

The Senate

Environment and Communications
References Committee

Sustainable management by the Commonwealth
of water resources

October 2010

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Committee membership

Committee members to 27 September 2010

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Senator Mary Jo Fisher (LP, SA) (Chair) (from 4 February 2010)
Senator Anne McEwen (ALP, SA) (Deputy Chair)
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Senator Scott Ludlam (AG, WA)
Senator the Hon. Judith Troeth (LP, VIC)
Senator Dana Wortley (ALP, SA)

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Recommendations

Recommendation 1

3.39 The government should prepare an annual report of the Sustainable Rural Water Use and Infrastructure Program, detailing projects completed, in progress and planned, including for each project information on costs and timelines, water savings, and the share of water savings dedicated to the environment, extractive uses or other purposes.

Recommendation 2

3.41 The government should commit to making community impact statements for Commonwealth water purchases from each sub region of the Murray Darling Basin.

Recommendation 3

3.43 The Commonwealth should fund a structural adjustment package, based on the needs identified by community impact statements, for communities affected by reduced water availability resulting from the Commonwealth's water buyback program.

Recommendation 4

3.56 The Commonwealth with the states and territories should give priority to developing a more efficient and transparent water market, including setting best practice standards or regulations for water brokers or intermediaries.

Chapter 1

Background

Conduct of the inquiry

1.1 On 20 August 2009 the Senate referred the following matters to the Environment, Communications and the Arts References Committee for inquiry and report:

The ability of the Commonwealth, across state borders, to sustainably manage water resources in the national interest, with particular reference to:

- a) the issuing, and sustainability of water licences under any government draft resource plans and water resource plans;
- b) the effect of relevant agreements and Commonwealth environmental legislation on the issuing of water licences, trading rights or further extraction of water from river systems;
- c) the collection, collation and analysis and dissemination of information about Australia's water resources, and the use of such information in the granting of water rights;
- d) the issuing of water rights by the states in light of Commonwealth purchases of water rights; and
- e) any other related matters.

1.2 The Committee advertised the inquiry in *The Australian* and on its website, and wrote to many peak organisations inviting submissions. The Committee received 32 submissions (see Appendix 1) and held 3 public hearings (see Appendix 2). The Committee thanks submitters and witnesses for their contribution.

1.3 Submissions were mostly from farmers' and irrigators' interest groups, environmental groups, and interested academic experts. Although the terms of reference are expressed broadly, almost all submissions were about water management in the Murray-Darling Basin, which is the location of the main environmental concerns about water use, and the focus of current interest in the Basin Plan now being developed by the Murray-Darling Basin Authority. Accordingly, this is the focus of the report.

1.4 The submissions and evidence of this inquiry date from late 2009 to mid-2010. The committee was unable to complete the inquiry before the general election called on 17 July 2010 and held on 21 August. On 30 September 2010 the Senate re-referred the inquiry to the committee. In the new parliament the committee's name has been changed to Environment and Communications References Committee.

1.5 In new administrative arrangements following the election, the Department of Environment, Water, Heritage and the Arts (DEWHA) was renamed Department of Sustainability, Environment, Water, Population and Communities. For clarity this report uses the old name in line with the submissions and evidence.

Structure of the report

1.6 The rest of this chapter gives background on recent water reforms.

1.7 Chapter 2 reports general views on the direction of water reform, and discusses issues to do with the issue of new entitlements and treatment of existing rights.

1.8 Chapter 3 considers the right balance between water buybacks and infrastructure investment; the regional impacts of buybacks and trade out; and the need for a more efficient and transparent water market.

1.9 Chapter 4 discusses issues relating to water for the environment, including the need for better knowledge of environmental requirements, and the need to use water recovered for the environment as efficiently as possible.

Background to current water policy in the Murray-Darling Basin

1.10 There have been various intergovernmental agreements relating to Murray-Darling water resources dating back to 1914. The immediate ancestor of the current Murray-Darling Basin Agreement was made in 1992. It established the Murray-Darling Basin Ministerial Council and the Murray-Darling Basin Commission as an inter-governmental body to promote cooperative management of the Murray-Darling Basin (MDB).

The Murray-Darling Cap and the Living Murray 'First Step'

1.11 In 1995 an audit of water use showed that diversions from the Murray-Darling rivers had increased by 8 per cent over the previous six years, and were averaging 10 800 gegalitres per year by 1994.¹ This was a significant proportion of the natural inflow (which averages 21 200 gegalitres per year).² Water diversions had greatly reduced flow in the lower Murray and had a significant impact on river health.

1.12 In December 1996 the Murray-Darling Basin Ministerial Council agreed to cap diversions at the volume of water that would have been diverted under 1993–4

1 Diversions are mostly for irrigated agriculture, but also include stock and domestic, town and industrial uses.

2 Murray Darling Basin Authority, *About the Basin*, www.mdba.gov.au/water/about_basin (accessed 8 July 2010).

levels of development. There were special conditions for South Australia, and a cap for Queensland was set for future decision.³

1.13 In 2003 the Murray-Darling Basin Ministerial Council concluded that additional environmental flows were needed to ensure an environmentally sustainable Murray-Darling river system. In August 2003 the Council of Australian Governments (COAG) committed \$500 million over five years to address over-allocation of water (the Living Murray Program).⁴ This was formalised in the *Intergovernmental Agreement on Addressing Water Overallocation and Achieving Environmental Objectives in the Murray-Darling Basin* of 25 June 2004.

1.14 Under the Living Murray Program water would be recovered by a range of measures including infrastructure improvements to increase water use efficiency; buying entitlements from irrigators; and regulatory measures such as changing the way water was allocated among users. It was estimated that this would translate into approximately 500 gigalitres per year on average of additional environmental flows, which would be used to water six key sites.⁵ Measures taken from June 2004 to late 2009 are expected to recover about 465 gigalitres of water per year on average: 45 per cent from market based measures, 30 per cent from infrastructure measures and 25 per cent from regulatory measures.⁶

The National Water Initiative 2004

1.15 In August 2003, COAG agreed a National Water Initiative to refresh its 1994 water reform agenda. The objectives were to:

- improve the security of water access entitlements;
- ensure ecosystem health;

3 Parliament of Australia - Parliamentary Library, *Bills Digest – Water Bill 2007*, p. 4. Murray Darling Basin Commission, *Water Audit Monitoring Report 1996/97*, pp 2 and 15. The cap for a year is the volume of water that would have been used in that year with the infrastructure (dams, irrigation areas, management rules etc) that existed in 1993–4.

4 Also known as the Living Murray First Step. The participants were Commonwealth \$200 million, NSW and Victoria \$115 million each, South Australia \$65 million, and ACT \$5 million. See Murray Darling Basin Authority, *The Living Murray First Step: frequently asked questions*, www.mdba.gov.au/programs/tlm/faqs (accessed 30 June 2010).

5 Barmah-Millewa Forest, Gunbower-Koondrook-Pericoota Forest, Hattah Lakes, Chowilla Floodplain and Lindsay-Walpolla Islands, the Lower Lakes, Coorong and Murray Mouth, and River Murray channel. Murray Darling Basin Authority, *Fact sheet: the Living Murray Program*, April 2009.

6 Murray Darling Basin Authority [MDBA], *The Living Murray First Step: frequently asked questions*, www.mdba.gov.au/programs/tlm/faqs (accessed 30 June 2010). MDBA, *The Living Murray–Environmental Water Recovery Progress Report*, December 2009. Figures are Long Term Cap Equivalent: that is, water expected to be delivered per year from the suite of entitlements held, taking account of their varying security levels, on average. Actual water delivered in a year will depend on seasonal conditions and allocations against entitlements arising from the rules in water resource plans.

- ensure water is put to best use by encouraging the expansion of water markets and trading; and
- encourage water conservation in cities.⁷

1.16 This was further detailed in the Intergovernmental Agreement on a National Water Initiative (NWI), which COAG agreed on 25 June 2004.⁸ The key elements of the NWI are:

- water access entitlements to generally be defined as open-ended or perpetual access to a share of the water resource that is available for consumption as specified in a water plan;
- improved specification of the environmental outcomes to be achieved;
- overallocated water systems to be returned to sustainable levels of use in order to meet environmental outcomes, with substantial progress by 2010;
- a framework that assigns the risk of future reductions in water availability;
- more efficient administrative arrangements to facilitate water trade in connected systems;
- removal of institutional barriers to trade in water, including a phased removal of barriers to permanent trade out of water irrigation areas in the southern Murray-Darling Basin;
- regional assessments of the level of water intercepted by land use change activities;
- continued implementation of full-cost recovery pricing for water in both urban and rural sectors;
- national standards for water accounting, reporting and metering; and
- actions to better manage the demand for water in urban areas.⁹

Australian Government Water Fund 2004

1.17 On 13 September 2004 the then Prime Minister, the Hon. J. Howard MP, announced a \$2 billion 'Australian Water Fund' (later known as Australian Government Water Fund) to support implementation of the National Water Initiative.¹⁰ Its elements were:

7 COAG communiqué, 29 August 2003.

8 Tasmania joined in 2005 and Western Australia in April 2006.

9 COAG communiqué, 24 June 2004. *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004.

10 Hon. J. Howard, Prime Minister, *A \$2 billion fund to secure Australia's water future*, media release, 13 September 2004. National Water Commission, *Annual Report 2004–2005*, pp 18, 20–21. Department of the Environment and Water Resources, *Annual Report 2006–07*, p. 71.

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- Water Smart Program: \$1.6 billion over five years for competitive grants for projects to improve water use efficiency;¹¹
 - Raising National Water Standards Program: \$200 million over five years to improve water accounting, groundwater assessment, and water efficiency labelling;¹² and
 - Water Wise Communities (later known as Community Water Grants): \$200 million over five years for smaller community water saving projects.¹³

National Water Commission 2005

1.18 As agreed in the 2004 NWI intergovernmental agreement, the National Water Commission (NWC) was established in 2005 to help with the implementation of the agreement and to advise COAG on water issues.¹⁴

1.19 The NWC also administered the Water Smart Program and the Raising National Water Standards Program.¹⁵

National Water Commission's first biennial review, 2007

1.20 The National Water Commission published its first biennial assessment of progress in implementing the National Water Initiative in August 2007, with an update in February 2008. It found that:

- overallocation of water continues to be a challenge;
- the quality of science underpinning water plans 'needs sustained attention and resources';
- progress in rolling out NWI consistent water plans continues to be difficult for governments;
- the connection between surface water and ground water needs to be better known and managed;

11 The period was later extended 2011. From 2005 to the end of 2008-09 about \$1 billion was provided to 75 projects. Department of Environment, Water, Heritage and the Arts, *Annual Report 2008-09*, vol. 1, p. 182. See also www.environment.gov.au/water/policy-programs/water-smart/index.html (accessed 30 June 2010).

12 To 30 June 2009, 148 projects were funded with \$193 million as a contribution to total project value of \$309 million. National Water Commission, *Annual Report 2008-09*, Appendix D.

13 The program ended on 30 June 2008 after funding 7884 projects to a total value of \$283 million. Department of Environment, Water, Heritage and the Arts, *Annual Report 2008-09*, vol. 1, p. 43.

14 See *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004, Appendix C.

15 The Water Smart Program was taken over by the Department of Environment, Water, Heritage and the Arts (DEWHA) in late 2007. National Water Commission, annual reports 2004-05, p. 18, 20-21, 2008-09, p. 49.

