

**SUBMISSION**

**LEGAL AND CONSTITUTIONAL AFFAIRS  
COMMITTEES**

**SENATE INQUIRY**

**PROVISIONS OF THE WATER ACT 2007**

It is recommended that this submission to the Senate Legal and Constitutional Committee Inquiry – Water Act 2007, be read in conjunction with:

**Murray Darling Basin Submission – Guide to the Proposed Basin Plan, Water Planning and the Environment (17<sup>th</sup> January 2011)** *Prepared by Louise Burge for Southern Riverina Irrigators.*

## GENERAL STATEMENT

The Water Act 2007 has major implications for the economic and social values of the Murray Darling Basin and Australia's long term national interests.

“Agricultural economic output from the Basin is around AUD \$23 billion. AUD \$10 billion of this is from agriculture, equivalent to almost one third of the value of Australia's total annual agricultural output”.<sup>2</sup>

“The Basin contains 72% of Australia's total area of irrigated crops and pastures. The value of irrigated production from the Basin has been estimated to be worth \$3-\$4 billion at the farm gate, with an estimated four fold multiplier in value through processing beyond the farm gate”.<sup>3</sup>

The Water Act 2007 will impose major economic and social changes that will extend far beyond the confines of the basin itself. The true parameters of the economic and social impacts have not been understood or assessed.

This has primarily occurred as a result of the political basis on which the Act was developed.

The design of the Water Act 2007 was developed in a manner to obtain the necessary level of power by the Federal Government over States rights on water. To achieve this, the Federal Government utilised Section 51 of the Australian Constitution, (xxix), External Affairs powers. Use of such powers will ensure that the environment takes precedence over recognition of social and economic values.

This is further enhanced by the continued political haste that has, accompanied proposed change to Australia's major water policies. Specifics of the Acts as it relates to the environment, are subject to interpretation **and remain open to political views at any given period.**

The Act 2007 sets to reverse Australia's previous historical investments in securing reliable water supplies. The basis for such a policy reversal is not transparent, nor based on sound principles.

Language in the Act, while not specific, clearly sets out a pathway of intent that dates from the mid 1990's and cements over a **decade of misinformation**. This was a period when there was little accountability or transparency in relation to environmental statements and claims. As a result a **'belief' system**, as **opposed to 'accurate and informed scientific analysis'**, has become embedded, in departmental planning.

The issue of public perception of river health during this period was increased with the onset of the major drought leading to a period of political opportunism.

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<sup>2</sup> Water for the Future

<sup>3</sup> MDBC

It was a highly emotional period with little understanding of Australia's natural climatic variances. This led to the Commonwealth's response to water planning and to the basis of the Water Act 2007.

For over a decade, historical engineering and operational expertise of the basin's water resource systems has been replaced in Australia. A new era developed where decisions at political and departmental was not matched with the equivalent historical skills sets. This resulted in a shift to environmental policies that departed from practical or research based assessment, to a reporting period with inadequate assessment timeframes and a reliance on modeled predictions.

This period coincides with long term objectives to increase river flows to the end of the Murray River to address environmental issues that arose from the construction of the barrages at the Lower Lakes in South Australia in the 1930s.

Specifically to maintain current operations of the Lower Lakes in South Australia, by increasing 'end of system Murray river flows', as the key mechanism to address long term sedimentation issues in the Murray Mouth.

It is disturbing that such major policy decisions on such a **critical natural resource** such as water, leading to the formation of the Water Act 2007, were **not made on sound policy principles**. The fact further evidenced upon the release of the Murray Darling Basin Authority's, Guide to the Proposed Basin Plan.

The design of the Water Act 2007 which gives priority to the interests of the environment beyond all other considerations, was based on a deliberate intent to overcome Australia's constitutional impediments that had vested the power of water, with the States.

This Senate Inquiry should investigate whether the very basis of the Act, has been made in the long interests of Australia.

In assessing this, consider whether the Water Act 2007 be repealed and replaced by a new Act that specifically addresses aspects of the National Water Initiative that may have required Federal intervention. As an example, a new Federal Act to address such things as a national framework to enable the governance arrangements for State border trade arrangements.

The full ramifications of the Water Act 2007 are only now becoming apparent. Attempts to address major flaws in the Act will not be resolved by minor modifications. The complexities and ambiguities in the Act, remain an impediment to a professional and practical approach, to Australia's long term water planning interests.

This is further enhanced by the inadequate approach by the Murray Darling Basin Authority to ensure that such impacts are identified.

