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5th Febuary 2009

Senate Inquiry into the Water Amendment (Saving the Goulburn and Murray Rivers) Bill 2008.

Submission
Proposed Senate Amendments to Water Act Abandons urban South Australians!

The proposed Senate Amendments are a further attempt to deny the common rights of residents of Australia equitable access to water, irrespective of the form it takes, from the Murray Darling Basin (MDB) as provided for under the Australian Constitution. Water rights are particularly relevant to the millions of Australians who depend upon the Murray for their town and city water supplies as noted by the Senate Inquiry into the Urgent Provision of Water to the Coorong and Lower Lakes. As expected nothing substantial has resulted from the Coorong and Lower Lakes Senate Inquiry. The problem is now beyond politicians, they have preferred to establish the National Water Market rather than ensure water is properly managed and equitably shared between residents, irrigators and conservation.

In December 2008, a number of South Australian senators failed to stand up for South Australians and ensure a fair share of water for this state when an audacious amendment was proposed that would have made it law for Adelaide to be weaned off the Murray. For once the Rudd Labor government acted correctly on public water policy and rejected an ill-conceived amendment that proposed all water users outside the MDB reduce their use of water from the MDB over time.

The proposed amendment, the subject of this submission, is a further variation of the same theme. South Australian politicians and the media have been strangely silent about these issues and their implications. The issues are as follows:

- In whose interests are the Senators supporting this proposal acting?
- Do they also support the privatisation of public water assets?
- Given the unfolding global economic disaster due to the misuse of deregulation and markets, why are they not speaking out on the real issue that needs to be addressed, and that is the wholesale privatisation of public water assets for economic development together with an audacious market experiment that will surely fail at the expensive of public use of water for the environment and for residents? It is not just the water of the MDB at stake here as the same privatisation and market principles are being applied to all economic water assets in Australia.
- Water diverted for economic use either as itself or in the form of food products as virtual water is still water irrespective of whether it is sourced as surface or ground water.
- Urban use of MDB diversions is small compared to that used by irrigators as explained by Professor Wayne Meyers at his public lecture in Adelaide on 15th October 2008;

"Urban water use is relatively small and very high value" and "Adelaide's water requirement is small relative to the MDB resource and other current users. Water restrictions in Adelaide will not save the Murray".

- Critically the proposed amendment contravenes the constitutional right of residents of a state to a fair share of water as provided for under section 100 of the Australian Constitution.

Australian Constitution Section 100 - Nor abridge right to use water

"The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation."

- As the former MDBC Chief Executive Don Blackmore pointed out in the 2003 Video "Tar-ru The Story of Lake Victoria", 65 major dams have been constructed together with 600,000 private dams that are capable of storing 1.5 times the average annual flow of every river of the MDB. It is a significant public investment that has allowed irrigation development to expand from less than 1,000 GL prior to the regulation of Lake Victoria in 1927 to over 11,000 GL today (on average),

The proposed amendment would be disastrous for the future development of not only Adelaide but the towns and cities of South Australia who depend on the Murray. One of the risks is to consign South Australians to economically expensive water supply solutions that will drive up the cost of water and reduce competitiveness of all who use water as an input in the economy. This is economic madness as the new lean economies that will gradually emerge from the failing neo-liberal globalised economies, high quality, cost and low price will be king, local markets will become a focus and all manner of waster will be reduced.

An example of the economically expensive water supply solutions being considered are the power hungry and environmental damaging desalination plants planned for the Gulfs of South Australia. The Adelaide Desalination Plant will add further damage to the marine life of Adelaide coastal waters that has already resulted in over 9,000 hectares of old-growth seagrass beds being wiped out by the indiscriminate discharge of stormwater and wastewater of over 200 GL per annum into Gulf St Vincent (CSIRO Adelaide Coastal Waters Study 2008 and Natural History of Gulf St Vincent 2008). This is outrageous when there are low cost ways to clean stormwater before storing it in deep underground aquifers and Adelaide's waste water could be treated and pipe North for BHP Billiton to use for the Olympic Dam Mine expansion instead of building a desalination plant at Stony Point in Upper Spencer Gulf. Compared to the Adelaide Desalination Plant, which is a very bad idea on economic and environmental grounds, building a Desalination Plant in upper Spencer Gulf is plain crazy for the marine environment and the world unique populations of giant cuttlefish that aggregate at Stony Point.

Governments should not have to buy water for Residents

There are two types of water licenses temporary and perpetual. Perpetual licenses are for life and using a price of $2,500 per ML (the top price paid in 2007/2008), a mere 50 GL (less than 1% or average diversions by irrigators) would cost $125 million. Depreciating this investment over 25 years amounts to a mere $5 million per year.

Using this price as a guide the South Australian government could use the current $1.4 Billion expected cost of the Adelaide Desalination Plant to purchase 560 GL without dipping into the expected annual operating costs of approximately $100 million or interest repayments for the life of the plant. Significant public investment has been invested into the MDM to create the water storages and regulate the river system to drought proof the MDB compared to pre-regulation days when less than 1,000 GL was diverted from the MDB compared to over 5,000 GL in 2007/2008 in the depth of a ten year drought. Today's MDB is climate and drought proof compared to pre-regulation. What has been impacting this inherent capability is over exploitation for economic means and the failure by governments to adapt to long drought conditions.

This Senate Committee needs to explain to residents of Australia what the public investment in the MDB represents in today's dollar that has been gifted to irrigators and free markets for free!

Using information provided by Professor Wayne Meyer at his Adelaide public lecture on 15th of October 2008 (ABS statistics for the period 1995 – 2001) the profit per megalitre of water achieved by irrigation regions in the MDB ranged from less than $0 per megalitre in the Upper Murrumbidgee and Upper Murray to $832 per megalitre in the Riverland. Clearly many irrigators have been handed a welfare cheque as most

will be able to make more money in the new National Water Market by the click of a mouse button that what they could ever make from irrigation. Just who are going to be the winners and losers in the National Water Market? Clearly Mum and Dad irrigators are going to be gobbled up by big corporates. Irrigation communities built up over many decades will be decimated. Services established to serve working irrigators will be replaced by leisure services to support the new life-styles of the water barons.