- there has been good progress in expanding water trading among the southern Murray-Darling states;
- action to include water intercepting activities such as large scale forestry and farm dams has been neither concerted nor systematic;
- independent audits of environmental outcomes are not yet occurring; and
- there has been good progress on water metering and accounting.¹⁶

National Plan for Water Security 2007

1.21 On 25 January 2007 the then Prime Minister, the Hon. J. Howard MP, announced a National Plan for Water Security in response to the protracted drought and the prospect of long-term climate change. The Commonwealth announced its intention to invest \$10 billion over ten years, with a special focus on the Murray Darling Basin. The Plan included:

- a nationwide investment in Australia's irrigation infrastructure to line and pipe major delivery channels;
- a nationwide programme to improve on-farm irrigation technology and metering;
- the sharing of water savings on a 50:50 basis between irrigators and the Commonwealth government to ensure greater water security and increased environmental flows;
- addressing water over-allocation in the Murray-Darling Basin, including by buying back entitlements;
- a new set of governance arrangements for the Murray-Darling Basin;
- a sustainable cap on surface and groundwater use in the Murray-Darling Basin;
- major engineering works at key sites in the Murray-Darling Basin;
- expanding the role of the Bureau of Meteorology to provide the water data necessary for improved decision making by governments and industry;
- a Taskforce to explore future land and water development in northern Australia; and
- completion of the restoration of the Great Artesian Basin.¹⁷

16 National Water Commission, *National Water Initiative – first biennial assessment of progress in implementation*, August 2007, p. 3. *Update of Progress in Water Reform*, 15 February 2008, p. 3ff.

17 Hon J. Howard MP, Prime Minister *A National Plan for Water Security*, January 2007, p. 1.

The Water Act 2007 and the Basin Plan

1.22 The new governance arrangements envisaged by the National Plan for Water Security involved the Murray-Darling Basin Commission setting a sustainable cap on diversions and accrediting state/territory water plans to ensure they complied with the cap. This would depend on the states/territories referring powers to the Commonwealth under section 51(xxxvii) of the Constitution. New South Wales, Queensland and South Australia agreed to refer powers, but Victoria did not.¹⁸

1.23 The *Water Act 2007* gave effect to key elements of the National Plan for Water Security, relying only on Commonwealth constitutional powers as Victoria had not agreed to refer powers. Key provisions were:

- to establish the Murray-Darling Basin Authority as a statutory authority reporting to a Commonwealth minister;¹⁹
- to establish Basin-wide planning through a Basin Plan to be made by the authority;
- to give a role to the Australian Competition and Consumer Commission (ACCC) in water trading and pricing;
- to give an expanded role to the Bureau of Meteorology in relation to water information and standards; and
- to establish a Commonwealth Environmental Water Holder to manage Commonwealth environmental water holdings.²⁰

1.24 Key elements of the Basin Plan will include:

- sustainable diversion limits (SDLs) to the quantities of surface water and ground water that can be taken from the Basin's water resources. The MDBA has advised that it is likely that the SDLs will be set at a level below the current level of use;
- an environmental watering plan;
- a water quality and salinity management plan;
- water trading rules;
- an assessment of the socio-economic implications of the sustainable diversion limits.²¹

18 Senate Environment, Communications, Information Technology and the Arts Committee, *Water Bill 2007 [provisions]*, report August 2007, p. 5. Hon. J. Howard, Prime Minister, transcript of press conference 24 July 2007.

19 The existing Murray Darling Basin Commission was an executive body reporting to the MDB Ministerial Council as a whole.

20 Senate Environment, Communications, Information Technology and the Arts Committee, *Water Bill 2007 [provisions]*, August 2007, p. 7.

21 Murray Darling Basin Authority, *The Basin Plan: A Concept Statement*, June 2009, p. 7.

Water Amendment Act 2008

1.25 At a COAG meeting on 3 July 2008 the Commonwealth and the basin states agreed a new Intergovernmental Agreement on Murray-Darling Basin Reform. The *Water Amendment Act 2008* gave effect to the agreement. It relies on referral of powers by the states. It provided for:

- transfer of the functions of the Murray-Darling Basin Commission to the new Murray-Darling Basin Authority (the Murray-Darling Basin Commission was abolished);
- increasing the role of the ACCC in advising on water charge and market rules; and
- enabling the Basin Plan to provide for critical human water needs.²²

Water for the Future Program 2008

1.26 On 29 April 2008 the Rudd government (elected in November 2007) announced *Water for the Future*. This is a 10-year, \$12.9 billion program with a number of subprograms including:

- Sustainable Rural Water Use and Infrastructure Program: \$5.8 billion for infrastructure improvements to improve water use efficiency;
- Restoring the Balance in the Murray-Darling Basin Program: \$3.1 billion for purchase of water entitlements for the environment; and
- a number of smaller programs.²³

1.27 According to the Productivity Commission, from the start of the program in 2008 to 31 January 2010 the Commonwealth bought 797 gigalitres of entitlements of varying reliabilities at a cost of about \$1.3 billion.²⁴ According to DEWHA, from the start of the program in 2008 to 28 February 2010 expenditure under *Water for the Future* on water infrastructure for irrigation and other primary industry purposes totalled \$465 million, and expenditure on purchase of water entitlements was \$1079 million.²⁵

22 Senate Rural and Regional Affairs Committee, *Water Amendment Bill 2008 [provision]*, p. 5.

23 Senator the Hon. P. Wong (Minister for Climate Change and Water, 'Water for the Future', speech to the 4th Annual Australian Water Summit, Sydney, 29 April 2008. See also www.environment.gov.au/water/australia/index.html.

24 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray-Darling Basin*, research report March 2010, pp 11–12. The expected average annual allocations against these entitlements is 532 gigalitres.

25 DEWHA, answer to question on notice 4 from hearing 15 December 2009 (received 3 March 2010).

National Water Commission's second biennial review, 2009

1.28 The NWC's second biennial assessment of progress in implementing the NWI was released on 9 October 2009. The NWC found that water trading has been successful and buybacks for the environment are commendable; however:

- overallocation has still not been dealt with;
- 40 per cent of promised water plans are still outstanding;
- barriers to trade are still being imposed by some states;
- irrigators lack clarity for investment decisions; and
- interstate bickering over water continues.²⁶

Guide to the proposed Basin Plan

1.29 The Intergovernmental Agreement on Murray-Darling Basin reform (3 July 2008) provides that the MDBA will make the first 'Basin Plan' in early 2011. A central element of the Basin Plan is to set sustainable diversion limits (SDLs) which local water resource plans will have to comply with. Water resource plans must be consistent with the Basin Plan and accredited by the Commonwealth minister on the advice of the MDBA. It is intended that water resource plans will be made by the states, although they can also be made directly by the MDBA.^{27, 28}

1.30 Existing state water resource plans will be allowed to run their course, which is to 2014 for most plans in South Australia, NSW and Queensland, and to 2019 for most plans in Victoria.²⁹

1.31 Under the *Water Act 2007*, before making the Basin Plan the MDBA must carry out various consultations, including exposing a 'proposed Basin Plan' for at least 16 weeks of public comment.³⁰

1.32 The MDBA published an issues paper on sustainable diversion limits in November 2009 and received 153 submissions in reply.³¹ At that time the MDBA expected to release a proposed Basin Plan for public consultation in mid-2010.

26 National Water Commission, *Australian Water Reform 2009*, overview of key findings and recommendations. Submissions to the assessment are at www.nwc.gov.au/www/html/147-introduction.asp?intSiteID=1.

27 *Water Act 2007*, sections 22(1) item 6, 23, 53(4), 55. MDBA, *Submission 16*, p. 2.

28 There are provisions for negotiation if the MDBA is inclined to recommend that the minister should not accredit a water resource plan proposed by a state, or if the minister is inclined to ask the MDBA to prepare a water resource plan: *Water Act 2007*, sections 63(4), 73.

29 MDBA, *Frequently asked questions*, March 2010, p. 7. See www.mdba.gov.au/files/Frequently-asked-questions-0609.pdf (accessed 30 June 2010). MDBA, *Basin Plan—fact sheet 6—Transitional and interim water resource plans*, May 2010.

30 *Water Act 2007*, section 42.

1.33 On 28 June 2010 the MDBA advised that it would hold an additional stage of consultation before releasing the legally mandated proposed Basin Plan. The extra stage will consist of a 'Guide to the proposed Basin Plan' on which stakeholder comments will be invited. The guide will feature key content of the proposed Basin Plan including:

- proposed Sustainable Diversion Limits on water use;
- environmental watering requirements;
- the minimum supply of water needed to meet critical human water needs;
- water quality and salinity objectives; and
- separate detailed guides for each of the Basin's 19 catchments.³²

1.34 In the 28 June 2010 announcement, the MDBA stated that it expected to release the Guide to the Proposed Basin Plan in August 2010, and the proposed Basin Plan 'later in the year'. The MDBA postponed releasing the guide during the caretaker period of the general election which was called on 17 July and held on 21 August. On 1 September 2010 the MDBA announced that it would release the guide on 8 October. The 1 September announcement did not advise how this delay will affect the timing of release of the proposed Basin Plan.³³

31 MDBA, *Issues Paper—Development of Sustainable Diversion Limits for the Murray-Darling Basin*, November 2009. See www.mdba.gov.au/basin_plan/sdl-submissions.

32 MDBA, *Additional consultation on draft Murray-Darling Basin Plan*, media release 28 June 2010.

33 MDBA, *Release of Guide to draft Basin Plan to be deferred*, media release 20 July 2010. *Guide to draft Basin Plan to be released on 8 October*, media release 1 September 2010

Chapter 2

Views on the general direction of water reform

Summary of views on the direction of water reform

2.1 Most submissions, from both farmer and irrigator groups and environment groups, supported the current direction of water reform based on the *Water Act 2007* and the National Water Initiative – its key elements being:

- the Basin Plan;
- local water resource plans made by state authorities subject to the Basin Plan's sustainable diversion limits; and
- the National Water Initiative principle of tradeable water entitlements.¹

2.2 Submissions generally supported Basin Plan arrangements. Most submissions did not support suggestions sometimes made that the Commonwealth should take over the detailed water planning which is now done by the states. For example:

Irrigators are comfortable with the current state management and water sharing arrangements, and would need a significant amount of convincing that a full Commonwealth takeover is warranted.²

NFF does not support further interventions in water planning management beyond what has been agreed between the Commonwealth and the States.³

2.3 Submissions supporting present arrangements argued that the state authorities' detailed local knowledge would be hard to duplicate at Commonwealth level, and cooperation among the states within the NWI framework will give better results:

We do not always agree with what the state governments do, but they have the corporate knowledge and the understanding and for many years have managed the system. To try to uproot all of that and move it into a Commonwealth sphere would be a huge change to things and not necessarily one for the better.⁴

1 For example, National Irrigators Council, *Submission 4*. Gwydir Valley Irrigators Association, *Submission 7*, pp 5 and 7.

2 National Irrigators Council, *Submission 4*, p. 2.

3 National Farmers Federation, *Submission 23*, p. 4, 12. Similarly Queensland Farmers Federation, *Submission 20*, p. 2. Mr A. Gregson (NSW Irrigators Council), *Committee Hansard*, 18 February 2010, p. 15.

4 Mr D. O'Brien (National Irrigators Council), *Committee Hansard*, 15 December 2010, p. 85. Similarly Mr A Gregson (NSW Irrigators Council), *Committee Hansard*, 18 February 2010, p. 17.

The VFF can't see any benefit or need for additional takeover or referral of powers from the states to the Commonwealth. All that is needed now is more co-operation among all jurisdictions.⁵

2.4 Groups and experts with a predominant environmental focus tended to be more critical of the states' current water management, mostly because of concerns about:

- the slowness in dealing with past overallocation (as noted in the NWC's second biennial assessment);
- whether water planning takes place without adequate scientific knowledge of environmental needs; and
- the regulation of floodplain harvesting.⁶

2.5 Some comments or concerns about particular issues follow:

- concerns about the delay in bringing sustainable diversion limits into operation, as a result of the policy to allow existing state water resource plans to run their course; and
- issues relating to entitlements, such as whether issuing new entitlements should be allowed; or the treatment of 'sleeper' licences in conversion to NWI-compliant entitlements.