This is also in part due to policy positions where at a political level, there is a reluctance to identify past mistakes or it is deemed not in the public's interest to disclose the full nature of the impacts. The issue may cross all parties and political interests.

This Act:

- **Establishes the Murray-Darling Basin Authority (MDBA)**
- The Act requires the MDBA to prepare the **Basin Plan**
- Establishes a **Commonwealth Environmental Water Holder**
- Australian Competition and Consumer Commission (ACCC) - key role in developing and enforcing **water charge and water market rules** (in line with NWI principles)
- Gives the Bureau of Meteorology **water information** functions that are in addition to its existing functions under the *Meteorology Act 1955*.

The Act has also created administration mechanisms that will operate outside the historical nature of State's rights and areas of expertise.

In particular the role of the Commonwealth in establishing the Murray Darling Basin Authority that operates independently of State powers.

The current structure of the Murray Darling Basin Authority has identified a lack of independence and inadequate operational expertise. In a review of the Act, consideration should be given to reintroduce a system of shared State and Federal responsibilities.

The role of the ACCC has also identified some knowledge gaps in relation to practical application of policy reforms. In particular, the constraints and operational costs imposed on infrastructure operators and/or individuals from the ACCC's decisions.

The establishment of the Commonwealth Environmental Water Holder (CEWH) will mean that the Commonwealth will now be Australia's largest individual water entitlement holder. There has been widespread community concern that the operational arrangements of the Commonwealth Environmental Water Holder remains unclear and decisions about the future management of such a scale of water, may pose significant social and economic risks to regional communities. In particular flood risks and impacts to the 'reliability factor' of other entitlement holders.

It may be argued that as the Water Act 2007 received broad political support, the Act is worthy of continued support.

It is evident now, that both major sides of politics did not understand the Act in its entirety, nor the scale and extent of its ramifications. The original parliamentary approval should not be a prerequisite for acceptance of the Act in its current form.

**The Water Act 2007 is flawed on the basis of political, scientific, economic, social and environmental principles. As such, it is paramount for Australia's long term interests, that the basis on which the Act 2007 was determined, be subject to a thorough review.**

## **BACKGROUND; WATER PLANNING**

The inland river systems of the Murray Darling Basin are naturally variable with periods of extreme drought and floods. Outside such extreme events, flow variability remain as typical characteristics of Australian's river systems.

The Basin's water storage reservoirs seek to harness the natural rainfall variability, meeting objectives of flood mitigation and securing water supplies. In drought scenarios, major water storages enhance river flows, benefiting the environment and the social and economic values of the Basin.

Such storages in most short term drought sequences, continue to serve Australia well.

The magnitude of the drought in the Murray Darling Basin extending through much of the 2000's, ending in early 2010, meant that it was impossible to continue to provide secure irrigation supplies and high flow events with the current capacity of existing storages. The system did ensure that despite such a severe drought, the Murray continued to flow and meet all human needs and some irrigation supplies. This contrasts to historical drought conditions where the Murray would frequently dry to a series of shallow pools.

There is a common misconception today, that the Basin's existing storages can store sufficient water to cover current demands, store secure supplies for several years in advance, plus meet requirements for a ten year drought scenario. In effect, that Australia's water storages can 'drought proof the nation'. Not only is such a presumption incorrect, it ignores the major risk of natural flood events re-occurring.

The waters of the Murray Darling Basin (MDB) have been subject to extensive planning. The most recent changes implemented through the Murray CAP (1997), the Living Murray Program and the National Water Initiative 2004.

National Water Initiative (NWI) policies introduced major changes to water planning in the basin, which specifically addressed further concerns on the environment. (*attachment Water Planning & the Environment pages 28-56*)

Major Federal, State and community investments on water policy under the National Water Initiative (NWI) have been progressively implemented. Significant investments in consultation and cooperative planning saw the roll out of Water Sharing Plans (WSPs) in New South Wales. The extreme dry years of 2006/07 and 2008/09 during the Millenium drought led to the introduction of special water accounting/planning arrangements. A number of the Water Sharing Plans were suspended to meet critical water planning needs.

The suspension of the newly introduced NWI Water Sharing Plans, was not an indication of plan failures, but a necessary response to meet the extremes of the drought. At the time it was worth noting that until January 2010, 81.8% of NSW was in the grip of severe and prolonged drought. The capacity of Australia's existing water storages, despite extensive water planning for a range of climatic scenarios, could not deliver physically or store safely, the scale of water to meet such extreme prolonged drought conditions.

This lack of understanding led to widespread crisis reporting of the extreme dry events in the Lower Lakes in South Australia (2006/07, 2007/08, 2008/09) and subsequent claims that the system was ‘over allocated’.