South Australia needs a Royal Commission into Water Management

The South Australian government no longer has a water department that is responsible and understands all facets of water resourcing, conservation and recycling whether water is sourced from the river Murray, storm water, underground water, recycled water and rain water including conservation of the ecology of world unique marine and freshwater environments that have co-existed for thousands of years under the stewardship of the original indigenous landowners of Australia in South Australia's world unique Gulfs, Lower Lakes and Coorong.

The Royal Commission needs to investigate the South Australian government's miss-management of water resources including their use and the organisation required for the effective management of water resources, their conservation and re-use. The decision making processes for the actions that have been taken or planned to be taken for such areas as Lake Victoria, Lower Murray including the Lower Lakes and Coorong, Port Stanvac and Port Bonython desalination plants also need to be investigated.

The Infrastructure of the MDB Storages was paid for by the Public

This is an ill-conceived amendment by Senators acting in the interest of neo-liberal free markets. They have forgotten who paid for the water that exists in the MDB and the millions of residents who vote in the towns and cities of states that have just as much right to water as irrigators. It is also clear that urban use is much more efficient on a per capita basis; three million Australians, their industries including agriculture and communities that directly use an average of 350 GL per year from the River Murray is insignificant compared to the average 11,500 GL per year extracted by the irrigation industry (3,285% more!). Let's not forget most of the infrastructure that irrigators have taken for granted was paid for by Australian residents in their taxes over many decades. Standard procedure by those who understand corrective action processes means you start where the majority of water is used and not where the least is used. Professor Wayne Meyers understands corrective action.

Since European settlement too much water has been diverted from the Murray Darling Basin by irrigators. It is time to re-balance the use of all water resources of the Murray Darling Basin including regulated and unregulated water. Not unsurprisingly agriculture interests have failed to act in the best interests of the MDB and ensure urban and Australian domestic or internal needs are met as the first priority, these are the real critical Australian needs and it is time for a national referendum to be called to decide the issue. Use of the Murray Darling for export must rank as a second priority. The prioritisation of use of water for domestic needs must be written into the Australian Constitution.

Water a Common Right of all Australians

As Isaac Isaacs correctly pointed out as the Victorian delegate to the Australian Constitution Convention, Water belongs to all Australians (Water Politics 2007). Australians for that matter have still not been told by politicians, and the media for that matter, that the Commonwealth's 2007 Water Act was essentially about taking what was a free access license assigned to a landholder, just like urban dwellers, and unbundling it from land and turning it into a unique property right. Water can now be traded on national water markets as just another commodity for world financial markets to play Russian roulette. This is a neo-liberal experiment on a grand scale that needs to be reconsidered before it is too late and causes irreversible damage to the environment, communities and local economies. One only has to look at the submissions being made to the ACCC on water trading to realise the increased complexity for all concerned, a standard outcome of deregulation. The water market is only going to fragment the resource, result in stranded infrastructure and increased complexity. The result will be a very angry population that will take their vengeance out on neo-liberal free market politicians at the ballot box who have helped to build the national water market at all levels of government with the help of Labor, Liberal, Greens and Independents and national media.

Submission by John E. Caldecott
4th February 2009

Water Privatisation in South Australia

The South Australian government without a murmur from the media or from the opposition are using Water Allocation Plans (WAP) established under the 2004 NRM Act to privatise all prescribed water resources for each of the NRM regions of the state where a water license is granted. A number of draft WAPs have recently been placed before the public for review with little fanfare as to the water privatisation cocktail they contain. How does it work? All the plan needs to do is contain provisions that assign a property right to a water license to allow the license holder to trade water on free markets. Once these WAPs are authorised by the Minister they become law and all prescribed water licensed resources, whether surface or ground water becomes the property of the private sector and free markets. This process is being done without any parliamentary and public debate or media scrutiny, as at this time of year the city of Adelaide is a place of continuous big events and celebrities to keep the masses distracted as to what is really going on. Parliamentary democracy is being circumvented in a process that also requires a public commission of inquiry. Although not confirmed, it would be of no surprise to discover that this process is being simultaneously carried out across the nation as after all the National Water Market is a creation of COAG.

An Inter-State of Emergency is Required

What is required to save the MDB is the establishment of an Inter-State of Emergency into the MDB without delay to address what is fundamentally a failure of management to adapt the available water supply and resources to meet critical Australian needs as a first priority. As the debacle in the Australian Wine Industry, submissions made to the ACCC and the environmental catastrophe of the Lower Lakes, the National Water Market is failing before it has begun.

An Inter-State Royal Commission is Required

An Inter-State Royal Commission into the MDB is becoming more critical day by day. This action would in fact give governments' breathing space to reflect on water markets and plans that were created when markets were in full flight and nothing could stop them invading every corner of society.

Markets can only work to maximise profit and self-interest. The Murray Darling Basin has complex interdependencies and interrelationships with the environment and ecosystems, society and the economy. Making decisions about water is not a job for markets but a job for politicians and the residents of Australia.

As previously mentioned I believe we are already seeing unintended effects; the Australian wine industry for example has increased production during a protracted drought and is probably the first market failure of the National Water Markets as they are now in a significant oversupply situation, are facing falling export prices and volumes as the world economy goes into a deep contraction.

Marinas including housing estates have been built or are planned to be built on the Murray – this is an extravagance that has no place in Australia, growth must not be for the sake of growth, it is time we got the quality of growth right and the stewardship of the freshwater and marine environment to be inherited by future generations of Australians.