Concerns about delay in bringing the Basin Plan into force

2.6 When the Basin Plan is made in 2011, existing state water resources plans will be allowed to run their course, which is until 2014 for most plans in South Australia, NSW and Queensland (involving about 60 per cent of Murray-Darling Basin surface water), and until 2019 for most plans in Victoria (involving about 40 per cent of Murray-Darling Basin surface water).⁷

2.7 There has been some concern that a reduction in diversions (which is expected in line with the MDBA's sustainable diversion limits now under development) is needed more urgently. For example the Australian Floodplain Association submitted that:

5 Victorian Farmers Federation, *Submission 12*, p.2.

6 For example, Nature Conservation Council of NSW, *Submission 9*, p. 3. Australian Floodplain Association, *Submission 14*, p. 1. Inland Rivers Network, *Submission 31*, p. 2. Prof. R. Kingsford (Australian Wetlands and Rivers Centre), *Committee Hansard* 18 February 2010, pp 1–2. National Water Commission, *Australian Water Reform 2009*, overview of key findings and recommendations.

7 Dr F. McLeod (MDBA), *Committee Hansard*, 15 December 2010, pp 69–73. MDBA, *Frequently asked questions*, March 2010, p. 7. See www.mdba.gov.au/files/Frequently-asked-questions-0609.pdf (accessed 30 June 2010).

The Commonwealth Basin Plan should take precedence over the state water resource plans and be enacted before 2014 as the decline in our MDB rivers is occurring at a rapid rate.⁸

2.8 There has also been concern that allowing existing water resource plans to run to 2019 in Victoria (compared with 2014 elsewhere) raises issues of competitive neutrality.⁹ The National Farmers Federation commented on this issue:

NFF understands that there has been some angst over the expiry of the Victorian Plans in 2019 and note that this will be a problem in maintaining competitive neutrality between each State's irrigators. However, it should be well understood that these plans cannot be less consistent with the Basin Plan and the majority of water will be covered by the Basin Plan from 2014.¹⁰

Committee comment

2.9 The committee acknowledges concerns about the delay in bringing sustainable diversion limits into force. However, the committee notes that the provision to respect existing water resource plans until their expiry was a commitment endorsed by Parliament in the *Water Act 2007*. The committee considers that for the security of irrigators and the stability of water reform it is important to maintain the commitment.

Issue of new entitlements and treatment of existing rights

Conversion of water rights to NWI-compliant entitlements

2.10 Rights to take water for consumptive use are controlled by state laws, and have historically taken a number of forms; for example:

- volumetric allocations calculated under a water resource plan;
- various conditions such as threshold to pump conditions (that is, permission to pump when the river reaches a certain height) or related conditions such as maximum rates of take or pump sizes or storages;
- area-based licences;
- authorisation to use approved structures (for example, to take overland flow).¹¹

2.11 Under the National Water Initiative agreement, water rights should be in the form of secure tradeable entitlements separate from land. An entitlement is an ongoing

8 Australian Floodplain Association, *Submission 14*, p. 3. See also discussion at *Committee Hansard*, 15 December 2009, p. 70ff.

9 National Water Commission, *Summary of submissions to SDLs issues paper*, 2010, p. 9.

10 National Farmers Federation, *Submission 23*, p. 7.

11 For example, see Queensland Government, *Submission 28*, p. 9.

share of the consumptive pool of a water resource as determined by a water resource plan. Exceptions are allowable for 'poorly understood and/or less developed water resources, and/or where the access is contingent upon opportunistic allocations, and/or where the access is provided temporarily as part of an adjustment strategy, or where trading may otherwise not be appropriate.'¹²

2.12 The NWI agreement is silent on the question of whether creating new water rights should be controlled in any way. These are matters for state government policy, subject to the NWI commitment to return systems to an environmentally sustainable level of extraction.¹³

2.13 The National Water Commission has noted that implementation of the NWI water access entitlements framework remains slow in some jurisdictions. The Commission considers that NWI-consistent entitlements should be implemented where possible.¹⁴

Whether all existing rights should be converted into NWI-compliant entitlements

2.14 The goal of achieving NWI-compliant entitlements could be achieved by converting present non-compliant rights, or by withdrawing them. Whether any rights should be withdrawn is a matter for state/territory government policy, since under NWI principles the states/territories remain responsible for creating rights to take water.

2.15 Debate over this possibility has occurred, for example, in relation to floodplain harvesting (take of overland flow), particularly in the Lower Balonne. The Lower Balonne is a 'flood-pulse' river', where large floods may be separated by years of low flow. Opportunistic floodplain harvesting is a significant form of water use in that area; it is relatively hard to measure; and it is controversial because past overdevelopment has affected beneficial flooding of downstream floodplains, including the RAMSAR listed Narran Lakes.¹⁵

2.16 The Lower Balonne Floodplain Association argued for a complete abolition of overland flow entitlements.¹⁶ The Australian Floodplain Association argued that 'future planning must target improved overland (floodplain) flow by removing existing structures so they reflect the intention of at least the original cap...'

Governments do not currently have any commitment to do this and instead generally are 'grandfathering' the current infrastructure on floodplains. This potentially just creates another major problem for future governments in the

12 *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004, clause 28ff.

13 *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004, clause 23(iv).

14 National Water Commission, *Submission 25*, pp 2 and 4.

15 RAMSAR: Convention on Wetlands of International Importance, 1971.

16 Lower Balonne Floodplain Association, *Submission 26*, p. 2.

same way that overallocation of rivers in the past has created the problem for present governments.¹⁷

2.17 The Australian Floodplain Association argued that 'if floodplain diversions are to be licenced, they should not be allowed to be traded because of the significant issues about transfer rates.'¹⁸

2.18 The Queensland government advised that water resources plans in the Queensland Murray-Darling Basin establish a cap on diversions and are 'no-growth' plans:

The replacement of existing authorisations with new and better specified entitlements is consistent with the National Water Initiative, and will not increase the amount of water that can be taken for consumptive use.¹⁹

2.19 Queensland is currently implementing a process for converting overland flow authorisations to water access entitlements.²⁰ In the Lower Balonne it is proposed to change rights based on 'existing works' to licences that authorise the amount of overland flow that can be taken. The licences will not be tradeable because they are linked to actual works. The Queensland Government advised that this process will not result in an increased level of allocation.²¹ The Queensland Farmers Federation argued that 'this licensing and management of overland flow take is the most advanced system to be introduced in Australia.'²²

2.20 In NSW, the Gwydir Valley Irrigators Association argued that formal licensing of existing floodplain harvesting 'will lead to a reduction in overland flow extractions, because licencing will give the state the legal ability to enforce the Cap...'

All licencing is doing is formally recognising a legitimate activity, in keeping with the requirements of the NWI and the *Water Management Act 2000*.²³

2.21 Similarly the NSW Irrigators Council said:

This form of irrigation water harvesting has underpinned production in large parts of the state for many years, is a recognised part of the resource set and is best managed at a macro-level with the issue of permanent licenses.²⁴

17 Australian Floodplain Association. *Submission 14*, p. 1.

18 Australian Floodplain Association, *Submission 14*, p. 2.

19 Queensland Government, *Submission 28*, p. 3.

20 National Water Commission, *Submission 25*, p. 6.

21 Queensland Government, *Submission 28*, p. 4.

22 Queensland Farmers Federation, *Submission 20*, p. 4.

23 Gwydir Valley Irrigators Association, *Submission 7*, p. 7.

24 NSW Irrigators Council, *Submission 11*, p. 5.

Treatment of sleeper licences

2.22 The treatment of 'sleeper' licences (unused rights) is a particular instance of the debate over whether all existing rights should be converted into NWI-compliant entitlements. There has long been debate over whether sleepers should be treated equally with active rights during the conversion to NWI-compliant entitlements. An issue is that when converted to tradeable entitlements, sleepers are likely to be traded and brought into use, which could increase extractions (or reduce reliability for other water users, if total extractions are capped by the relevant water resource plan). An alternative would be to withdraw the right on a 'use it or lose it' principle.

2.23 Some stakeholders argued that government should retain the right to cancel sleepers if necessary to meet the needs of the environment. For example the Australian Wetlands and Rivers Centre said:

Sleeper licences may be activated through commitment to trade under the National Water Initiative, but if deemed unacceptable there needs to be commitment to cancellation (e.g. Cooper Creek, Queensland).²⁵

2.24 On the other hand irrigators' interest groups mostly argued that sleepers are property with value that should be respected:

A licence is a licence and therefore a property right which needs to be recognised as such. The fact that a licence has not been activated should not diminish the value or right that this licence possesses. Treating them differently is to discriminate against them.²⁶

2.25 The National Water Commission submitted that treating sleepers in a discriminatory way sets an 'undesirable precedent' against the principle of secure title:

We as a commission think that a really important principle is security of licences, including sleeper licences. If there is an arbitrary change to licences which are otherwise described as sleeper licences, that sets an undesirable precedent.²⁷

2.26 For example, in the case of the Queensland Murray-Darling Basin, the Queensland government advised that sleeper licences are treated equally with active licences. An exception is the Condamine Balonne water resource plan, which treats sleepers differently by converting them to entitlements at a reduced volume, and imposing high flow conditions compared with active licences. Queensland

25 Australian Wetlands and Rivers Centre, *Submission 22*, p. 3. Similarly Australian Floodplain Association, *Submission 14*, p. 1. Dr B. Morrish (Coopers Creek Protection Group), *Committee Hansard*, 15 December 2009, p. 14.

26 NSW Irrigators Council, answer to question on notice 6 from hearing 18 February 2010 (received 10 March 2010).

27 Mr K. Matthews (National Water Commission), *Committee Hansard*, 15 December 2009, p. 38. Similarly Mr R. James (DEWHA), *Committee Hansard*, 15 December 2009, p. 50.

government officials explained that 'the activation of these entitlements has been accounted for in the hydrologic modelling for each valley.'²⁸

2.27 Agforce Queensland submitted that 'sleeper licences [in the Queensland Murray-Darling Basin] have been recognised by the Queensland Government in line with the objectives and requirements of the National Water Initiative.'²⁹

2.28 In the context of the discussion of sleepers, several submissions raised concerns about possible inappropriate development of water resources of the Lake Eyre Basin. For example, the Cooper's Creek Protection Group said:

The [National Water Initiative] trading requirement is counterproductive if applied to rivers such as the Lake Eyre Basin rivers where irrigation is inappropriate. In Cooper's Creek, for example, application of water trading would force the activation of unused "sleeper" entitlements and thus have an ecologically undesirable effect.³⁰

2.29 In relation to sleeper licences on Cooper Creek, the Queensland Government advised that:

We are going through a water resource planning review process. ... At this stage we are still awaiting advice from our minister on how he would like to see them dealt with.³¹

2.30 The Lake Eyre Basin, not being part of the Murray-Darling Basin, will not be covered by the Basin Plan. However it is the subject of the Lake Eyre Basin Intergovernment Agreement agreed by the Commonwealth, Queensland, South Australian and Northern Territory Governments. The Agreement aims to manage water and related natural resources to avoid adverse cross-border impacts. The Lake Eyre Basin Ministerial Forum, which is responsible for implementing the agreement, has agreed a policy that water resource development proposals in the basin will be assessed to determine their potential impact on river flows and water quality, and will be based on the best available scientific information and local knowledge.³²

28 Queensland Government, *Submission 28*, p. 4. See also Mr T. Crothers (Queensland Department of Environment and Resource Management), *Committee Hansard*, 15 December 2009, p. 18.

29 Agforce Queensland, *Submission 17*, p. 3. See also Queensland Farmers Federation, *Submission 20*, p. 3.

30 Cooper's Creek Protection Group, *Submission 8*, p. 2. Similarly J. Osborne, *Submission 5*; Australian Wetlands and Rivers Centre, *Submission 22*, p. 3; Prof. R. Kingsford (Australian Wetlands and Rivers Centre), *Committee Hansard* 18 February 2010, p. 9.