Minimal water levels in the South Australian Lower Lakes during such extreme droughts, were a natural event, mirrored in all other of the Basin’s river and creek systems.

Few commentators understood the operational nature of the Basin’s water storage systems, in particular the system of annual allocation against entitlement, where water is ‘allocated’ on an annual basis and only when it is determined that sufficient water is in a system, to do so.

An example of this can be identified through allocation announcements in the largest irrigation area of the Basin (Murray Irrigation Limited), where general security supplies had the following allocation announcements:

2006/07	0% water on entitlements
2007/08	0% water on entitlements
2008/09	9% water on entitlements

Despite zero allocations against entitlements during that period, a public view prevailed that stated that the system was ‘over allocated’ and that major policy changes on water must be implemented.

A key criticism of the Water Act 2007, is that its basis was developed as a political response during a major drought crisis, the scale of which equates to the magnitude of the Federation drought of 1895-1903 and the mid 1930’s to 1940s drought period.

It seems illogically to embark on large scale further policy changes, including substantial taxpayer expenditure, to meet new ‘untested’ claims for the environment, when there has been no analysis of the major benefits to the environment, delivered under the National Water Initiative (2004).

**A foundation principle prior to the development of further public policy on water for the environment, should have been, an open and transparent cost benefit analysis. Particularly, when factoring in the scale of public expenditure (\$10 billion) to meet the further claimed ‘needs’ for the environment.**

## 1) TERMS OF REFERENCE

### **(a) any ambiguities or constraints in the Act which would prevent a Basin Plan from being developed on an equally weighted consideration of economic, social and environmental factors.**

The Water Act 2007 is a legislative instrument to regulate and control one of Australia's key natural resources – water.

Australia's other natural resources, including gas, minerals and coal, are subject to Australia's accepted principles of ecologically sustainable development.

Australia's natural resource -water, will now have planning decisions applied that place the environment first. Only after these interests have been addressed, social and economic values are considered.

This approach is unprecedented by a Federal or State Government in relation to the management of natural resources.

Despite legal interpretation of the Water Act 2007 being subject to public dispute since the release of the Murray Darling Basin Authority's Guide to the Proposed Basin Plan, it remains clear that the Act is an environmental act, first and foremost.

As flaws in the Water Act have been made more transparent, upon release of the Guide to the Basin Plan, it is vital the failings of the Act are rectified.

The Guide to the Basin Plan and the varying legal interpretations of the Act, provide little social or investment assurances to communities and businesses, in the Murray Darling Basin.

Adding to the economic and social risks resulting from development of the actual plan itself, are the threats of legal challenge to the Basin Plan in the High Court, made by environmental advocacy groups. The construct of the Act has enabled such legal threats to occur.

It is worth noting that such uncertainty is not limited to the initial development of the Basin Plan at Federal Level, but also how the plan is determined at the State implementation phase. In this aspect, the true nature of the social and economic impacts may become more apparent to individual entitlement holders or to specific regions. Legal challenge may also occur within the State system.

The social and economic ramifications are further heightened in Part 2, Division 1, subdivision F – Amendment of Basin Plan.

It is not possible for the Basin Plan to meet its objects, Part 1, (3), as the ambiguities relating to social and economic considerations cannot be determined or properly assessed due to the nature of the Act itself.



To measure the impact is further eroded by the non determinable status of meeting environmental objectives or conditions. This is a common aspect of determining environmental health, where either modeled predictions prevail, expert panels are used or estimates are made in the absence of sound scientific data.

Section 21 – General Basis on which the Basin Plan is to be developed (2) (a) be prepared to have regard to:

- (a) the fact that the use of the Basin water resources has had, and is likely to have, significant adverse impacts on the conservation and sustainable use of biodiversity;
- (b) promote sustainable use of the Basin Water resources to protect and restore ecosystems, natural habitats and species that are reliant on the Basin water resources and to conserve biodiversity

This section is open to interpretation or diverse scientific opinion.

The release of the Guide to the Basin Plan highlighted major flaws in the foundation source information and data, that the Murray Darling Basin Authority relied on to develop the Basin Plan.

This submission draws attention to examples of supporting documents that underpinned the decisions of the Murray Darling Basin Authority.