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PDF Attachments:

"**Water Must Never be let out of Public Hands**" Australian Options Magazine Inc, No. 55 Summer 2008/2009 Interview of Maude Barlow by John Caldecott	Aust Options Magazine No. 55_Maude Barlow Interview_Summer08.PDF (includes full questions & background information not included in published magazine because of space issues)
"**National Water Market – Privatisation of the Murray Darling**" Australian Options Magazine Inc, No. 54 Spring 2008 by John Caldecott	Aust Options Magazine No 54_Privatisation of Murray Darling_Spring08.PDF (includes web links not include in published magazine because of space issues)

References & Further Information

ACCC and its role in the National Water Market

The ACCC has responsibilities in relation to water markets, water trading and water delivery services in the Murray-Darling Basin (MDB) under the Water Act 2007. The ACCC also has responsibilities in relation to third party access to water – related infrastructure under Part IIIA of the Trades Practices Act 1974. The ACCC does NOT have any role in relation to:

- urban water supplies
- water resources other than MDB resources.

http://www.accc.gov.au/content/index.phtml/itemId/809334

Revised timelines for the provision of advice to the Minister for climate change and water under the Water Act 2007

The Water Act 2007 created new institutional and governance arrangements to address the sustainability and management of water resources in the MDB. In accordance with the Act, the Minister for Climate Change and Water wrote to the ACCC formally requesting advice on the proposed water market rules and water charge rules by August 2008 and January 2009 respectively. The ACCC has been conducting formal consultation since April 2008 on the development of its advice on water market rules and water charge rules. During this consultation stakeholders have indicated they want more time to consider the draft rules. Accordingly, the ACCC requested, and the Minister has granted an extension to the deadline for the provision of advice. As a result of the extension, an additional 'position paper' stage has been included to provide more time for stakeholders to consider the draft rules. The revised timelines are presented below:

(Links to submissions have been provided as at 2nd December 208, a total of 209 submissions have been received by the ACCC.)

Water market rules

Issues paper April 2008

Position paper July 2008

Draft report and rules October 2008

Final advice December 2008

Submissions to water market rules issues paper (56): http://www.accc.gov.au/content/index.phtml/itemId/827347

Submissions to water market rules position paper (44): http://www.accc.gov.au/content/index.phtml/itemId/839707

Submissions to water market rules draft report (21): http://www.accc.gov.au/content/index.phtml/itemId/849646

Water charge rules—termination fees

Position paper August 2008

Draft report and rules October 2008

Final advice December 2008

Submissions to the draft water charge (termination fee) rules (17):
http://www.accc.gov.au/content/index.phtml/itemId/850096

Submissions to water charge rules for termination fees position paper (20):
http://www.accc.gov.au/content/index.phtml/itemId/844047)

Water charge rules—irrigation operators (excl termination fees)

Issues paper May 2008 (including termination fees)

Position paper September 2008

Draft report and rules February 2009

Final advice June 2009

Submissions to irrigation infrastructure operators issues paper (28):
http://www.accc.gov.au/content/index.phtml/itemId/836768

Water charge rules—bulk water

Issues paper June 2008

Position paper September 2008

Draft report and rules February 2009

Final advice June 2009

Submissions to bulk water charge rules issues paper (15):
http://www.accc.gov.au/content/index.phtml/itemId/844008

Water charge rules—water planning and management

Issues paper October 2008

Position paper December 2008

Draft report and rules February 2009

Final advice June 2009

Submissions to the water planning and management charge rules issues paper (8):
http://www.accc.gov.au/content/index.phtml/itemId/850508

The ACCC welcomes submissions and input on issues raised throughout this process, as well as any other relevant information which could assist the ACCC in forming its advice to the Minister.

http://www.accc.gov.au/content/index.phtml/itemId/837811

Adelaide Coastal Water Study

CSIRO 2008

"Providing an integrated understanding of the causes of water quality decline, seagrass loss and sediment instability along Adelaide's near-shore coastal waters."

http://www.csiro.au/solutions/AdelaideCoastalWaters.html

AUSTRALIA'S FIRST NATIONAL WATER MARKETS REPORT

National Water Commission 17th December 2009

Selected extracts from NWC's website begs the question why has the South Australian Government abandoned the Lower Lakes and why is there a need for a desalination plant when allocations (temporary water) can be obtained to top up Adelaide's urban water requirements when required even though the MDB is in the worst drought in recorded history! It is not surprising as the MDB system of storages were designed to give us a reliable supply of water even in times of drought, climate proof if you like.

Using the average price of $540 per ML (2007/2008), 50 GL would cost $27Million – compare this to the predicted annual operating cost of the Adelaide Desalination Plant of over $100M/year and let's not mention the expected capital cost of $1.4Billion and clearly water is available despite 10 years of drought in the MDB.

It also means those with money can now decide what is right according to self-interest and not sound public water policy. It will be interesting to see whether this report discloses how much additional water is required to convey the water between buyer and seller to allow for losses on the way and whether this is being provided to the detriment of other public needs such as the environment. An entitlement is a water license subject to allocation policy that is granted for perpetuity! (Comments John Caldecott)

Backgrounder: Major findings of the National Water Commission Australian Water Markets Report 2007-2008

- The overall value of the water market transactions for the year was approximately $1.68 billion with most trading activity occurring in the Murray-Darling states.
- Activity in the water trading market has been driven in large part by the variable rainfall around Australia and the continuing severe drought in the southern Murray-Darling Basin.
- The total trade volumes are 921GL (water access entitlement) + 1594 (water allocation) = 2515GL in total.
- A key aspect of the report's findings is that water owners on-sold 1 594 GL of water allocations during the year and 14 per cent of that trading occurred across state borders.
- Approximately 148 GL of water allocation was traded into South Australia, with two-thirds coming from New South Wales (100 GL) and the rest from Victoria (48 GL).
- Water purchased for the environment made up approximately 8% of the total water access entitlements traded.
- The price of the water allocations traded varied greatly throughout the year, for example the price for Murrumbidgee High Security water ranged from $150 per ML to $1100 per ML, with an average price of approximately $540 per ML.
- The prices for water access entitlements were less volatile, but still ranged from $1000 to $2500 per ML in the Basin, with an average of approximately $1400 per ML.