31 Mr T. Crothers (Queensland Department of Environment and Resource Management), *Committee Hansard* 15 December 2009, p. 23.

32 *Lake Eyre Basin Intergovernment Agreement*, 2000, clause 2.1. DEWHA, *Submission 21*, p. 9.

Committee comment

2.31 The committee agrees that the important National Water Initiative principle of secure property rights in water should be respected. The environmental effects of this, for example resulting from activation of sleepers, should be handled by the water planning process subject to sustainable diversion limits, not by discriminating against sleepers. In the committee's view it is fundamentally important to maintain public trust in the underpinning principles of the National Water Initiative.

2.32 In relation to concerns about possible activation of sleeper licences in the Lake Eyre Basin, the committee notes that this area will not be covered by the Murray-Darling Basin Plan. The committee urges the Lake Eyre Basin states to plan the water resources of the Lake Eyre Basin according to the same principles of sustainability as are being applied in the Murray-Darling Basin.

Whether issuing new water rights should be allowed

2.33 The committee was advised that in fact there is now little or no issuing of new water rights in the Murray-Darling Basin. The National Farmers Federation stated:

In most water plan areas, the granting of additional water entitlements is now embargoed. It is only low development catchments such as the Paroo that Governments have retained the right to issue new entitlements.³³

2.34 The Queensland Government advised that there has been a moratorium on the issuing of new water licences in the Queensland Murray-Darling Basin since 1995 and a moratorium on new overland flow diversions since 2001. Since then controls have limited the issuing of additional entitlements or the construction of new overland flow capture structures.³⁴

2.35 New South Wales has drafted a policy for floodplain harvesting that will require all floodplain harvesting activities to be licensed, and subjected to volume limits. Furthermore, no new licences will be issued to existing licence holders.³⁵

2.36 However the question of principle remains whether the states should be able to issue new water rights. Submissions that mentioned this point mostly argued that the right of the states to issue new rights should be respected, providing it is done consistently with the NWI principle of bringing systems back to an environmentally sustainable level of extraction, and the Water Act principle that water resource plans must be consistent with the sustainable diversion limits of the Basin Plan.

33 National Farmers Federation, *Submission 23*, p. 5. Similarly Mr R. Anderson (Victorian Farmers Federation), *Committee Hansard*, 18 February 2010, p. 79.

34 Queensland Government, *Submission 28*, p. 3. Mr G. Claydon (Queensland Department of Environment and Resource Management), *Committee Hansard*, 15 December 2009, p. 20.

35 National Water Commission, *Submission 25*, p. 6.

2.37 For example, the NSW Irrigators Council submitted:

A decision to issue new licenses in any system ought be based on best-available science to show that the system has not reached its sustainable extraction limit or must be done on the basis of underpinning existing legal practice with a property right... [L]icenses ought be issued to reflect existing and long-term legal practice to then enable the suite of extraction reduction policies currently in position (all of which are based on property rights in existence), including the Basin Plan, to reduce extraction to sustainable levels.³⁶

2.38 The Department of the Environment, Water, Heritage and the Arts (DEWHA³⁷) argued that the core concern is not the number of rights on issue, but the principle that consumptive use is limited by a water resource plan consistent with the sustainable diversion limits of the Basin Plan:

If we are living in a world where entitlements progressively are being issued on the basis of a share of what is available, in a sense it does not matter how many entitlements are issued provided the consumptive pool is still as it was intended in the plan and the environment's pool is not undermined by the issuing of more entitlements. Those are the key things.³⁸

2.39 This raises the possibility that the Commonwealth may buy entitlements for environmental flows at the same time as a state issues new rights (although, as noted above, in fact there is now little or no issuing of new rights in the Murray Darling Basin). The Gwydir Valley Irrigators Association commented on this possibility:

To the uninformed, it may not appear to make sense, for the Commonwealth to be seen to be purchasing licenses in a jurisdiction with the aim of increasing the environment's share, while at the same time the jurisdiction is issuing new extractive use licenses.

However, if those new licenses are being issued in accordance with the Cap then it is part of the process to ensure all jurisdictions are entering this new phase of Commonwealth involvement in water purchases with a level playing field (at least in terms of licencing)...

What would not be legitimate is for the Commonwealth to prevent the State from issuing these licenses, which recognise long standing and legal water extraction, properly accounted for under the Murray-Darling Basin Cap... [T]he proper and legal issuing of entitlements is absolutely critical to the long term success of coordinated Basin water resource management.³⁹

36 NSW Irrigators Council, *Submission 11*, p. 6.

37 In new administrative arrangements following the general election on 21 August 2010, DEWHA was renamed Department of Sustainability, Environment, Water, Population and Communities.

38 Mr R. James (DEWHA), *Committee Hansard*, 15 December 2009, p. 48.

39 Gwydir Valley Irrigators Association, *Submission 7*, p. 9–10.

Committee comment

2.40 The committee notes that under the National Water Initiative issuing water rights remains a state responsibility. The core principle is that water use should reflect environmentally sustainable levels of extraction and in future comply with the sustainable diversion limits of the Basin Plan. Providing this is achieved there is no reason of principle why issuing new rights should be generally forbidden. In practice the demands of achieving environmentally sustainable levels of extraction may well prevent issuing new rights in overused or overallocated systems, as it should. The committee does believe that the Commonwealth should closely monitor any such decisions, especially to avoid any conflict with Commonwealth sustainability, infrastructure or water buyback activities.

Chapter 3

Water buybacks and infrastructure investment

3.1 The major elements of the Commonwealth's ten-year Water for the Future program commence in 2008 are:

- \$3.1 billion for purchase of water entitlements for the environment (Restoring the Balance in the Murray-Darling Basin Program); and
- \$5.8 billion for infrastructure improvements to improve water use efficiency (Sustainable Rural Water Use and Infrastructure Program).

3.2 A summary of the programs follows, and issues arising are considered further below, including:

- the balance between buybacks and infrastructure investment to recover water for the environment;
- the regional impacts of buybacks and trade out, and the problem of stranded assets; and
- need for a more efficient and transparent water market.

Government purchase of water entitlements for the environment

3.3 Recovering water for environmental purposes has in the past been largely achieved through administrative reallocations under state water plans, or by increasing water efficiency through upgrades to delivery and (more recently) on-farm infrastructure. These mechanisms are now being overlaid with purchases of water entitlements mainly by the Commonwealth and to a lesser extent by some Basin states.¹

3.4 The Restoring the Balance program is the main buyback operation currently operating in the Murray-Darling Basin. The program is focused on the purchase of entitlements. Since the start of the program in 2008 the expected timing of expenditure has been brought forward significantly, as outlined in Table 1.

1 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray-Darling Basin*, issues paper, August 2009, p. 3.

Table 1—Budgeted expenditure for Restoring the Balance program

Financial year	Budgeted expenditure original (\$ million)	Budgeted expenditure revised (\$ million)
2007–08	50	45.5
2008–09	157	432.5
2009–10	466	1 237.8
2010–11	468	254.4
2011–12	346	249.5
2012–13	n/a	510.5
2012–13 to 2016–17	1633	n/a
2013–14 to 2016–17	n/a	369.8

source: Productivity Commission, *Market Mechanisms for Recovering Water in the Murray-Darling Basin*, research report, March 2010, p. 5.

3.5 From the commencement of the Restoring the Balance program in 2008 to 31 January 2010 the Commonwealth has purchased 797 gigalitres of entitlements of varying reliabilities at a cost of about \$1.3 billion.²

3.6 In addition to the Restoring the Balance program, the Commonwealth has been purchasing water through an open tender process operated by the MDBA to meet earlier commitments to the Living Murray Initiative. Some of the Basin states have also been or are still actively purchasing entitlements—one example being NSW's Riverbank program.³

Government assistance for infrastructure improvements

3.7 The \$5.8 billion Sustainable Rural Water Use and Infrastructure Program funds rural water projects to save water by infrastructure improvements. Components include:

- State priority projects: in the Intergovernmental Agreement on Murray-Darling Basin Reform (3 July 2008), the Commonwealth committed up to \$3.7 billion for state priority projects in the basin states, subject to due diligence;

2 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, March 2010, p. 9.

3 See Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, research report, March 2010, p. 29ff. NSW RiverBank is a \$105 million environmental fund set up by the NSW Government to buy water for the state's most stressed and valued inland rivers and wetlands for five years up until 2011: see www.environment.nsw.gov.au/environmentalwater/index.htm.

- On-Farm Irrigation Efficiency program: up to \$300 million to assist irrigators in the Lachlan and southern connected system to modernise on-farm irrigation infrastructure;
- Private Irrigator Infrastructure Operator Program in New South Wales: up to \$650 million to assist private irrigation infrastructure operators to modernise and upgrade irrigation infrastructure;
- Private Irrigator Infrastructure Operator Program in South Australia: up to \$110 million to fund irrigation infrastructure efficiency improvements;
- Menindee Lakes and Aquifer Recharge: up to \$400 million to reduce evaporation and improve water efficiency at Menindee Lakes to secure Broken Hill's water supply and return up to 200 gigalitres a year to the environment; and
- Water Meter Test Facility Upgrading and Accreditation: a \$600 million program to improve water metering and monitoring in the Murray-Darling Basin; and
- Irrigation Modernisation Planning Assistance: up to \$2 million to help irrigation water providers develop modernisation plans for their districts.⁴

3.8 The planned timing of expenditure under the Sustainable Rural Water Use and Infrastructure Program is shown in Table 2:

Table 2—Budgeted expenditure for Sustainable Rural Water Use and Infrastructure Program

Financial year	as shown in 2009–10 Budget (\$ million)	as shown in 2010–11 Budget (\$ million)
2008–09	92	
2009–10	575	230
2010–11	539	706
2011–12	828	868
2012–13	1217	900
2013–14		732

source: DEWHA Portfolio Budget Statements 2009–10, p. 63; 2010–11 p. 59.

The balance between water buybacks and infrastructure improvement

3.9 From the commencement of the Water for the Future program in 2008 to 28 February 2010, expenditure on the buyback component was \$1079 million, and

4 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, research report, March 2010, p. 13–14. DEWHA, *Water for the Future - Irrigation Modernisation Planning Assistance*, fact sheet May 2010. DEWHA, 'Irrigation' at www.environment.gov.au/water/topics/irrigation.html (accessed 20 September 2010).

expenditure on water infrastructure for irrigation and other primary industry purposes was \$465 million.⁵

3.10 Irrigator groups generally submitted that they would prefer a greater emphasis on infrastructure improvements, and are concerned that spending on infrastructure has lagged behind spending on buybacks. For example:

NFF's concern in this regard is a balancing of [the acquisition of water entitlements] with the \$5.8 billion Rural Water Infrastructure package, with much of the latter held up in negotiations with the states and development of project plans. NFF supports an acceleration of the infrastructure package as this delivers more widespread and improved social, economic and environmental outcomes throughout the Basin.⁶

We would prefer that Commonwealth acquisition of water were done by infrastructure programs; that is our first preference. Our second preference is that infrastructure and purchase programs run contemporaneously... We recognise that infrastructure programs take a bit longer to roll out but they do really need to be on the ground now.⁷

3.11 There was some frustration at the 'long gestation' of the state priority projects foreshadowed in the 2008 Intergovernmental Agreement on Murray-Darling Basin Reform.⁸ For example, the NSW Irrigators Association noted that the Commonwealth has allocated up to \$400 million to improve the efficiency of the Menindee Lakes storage (which suffers from high evaporation), but:

We have been frustrated that the money set aside to do something to improve the efficiency of the Menindee Lakes system is still sitting aside and nothing as yet has been done.⁹

3.12 Mr Anderson of the Victorian Farmers Federation suggested that there should be priority to on-farm works, since in that way 'you should find out who is serious about staying in irrigated agriculture and then build state-of-the-art delivery systems

5 DEWHA, answer to question on notice 4 from hearing 15 December 2009 (received 3 March 2010). The discrepancy between these figures and the budgeted figures in table 1 (2007-8 to 2009-10) presumably arises because of underspending, and/or because the figures quoted here do not complete the 2009-10 financial year.