**In particular the reports:**

- 1999 Murray Darling Basin Commission Salinity Audit and the complimentary CSIRO report ‘Effectiveness of Current Farming systems in the control of Dryland Salinity’ (*note: refer page 9 Water Planning & the Environment*)
- Murray Darling Basin Commission Ministerial Council report – Sustainable Rivers Audit (SRA)

Original predictions for the Murray River to exceed World Health Organisation’s Drinking Water Standards of 800 EC, subsequently failed to reach expectations and heighten salinity issues particularly in the Lower Lakes during the current drought, were geographically specific and did not reflect the salinity readings of the Murray River itself, which remained well within the threshold standard for drinking water.

Subsequent to the height of the perceived ‘salinity crisis’ in the late 1990s affecting the Murray Darling Basin, concerns were raised about the accuracy of the original modeled predictions. Salinity predictions in 1999 failed to meet practical observations. This led to a public re examination of the original claims.

The Australian Farm Institute – Mick Keogh stated

*“... Individual research says the figure doesn’t look right because the model that underlay it – basically - isn’t what’s happening in practice”.*<sup>4</sup>

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<sup>4</sup> ABC Science

In 2005, Professor Wayne Meyer, chief scientists at the CRC for Irrigation Futures in ABC Science ....

*‘there’s no question that salinity fears have been exaggerated in some parts of Australia... this could be a short-term effect caused by environmental factors’,... but adds ‘now is a good time to revisit the 2000 figures’. ‘We’re five years down the track so it’s probably time to have another look at that information ... and it may well change’.<sup>4</sup>*

In the report, Myth and the Murray – Measuring the Real State of the River Environment: Jennifer Marohasy (IPA 2003), noted that a:

*‘plot of average salinity levels for the last 20 years indicate that salinity levels have dropped since the drought of 1982’.*

Another report relied on by the MDBA, was prepared by the Independent Sustainable Rivers Audit Group, (a group of independent ecologists)– for the Murray Darling Basin Commission Ministerial Council. The use of this particular report identifies how different aspects of environmental determinations can occur.

The Sustainable Rivers Audit assessed the long-term assessment of the condition and health of the 23 river valleys in the Murray-Darling Basin, based on three environmental criteria, fish, macro invertebrates and hydrology.

The comparison benchmark described the patterns and processes, that would have been expected to prevail, had there been NO significant human intervention in the landscape.

The Report released in June 2008 uses data on hydrology, fish and macro invertebrates gathered during period – 2004 to 2007 (MDB major drought period).

The Murray Darling Basin Authority which operates under the auspices of the Water Act 2007, incorporated information from the report despite the fact that this report was only an analysis of trends and was to be the 1<sup>st</sup> in a series of 3 reports at 3 yearly intervals.

The SRA reports itself notes:

*“1<sup>st</sup> step toward analysis of trends which will be a feature of later reports”*

*“ A severe drought has prevailed over the Basin during the Audit period – it is too soon to say how much this has affected fish & macro invertebrates communities”*

*“SRA is an audit, concerned with surveillance.....is concerned with signs of change of changes rather than causes”.*

*“SRA employs a concept of Reference Condition. This describes the patterns & processes that would be expected to prevail now had there been no significant human intervention in the landscape. It is open to some uncertainty, because it is*

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<sup>4</sup> ABC Science

*estimated rather than measured*” ( note reference condition is not a target for management but is comparison figure)

*“ecosystems are conceptual entities..... generalisations may be elusive and comparisons may be difficult. The ‘health of an ecosystem cannot readily be judged by comparison with a database indicating ‘normal’ ranges for different variables, as ecologists do not have access to the kinds of reference data that a medical practitioner does”*

*“historical data, expert knowledge and modelling are used where possible, but sometimes these may not be sufficient for reliable estimates of some variables”*

In the SRA Report, of the 23 river valleys assessed only 1 was rated in good health, 2 were rated in moderate health, 7 were described as in poor health, 13 in very poor health.

In determining river health, a score high on flow volume but low on macro invertebrates, or low on native fish, due to the presence of alien fish species (eg European carp), could render a site score - in poor condition.

As an example only, use of this report and such data under the provisions of the Water Act 2007 to influence the development of a Basin Plan, raises concerns about how the objects of the Act relating to social and economic outcomes can be met when environmental determinations have few effective parameters.

Incorrect statements on the health of the Murray River have continued to be expressed and the Murray River is regularly described as a dead and dying river, in need of urgent restoration.

The Murray Darling Basin Authority itself stated;

- ‘the Authority is acutely aware of the urgency and importance of restoring the ecological health of the Basin’
- ‘twenty out of twenty three catchments in the Basin are in ‘poor health’ to ‘very poor’ ecosystem health’

In raising this issue, it is clear that section 21 of the Act is open to interpretation at any point in time, even by an ‘Independent Authority’ set up by the Water Act 2007.