Notes: GL - gigalitre = 1000 megalitres or 1 billion litres of water

ML - megalitre = 1 million litres (roughly the amount of water in an Olympic swimming pool)

http://www.nwc.gov.au/www/html/956-first-national-water-markets-report---17-dec-08.asp

A Fresh History of the Lakes: Wellington to the Murray Mouth, 1800s to 1935 (selected quotes)

Page 1 - Prior to European settlement, Lakes Alexandrina and Albert at the terminus of the River Murray were predominately fresh, with river water discharging to sea and keeping the Mouth clear. Contrary to what many believe today, saltwater intrusions into the Lake environment were not common until after 1900 when significant water resource development had occurred in the River Murray system. Before large-scale extractions of water, the Lakes and lower Murray were rarely subjected to seawater invasions. Long time Goolwa resident Edward Leslie Goode told an enquiry in 1933 'I can remember when it was a remarkable thing when saltwater came up to the Goolwa wharf. Now we see saltwater in the lakes for months'.

Page 4 - Under natural conditions, flow out of the Murray Mouth was greater than 2,000 Megalitres per day (730 GL per year) ninety five percent of the time and geo-morphological studies suggest that the Mouth did not close for at least 8,000 years. In 1981, the Mouth closed completely for the first time and within 24 hours sand deposits at the Mouth were higher than the 1956 flood level (the largest flood in the River since European settlement).

Page 7 - River flows and the need to provide water for irrigation began to become a political issue by the 1880's. Reduction in River flows were raised in the South Australian Parliament from 1878. In 1885, the colonies of New South Wales and Victoria signed an agreement to share the waters of the River Murray evenly between those two colonies without provision for the downstream use or needs of South Australia. By 1887, there was great fears that extraction for irrigation would cause the lower River Murray to be impregnated with salt because river flows could no longer hold back the sea. This major decline in flows lead to first the planning (from 1890) and then the construction of the barrages in the 1930's.

Page 11 - 1885 New South Wales and Victoria sign an agreement dividing waters of Murray.

Page 11 – 1886 Premier of Victoria writes to Premier of South Australia suggesting that South Australia set up a Royal Commission of enquiry into the River Murray.

Page 12 – 1902 Councils around Lakes begin urging the State Government to bring under notice of the Federal authorities the necessity of conserving the freshwaters of the lakes. Concern was expressed that the value of the land was decreasing. Mr Hacket, Chairman of Meningie council said, "the land had been purchased from the Government at high figures owing to the beautiful fresh water frontage which it then possessed". Murray Waters Commission whilst taking evidence at Victor Harbor, Goolwa and Milang on the state of the lakes were told that they were becoming saltier every year. A consequence was that reeds and waterweeds were being killed. Mr Allan McFarlane of Wellington Lodge said he had used the water for stock and irrigation for 45 years.

Page 13 – 1904 South Australia was under the impression that Victoria was extracting 75% of water in the upper Murray. South Australia Parliament urged to construct barrages to restrict entry of seawater. Federal Government suggested that a central body was needed to control the River Murray. Mr Hacket, Chairman of the District Council of Meningie and Manager of Narrung Station said " The natural condition for the last 40 years of my own knowledge – if I except last year, which I admit was affected by the drought, but was intensified by diversions – was sufficient supply of fresh water to meet the requirements of settlers for their stock, and any divergence from these natural conditions is a direct infringement on the riparian rights which have been in existence for half a century'.

Page 15 – 1930 As a result of a public meeting at Strathalbyn a deputation met with the South Australian Commissioner of Public works to request that the fresh water condition of the lakes be conserved. He was told that both Lakes were "perfectly fresh all year round, with weeds growing on its margin"

Page 29 – 1889 Mr Hussey. ' A report supplied by the Government of New South Wales showed that on the north bank of the river there are 70 trusts and other diversions, which use in summer 765 cubic feet of water per minute, and in winter 1,065 cubic feet per minute. On the south or Victorian bank there were 63 trusts and other diversions, taking in summer 46,577 cubic feet per minute, and in winter 161, 618 cubic feet per minute. It was therefore no wonder people were complaining that the lakes near the Murray mouth are going salt.' It was found the Loddon could not afford a supply for irrigation to all those claiming to share its use, and in May 1887, it was recommended by the Chief Engineer of Water in Victoria to supply the lower part of the Loddon River, from a point some miles above Kerang with water from the Murray by way of Kow Swamp (1000 cubic feet per minute = 14.88 GL per year)

Page 43 – 1903 Premiers' Conference, Sydney, for first time other States admitted that South Australia had an interest in the Murray. Allocated 150,000 cubic feet of water to pass the border (assuming cubic feet per minute this is equivalent to 2,232 GL).

PDF can be downloaded from Goolwa to Wellington Local Action Planning group

http://www.gwlap.org.au/publications.php

http://www.riverlakescoorong.com.au/documents/Lakes_History.pdf

Groundwater a Resource for the Future

Murray Darling Basin Commission 2004

"Groundwater is a major natural resource in the Murray-Darling Basin. Its current and future management will have a fundamental impact on the economic viability of many of the Basin's regional communities. In some parts of the Basin, groundwater is an underutilised resource. In others, it is being used unsustainably. This booklet has been designed to be useful to water managers, policy makers, students and those members of the public with an interest in the groundwater systems of the Murray-Darling Basin. Although salinity issues are discussed they are not the primary focus of the publication. A listing of relevant publications and details of relevant websites have been included.

- "At present, the Murray Basin contains about 4,600 million ML of water, two thirds of which is useful for humans"

http://www.mdbc.gov.au/nrm/groundwater/groundwater_a_resource_for_the_future

Marina boost to River Murray economy

Planning SA 30 October 2008 (selected quotes)

"Minister for Urban Development and Planning Paul Holloway and Minister for the River Murray Karlene Maywald today released a proposed houseboat marina strategy to give a much-needed shot in the arm to the economy along South Australia's major waterway. The draft Houseboat, Mooring and Marina Strategy for the River Murray in South Australia seeks to improve the health of the river while supporting and enhancing tourism, the Ministers said in releasing the document for public comment."