6 National Farmers Federation, *Submission 23*, p. 12. Similarly Mrs D. Kerr (NFF), *Committee Hansard*, 15 December 2009, p. 64; Victorian Farmers Federation, *Submission 12*, p. 6; Riverina and Murray Regional Organisation of Councils, *Submission 15*, p. 3.

7 Mr A. Gregson (NSW Irrigators Council), *Committee Hansard*, 18 February 2010, p. 16.

8 Mr L. Arthur (National Farmers Federation), *Committee Hansard*, 15 December 2009, p. 64.

9 Mr A. Gregson (NSW Irrigators Council), *Committee Hansard* 18 February 2010, p. 23. The commitment of \$400 was a 2007 election commitment of the present government: Hon A. Albanese MP, *Labor's plan to invest \$400 million in water infrastructure at Menindee Lakes*, media statement 20 November 2007. See also www.environment.gov.au/water/policy-programs/srwui/menindee-lakes/index.html (accessed 1 July 2010).

to deliver to them.¹⁰ Mr Rooney of Waterfind (a water trading broker), argued that there should be more emphasis on helping irrigation communities adjust to a lower water environment:

Our approach to this at the moment is, 'We'll buy your water from you and, in the instance of a small block irrigator grant, you can't even use your property for five years,' rather than programs designed to help, for instance, an irrigator live with a lower water entitlement or a lower water allocation.¹¹

3.13 Some submitters were concerned about references to buybacks from 'willing sellers', on the grounds that in present conditions many sellers are more distressed than willing.¹² On the other hand the National Water Commission, in a recent review of water trading, argued that:

...while water trading is sometimes undertaken by individuals facing difficult circumstances, it is entered into voluntarily... This suggests that water trading is likely to be financially beneficial to both parties, provided that they make trading decisions that are in their own best interests.¹³

3.14 The alternative view on the appropriate balance of buybacks and infrastructure improvement, is that water can usually be recovered for the environment more economically by buying it directly from entitlement-holders. This allows sellers to decide the best way to allocate available funds, including infrastructure improvements to make better use of their remaining water.¹⁴

3.15 For example, Prof. Young argued that 'the type of investment being made at the moment in infrastructure...is very, very expensive'; on the other hand, the contraction of rural economies resulting from buybacks (which appears to be the main reason why rural interest groups prefer infrastructure investment) would be less than is often feared:

The research that is being done around this shows that the economic impacts would be much less than people think and there would be massive reinvestment back into the basin and into the community because of the amount of money that would be injected into each area.¹⁵

10 Mr R. Anderson (Victorian Farmers Federation), *Committee Hansard*, 18 February 2010, p. 80.

11 Mr T. Rooney (Waterfind), *Committee Hansard*, 21 June 2010, p. 40.

12 Murray Valley Water Diverters Advisory Association, *Submission 2*, p. 2. Mr R. Stubbs (Riverina and Murray Regional Organisation of Councils), *Committee Hansard*, 18 February 2010, p. 41. Mr R. Lake, *Committee Hansard*, 21 June 2010, p. 27.

13 National Water Commission, *The impacts of water trading in the southern Murray-Darling Basin*, June 2010, p. 7.

14 Ms B. Smiles (Inland Rivers Network), *Committee Hansard*, 21 June 2010, p. 5.

15 Prof. M. Young, *Committee Hansard*, 18 February 2010, p. 20.

3.16 Similarly, in March 2010 the Productivity Commission argued that 'subsidising infrastructure is rarely cost-effective in obtaining water for the environment':

Purchasing water from willing sellers (at appropriate prices) is a cost-effective way of meeting the Government's liability for policy-induced changes in water availability. Subsidising infrastructure is rarely cost effective in obtaining water for the environment, nor is it likely to be the best way of sustaining irrigation communities.¹⁶

3.17 However, the Productivity Commission also noted that 'the case for subsidising a particular irrigation infrastructure project would be stronger where it provided external benefits':

For example, reducing leakages from distribution systems can decrease waterlogging and land salinisation problems for unrelated third parties. But these projects can also decrease return flows that otherwise might benefit downstream users, or increase downstream salinity, hence the net impacts would need to be considered on a case-by-case basis.¹⁷

3.18 The government has indicated that it does not agree that infrastructure investment should be de-prioritised:

The Rudd government agrees that water purchase is the fastest way to improve the health of our rivers... But we don't agree that infrastructure investment should be de-prioritised. It is equally important to invest in infrastructure to shore up the long term viability of our food producing communities and sustain the regions—particularly in the face of a future with less water.¹⁸

Regional impacts of buybacks and trade out

3.19 Several submissions argued that the regional socio-economic effects of buybacks need to be considered:

There is no information regarding the socio-economic impact of diverting additional water to environmental flows. As national water reforms are rolled out, the socio-economic impact on communities must be measured and publicly reported...¹⁹

3.20 The National Water Commission (NWC) recently reviewed the impact of water trading in the southern Murray-Darling Basin and found that:

16 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, research report, March 2010, p. xxii.

17 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, research report, March 2010, p. xxxiv.

18 Hon. P. Wong, Minister for Climate Change, Energy Efficiency and Water, *Productivity Commission Report*, media release 31 March 2010.

19 Victorian Farmers Federation, *Submission 12*, p.7.

...reduced regional water use does not lead to a proportional reduction in the value of agricultural production—because water is moving to those who value it most...

Comparisons of trade patterns and key socioeconomic indicators revealed no discernible link between patterns of water trading in or out of a region and changes in population, employment in agriculture or weekly household income. Instead, it was found that observed trends in those indicators were similar across regions regardless of their water trading history. For example, employment in agriculture fell in all regions, regardless of whether those regions were net purchasers or sellers of water.²⁰

3.21 A recent paper by the Wentworth Group of Concerned Scientists suggested that the current buyback and infrastructure programs should be rolled into one, to be used for buybacks or infrastructure according to which is most cost-effective, case by case. This would yield savings that could be used for structural adjustment assistance to the affected communities as a whole, not only to irrigation farmers as at present.²¹

3.22 The Minister for Sustainability, Environment, Water, Population and Communities, the Hon Tony Burke MP, recently highlighted the importance to regional communities of the Basin Plan consultation process:

None of this adjustment [to a long-term healthy river system] is easy. We are talking about a situation where up and down the Murray-Darling Basin there has been over-allocation and we need to be able to adjust to have a long-term healthy river. We need to be able to do that in a way that pays respect to the importance of environmental flows, to the importance of food production, and to the importance of the future of regional communities...

The guide to the draft plan that is released on 8 October [2010] is put together by the [Murray Darling Basin] Authority, not by myself. But I will be doing everything I can to encourage people up and down the basin—those who are concerned about what sort of adjustment comes through and about where we end up in terms of sustainable diversion limits—to make sure that they do participate in that, because we want to make sure that we end up getting the balance right.²²

Committee comment

3.23 While infrastructure investment can at times be more costly than market purchases of water, it can also deliver wider community benefits by maintaining a viable irrigation sector to support a town or community. The beneficiaries of water

20 National Water Commission, *The impacts of water trading in the southern Murray-Darling Basin—an economic, social and environmental assessment*, June 2010, p. vii.

21 Wentworth Group of Concerned Scientists, *Sustainable Diversions in the Murray-Darling Basin—an analysis of the options for achieving a sustainable diversion limit in the Murray-Darling Basin*, June 2010, p. 5.

22 The Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, House of Representatives *Proof Hansard*, 30 September 2010, p. 58.

buybacks are those that hold water licences. However, those whose economic investments and livelihoods rely on the economic health of the irrigation community do not receive direct compensation. Investing to make irrigation more efficient can be a way both to save water for the environment and underpin the economic base of an entire community. In such instances, paying a premium for infrastructure investments may be justified by these wider benefits.

3.24 That said, such community benefits could be delivered in other ways. For example, in some communities economic activities other than irrigation may provide a more sustainable base. A wider structural adjustment package, which had a focus beyond just investment irrigation infrastructure, could target these opportunities.

Problem of stranded assets and structural adjustment

3.25 The problem of 'stranded assets' refers to assets, such as water delivery channels, which have fixed maintenance costs that may become unsupportable if the number of end users served by them falls below a certain point.

3.26 Some submissions were concerned that buybacks risk leaving assets stranded, and are not well targeted to minimise adjustment costs. For example:

The [buyback] program...represents an unmanaged "swiss cheese" approach, with potential to leave lots of stranded assets.²³

Four pump districts averaged 750 properties in each district, and all of a sudden you only have 350 properties, which might be owned by only 100 people... A hundred people cannot sustain what 750 used to.²⁴

3.27 The Victorian Farmers Federation argued that buybacks should be designed so as to reduce structural adjustment costs:

The VFF have always supported a planned approach to buyback (targeted buyback) as opposed to a 'shotgun' method of simply buying individual water entitlements with no overall vision for the future of irrigation and regional communities.²⁵

3.28 This problem of stranded assets was the reason for the restrictions on permanent trade out of irrigation areas accepted in the National Water Initiative (the four per cent annual cap).²⁶ However the National Water Commission argued that:

23 Riverina and Murray Regional Organisation of Council, *Submission 15*, p. 2. Similarly Murray Valley Water Diversers Advisory Association, *Submission 2*, p. 2.

24 Mr R. Lake, *Committee Hansard*, 21 June 2010, p. 28.

25 Victorian Farmers Federation, *Submission 12*, p. 7.

26 The agreement included 'to review the impact of trade under the interim [four per cent annual limit] threshold in 2009, with a view to raising the threshold to a higher level if considered appropriate': *Intergovernmental Agreement on a National Water Initiative*, 25 June 2004, clause 63(vii).

...interregional entitlement trade restrictions are no longer necessary to manage potential stranded assets...

Unbundling of water access entitlements and delivery rights, combined with the potential application of termination fees, provides a fair and effective mechanism to manage potential stranded assets resulting from water trading.²⁷

3.29 The Nature Conservation Council of NSW noted that a patchwork effect is to some extent inevitable if buybacks are voluntary:

It has to be patchy if you depend on volunteers doing it. In the longer term it would be much better to be able to develop a bit of a consistent plan where you might encourage targeted invitations to sell, in order to manage the system better.²⁸

The four per cent annual cap on trade out of irrigation areas

3.30 In 2009, the Commonwealth and Victoria agreed to begin phasing out the four per cent annual limit on inter-district entitlement trades from July 2011, with a view to removing the limit entirely by 2014. The agreement also allows exemptions to the four per cent limit to enable the Commonwealth buyback program to purchase up to 300 GL of additional water entitlements over five years, subject to certain conditions. A similar bilateral agreement between NSW and the Commonwealth was also completed.

3.31 Despite these agreements, there is still debate about the four per cent limit and other artificial trade barriers. The ACCC's (2009) draft advice on water trading rules and the Productivity Commission's Research Report on market mechanisms for recovering water in the Murray–Darling Basin both recently recommended the immediate removal of the four per cent limit. The committee notes that the South Australian Government has filed a constitutional challenge in the High Court against Victoria's implementation of the limit.

3.32 In its 2009 biennial assessment of progress in the implementation of the NWI, the National Water Commission (NWC) also recommended the coordinated removal of all barriers to trading, including the four per cent cap.²⁹

3.33 In a recent report the NWC noted that the cap increasingly constrained buyers and sellers, particularly from 2007–08:

27 National Water Commission, *The impacts of water trading in the southern Murray-Darling Basin—an economic, social and environmental assessment*, June 2010, p. vii.