The Authority’s use of the SRA report identifies the interpretational nature of section 21 (2) (b) ‘ *to protect and restore ecosystems, natural habitats and species that are reliant on the Basin water resources and to conserve biodiversity*’

While the Act suggests the optimization of social and economic outcomes, the Act allows a very broad interpretation on the needs of the environment. One that is not open to scrutiny or rigor.

This risk is further heightened by Section 4 Definitions – Principles of Ecological Sustainable Development Section 4 (2) (b) (page 19) where the Act states “that lack of

full scientific certainty should not be a measure to postpone measures to prevent environmental degradation”.

**In contrast to this, it could be argued** that Act’s failure to adequately ensure that *“the lack of scientific certainty should not be a measure to imposed irreversible social and economic impacts on regions, where it can be clearly identified that the foundation science has been based on incorrect assumptions or modeled predictions.”*

Section 21 – General Basis on which the Basin Plan to be developed, identifies:

- (1) The Basin Plan (including any environmental watering plan or water quality and salinity management plan included in the Basin Plan) must be prepared so as to provide for giving effect to relevant international agreements (to the extent to which those agreements are relevant to the use and management of the Basin water resources)

The reference to relevant international agreements in this context could mean that the Australia’s original intent in becoming a signatory to any or one of those international agreement, can now lead to consequences not originally understood.

While international agreements such as RAMSAR are based on the principle of ‘wise use of resources’ and are not exclusive to the needs of the environment, other international agreements may be based on purely environmental objectives.

Participation in these agreements is generally voluntary and as such, the specifics of the agreements are not general linked to legal instruments.

This raises the question, why is the Water Act 2007 – a legal instrument, placing the resources of Australia under the control of an international agreements that is NOT legally binding?

Further, components of such international agreements may be met without the necessary obligations that would normally be associated with Australian Federal or State legislation.

The Water Act 2007 contradicts Australia’s acceptance of the international principles of Ecological Sustainable Development.

“Australia’s National Strategy for Ecological Sustainable Development (Dec 1992) endorsed by the Council of Australian Governments (COAG), accepts there is no universally accepted definition of ESD, but is largely based on internationally recognized principles of ecological sustainable development that seek to achieve a balance of environmental, social and economic needs”<sup>4</sup>

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<sup>4</sup> SRI Submission Water Planning and the Environment

The Water Act 2007 refers in Section 4 (2) (page 19) to the principles of ecologically sustainable development (ESD)

- a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
- b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- c) the principles of inter-generational equity – that the present generation should ensure that the health, biodiversity and productivity of the environment is maintained or enhanced for the benefit of future generations
- d) the conservation of biodiversity and ecological integrity should be a fundamental consideration in decision making
- e) improved valuation, pricing and incentive mechanisms should be promoted

The objects of the Water Act refer to accepted principles of ESD, but only within the limitations of the words

- c) **in giving effects to those agreements (*international*)**, to promote the use and management of the basin resources in a way that optimizes economic, social and environmental outcomes’.

#### The objects of the Water Act

- (3) (f) also states that “to ensure that the management of the Basin water resources takes into account the broader management of natural resources in the Murray Darling Basin”.

Although objects of the Act taking account of ESD principles and the broader management of natural resources in the Basin, such recognition is not evident in the body of the Act.

This would suggest on the issue of water planning, this is a policy reversal of Government, where previous Federal and State funded principles of Total Catchment Management, now seem redundant.

As the full ramifications of the Basin Plan have become more evident, this reinforce the need to ensure that the Water Act 2007 is substantially amended or repealed, to ensure a clear legal obligation to develop a basin plan that balances equally the social, economic and environmental values of Australia. This is heightened by the fact that without such protection, continued risk and uncertainty will prevail long after the initial release of the basin plan.

The Water Act 2007 also opens the pathway for ambiguity in terms of assessing social, economic and environmental outcomes linked to specific sites.

Ramsar listed sites are not necessarily pristine environments and can involve significant alternations from a historical ‘natural’ state. This is in line with the Ramsar principles of wise use of resources.

A number of sites were listed to protect economic values as well as environmental. The decision for a State to list a site may have been made to increase recognition of area, thus leading to an elevation in importance of a site in political terms.

In this current political period associated with the Water Act 2007, Ramsar sites have taken on even more significance.

A State can use the Ramsar process to ensure recognition of a 'continuing use' (eg timber harvesting) or gain for example, additional advantage in terms of securing extra water, through revised sustainable diversion limits achieved via the Basin Plan. Alternatively, it could attract a greater share of water held by the Commonwealth Water Holder.

