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NSW Parliamentary Library

Murray-Darling Basin: water management issues

Background information

The River Murray Waters Agreement was signed in 1915 by the Commonwealth, NSW, Victorian and South Australian Governments. This Agreement was implemented by the River Murray Commission, which was responsible for regulating the Murray River to ensure each of the three States received their agreed share of water. Various amendments were subsequently made, culminating in the Murray-Darling Basin Agreement of 1987. A new Murray-Darling Basin Agreement was signed by the same four Governments in 1992, and placed on a legislative basis in NSW by the Murray-Darling Basin Act 1992. Queensland became a signatory in 1996. Two years later the ACT joined the Agreement. The 1992 Agreement established new institutions for its implementation: the Murray-Darling Basin Commission, Murray-Darling Basin Ministerial Council, and a Community Advisory Committee.¹

One of the most significant governance reforms introduced by the Murray-Darling Basin Commission was the Cap on water diversions for consumption. An Audit in 1995 resulted in the imposition of an interim Cap in June 1995, and the introduction of a permanent Cap for NSW, Victoria and South Australia on 1 July 1997.² A Cap for the ACT was agreed to in 2008.³ A Cap for the Queensland Border Rivers was recently finalised, and Caps for the NSW Border Rivers and the Queensland Condamine-Balonne system are expected to be finalised soon.⁴

An <u>Agreement on Murray-Darling Basin Reform</u> was signed by the Commonwealth, NSW, Victorian, Queensland, South Australian and ACT Governments on 3 July 2008. Further to this Agreement, under the <u>Water Act 2007</u> (Cth) a new governance structure for the Murray-Darling Basin has been formed: the Murray-Darling Basin Authority; Murray-Darling Basin Ministerial Council; Basin Officials Committee; and Basin Community Committee. These reforms required a referral of powers from the

Murray Darling Basin Commission, 2006. A Brief History of the Murray-Darling Basin Agreement, accessed 05/05/2010 and Murray Darling Basin Commission, 2009. The Murray-Darling Basin Agreement, accessed 05/05/2010.

Murray Darling Basin Commission, 2008. The Cap, accessed 05/05/0210.

Murray Darling Basin Commission, 2008. Murray-Darling Basin Commission Annual Report 2007-2008.

Murray Darling Basin Authority, 2009. Murray-Darling Basin Authority Annual Report 2008-2009.

participating States, as enacted by the <u>Water (Commonwealth Powers) Act 2008</u> (NSW).

The Murray-Darling Basin Authority is currently developing a Basin Plan. This will replace the Cap with sustainable diversion limits for the Basin as a whole and for each water management area. A draft Plan will be released during 2010, and the final Plan is expected in 2011. These proposed developments have implications for NSW Water Sharing Plans under the Water Management Act 2000 (NSW). Once the current Plans expire, each Water Sharing Plan in the Murray-Darling Basin will have to become consistent with the Basin Plan. The Plans will also require accreditation by the Commonwealth Minister for Climate Change, Energy Efficiency and Water, and will be audited along with the Basin Plan by the National Water Commission. Complicating the creation of a Plan for the whole Murray-Darling Basin are the political, social, economic, scientific and environmental issues inherent in any water sharing endeavour.

This Issues Backgrounder contains links to material on issues and debates relevant to water management in the Murray-Darling Basin. It should be read in conjunction with <u>Water: Regulatory Frameworks in Rural NSW</u>.

Parliamentary Material

NSW legislation

The First Print of the Water Management Bill 2000 (unamended);

The Explanatory Notes;

The Second Reading Speech;

Parliamentary debates in the Legislative Assembly;

Parliamentary debates in the Legislative Council;

Briefing Paper on the Water Management Bill 2000;

The Water Management Act 2000 as originally assented to;

The Water Management Act 2000 has been amended by the following legislation (as assented): Water Management Amendment Act 2002 and its Second Reading Speech; Water Management Amendment Act 2004 and its Second Reading Speech; Water Management Amendment Act 2005 and its Second Reading Speech; Water Management Amendment Act 2008 and its Second Reading Speech; Water Management Amendment Act 2009 and its Second Reading Speech; and the Water (Commonwealth Powers) Act 2008 and its Second Reading Speech;

Current version of the Water Management Act 2000.