28 Ms A. Reeves (Nature Conservation Council of NSW), *Committee Hansard*, 18 February 2010, p. 56.

29 National Water Commission, *The Impacts of Water Trading in the Southern Murray-Darling Basin*, June 2010, pp 2–3.

Such restrictions create uncertainty and are costly to buyers and sellers. They prevent prospective sellers from alleviating financial pressures or exiting the industry.³⁰

3.34 In this inquiry, submitters who mentioned this matter supported the cap. The Victorian Farmers Federation submitted that 'the four per cent cap on trade from a water district is essential in preventing large scale and significant social and economic dislocation of rural communities...'

The reduced allocations of recent years have already caused significant economic impacts on rural communities. Allowing unfettered trade at this time would result in unintended and significant negative consequences for the sustainability of many rural communities. This is exacerbated by the Federal Government's decisions to speed up a water buy back.³¹

Need for more transparency about buybacks

3.35 Several submissions argued that there should be more transparency about Commonwealth buybacks. For example, the Victorian Farmers Federation said:

The transparency of water buybacks has not been adequate and is adding to the level of uncertainty in rural communities.³²

3.36 Mr Rooney of Waterfind argued that more transparency is needed to reduce concern about potential conflict of interest in that 'the body that is responsible to provide transparency in the marketplace is also the body which is supplying information to the federal government in relation to what they should be paying for entitlements':

This year, the federal government is not providing information about the quantity of submissions which are being received or the volumes of water actually acquired in each particular pricing round. So our key points there would be that there is a need for greater transparency in relation to the buybacks which are occurring and the elimination of some of those potential conflicts of interest.³³

Committee comment

3.37 The committee agrees with the predominant view in submissions that both buybacks and infrastructure improvements have a place in recovering water for the environment. Infrastructure improvements are considered necessary by rural communities, and in the committee's view are important to secure their economic and social future. The committee is concerned about the delay in delivering results from

30 National Water Commission, *The impacts of water trading in the southern Murray-Darling Basin*, June 2010, p. 35.

31 Victorian Farmers Federation, *Submission 12*, pp 5 and 8.

32 Victorian Farmers Federation, *Submission 12*, p. 9.

33 Mr T. Rooney (Waterfind), *Committee Hansard*, 21 June 2010, p. 33–34.

the Commonwealth's infrastructure program (the Menindee Lakes project is a prime example).³⁴

3.38 However infrastructure projects should be subject to orderly prioritising including due diligence, and delivery against clear timeframes. The committee recommends that there should be better reporting of their outcomes.

Recommendation 1

3.39 The government should prepare an annual report of the Sustainable Rural Water Use and Infrastructure Program, detailing projects completed, in progress and planned, including for each project information on costs and timelines, water savings, and the share of water savings dedicated to the environment, extractive uses or other purposes.

3.40 The committee agrees with suggestions that it is important to monitor the regional socio-economic impacts of buybacks and trade out.

Recommendation 2

3.41 The government should commit to making community impact statements for Commonwealth water purchases from each sub region of the Murray Darling Basin.

3.42 The committee is concerned that there has been no financial support provided to affected communities beyond payments to water holders. Economic contraction resulting from less water use flows through to the whole community. The committee considers that a structural adjustment package is necessary to help communities adjust to reduced availability of water.

Recommendation 3

3.43 The Commonwealth should fund a structural adjustment package, based on the needs identified by community impact statements, for communities affected by reduced water availability resulting from the Commonwealth's water buyback program.

3.44 The committee agrees with stakeholders' concerns that there needs to be full transparency of the details of Commonwealth water purchases. Issues raised by stakeholders in this context included:

- the need for full disclosure of details including price, volume, security, location and where applicable any subsequent changes in land use; and
- a real time or live exchange disclosing irrigation region, latest sale and value, bid and offer and price per megalitre.

34 See paragraph 3.11.

3.45 The committee recommends below that the Commonwealth with the states and territories should give priority to developing a more efficient and transparent water market (see paragraph 3.56).

Need for a more efficient and transparent water market

3.46 Most trading in Australia's water markets is facilitated by intermediaries, who include water brokers, water exchanges and lawyers. Water market intermediaries match willing buyers and sellers and offer transaction and information services. The activities of water market intermediaries are currently unregulated, so there are no barriers to entry into the intermediary market. This also means that the number and activity of intermediaries are not reported.³⁵

3.47 Some submitters and witnesses argued for a more transparent, more efficient water market. For example:

The market operations appear to be relatively inefficient with considerable time required for trade of water to be completed.³⁶

Trade in entitlements (apart from the Commonwealth's acquisitions) [is] historically and now very thin. Development of appropriate systems that facilitate electronic and shorter trade timeframes is supported. NFF supports the COAG agreed maximum timeframes for temporary trade but encourages jurisdictions to facilitate similar maximum timeframes for entitlement trade.³⁷

At the moment information about water markets and water trading arrangements is still very hard to obtain and the Commonwealth, in the way it is purchasing water, is really behaving like a monopoly purchaser and is not making information available about what it is doing in a timely manner. There are big delays between when it agrees to purchase water and when people find out what prices it is paying. It can do that because it is a monopolist almost in the purchase of entitlements at the moment. One would not expect the Commonwealth to be exploiting that opportunity in the way it is.³⁸

3.48 It was argued that lack of clear market information will encourage risk-takers over efficient farmers:

Unless we have a cluster of information or, if you like, a data room from which everyone can draw... we are never going to have an efficient market. So this medium of exchange that we have created—water right, or water share as I prefer to call it—is currently being dealt with in a dysfunctional marketplace. That is really dangerous because it will only find its way to

35 National Water Commission, *Australian Water Markets Report 2008–09*, p. 19.

36 Victorian Farmers Federation, *Submission 12*, p. 8.

37 National Farmers Federation, *Submission 23*, p. 12.

38 Prof. M. Young, *Committee Hansard*, 18 February 2010, pp 26–27.

the biggest risk-takers and the deepest pockets. It will not find its way to the most efficient farmers or the most efficient farm output.³⁹

3.49 Some submitters and witnesses argued that brokers should be licensed. For example, the Victorian Farmers Federation said:

A national brokering system including registration of brokers and, at minimum, codes of practice are necessary to ensure markets operate effectively and fairly.⁴⁰

3.50 Waterfind (a water broker) gave suggestions for the types of matters that should be regulated: for example, intermediaries should be obliged to operate through a trust account; intermediaries should be forbidden to buy or sell on their own behalf; and intermediaries should be obliged to carry professional indemnity insurance.⁴¹

3.51 Waterfind argued further that the relevant government agencies should only be able to accept transactions from licensed intermediaries, and that this requirement would create more transparency:

One of the issues with transparency of trading in the water market is the delays in settlement times between entering a transaction and settling a transaction.... The settlement time frame differences in the water market might be anywhere between a few days to nine months, depending on the type of transaction and the complexity of the transaction. We believe that, through requiring all transactions to occur through a licensed water market intermediary, there could be reporting functions which that intermediary needs to do to a centralised agency which could create greater transparency in relation to the market place. Participants in that water market could then see the contracted prices which are actually occurring for that particular day.⁴²

3.52 Waterfind argued further that there is potential for conflict of interest where the market regulator is also a player, and there should be clearer separation of responsibilities.⁴³

Committee comment

3.53 The committee agrees with the principles of water trade established in the National Water Initiative. The National Water Commission's recent study shows that water markets and trading are making a major contribution to achieving the NWI objective of optimising the economic, social and environmental value of water.

39 Mr R. Lake, *Committee Hansard*, 21 June 2010, p. 22.

40 Victorian Farmers Federation, *Submission 12*, p. 8.

41 Waterfind, *Submission 32*, p. 3.

42 Mr T. Rooney (Waterfind), *Committee Hansard*, 21 June 2010, p. 38.

43 Waterfind, *Submission 32*, p. 3. Mr T. Rooney (Waterfind), *Committee Hansard*, 21 June 2010, p. 38.

3.54 The committee has recommended above that there should be a structural adjustment program to assist communities (not only irrigation farmers) affected by buybacks and trade out.

3.55 The committee agrees with concerns about the need for a more efficient and better regulated water market. The details should be a matter for further consideration.

Recommendation 4

3.56 The Commonwealth with the states and territories should give priority to developing a more efficient and transparent water market, including setting best practice standards or regulations for water brokers or intermediaries.

Chapter 4

Issues relating to water for the environment

4.1 Issues relating to water for the environment include:

- the need for better knowledge of environmental needs;
- the need to use water for the environment efficiently; and
- concerns that the goals and outcomes of Commonwealth water buybacks are unclear.

Need for better knowledge of environmental needs

4.2 Submitters and witnesses commented on the need for better scientific knowledge of the needs of the environment and the effects of water use. This was mostly raised in context of current Commonwealth water buybacks, though it is also relevant to calculation of sustainable diversion limits. For example:

The Nature Conservation Council is concerned that the ecological impact of changes following the Commonwealth Water Act and National Water Initiative on licensing, extraction and water transfers has not been adequately considered. NCC would like to see more research and consideration into Biodiversity and river health outcomes when market rules and water licensing are changed.¹

There is a need for considerably more scientific investment into understanding the outcomes of environmental flows and predicting scenarios based on different management options.²

4.3 The Productivity Commission recently commented that 'determining environmental allocations and water recovery targets that maximise community benefits is hampered by incomplete information on ecological responses to environmental watering'.³

4.4 An environmental watering plan will be part of the Basin Plan. This will coordinate the management of environmental water across the Basin, and identify key environmental features and ecosystems that must be protected. When the proposed

1 Nature Conservation Council of NSW, *Submission 19*, p. 1.

2 Australian Wetlands and Rivers Centre, *Submission 22*, p. 3. Similarly Councillor T. Hogan (Riverina and Murray Regional Organisation of Councils, *Committee Hansard*, 18 February 2010, p. 40.

3 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, March 2010, p. 57.

Basin plan is released for public comment it will include an outline of the scientific knowledge and socioeconomic analysis on which it is based.⁴

4.5 A particular need is for better knowledge of the connection between surface water and groundwater. The MDBA advised that it has commissioned a range of work on this issue.⁵ The MDBA commented generally, in relation to concerns that the science is incomplete, that the Basin Plan must be developed on the 'best available' science, and the precautionary principle should apply:

There is a provision in the [Water] Act that requires us to develop the Basin Plan on the best available science... There are also other provisions in the earlier parts of the act which go to the application of the precautionary principle, which is not to let the absence of perfect knowledge hinder you from making decisions.⁶

4.6 There were concerns raised in evidence that water-intercepting activities such as mining and plantation forestry need to be better accounted for. For example the National Water Commission (NWC) submitted that:

Miners, plantation forests and a range of other large industrial water users now need to be better integrated into the water access entitlements framework... The Commission considers that ultimately all surface and groundwater extractions, including for stock and domestic purposes, should be licensed and metered or otherwise measured.⁷

4.7 The National Water Initiative requires that by 2011 states should have taken into account significant interception activities in water systems that are fully allocated, overallocated or approaching full allocation. The NWC noted that only limited progress has been made by most jurisdictions in addressing NWI water interception commitments.⁸ A June 2010 report for the NWC estimated that Australia-wide,

4 *Water Act 2007*, section 22(1) item 8, section 28. MDBA, *Frequently asked questions*, March 2010, p. 6: See www.mdba.gov.au/files/Frequently-asked-questions-0609.pdf (accessed 30 June 2010).

5 Dr F. McLeod (MDBA), *Committee Hansard*, 15 December 2009, p. 71. See also MDBA, *Issues Paper—Development of Sustainable Diversion Limits for the Murray-Darling Basin*, November 2009, attachment B.

6 Dr F. McLeod (MDBA), *Committee Hansard*, 15 December 2010, p. 72.

7 National Water Commission, *Submission 25*, p. 4. Similarly Australian Wetlands and Rivers Centre, *Submission 22*, p. 2; Mr L. Arthur (National Farmers Federation), *Committee Hansard*, 15 December 2009, pp 52–53; Mr D. O'Brien (National Irrigators Council), *Committee Hansard*, 15 December 2009, p. 82.