The ecological character description (ECD) of a Ramsar site are developed by an individual state, approved by the relevant State Minister and endorsed by the Federal Ministerial council. In many cases ecological character descriptions of Australian Ramsar sites have already been developed or partially developed, prior to the formation of the Water Act 2007. This process could have extended over a decade and is subject to continual review.

Under this scenario a State may have determined the '*needs*' for a Ramsar site, based on an ecological character description, that are preferential to that State's interests.

Ecological character descriptions are the basis on which the future health of a site are measured and reported on by the Federal Government under the Ramsar Convention Agreement.

The relevance of the Water Act, Section 21 3 (c) then becomes apparent, where development of the Basin Plan, must take account of the ecological character descriptions of a Ramsar site.

While ECD must be prepared in accordance with the National Framework and Guidance for describing the ecological character of Australian Ramsar site and is endorsed by the Natural Resource Management Ministerial Council, it is likely that original decisions taken a number of years ago in regard to a site's ECD, would not have been made with the full knowledge of how such ECD, could affect water planning in the future.

The listing process for a Ramsar site today, would likely result in individual States applying more scrutiny to the details of an ECD. This is because the ramifications of the ECDs under the Water Act 2007, may now be better understood.

It appears that the use of an ECD could have led to preferential treatment by the Murray Darling Basin Authority in its deliberations on the Guide to the Basin Plan.

An example of this could be to increase 'end of system' flows to the Lower reaches of the Murray, to overcome specific environmental problems, based on the character descriptions (ECD) of the combined Coorong, Lower Lakes and Murray Mouth (CLLMM) site.

It could be argued that this scenario has occurred in the recently released Guide to the Basin Plan where in the section assessing impacts of the Basin Plan, the beneficiaries of the Basin Plan will primarily be below Lock 1 in South Australia.

This would be in line with the Guide's intent to ensure that of the minimum 3000 GL of water recovered for the environment, 2000 GL of this was to flow over the barrages of the Lower Lakes.

The Water Act's focus on international agreements raises some unique challenges in relation to Australia's interests in its own natural resources.

It is difficult to know what the level of parliamentary scrutiny applies in the initial signatory stage of an International Agreement and what level of assessment is conducted to determine any impacts to Australia's social and economic interests.

**'Interpretation' by relevant Government Departments** of an international agreement or a review of any component of that agreement, may also add to the impacts.

An example of this has been the cost to the Australians of a range of policy measures imposed on Australian industries, individuals and Australia taxpayers resulting from Australia's participation in the International United Nations Conference on the Environment, Climate Change, Forests and Biodiversity, at Rio de Janeiro in 1992.

The true economic and social impacts resulting from Australia's agreement on forests as part of 1992 Rio de Janeiro conference was not apparent at the time of the initial agreement. Industry impacts have continued since the original signing in 1992, with total costs of industry closures, structural adjustment packages, subsidized timber haulage necessary to meet contractual obligations, being shielded from the public's interests.

The true economic and social impacts in regard to the proposed changes to use of water, again with use of international agreements, are also being withheld from the Australian public.

The Water Act 2007, Section 21 (4) (page 39) refers to the principles of ecological sustainable development and social and economic analysis. However the reference to (4) (a) 'take into account the principles of ecologically sustainable development', **should not be interpreted as the need to fully consider social and economic impacts.**

This is because the Act does not specifically identify provisions for a proper analysis on the impacts.

The Murray Darling Basin Authority (MDBA) has commissioned social and economic studies to provide some information on the impacts of the Basin Plan, however this has been extremely limited.

The strong public criticism in relation to specific job loss calculations should not give the impression that the study was comprehensive. Such an assessment was restricted to impacts associated with loss of entitlements only. No flow on effects were addressed.

The studies terms of reference also prevented a full analysis of the impact on the 'reliability to an entitlements, or potential changes to yield on an entitlement. This is despite the MDBA clearly stating in its guide that there will be an impact on the reliability. When questioned the MDBA have publicly identified that yes, such impacts would occur but the MDBA could not identify how or when.

There still has been no broader social and economic study done on this to date. At the time community reaction to the Guide also raised strong concerns about the economic and social impacts of adverse flooding risks imposed on 3<sup>rd</sup> parties, including to relevant Shire infrastructure.

Flood risks associated with the delivery of the scale of environmental flows being proposed remain a significant threat to basin communities. Yet the MDBA (established by the Water Act 2007) have failed to account for this risk.

