelle Lauder, Assistant Secretary, Water Branch
Mr Stephen Taylor, Senior Policy Officer

Murray Lower Darling Rivers Indigenous Nations

Mr Darren Perry, Chair

National Farmers' Federation

Mr Les Gordon, Chair, Water Taskforce
Dr Christine Kershaw, Manager, Natural Resource Management
Mr Christopher Young, Policy Officer

Murray-Darling Basin Authority

Dr Rhondda Dickson, Chief Executive
Dr Peta-Joanne Derham, Acting General Manager, Ecohydrology Analysis Branch
Mr Alan Dreverman, Executive Director

Thursday, 27 August 2015 – Adelaide

Conservation Council of South Australia

Mr Craig Wilkins, Chief Executive
Dr Adam Webster, Executive Committee

Alexandrina Council

Mr Simon Grenfell, General Manager Engineering and Environment
Ms Shen Mann, Environmental Strategy Officer

South Australian Murray Irrigators

Ms Caren Martin, Chairperson

Department of the Environment

Mr Anthony Slatyer, First Assistant Secretary
Ms Mary Colreavy, Assistant Secretary, Water Acquisition and Markets Branch *via teleconference*
Mr Timothy Fisher, Assistant Secretary, Water Policy Branch *via teleconference*

Murray-Darling Basin Authority

Dr Peta-Joanne Derham, Acting General Manager, Echohydrology Analysis Branch *via teleconference*