8 National Water Commission, *Submission 25*, p. 5.

unaccounted water use as a result of interception activities (including floodplain harvesting, but not including mining) is about a quarter of all entitled water on issue.⁹

4.8 The Basin Plan will not control land use, which is regulated by the states; however it must include consideration of the risks to the availability of water arising from interception activities:¹⁰

The Basin Plan cannot influence in any way land planning decisions made by the states. For instance... The Basin Plan cannot mandate or prevent any mining activity. It can require that for a mining activity with a significant impact on the surface waters, for instance, there would have to be possession of a licence, which would require them to trade to offset the impact they are having on surface water availability—or groundwater, for that matter.¹¹

4.9 DEWHA noted that a mining project could be subject to Commonwealth control under the *Environment Protection and Biodiversity Conservation Act 1999* if it is likely to have a significant impact on a matter of national environmental significance.¹²

Need to use environmental water most efficiently

4.10 Environmental flows may be either 'rules-based' – that is, reserved for the environment by the rules in a water resource plan controlling consumptive use; or entitlements held by an environmental water holder with the same rights as privately held entitlements; or seasonal allocations bought by an environmental water manager on the market. Where water is recovered for the environment through entitlements, environmental water managers must manage the seasonal allocations that arise from the entitlements.¹³

4.11 Environmental water must be used efficiently and effectively to achieve the best possible result for river system health. This depends on both scientific knowledge of the environment's needs as noted above, and efficient management of environmental water. The Productivity Commission in a March 2010 report argued

9 Sinclair Knight Mertz, CSIRO & Bureau of Rural Sciences, *Surface and/or groundwater interception activities—initial estimates*, report for National Water Commission, Waterlines report series no. 30, June 2010, p. ix. The report includes floodplain harvesting, farm dams, stock and domestic use and plantations. The NWC is separately investigating the effects of mining on groundwater: see Sinclair Knight Mertz, *Water issues for jurisdictional planning for mining: an overview of current practice*, report for National Water Commission, Waterlines report series no. 29, May 2010.

10 *Water Act 2007*, subsection 22(1) item 3.

11 Dr F. McLeod (MDBA), *Committee Hansard*, 15 December 2010, p. 78.

12 DEWHA, *Submission 22*, p. 12.

13 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, March 2010, p. 32, 143ff.

that there is no 'one size fits all' choice of water products; rather, different products (entitlements, allocations, leases on entitlements) may be suitable in different circumstances.¹⁴

4.12 Professor Young suggested that environmental entitlements should be managed by regional trusts, which would be likely to have better local knowledge than 'a centralised Commonwealth environmental water holder sitting in Canberra'.¹⁵ He argued for more sophisticated management with a focus on the environmental outcome rather than merely delivering water:

Sometimes the smartest thing to do—for example, in a forest—would be to pay somebody who has a grazing right for that forest not to graze it. Therefore, you only have to put a third of the amount of water on the forest.¹⁶

4.13 Several submitters noted that in times of drought rules-based water has suffered disproportionately compared with entitlement water, because of the states' allocation methods. Similarly, modelling by CSIRO indicates that under current settings a reduction of run-off in the southern Murray-Darling Basin because of the expected effects of climate change will have greater effect on the environment's share.¹⁷ The National Water Commission 'is concerned about the robustness and transparency of allocation systems during periods of critical water shortage, which are expected to become more frequent as a result of climate change.'¹⁸ Professor Young suggested that it would be better to specify all environmental water as entitlements with the same rights as other entitlements.¹⁹

4.14 Submitters and witnesses noted that where water rights are based on 'threshold to pump' rules relating to the river height, changes will be needed to protect environmental flows from being extracted further downstream ('shepherding').²⁰

14 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, March 2010, p. 32, 143ff.

15 Prof. M. Young, *Committee Hansard* 18 February 2010, p. 31. Similarly Mr D. Eyre (NSW Farmers Association), *Committee Hansard*, 18 February 2010, p. 72.

16 Prof. M. Young, *Committee Hansard*, 18 February 2010, p. 37.

17 Australian Wetlands and Rivers Centre, *Submission 22*, p. 4. Ms B. Smiles (Inland Rivers Network), *Committee Hansard*, 21 June 2010, p. 2. See also Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, March 2010, p. 25–26.

18 National Water Commission, *Submission 25*, pp 4–5.

19 Prof. M Young, *Submission 29*, p. 1; *Committee Hansard*, 18 February 2010, p. 33.

20 Australian Wetlands and Rivers Centre, *Submission 22*, p. 4; Lower Balonne Floodplain Association, *Submission 26*, p. 3; Inland Rivers Network, *Submission 31*, p. 4; Prof. M. Young, *Committee Hansard*, 18 February 2010, p. 28. See also Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, March 2010, p. 167ff, 251.

Concerns about unclear goals of water buybacks

4.15 Some submitters were concerned that current buybacks appear to be taking place without clear knowledge of their environmental goals. For example:

The current buyback program appears to have no overall strategic plan, nor due consideration to the differing catchments throughout the Basin, in terms of the environment, agriculture and communities...there continues to be no indication from government as to the target quantity of water which is proposed to be acquired for environmental purposes.²¹

The government must specify how water for the environment will be utilised, how the additional flows will be accounted for, the river health benefits that can be expected and how these benefits will be measured...²²

Governments are charging ahead purchasing water and even properties to take water out of production to flush down rivers to address problems that have not been identified.²³

4.16 The Productivity Commission in a recent report noted that buybacks are occurring before sustainable diversion limits are set under the Basin Plan, and before the liability for policy-induced changes to water availability has been resolved; and 'this is creating uncertainty in the minds of irrigators and affecting the efficiency of the buyback.'²⁴

4.17 The government has previously said that, given the pressing environmental needs in the Murray-Darling Basin, water purchases to date are justified on a 'no regrets' basis.²⁵

4.18 The Commonwealth Environmental Water Holder's report for 2008–09, which was released in March 2010, reported on environmental watering of ten sites on the lower Murray. It found that 'although the program is at a very early stage, monitoring programs have already detected encouraging changes such as improving tree health, decreasing salinity and benefit to populations of rare and endangered species'.²⁶

4.19 An environmental watering plan will be part of the Basin Plan. It will coordinate the management of environmental water across the Basin, and identify key environmental features and ecosystems that must be protected. When the proposed

21 Riverina and Murray Regional Organisation of Councils, *Submission 15*, pp 2–3.

22 Victorian Farmers Federation, *Submission 12*, p. 6.

23 Murray Valley Water Diverters Advisory Association (NSW), *Submission 2*, p. 1.

24 Productivity Commission, *Market Mechanisms for Recovering Water in the Murray Darling Basin*, research report, March 2010, p. xii.

25 Australian Government, *Water Matters*, issue 7, November 2009, p. 1. 'Water plan may flush away \$3 billion', *Australian Financial Review*, 6 October 2009, p. 1.

26 Commonwealth Environmental Water Holder, *2008–09 Outcomes Report*, March 2010, p. 1.

Basin Plan is released for public comment it will include an outline of the scientific knowledge and socio-economic analysis on which it is based.²⁷

Committee comment

4.20 The committee acknowledges the concerns of stakeholders who believe that buybacks have occurred without adequate knowledge of the environmental outcomes, or who fear that the forthcoming sustainable diversion limits may reduce water available for irrigation without sufficient scientific basis.

4.21 However the committee agrees with the Murray-Darling Basin Authority that the Basin Plan must be based on the best available science, and a precautionary approach is needed. To wait for ideal scientific knowledge before setting sustainable diversion limits would be likely to cause serious delays in remediating the environmental problems of the basin.

4.22 The committee hopes that the proposed Environmental Watering Plan, which will be released as part of the Basin Plan, will provide greater clarity to all stakeholders about the MDBA's environmental objectives. The committee trusts this plan will guide future water purchases, and urges the MDBA to heed local knowledge and expertise in the finalisation and implementation of these plans wherever possible.

Senator Mary Jo Fisher
Chair

27 *Water Act 2007*, section 22(1) item 8, section 28. MDBA, *Frequently asked questions*, March 2010, p. 6: See www.mdba.gov.au/files/Frequently-asked-questions-0609.pdf (accessed 30 June 2010).

Minority Report by

Independent Senator Nick Xenophon

Background

- 1.1 The inquiry into sustainable management by the Commonwealth of water resources was established to look into the ability of the Commonwealth, across state borders, to sustainably manage water resources in the national interest.
- 1.2 In particular, the Committee was asked to address:
 - i. the issuing, and sustainability of water licences under any government draft resource plans and water resource plans;
 - ii. the effect of relevant agreements and Commonwealth environmental legislation on the issuing of water licences, trading rights or further extraction of water from river systems;
 - iii. the collection, collation and analysis and dissemination of information about Australia's water resources, and the use of such information in the granting of water rights;
 - iv. the issuing of water rights by the states in light of Commonwealth purchases of water rights; and
 - v. any other related matters.
- 1.3 Unfortunately, as a result of a lack of participation and cooperation by some key stakeholders, this Senate Inquiry was unable to thoroughly assess issues such as overland flows, water speculation and the decision-making process around licences, particularly those issued in Queensland.
- 1.4 Further, while there are a number of existing intergovernmental agreements relating to Murray-Darling water resources – the National Water Initiative 2004, the Australian Government Water Fund 2004, the National Plan for Water Security 2007, the Water Act 2007, Water for the Future 2008 and Water Amendment Act 2008 – these do not provide for the allocations of water resources to be managed at a Federal level in the national interest.

Rather, they continue to allow states and territories to manage water resources in their own interests, to the detriment of the Murray-Darling system as a whole.
- 1.5 South Australia is particularly impacted by the 'each-state-for-itself' approach as it is inevitably reliant on the eastern states – New South Wales, Victoria and

Queensland – to effectively manage and allow water to flow to the southern catchments.

- 1.6 This was demonstrated first hand following flood events in December 2009 and January 2010 in the north-east of New South Wales.

Approximately 300 gigalitres of water was injected into the Murray-Darling River system as a result of the floods. However, a significant proportion of this water was to be dammed and diverted upstream for New South Wales' use only, with none allowed to flow into the drought-affected South Australian catchments.

Following pressure from the Federal, Victorian and South Australian governments, the New South Wales Government agreed to release 148 gigalitres of the floodwaters, which was diverted into the Lower Lakes where water levels have dropped to dangerously low levels.

- 1.7 This event made it apparent that, despite the existence of intergovernmental agreements, individual states make water management decisions in the interests of themselves, not necessarily in the interests of the Murray-Darling Basin as a whole.
- 1.8 It was also revealed during the Additional Senate Estimates in February 2010 that the States have the power to veto any Federal Government decisions regarding the management of the Murray-Darling River.
- 1.9 This matter was identified in relation to the 640-gigalitre rule applied to water storage arrangements at Menindee Lakes in New South Wales.

Senator XENOPHON—Dr Horne, if the New South Wales government, for whatever reason, did not want to review the 640-gigalitre rule, what would that mean? If New South Wales did not want to review that rule, how could it be changed and at what point could it be changed? Would the Basin Plan have to come into force for that rule to be reviewed if one party did not want it to be reviewed?

Dr James Horne [Deputy Secretary, Department of the Environment, Water, Heritage and the Arts]—The review of the agreement requires consensus. So any agreement will need an overall package of changes. New South Wales clearly has, if you like, the largest issue or leverage chip, and that is the Menindee clause. And it will no doubt use that clause.

Senator XENOPHON—So an absent agreement from the New South Wales government, and that 640 gigalitre rule could be with us for many years to come?

...

Senator XENOPHON—But, essentially, in the absence of New South Wales agreeing to change the rule, we are kind of stuck with it for the current period, I think you said.

Dr Horne—That is right.

...