NSW parliamentary inquiries into water

Water Management

Legislative Assembly Natural Resource Management (Climate Change) Committee Ongoing

Better Approaches to Salinity and Drought Management: Sustainable and Profitable Farming

Legislative Assembly Standing Committee on Natural Resources Management December 2005

<u>The Impact of Water Management Arrangements on Salinity Management</u>
Legislative Assembly Standing Committee on Natural Resource Management
October 2004

Commonwealth legislation

The Water Bill 2007 Explanatory Memorandum;

The Second Reading Speech;

The Senate Environment, Communications, Information Technology and the Arts Committee Inquiry into the *Water Bill 2007* and *Water (Consequential Amendments) Bill 2007* along with its submissions and hearing transcripts can be found here;

The Water Bill 2007 Bills Digest;

The Water Act 2007 as originally assented to;

The Water Amendment Bill 2008 Explanatory Memorandum;

The Second Reading Speech;

The <u>Supplementary Explanatory Memorandum</u>, <u>Revised Explanatory Memorandum</u> and <u>Further Supplementary Explanatory Memorandum</u>;

The Water Amendment Bill 2008 Bills Digest;

The Senate Rural and Regional Affairs and Transport Committee Inquiry into the *Water Amendment Bill 2008* along with its submissions and hearing transcripts can be found <u>here</u>;

The Water Amendment Act 2008 as originally assented to;

The current Water Act 2007.

Commonwealth parliamentary inquiries into water 2007-2010

Water Licences and Rights

Senate Standing Committee on Environment, Communications and the Arts Ongoing

The Impacts of Mining in the Murray Darling Basin

Senate Standing Committee on Environment, Communications and the Arts December 2009

The Implications for the Long-Term Sustainable Management of the Murray Darling Basin System

Senate Rural and Regional Affairs and Transport Committee June 2009

The Water Amendment (Saving the Goulburn and Murray Rivers) Bill 2008

Senate Environment, Communications, Information Technology and the Arts Committee
May 2009

Water Management in the Coorong and Lower Lakes (including consideration of the Emergency Water (Murray-Darling Basin Rescue) Bill 2008)

Senate Rural and Regional Affairs and Transport Committee October 2008

The Murray-Darling Basin Amendment Bill 2006

Senate Rural and Regional Affairs and Transport Committee February 2007

Government Publications

NSW

<u>Draft Floodplain Harvesting Policy</u>

NSW Office of Water April 2010

Water Compliance Policy

Department of Water and Energy December 2008

NSW Water Extraction Monitoring Policy

Department of Water and Energy August 2007

NSW Water Sharing Plans, along with information on how they operate, can be found here

The following <u>Catchment Management Authorities</u> are located in the Murray-Darling Basin, and each has developed a Catchment Action Plan: <u>Border Rivers-Gwydir</u>; <u>Central West</u>; <u>Lachlan</u>; <u>Lower Murray-Darling</u>; <u>Murray</u>; <u>Murrumbidgee</u>; <u>Namoi</u>; and Western.

Commonwealth

Australian Bureau of Agricultural and Resource Economics

<u>ABARE</u> has released several reports on water management in the Murray Darling Basin:

Assessing the future impact of the Australian Government environmental water purchase program

Simon Hone, Adam Foster, Ahmed Hafi, Tim Goesch, Orion Sanders, Daniel Mackinnon and Brenda Dyack, ABARE Research Report 10.03 April 2010

Adapting to water scarcity

Orion Sanders, Tim Goesch and Neal Hughes; ABARE Issues Insights 10.5 March 2010

Adapting to ongoing drought: irrigation in the Murray-Darling Basin

Dale Ashton; ABARE Issues Insights 10.4

March 2010

<u>Defining property rights to surface water in complex regulated river systems:</u> generalising the capacity sharing concept

Neal Hughes, Conference Paper, Australian Agricultural and Resource Economics Society, 10-12 February 2010, Adelaide February 2010

An economic survey of irrigation farms in the Murray-Darling Basin: Industry overview and region profiles 2007-08

Dale Ashton, Stephen Hooper and Mark Oliver; ABARE Research Report 09.21 December 2009