"In keeping with the strategy, the State Government announced today conditional approval of a new residential marina development at Mannum in the mid-Murray. Minister Holloway says approval of the residential marina project proposed by Tallwood Pty Ltd follows a comprehensive environmental assessment using the State's major development process. Stage one of the development involves an investment of $15 million, which is expected to grow to $165 million once the project is fully constructed, Minister Holloway says. "The Mannum Waters development sets a new benchmark for best-practice marina and residential developments along the River Murray, in keeping with the Government's draft strategy," he says. "Water quality will be safeguarded by providing secure houseboat moorings off-river and adopting comprehensive wastewater collection and spill containment."

http://www.planning.sa.gov.au/index.cfm?objectID=4B22DD92-F203-0D46-A8356C8D5D4F5653

Review of Non-Forestry Managed Investment Schemes

The Treasury *Australian Government* 1 August 2008

"Abstract: On 1 August 2008, the Government released an issues paper regarding non forestry managed investment schemes (MIS) as part of the review of the costs and benefits of non forestry MIS. The issues paper outlines the areas that the review will cover and the various claims that have been made regarding MIS, as well as the information that Treasury seeks from contributors. To assist in identifying and quantifying the impact of non forestry MIS, Treasury invites interested parties to contribute information. The submissions received will be incorporated into a discussion paper to be produced by Treasury. The issues outlined in the paper are not exclusive. Submissions may raise other issues, relevant to the broad range of the review."

http://www.treasury.gov.au/contentitem.asp?NavId=037&ContentID=1401

Submissions: Review of Non-Forestry Managed Investment Schemes - 14/10/2008

"Treasury received 79 submissions in response to the Review of Non-Forestry Managed Investment Schemes. Seventy-five of these are public submissions and there were four confidential submissions. The submissions that do not contain confidential material are listed below and are accessible by selecting the author. The opinions expressed in the submissions are those of the authors and do not necessarily reflect the views of the Government or the Treasury."

http://www.treasury.gov.au/contentitem.asp?ContentID=1423&NavID=037

Submision 82 to Senate Rural and Regional Affairs and Transport Committee

Inquiry into water management of the Lower Lakes and Coorong

Submission by John Caldecott

29th September 2008

http://www.aph.gov.au/senate/committee/rrat_ctte/lowerlakes_coorong/submissions/sub82.pdf

Submission 40 to the Parliament of Australia Senate Inquiry into water management in the Coorong and Lower Lakes by Dr Kerri Muller, Principal, Kerri Muller NRM (selection)

13. Best practice management for ASS (Acid Sulphate Soils) sites is to keep them wet if wet, not to disturb them (i.e. do not build weirs, channels, embankments or other structures), to take care when discharging water from them, to neutralize them slowly preferably with fresh source water, to bioremediate where possible with plants and mulch and to not add extra sulfate, particularly to confined systems.

14. ASS science and management experience suggests that letting sea water into Lake Alexandrina will not fix the ASS problem but will exacerbate it because once in the Lakes, the sea water will not be able to be thoroughly discharged and hypersaline conditions conducive to the production of monosulfidic black oozes are likely to be created.

15. Ramsar listed and otherwise significant wetlands, tributaries and River reaches in all parts of the Murray-Darling Basin, not just the Lower Lakes and Coorong, are severely degraded and in need of additional flows to rehabilitate their Ecological Character. Not one of the six Living Murray Icon sites is receiving adequate water and thousands of wetlands and several major tributaries across the Basin are at risk from exposure and/or disturbance of Acid Sulfate Soils."

http://www.aph.gov.au/SEnate/committee/rrat_ctte/lowerlakes_coorong/submissions/sub40.pdf

TAR-RU The Story of Lake Victoria

MDBC 1st January 2003

"Lake Victoria in south-western NSW is a special cultural place and a key national water resource. It is an important cultural heritage site for the Aboriginal community and an indispensable environmental resource for a major part of the health of the River Murray, its plants, animals and ecosystems.

The story of Lake Victoria crystallises many of the driving issues in Australia's national development. At a time when problems of environmental degradation and salinity are as significant as water scarcity, the story revealed by archaeology encourages a long-term view of land and water management. Lake Victoria teaches one central lesson: shared responsibility is the key to future sustainability."

To quote the MDBC Chief Executive Don Blackmore at the time during this video "Well what's changed was when Lake Victoria first got thought about which was back in the 1920s we were just building Hume Dam, and Hume Dam was the second largest dam on earth and the pressures where very slight. What people where trying to do was to take out the variability of flow in this river which has a very high variability of flow and what they where trying to do is drought proof themselves. But since then we've had 65 major dams built in this basin, 600,000 private water supply dams, stock and domestic dams and the like and we now store in this basin one & half times the average annual flow of every river. So the whole demand pattern in this basin has just changed dramatically. And we're now consuming, when Lake Victoria was first conceived we were consuming less than one million megalitres a year and we are now consuming eleven million megalitres of water a year out of this basin so there's just been massive change and we've all benefited from the economic performance of that." (Transcript by John Caldecott (1,000 megalitres = 1 gigalitre))

http://publication.mdbc.gov.au/product_info.php?products_id=179&osCsid=70d19167c9d599f9af3ca2d911b2a4f3

Vics want our help to take River Murray water

Cara Jenkin The Advertiser p13 28th November 2008

"The Victorian Government wants South Australian support to override amendments to a Bill which would stop Melbourne taking water from the Murray-Darling Basin. The Senate yesterday passed the Water Amendment Bill, which includes amendments to block the construction of a pipeline to supply water from the basin to Melbourne. It also includes amendments for cities outside the basin to reduce their take of water from the system over time. Melbourne now does not source water from the basin but the proposed pipeline would take 75 gigalitres of water each year. It is about half what Adelaide takes from the River Murray in dry years."

A member of the Victorian Premier's media unit contacted The Advertiser on Wednesday to suggest more SA media coverage on the consequences of the amendments. He suggested South Australians should be made aware that if the Bill's amendments were passed, Adelaide would have to be weaned off the River Murray."