Senator XENOPHON—I am just trying to understand in relation to the 640-gigalitre rule, in the absence of New South Wales agreeing to change that rule, if that could be overridden by the new water-sharing plan in several years time. Is that something that New South Wales could still have a veto power over in relation to that 640-gigalitre rule? That is my discrete question. I think the answer is that it is—
Senator Penny Wong [former Minister for Climate Change and Water]—The Murray-Darling Basin agreement requires consent by the parties to be altered, and this is an aspect of that.¹

1.10 Ultimately, the long-term survival of the Murray-Darling Basin as a whole relies on its water resources being responsibly managed from the head waters in Queensland to the Murray mouth in South Australia.

1.11 Dr Robert Morrish, Chairman of the Cooper's Creek Protection Group, says that management of the system as a single river, rather than based on jurisdiction, is crucial to ensuring the survival of the Murray-Darling Basin:

There is clearly a need for rationalisation of water management across all the states, in the view of the current crisis of over-allocation by different states acting independently and in their own interests. The ecological integrity of rivers and wetlands can only be achieved by whole-of-catchment management, and for rivers which span several states there is an obvious need for a broader set of policies and principles of river management with which the states should conform.²

1.12 The Murray Valley Water Diverters Advisory Association (NSW) agrees and says that:

Unless there is a fundamental shift in government policy on water matters as relates to productive use and environmental needs, I [Mr Neil Eagle AO, Chairman] have grave concerns for Australia's irrigation industry and future national food security.³

1.13 The Murray-Darling Basin contains over 40 per cent of all Australian farms and produces one third of Australia's food supply and, therefore, it is crucial that the river system be managed as a single system to ensure its sustainability into the future.

¹ Senate Estimates - Environment, Communications and the Arts, *Proof Committee Hansard*, 09 February 2010, pg 176

² Dr R.B. Morrish – Chairman, Cooper's Creek Protection Group, *Submission 8*, pg 1

³ Neil Eagle AO – Chairman, Murray Valley Water Diverters Advisory Association (NSW), *Submission 2*, pg 4

The need for a national approach

1.14 The Murray-Darling River covers 1 061 469 square kilometres across Queensland, New South Wales, the Australian Capital Territory, Victoria and South Australia. There are 23 catchments along the entire length of the system and entitlements differ according to the jurisdiction concerned and whether the water supply is regulated or not.

1.15 In Queensland, for example, water management, allocation and trading rules are determined depending on climate and geography within the state.

In New South Wales, the allocation process differs between the northern and southern regions, based on measurement of water in storage, prediction of likely water inflow, review of historical water data and deduction of removals.

Meanwhile, in South Australia, existing users have priority access to water over new users and are allocated water based on a land and water use survey, taking environmental needs into account. South Australia also issues water permits, which are different to water licences, and are for water affecting activities such as weirs, dams and wells.

Finally, in Victoria, there are four types of water entitlements which change seasonally and sometimes by decision of the water authorities through bans, rosters or restrictions.⁴

1.16 These variations between how water entitlements are determined in the four key states which the Murray-Darling Basin covers clearly indicate a lack of consistency along the river system, and also confusion around who gets access to what water resources and when.

1.17 Furthermore, water allocation trading is restricted between states, which means irrigators, particularly in New South Wales and Victoria, are at a disadvantage in terms of being able to sell water licences, and South Australian farmers are unable to purchase the water they need from their interstate counterparts.

1.18 Victoria currently has 4 per cent annual limit on permanent trade out of irrigation areas, although it has been agreed that this will be phased out from July 2011, and removed entirely by 2014.

1.19 The cap constrains willing buyers and sellers, and its immediate removal has been called for by the ACCC, the National Water Commission and the Productivity Commission.

⁴ Senate Committee Report, Chapter 1

- 1.20 Professor Ian Falconer, member of the Basin Community Committee of the Murray-Darling Basin Authority, stated in his submission to the Committee that:

The present constraints on the purchase of water licences by the Commonwealth, which are imposed by the States, are counter-productive for both the licence owners and the Commonwealth environmental water purchase.⁵

- 1.21 Professor Falconer also argues that:

...the current State water plans do not provide the speed of response that is necessary for concerted action in the face of continuing drought.⁶

- 1.22 The crisis in the Murray-Darling Basin has shown that a lack of a uniform national approach is not in the interest of the Murray-Darling river system and the communities that rely on it.

Each state for itself

- 1.23 In July 2008, the New South Wales Government announced it would develop a draft floodplain harvesting policy across the state, which was finalised in 2010.

- 1.24 The draft Floodplain Harvesting Policy Framework is intended to “put a stop to the unconstrained harvesting of flood waters”⁷ by way of stopping farmers from building channels to illegally divert floodwaters to their dams.

- 1.25 Critics, however, have said that the rules under this draft plan can be rorted by NSW irrigators.

- 1.26 The Australian Conservation Foundation’s healthy rivers campaigner, Arlene Buchan, says the scheme, which is essentially an honesty system of recording what is taken by individual NSW farmers, will not stamp out the practice.

Without adequate metering and monitoring by the government, this policy is ridiculous.⁸

- 1.27 In May 2010, I, along with Senator Sarah Hanson-Young, introduced a Private Senator’s Bill – the Water (Crisis and Floodwater Diversion) Bill 2010 – which provides that, in the event of extreme rainfall in the north of the system and drought in the south, state/territory powers for the management of water flows would be transferred to the Federal Government to authorise the Murray-

⁵ Professor Ian Falconer, *Submission 1*, pg 1

⁶ Professor Ian Falconer, *Submission 1*, pg 1

⁷ Media Release – NSW Government, Department of Water and Energy, *Floodplain harvesting Policy to provide security for NSW rivers and communities*, 03 July 2008

⁸ Adelaide Advertiser, *NSW implements honesty system for recording flood water harvesting*, 04 May 2010

Darling Basin Authority to manage the water resources in the interest of the river as a single system, rather than on a state-by-state basis.

This Bill was re-introduced into the 43rd Parliament.

1.28 The manner in which water rights have been granted in Queensland, Cubbie Station a prime example, highlights the need for a robust national approach.

1.29 According to a report by Melaleuca Media:

Cubbie Station, with enough capacity to more than swallow up Sydney Harbour. Cubbie holds licences which mean that in a good year, even more water than this can be taken from the river, for the total payment to the State of just \$3700 a year.

“Effectively, their water is free,” said former Queensland Natural Resources and Environment Minister, Mr Rod Welford.⁹

Infrastructure versus Water Buybacks

1.30 The Sustainable Rural Water Use and Infrastructure Program provides \$5.8 billion to the upgrading of out-dated and/or ineffective irrigation systems. \$3.7 billion has already been allocated, subject to due diligence requirements.

1.31 However there are concerns that the focus on infrastructure is not an effective approach.

1.32 The Productivity Commission concluded in its March 2010 report, *Market Mechanisms for Recovering Water in the Murray-Darling Basin*, that the money being spent on infrastructure could be better spent on water buybacks, especially in instances where the infrastructure investment would not improve the viability of a location's water saving ability.

Conclusion

1.33 As one river system, there needs to be one set of rules to ensure that the Murray-Darling Basin is sustainable into the future.

1.34 Decisions need to be made at a Federal level because States have in the past failed to act in the national interest.

⁹ Melaleuca Media, *The rise and rise of Cubbie Station*, http://www.melaleucamedia.com.au/01_cms/details.asp?ID=257

Recommendation 1

That there be an immediate full Federal takeover of the Murray-Darling Basin to ensure that there is a uniform and consistent approach to water licences in the Basin.

Recommendation 2

That the Committee re-visit this issue following the release of the Murray-Darling Basin Authority's draft Basin Plan.

Nick Xenophon
Independent Senator for South Australia
07 October 2010

Appendix 1

Submissions, additional information and answers to questions taken on notice

Submissions

- 1** Prof Ian Falconer
- 2** Murray Valley Water Diverters Advisory Association (NSW)
- 3** Ms Acacia Rose
- 4** National Irrigators' Council
- 5** Ms Joan Osborne
- 7** Gwydir Valley Irrigators Association
- 8** Dr R B Morrish, Cooper's Creek Protection Group
- 9** Nature Conservation Council of NSW
- 10** Ms Libby Ciesiolka
- 11** NSW Irrigators' Council
- 12** Victorian Farmers Federation
- 13** Bureau of Meteorology
- 14** Australian Floodplain Association
- 15** Riverina and Murray Regional Organisation of Councils
- 16** Murray Darling Basin Authority
- 17** AgForce Queensland
- 18** Mr David Mittelheuser
- 19** Professor Timothy S Miles
- 20** Queensland Farmers' Federation

- 21 Department of the Environment, Water, Heritage and the Arts
- 22 Australian Wetlands and Rivers Centre, University of NSW
- 23 National Farmers' Federation
- 24 Professor Lee Godden
- 25 National Water Commission
- 26 Mr Ed Fessey, Lower Balonne Floodplain Association
- 27 Mr Pat Byrne, Murray Darling Basin Water Crisis Management Council and National Civic Council
- 28 Queensland Government
- 29 The Environment Institute, The University of Adelaide
- 30 Mr Robert A Lemon
- 31 Inland Rivers Network
- 32 Water Find Pty Ltd

Additional information

Letter dated 13 January 2010 from Office of Water, New South Wales government following a request from the committee requesting additional information.

Answers to questions taken on notice

National Water Commission - Answers to questions taken on notice (from public hearing 15 December 2009, Canberra)

National Farmers' Federation – Answers to questions taken on notice (from public hearing 15 December 2009, Canberra)

Department of the Environment, Water, Heritage and the Arts – Answers to questions taken on notice (from public hearing 15 December 2009, Canberra)

NSW Irrigators' Council - Answers to questions taken on notice (from public hearing 18 February 2010, Sydney)

Appendix 2

Public hearings

Tuesday, 15 December 2009 – Canberra

Bureau of Meteorology

Dr Robert Vertessy, Deputy Director, Water

Cooper's Creek Protection Group

Dr Bob Morrish, Chairman

Queensland Department of Environment and Resource Management

Mr Gregory Claydon, Executive Director, Strategic Water Initiatives

Mr Thomas Crothers, General Manager, Water Accounting and Planning

National Water Commission

Mr Ken Matthews, Chief Executive Officer

Department of the Environment, Water, Heritage and the Arts

Mr Russell James, Acting First Assistant Secretary, Water Reform Division

National Farmers' Federation

Mrs Deb Kerr, Manager, Natural Resource Management

Mr Lawrence Arthur, Chair, Water Taskforce

Murray-Darling Basin Authority

Dr Fraser Macleod, Executive Director, Basin Plan Division

Dr Tony McLeod, General Manager, Water Planning

Ms Jody Swirepik, Acting Executive Director, Natural Resource Management

National Irrigators Council

Mr Danny O'Brien, Chief Executive Officer

Thursday, 18 February 2010 – Sydney

Australian Wetlands and Rivers Centre, University of New South Wales

Professor Richard Kingsford, Director

New South Wales Irrigators Council

Mr Andrew Gregson, Chief Executive Officer

Mr Mark Moore, Policy Analyst

Wentworth Group of Concerned Scientists

Professor Michael Young

Riverina and Murray Regional Organisation of Councils

Councillor Terry Hogan AM, Chairman

Mr Ray Stubbs, Executive Officer

Nature Conservation Council of New South Wales

Mr John Asquith, Convenor, Water Committee

Ms Anne Reeves, Member and President, Inland Rivers Network

Professor Don White, Chair

New South Wales Farmers Association

Mr David Eyre, Policy Manager

Ms Fiona Simson, Executive Councillor

Victorian Farmers Federation Water Council

Mr Richard Anderson, Chair

Monday, 21 June 2010 – Canberra

Inland Rivers Network

Ms Bev Smiles, Secretary

Moree Plains Shire Council

Mr David Aber, General Manager

Tasco Inland

Mr Ross Lake, Managing Director

Waterfind

Mr Thomas Rooney, Chief Executive Officer