<u>Dealing with irrigation drought: The role of water trading in adapting to water</u> shortages in 2007-08 in the southern Murray-Darling Basin

Thilak Mallawaarachchi and Adam Foster; ABARE Research Report 09. March 2009

The impact of climate change on the irrigated agricultural industries in the Murray-Darling Basin

Ahmed Hafi, Sally Thorpe and Adam Foster, ABARE Conference Paper 09.3, Australian Agricultural and Resource Economics Society, 11-13 February 2009, Cairns

February 2009

Management of irrigation water storages: Carryover rights and capacity sharing

Neal Hughes, ABARE Conference Paper 09.2, Australian Agricultural and Resource Economics Society, 11-13 February 2009, Cairns

February 2009

Australian Bureau of Statistics

Water Use on Australian Farms, 2008-09;

Water and the Murray-Darling Basin – A Statistical Profile, 2000-01 to 2005-06;

The Australian Competition & Consumer Commission

The <u>Australian Competition & Consumer Commission</u> regulates implementation of water charge rules and water market rules in the Murray-Darling Basin. It also advises on the creation of water trading rules for the Murray-Darling Basin.

CSIRO

Relevant publications from the CSIRO "<u>The Murray Darling Basin Sustainable Yields</u> Project" are as follows:

Water Availability in the Murray-Darling Basin Report and Executive Summary CSIRO
October 2008

Murray Darling Basin Sustainable Yields Project Regional Reports
CSIRO
2008

The Shared Water Resources of the Murray-Darling Basin Part 1 and Part 2 CSIRO; MDBC Publication 21/06 February 2006

Department of Environment, Water, Heritage and the Arts

The <u>Department of Environment, Water, Heritage and the Arts</u> is running a <u>Strengthening Basin Communities Program</u> with two components: a <u>Planning component</u> and a <u>Water Saving Initiatives component</u>. The Department also manages the <u>Sustainable Rural Water Use and Infrastructure</u> program and the Restoring the Balance in the Murray-Darling Basin program.

Land and Water Australia

A future-proofed Basin: A new water management regime for the Murray-Darling Basin

Mike Young, Jim McColl 2009

Australian Water Entitlements
Webb, McKeown & Associates
February 2008

Murray-Darling Basin Authority

The Murray-Darling Basin Authority is currently preparing a draft Basin Plan. It has released The Basin Plan: a concept statement, The Basin Plan: Legislative requirements (objects, purpose and basis) and an Issues Paper: Development of Sustainable Diversion Limits for the Murray-Darling Basin, to which it has so far received 153 submissions (find a summary of the submissions here). Two further documents are important for development of the Basin Plan: Assessing Environmental Water Needs of the Basin; and Socio-Economic Context for the Murray-Darling Basin.

The Authority runs a number of programs, including: <u>The Living Murray</u>; <u>Sustainable Rivers Audit</u>; and the <u>River Murray Water Quality Monitoring Program</u>. The Living Murray is a water buyback program – its latest report can be found <u>here</u> and an audit of its implementation can be found <u>here</u>. It has also released a <u>Water Audit Monitoring Report 2008-09</u>.

Murray-Darling Basin Ministerial Council communiqués can be found here.

Murray-Darling Basin Commission

The <u>Murray-Darling Basin Commission</u> was replaced in 2008 by the Murray-Darling Basin Authority. Some key documents released by the Commission are listed below and all their documents may be found <u>here</u>.

Risks to the Shared Water Resources of the Murray-Darling Basin: Implementation of regulatory approaches to manage farm dams, groundwater and afforestation NSW Department of Water and Energy March 2008

Issues and Options in applying market based measures in the Living Murray First
Step March 2006
Murray-Darling Basin Commission
March 2006

National Water Commission

The <u>National Water Commission</u> provides a good overview of water management in the <u>Murray-Darling Basin</u>. It has also released several relevant reports, as listed below.