"Senator Birmingham said most South Australians wanted Adelaide's reliance on the river to be reduced. "It would be the first time the Victorian Government has tried to feign interests in South Australia's water supply," he said. Senator Fisher

said SA needed to take the lead before other states could follow. "The amendment is to, over time, reduce reliance on the Murray by those who have more choice in their access to water, like a capital city like Adelaide, like a capital city like Melbourne," she said."

http://www.news.com.au/adelaidenow/story/0,22606,24717782-5006301,00.html

Water Allocation Plans in South Australia under the NRM Act 2004

Water Allocation Plans now provide for the unbundling of water licences from property that will betradeable for prescribed water authorised by the Minister and will become law once Water Allocation Plans are approved by the Minister.

http://www.senrm.sa.gov.au/OurPlans/WaterAllocationPlans/PadthawayWaterAllocationPlan/tabid/618/Default.aspx

http://www.kinrm.sa.gov.au/Portals/4/Freshwater/watermanagementFAQ1_August08.pdf

http://www.kinrm.sa.gov.au/Portals/4/Freshwater/watermanagementFAQ2_August08.pdf

Water Politics in the Murray-Darling Basin

The Federation Press 2007

Daniel Connell (selected quotes)

Chapter 2 Beyond Sober Thought (Governments take control 1880s-1920s)

- Page 63 "The Victorian delegate, Isaac Isaacs, a future Commonwealth Attorney-General, Chief Justice of the High Court and the first native-born Governor-General, immediately took issue with Barton's suggestion that the proposed High Court would be the best arbitrator of such future conflicts:

  > This is not a question of legal rights to be measured by some legal standard or statutory provision but of the requirements of the states in relation to their development. This is an absolutely political question to be determined by the extent fo the territory, the quantity of water and the needs of the population. How that can be a matter for the Supreme [High] Court is more than I can well understand.

- Isaacs stressed the need for a decision to be made on its merits from a national perspective, given that rivers 'by their very existence and course, are the common property of Australia'."

The Federation Press 2007 Website:

"In January 2007 the Australian Prime Minister, John Howard, announced a $10 billion plan to reform rural water management. Most of the effort will focus on the Murray-Darling Basin. In this book Daniel Connell explains why there is a crisis in the Murray Darling. He highlights the disastrous consequences of a century of fitful, reluctant “co-operation” between the six governments responsible for the region. Connell argues that a new institutional system is essential – but a Commonwealth takeover is not the best answer. Instead, the Commonwealth government should use its constitutional and financial power to force the States to adopt national policies – and stick to them, whatever the local politics. The States would continue to play a substantial role but the controls would be tighter, the framework more comprehensive. He also shows how the National Water Initiative, the great blueprint for water reform, has stalled with many of its most important recommendations ignored. So far the public debate about the future of the Murray Darling Basin has concentrated on new technical projects and increased water trading. Connell argues that unless institutional change is given priority, hundreds of millions of dollars of annual investment will be frittered away – and the crisis will continue."

http://www.federationpress.com.au/bookstore/book.asp?isbn=9781862876330

http://www.crawford.anu.edu.au/staff/dconnell.php

Water for Adelaide

Professor Don Bursill presentation 20th November 2008

First some key facts summarised from a recent talk by the former Chief Scientist of SA Water Don Bursill AM on 20th November 2008 during a talk "Water for Adelaide" (water consumption figures are on a per annum basis) presented to the AGM of the Electronics, Information & Communications Technology Association (EICTA) in Adelaide:

- South Australia has the worst water resources position of any state of Australia however it has the most reliable water supply of any Australian capital city due to good early planning and infrastructure provision.
- Minimum entitlement flow of 1850 GL was negotiated for SA, which was suspended under drought management arrangements. 600 GL allocated for irrigation and 150 GL for urban use.
- Adelaide uses approximately 200 GL under normal conditions but has reduced consumption to 160 GL during water restrictions (60% Mount Lofty Ranges and 40% from the River Murray in an average year).
- Water sourced from the Murray ranges from 20% to 95% depending on rainfall, the average is approximately 80 GL and is less than 1% of total abstractions and less than 2% of average flow to South Australia. 70-80% of water used is for irrigation.
- SA rehabilitated its open trench irrigation systems some 20 years ago – funded largely by EWS ratepayers with some contributions from irrigators and the Commonwealth.
- Adelaide recycles 20% of its wastewater the largest of any Australian city.
- Water diversions from MDB as a percentage of total diversions; NSW 57%, VIC 34%, SA 5%, QLD 2% and ACT 1%.

- From 2000-01 to 2005-06 irrigation diversions reduced 11% whilst total inflows to the Basin declined by 55%.
- 80% of irrigation in Australia is in Victoria and NSW where 93% of water is applied by flood irrigation technology.
- A 12% improvement in irrigation efficiency would be equivalent to the total annual use by all urban communities in Australia.

Water Wednesday - 15 October 2008 (Presentations & Podcasts available for download)

The theme will be 'How do we reduce diversions from the River Murray and use innovation and science to find clever options for future water management?"'

Honorable Karlene Maywald, Minister for the River Murray and Water Security South Australian State Government "Exploring all options for smarter water use"

Mr Peter Cosier, Director Wentworth Group of Concerned Scientists "Impediments to sustainable water use"

Professor Wayne Meyer, School of Earth and Environmental Science University of Adelaide "Finding innovative ways to reduce water use by 30 to 50%"
http://water.adelaide.edu.au/events/2008/event5.html

Professor Wayne Meyer

Professor Wayne Meyer presentation 15th October 2008

The following quotes have been selected from the slides used by Wayne Meyer Professor, Natural Resource Science at the University of Adelaide when delivering a Water Wednesday talk on the 15th October 2008 "Finding innovative ways to reduce water use by 30 to 50%"; "If we want the Murray & Darling to remain iconic Australian inland rivers we need to reduce water extraction by 30 to 50%":

- The biggest improvements can come from the biggest users
- Urban water use is relatively small and very high value
- Urban “cool & green” is possible with improved urban irrigation
- Pasture irrigation is the biggest water use - & the lowest value
- Viable, long term irrigated agriculture is possible with targeted rehabilitation, area consolidation, improved distribution
- The current “buyback and update” has only a limited chance of delivering

Additional statements and facts selected from Wayne Meyer's presentation:

- Greater Adelaide area water use (all sources); Household water use 45%, Primary production Primary production (94 GL) = irrigation (farm dams, bores, recycled) 28%, Community purposes 17%, Commercial & industrial 10%.
- Total MDB Extraction; 2001/02 – 11, 567 GL (Irrigation 95% or 10,960 GL), 2006/07 – 5,234 GL (Irrigation 89% or 4667 GL).
- Adelaide’s water requirement is small relative to the MDB resource and other current uses. Water restrictions in Adelaide will not “save the Murray”
- Length of irrigation supply and drainage channels - Total 25,560 km, Asset value ~$3.77 billion
- Profit ($) per ML water (1995 – 2001) and give preferentially support those regions and systems that have a better chance of being financially viable; Riverland $832, Sunraysia $748, Goulburn – Broken $211, Lower Murray $96, Murrumbidge $45, Colearnbally $43, NSW Murray $16, Loddan – Campaspe $13, Upper Murrumbidgee and Upper Murray less than $0.
- Preferentially support those regions and systems that have a better chance of being environmentally viable, relocate irrigation out of high salinity impact zones
- Current “buy back” ($3.1 billion over 10 years); At best, will reduce extraction by <1,400 GL (@$2,500 / ML), sellers will bide their time waiting for an increased price and runs the real risk of delivering disjointed, non viable irrigated areas.

Water management in the Coorong and Lower Lakes

The Senate Committee Report Rural and Regional Affairs and Transport has produced the first report

3rd October 2008

The following sections have been selected and reproduced here to understand the potential water availability to Adelaide and to recognise that water used by urban and domestic consumers is insignificant when compared to the water used by irrigation and there is a need for a rethink and prioritisation of the allocations of the Murray Darling Basin:

"2.21 The Murray-Darling Basin (the Basin) covers approximately 1 059 000 square kilometres or 14 per cent of Australia's land area. Two million people (10 per cent of Australia's population) live in the Basin and are dependent on it for their drinking water, as are another 1.1 million residents of the city of Adelaide.

2.23 The estimated long term average annual runoff into all rivers in the Basin is approximately 23 609GL which is approximately 4 per cent of the average annual rainfall of 530 618GL. There is considerable variation in runoff from one part of the Basin to another.

2.28 To regulate the River Murray system, River Murray Water utilises four major storages, sixteen weirs, five barrages and numerous other smaller structures. Major storage capacity in the Murray system (Dartmouth, Hume, Lake Victoria, and Menindee) is approximately 9000GL and in all Basin storages is approximately 23 000GL.

2.29 The total net open water evaporation from major water bodies within the Basin is in the order of 3000GL/year. Of this, the Menindee Lakes account for about 460GL/year, Lake Victoria 120GL/year, and Lake Hume accounts for about 60GL/year of evaporation. The Lower Lakes account for net evaporation of approximately 700-950GL per year, almost a third of the total estimated evaporation.

2.33 Irrigated agriculture covers a total of almost 1.65 million hectares in the Basin and is the single greatest water user. Average annual diversions in the Basin are about 11 500GL per year; about half of the annual flow in the Basin. Around 95 per cent of this diversion is for irrigation. In 2006-07, water diverted from the Murray, Murrumbidgee and Goulburn Rivers accounted for about 72 per cent of all the water diverted in the Basin.

2.34 Irrigation within the Basin can be broadly characterised by several main industries with different patterns of water use. These are:

- pasture in the southeast which is often flood-irrigated and occurs throughout much of the year (17 per cent);
- rice in the Murray and Murrumbidgee which is flood-irrigated (standing water) for about three months in the summer (16 per cent);
- dairy farming (17 per cent);
- cotton in the northern Basin catchments which is flood-irrigated for about three months in the summer (20 per cent); and
- Horticulture, including grapes, other fruit, nuts and vegetables (13 per cent).

2.43 Under the basic sharing provisions of the Agreement, SA is entitled to receive a minimum volume of 'entitlement' water from the upper States (1859GL per year).

2.50 Approximately 350GL of River Murray Water is used by urban and domestic consumers each year. The largest consumer of this water in dry years is SA (200GL), near the end of the River Murray.

3.5 The current dry period and low water availability can be put into perspective by comparisons with similar extended droughts in the early and mid-twentieth century. The average annual Murray inflow of 3800GL/yr during the current drought (2002 to 2008) is lower than that experienced in the previous worst two droughts on record – 4900GL/yr in 1897 to 1904, and 5600GL/yr in 1938 to 1946."

3.14 In its March 2008 report to COAG, the Working Group on Climate Change and Water noted that (selected paragraph):

> "Moreover, in the absence of increased regulation, new estimates are that in the MDB alone, within 20 years a further 1200-3400 gigalitres of water will be intercepted annually by activities that currently do not require a water access entitlement, such as farm dams and bores and plantation forestry."

3.18 The overall impact of the current drought and water extraction for consumptive use has been a dramatic fall in the level of fresh water in the lakes. Lake Alexandrina is now at its lowest recorded level.

3.24 (selected quote) Salinity levels in the lakes have been steadily rising. The Murray River deposits approximately 500,000 tons of salt in the lakes every year. With no outflow this salt has been concentrated by evaporation.

http://www.aph.gov.au/SEnate/committee/rrat_ctte/lowerlakes_coorong/interim_report/report.pdf

Water Resources Observation Network

Select state to view current dam levels.

http://wron.net.au/DemosII/DamData/DamLevels.aspx

Google Map Interface

http://wron.net.au/DemosII/DamData/DamMap.aspx

Adelaide Metropolitan Water Storages are currently at 75% capacity (12th December 2008) = 147 GL

http://www.sawater.com.au/SAWater/WhatsNew/WaterDataUpdate/ReservoirHome.htm?ReservoirSystem=StateSummary

Review of Cap Implementation 2006/07-Report of the Independent Audit Group

Murray-Darling Basin Commission March 2008

An assessment of States compliance with the Cap during 2006/07. Total basin diversions was 5,303 GL!

http://publication.mdbc.gov.au/product_info.php?products_id=427

Wine Industry

Vine debate

Jillian M Wehr *Herald Letter to Editor* 25th September 2008

"Desperate Riverland irrigators are being forced to burn hundreds of decade-old trees as one-third of growers prepare to walk off their blocks." (The Advertiser, September 8), while on the outskirts of the Barossa Valley vines are still being planted by syndicates.