Regional communities can legitimately argue, how can the social and economic impacts in relation to the Basin plan be adequately assessed, when such vital criteria have been precluded.

Community consultation identified the need for the MDBA to prepare an environmental water delivery plan. This is essential as there is limited natural system capacity to deliver additional environmental flows (entitlement), base environmental flows (planned), productive flows, human and stock and domestic flows. Such a scenario at certain peak periods may cause difficulties in accessing entitlements or alternatively, severe flooding risks along the system.

This submission specifically raises this issue to demonstrate that while the objectives of the Water Act 2007 may refer to social and economic considerations, the Act does not provide any avenue to ensure that **even the most basic social and economic analysis is undertaken.**

A shortcoming of the Act in relation to this is Part 2 subdivision C, 28 where reference is made to an Environmental watering plan. This section makes no provisions to acknowledge any other consideration other than the environment.

**An environmental watering plan is not an environmental water delivery plan.** This knowledge is critical in determining the social and economic impacts. In particular to potential third party impacts from flooding and/or impacts on the reliability of certain water entitlements.

The MDBA has identified that there will be a 'reliability' impact on entitlement, but has and could not specify - how. This also should be assessed as part of an environmental water delivery plan.

The relevant **review and amendments sections of the Basin Plan**, (Section 45 Subdivision F – Amendment of Basin Plan and Part 2, Section 50-52 – Review of Basin Plan) do not inspire the community with confidence. This is because any amendments or



reviews, would still be subject to the failings of the current Act and the foundation on which it was based.

### **b) The Difference in Legal interpretations of the Act**

This submission does not attempt to provide opinion on the legal interpretations of the Act

### **c) The constitutional power of the Commonwealth to legislate in the area of water**

This submission acknowledges that the Commonwealth of Australia has no power on water. This power lies with the States of Australia.

In order to obtain power over the States, the Federal Government has utilised section 51 of the Australian constitution (xxix ) External Affairs powers. The Water Act 2007 therefore must prioritise the environment in order to remain within the provisions of use of the external powers under the Constitution.

This is the key concern that relates to the basis of the Water Act 2007.

The Act remains an impediment to the interests of Australia while it operates under the External Affairs powers of the Australian constitution.

The Act, to remain constitutionally valid, must by default continue to give priority to the environment.

For this reason, this submission argues that the Act must be repealed as attempts to make minor amendments will be subject to legal challenge.

### **d) the role of relevant international agreements and the effect of those on the parts of the Act which direct the Basin Plan to give effect to those agreements and the Act more generally**

The ability for the Federal Government to obtain power over water from the States, lies in the construct of the Water Act 2007. The mechanism to obtain power is obtained through the use of the external affairs power provision of the Australian constitution - Section 51, (xxix) and is delivered through Part 9 of the Water Act – the establishment of the Murray Darling Basin Authority.

In order to remain within the powers established, the Water Act 2007 and the subsequent development of the Murray Darling Basin Plan, must ‘give effect to relevant international agreements’.

This ensures that the Basin Plan must prioritise the environment, over all other interests.

This leaves open to interpretation, how Australians can protect the security of Australia's leading resource – water.

Of particular relevance and concern, is the manner in which environmental considerations are determined and acted upon. A more cautious approach to the environment may limit the social and economic impacts. Alternatively, the over use of the precautionary principle, may impose significant impacts to humans in favor of the environment, delivering a greater impact to social and economic values.

Section 21 (3) (b) and (c) stipulates the basis on which development of the Basin Plan must be made. This section notes the relevance of international agreements (to the extent to which those agreements are relevant to the use and management of the Basin water resources)

In stating this, the Act specifically notes Ramsar wetlands.

In interpreting the Act, Australia's participation in other international agreements could be silent. An example of this is Australia's participation in the Food and Agriculture Organisation of the United Nations (FAO).

The role of the FAO investment centre is to generate increased investment in agriculture and rural development. A key strategy is to encourage agriculture and rural development as part of a country nation and regional development plans.

Capacity development is encouraged to achieve food security and agricultural development

Australia also participates in a number of other environmental agreements. These include the Japan/Australia and China/Australia migratory bird agreements, (CAMBA, JAMBA), the Convention to Combat Desertification, the Commission for Sustainable Development and the United Nations Environment Program.

While the Act is silent on a range of international agreements, it is specific in terms of the Ramsar.

This is probably due to the specific design of the Act, where avenues to usurp State powers on water, were overcome by the Act's specific recognition of Ramsar sites.

Australia has more sites listed than any other country, therefore the reference by the Act to Ramsar specifically, is no surprise.