Australian Water Markets Report 2008-2009
National Water Commission
December 2009

<u>Australian Water Reform 2009: Second biennial assessment of progress in implementation of the National Water Initiative</u>

National Water Commission

September 2009

Water Allocation Planning in Australia - Current Practices and Lessons Learned

Mark Hamstead, Claudia Baldwin, Vanessa O'Keefe; Waterlines Occasional Paper No 6 April 2008

The Economic and Social Impacts of Water Trading: Case Studies in the Victorian Murray Valley

Frontier Economics, in association with Tim Cummins and Associates, Dr Alistair Watson, and Dr Elaine Barclay and Dr Ian Reeve of the Institute for Rural Futures September 2007

Productivity Commission

<u>Market Mechanisms for Recovering Water in the Murray-Darling Basin</u> and Submissions

Productivity Commission Research Report March 2010

Earlier Productivity Commission reports can be found here.

COAG

<u>Water Management Partnership Agreement – the Commonwealth of Australia and the State of New South Wales</u> (January 2010);

COAG Work Program on Water – November 2008 – Agreed Actions;

Intergovernmental Agreement on Murray-Darling Basin Reform (2008);

Intergovernmental Agreement on a National Water Initiative (2004);

Intergovernmental Agreement on Addressing Water Overallocation and Achieving Environmental Objectives in the Murray-Darling Basin (2004);

The Council of Australian Governments' Water Reform Framework (1994).

Journal Articles 2007-2010

An empirical assessment of the value of irrigation water: the case study of the Murrumbidgee catchment

Muhammad Ejaz Qureshi, Ram Ranjan and Sumaira Ejaz Qureshi; The Australian Journal of Agricultural and Resource Economics January 2010

Water rights in NSW: properly property?
Michael McKenzie; Sydney Law Review
September 2009

<u>Declining inflows and more frequent droughts in the Murray-Darling Basin: climate change, impacts and adaptation</u>

David Adamson, Thilak Mallawaarachchi and John Quiggin; The Australian Journal of Agricultural and Resource Economics

July 2009

Swimming in new waters: recent reforms to Australian water law

Robyn Briese, Alice Kingsland and Robert Orr; Legal Briefing July 2009

Nearly a decade of Basin drought makes water delivery a major challenge

Australian Landcare June 2009

Two decades of Murray-Darling water management: A river of funding, a trickle of achievement

Lisa Lee and Tihomir Ancev; Agenda, Volume 16 Number 1 2009

The South-East Australia Drought: possible causes

W Cai and T Cowan; Water

August 2008

Managing the Murray-Darling Basin: Some Implications for Climate Change Policy

John Quiggin; Economic Papers

June 2008

The Howard-Turnbull National Plan for Water Security of January 2007: Rescue or Rejection?

Alistair Watson; Economic Papers

June 2008

Water policy for the future

Jillian Furner; Public Administration Today April – June 2008

Managing and protecting environmental water: Lessons from the Gwydir for ecologically sustainable management in the Murray Darling Basin

Anita Foerster; Environmental & Planning Law Journal February 2008

Planning for Water Security in the Murray-Darling Basin

Daniel Connell and R Quentin Grafton; Public Policy, Volume 3, Issue 1 2008

Water policy and climatic risk

Stephanie Szakiel and Stephen Beare; Issues June 2007

Contrasting approaches to water management in the Murray-Darling Basin

Daniel Connell; Australasian Journal of Environmental Management March 2007

Paying farmers for water or not: a new \$10 billion plan

Jennifer Marohasy; Institute of Public Affairs Review March 2007

Assessing the Future Risks to Irrigation in the MDB

Wendy Craik; Water February 2007

Issues in Australia's water policy

John Quiggin; Australian Chief Executive

February 2007

A Bridge? The troubled history of inter-state water resources and constitutional limitations on state water use

Nicholas Kelly; University of New South Wales Law Journal 2007

Drought, water, farmers and the law

John Cherry; Reform (Australian Law Reform Commission)

Summer 2006-2007

The quest for environmentally sustainable water use: constitutional issues for federal, state and local governments

Jennifer McKay; Reform (Australian Law Reform Commission)

Summer 2006-2007

Letting markets work for the environment: market-based instruments and water recovery in the Murray-Darling Basin

Arlene Buchan; Reform (Australian Law Reform Commission)