Since the 1800s this land has been producing broad acre crops and sheep, relying on natural rainfall with no irrigation. The vines, on the other hand, are being irrigated either by the BIL (Barossa Infrastructure Ltd) Scheme or in some cases from SA Water mains supplies. Whether it comes from the BIL Scheme or SA Water, it is all drawn from the River Murray. Surely it would be commonsense to use the limited water available to sustain those Riverland enterprises (and communities) established decades ago, rather than squander it on vines already in over-supply. Surely, too, it would be commonsense to use this land to produce food (one of life's necessities) rather than wine (one of life's pleasures).

For more than 150 years the Barossa Valley was world-renowned for its quality wine, all produced from dry-grown grapes. Lesser quality wine from irrigated vines, labelled 'From the Barossa Valley' will destroy this hard-won reputation. Years ago local governments should have stopped approving this explosion of water-hungry vines in areas able to support food production without irrigation. If they are prevented from doing this because of legislation, it is time to change the laws."

http://barossa.yourguide.com.au/news/opinion/letters/general/vine-debate/1282472.aspx

Are you prepared to pull up vines?

Anita Donaldson *Daily Wine News* 19th November 2008

"Early mainstream media reports from last week's Australian Wine Industry Outlook Conference, presented by the Winemakers' Federation of Australia and Winetitles, have largely centred on the debate about harvest size in Australia. John Grant, president of Constellation Wines Australia, was part of a panel convened to discuss the issue and his view was "one in five" vine rows in Australia was a row too much. He said the industry needed to reduce production by about 20%. Early predictions are the 2009 Australian harvest will be of similar size to 2008, at 1.8 to 1.9 million tonnes with current demand at around 1.5 million tonnes. There were also views expressed at Outlook that smaller vineyards and wineries would continue to face enormous pressure and would be replaced by bigger operations."

http://www.winebiz.com.au/dwn/details.asp?ID=2204

Australian Wine Industry Overview

The Australian Bureau of Statistics (ABS) estimates that 158,595 hectares are cultivated for wine, drying and table grapes in Australia (see table). Of this amount 143,373 hectares are now bearing fruit; 11.9% of all vines planted are still not bearing. The total area of vines at harvest increased by 7.0% from 2001, continuing a trend of increasing plantings since 1987 (Figure 1).

http://www.winetitles.com.au/awol/overview/viticulture.asp

Wine Industry Statistics – Viticulture (selected quotes)

Vineyard Area

"The Australian Bureau of Statistics (ABS) estimates that 173,776 hectares are cultivated for wine, drying and table grapes in Australia. Of this amount 163,951 hectares are now bearing fruit, an increase of 3.7% on 2005-06. The area of non-bearing grapes fell 7.5% in 2007 to 9825ha from 10,642ha in 2006. The net increase in area planted under vines for 2006-07 was 477ha, well down on the 1103ha recorded in 2005-06. South Australia remains the State with the largest area of vineyards accounting for 42.2% of the national total vineyard area. The total area of vines increased in all States with the exception of Victoria (-0.8%)."

"New plantings of vines during 2007 declined by 4.5% with 3684ha of new vines planted (See Table). This represents just 33.2% of the total of new vines planted when compared with 2000 when 11,468ha of vines went in the ground. Queensland showed a dramatic 464.7% increase in new plantings and both South Australia (5.9%) and Western Australia (12.4%) increased new plantings when compared with 2006 levels. New South Wales and Victoria planted fewer vines in comparison with the previous year and plantings in Tasmania were down 31.4%."

Water Use In Vineyards

"The ABS estimates 6,734 vineyards were irrigated in 2007. This was 83.7% of the total number of vineyards in Australia (8041). The area of grapevines irrigated was 157,401ha. The average usage of water was 3.4 megalitres per hectare, down from 3.66ML/ha in 2006. The three largest wine-growing States all reduced their average water consumption from 2006. Victoria averaged 4.8ML in 2007 (5.10ML/ha in 2006); New South Wales 4.0ML/ha (4.38ML/ha in 2006) and South Australia 2.7ML/ha (2.91ML/ha in 2006). The most common watering method continues to be drip or micro spray with 123,497ha or 78.5% of the total hectares irrigated in this way. There were 58,034ha of vineyard land watered with drip or micro spray in South Australia. In Victoria, 30.3% of irrigated vineyards are irrigated using spray (excluding micro-spray). In New South Wales, 20.7% of their total area is irrigated by furrow or flood which remains the third most-common method of watering. Most vineyards (93,739ha) used surface water from either State-owned or private irrigation schemes for their major source of water. Nationally, the next most important water source for vineyards was underground water supply (37,496ha) followed by other surface water (25,528ha).

http://www.winebiz.com.au/statistics/viticulture.asp

Outlook (selected quote)

According to the Australian Bureau of Agricultural and Resource Economics (ABARE), assuming average rainfall in winter 2007, total winegrape production is expected to begin to increase in 2007-08 by 19% to around 1.5 million tonnes (See Table), with ABARE forecasting a further increase in 2008-09 to 1.93 million tonnes, close to the record figures of 2004-05. It is also assumed that yields will return to 11.9 tonnes per hectare in 2008-09, based on five-year average yields for most regions. This return to average yields, combined with an increase in bearing area, is projected to lead to a 28% increase in production from 2007-08 to 2008-09.

http://www.winebiz.com.au/statistics/outlook.asp

Australian Winegrape Production: Projections to 2009-10

This report contains estimates of wine grape production in the 2006-07 vintage, as well as production projections for and 2007-08, 2008-09 and 2009-10. Estimates have been made for specialist wine grape, multi-purpose and minor varieties in each of Australia's wine grape producing regions.

http://www.abareconomics.com/interactive/winegrapes08/index.html