Summer 2006-2007

Media Coverage

Below are some selected media articles on the issue

Wildlife pays price of thirsty river system, 12 May 2010, SMH

Land goes begging as water's offloaded, 29 April 2010, The Australian

Scoping New England's environmental wars, 28 April 2010, Armidale Express

Irrigators face further water cuts, 22 April 2010, Western Herald

Googong water a pip dream? 21 April 2010, Yass Tribune

Council willing to accept water plan, 19 April 2010, Country Leader

Lower rivers reap bounty of northern floods, 16 April 2010, The Australian

\$162 million for Macquarie Scheme irrigators, 15 April 2010, Western Herald

It's not just about money, 14 April 2010, Australian Financial Review

What follows the flood, 14 April 2010, SMH

Protecting the land, 12 April 2010, Goulburn Post

PC report finds holes in buyback plan, 8 April 2010, The Land

Murray-Darling plan will give 18 sites environmental priority, 7 April 2010, SMH

Farmers sickened by the water waiting game, 3 April 2010, The Australian

Water is the blind spot on our environmental balance sheet, 2 April 2010, 2010

Rethink urged on water strategy: buyback billions going to waste, 1 April 2010, The Australian

Parish pumps stake claim for Murray-Darling water share, 1 April 2010, SMH

To update newspaper articles, click onto our dynamic link.

Press Releases

NSW

NSW Government Press Releases:

Tenders closing for farmers seeking irrigation funding (March 2010)

Joint Media Statement - Water Flows (January 2010)

Water inflows from NSW floods (January 2010)

New rules for inland groundwater transfers (September 2009)

NSW water embargo – deadline extended to apply for an exemption (July 2009)

NSW Opposition Press Releases:

Williams slams suggestions that floodwater wasted on Murray-Darling (March 2010)

Williams says Abbott's federal overhaul plan: 'unrealistic, extreme' (January 2010)

Don't divert flood water (January 2010)

Williams says irrigators left frustrated and confused (December 2009)

NSW Greens Press Releases:

Will legislative change save the Murray-Darling? (September 2008)

Memo to Morris: Place the Murray Darling above politics (February 2007)

Commonwealth

Penny Wong (Minister for Climate Change, Energy Efficiency and Water)

New study answers the critics of water purchase (April 2010)

Further funding for councils to plan for a future with less water (April 2010)

Second round of water for the future information sessions (April 2010)

New report confirms water purchase delivering results (March 2010)

New round of water purchasing announced for the Southern Murray Darling Basin (March 2010)

12 new water saving infrastructure projects in the Murray Darling Basin (March 2010) Minchin rejects Abbott plan for federal takeover of the Murray Darling Basin (January 2010)

Murray-Darling Basin States sign on water reform (January 2010)

Murray-Darling Basin Authority Media Releases can be found <u>here</u> and the Authority's e-Letter can be found <u>here</u>.

Advocacy/Interest Groups

Irrigation and water user groups

Cotton Australia

National Farmers' Federation

National Irrigators' Council

NSW Farmers Association

NSW Irrigators' Council (see also their list of members)

Ricegrowers Association of Australia

Conservation and environment groups, and non-government organisations

Australian Conservation Foundation

Environmental Defender's Office NSW

Environmental Farmers Network

Inland Rivers Network

Landcare NSW

Murray Darling Association

Murray Darling Rescue

Nature Conservation Council NSW

Total Environment Centre

World Wide Fund for Nature Australia

Local Government

<u>Australian Local Government Association</u>

Local Government and Shires Associations of NSW

Riverina Eastern Regional Organisation of Councils

Science and Research

Cotton Catchment Communities CRC

CRC for Irrigation Futures

eWater CRC

The Fenner School of Environment and Society (ANU)

Institute for Land, Water and Society (Charles Sturt University)

Institute for Rural Futures (UNE)

Wentworth Group of Concerned Scientists

Water Trading in the Murray-Darling Basin

Maddocks Sustainability and Climate Change Team

December 2008

Relevant Research Service publications on water

Water: Regulatory Frameworks in Rural NSW (2010);

Water Reforms in NSW: An update (2002);

New Water Management Legislation in NSW: A Review (2000);

Water Reforms in NSW (1998);

Water for Rural Production in NSW: Grand designs and changing realities (1997).

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For further information please contact the Library on 9230 2382

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