While the purpose and time of Ramsar listings have been done for various reasons, all were based on the premise of 'wise use of resource' – a foundation principle of the Ramsar Convention. Under this scenario, it is incorrect to assume a higher level of 'conservation' status should automatically apply, but again, this is open to interpretation.

The listing of the Millewa Forests by NSW State Forests in 2002 in the Southern Riverina of NSW, was done to recognize both conservation and timber production values that were

part of the red gum forest history since European settlement. The River Red Gum forests now are not considered 'natural' due to the more 'closed' status of the forest (increased number of trees per hectare resulting from over 100 years of timber harvesting), but nevertheless, are considered a forest of such high standard, where recent moves have seen a conversion in tenure to national park.

As a condition of listing a Ramsar site, a plan of management is developed and an ecological character description (ECD) for each site is completed. This is done in accordance with the National Framework and Guidance for Describing the Ecological Character of Australian Ramsar Wetlands.

ECDs are then used to guide future management and potential future impacts to the site can be measured against.

ECDs may be varied or subject to review periods.

The Millewa Forest ECD was prepared by NSW State Forests and submitted to Governments for approval. In the ensuing period, the site was subject to a political decision to convert land tenure from State Forest control to National Park status.

Since the original listing of the site, an ECD is still not publicly available. This highlights that an ECD can be subject to political review to suit any particular period in time.

This raises concerns that the Water Act 2007 and the development of the Basin Plan (21, (3) (c)), is required to 'take account of the ecological character descriptions'. Yet the Ecological character descriptions may be subject to the whims of the States and political decisions of the time. There may also be a considerable lag period between the site original listing under Ramsar and the development of an ECD.

There are two factors under the Water Act 2007 where a Ramsar site can impact on the social and economic values of the Australia.

First is the ecological character description of a site. The second, is the plan of management for that site that is developed to ensure that the ecological character descriptions are maintained.

The Ramsar listing for the Coorong, Lower Lakes and Murray Mouth (CLLMM) region, applies to an area that has undergone extensive modification since European settlement. Some of these changed conditions were noted at the time of listing. For example the **hyper saline conditions of the Southern Lagoon of the Coorong were noted in 1985** when the site was recognized under the Ramsar convention.

However, the **nature of why hyper saline conditions** of the Southern Lagoon of the Coorong prevailed, **was NOT noted in the listing process.**

Since listing in 1985, a plan of management was developed in 2000 and an ecological character description (ECD) was developed in 2005 for the CLLMM site.

Indications are that a **new plan** of management has now been developed. This plan released in **June 2010** titled: **Securing the Future** – A long term plan of management for the Coorong, Lower Lakes and Murray Mouth, is closely aligned with the South Australian objectives to obtain additional water flows achieved through the setting of sustainable diversion limits under the Murray Darling Basin Plan.

It is difficult for the public to understand the changes that can occur in relation to a Ramsar site. This can be further complicated when members of the public trying to identify the original ecological character description (ECD) on either the Australian Government Ramsar site or the link back to the South Australian site, cannot locate the original 2005 ECD.

When accessing the link to the ecological character descriptions for Coorong Lower Lakes Murray Mouth site on the South Australian website in April 2011, *Securing the Future – A long term plan of management for the Coorong, Lower Lakes and Murray Mouth* is identified. This appears to have replaced the original ECD (2005).

This may suggest that the ECD is currently being revised to be compatible with the new plan of management ‘*Securing the Future*’ released in June 2010. At this stage this is difficult to verify, alternatively, the public may assume that a mistake in the link has occurred.

It may be argued that Australia’s broader interests for food production in the Basin will be impacted by the new plan of management – **Securing the Future**, as this plan has a primary **focus to use increased fresh water flows** achieved through the setting of new Sustainable Diversion Limits (Basin Plan) to address long term environmental problems of the Lower Lakes area.

This is particularly disturbing when previous recommendations to achieve environmental improvements in the area are ignored.

The Murray Darling Basin Commission commissioned a report in 2000 which recommended modifications to the operations and management of the barrages, including a relocation of the Mundoo barrage to improve ecological outcomes.

In contrast to this, the June 2010 South Australian Plan -Securing the Future Plan aims to ensure:

**"when flows are adequate to maintain the Lower Lakes at or near optimal operating range, minimal intervention is required and adaptation actions that aim to build and maintain resilience ecology at the site are possible"**

The Lower Lakes are not in a historically natural state. When the Lower Lakes were converted from estuarine conditions to freshwater lakes, major hydrological changes resulted. Environmental problems arising from the construction of the barrages have been heightened by the limited release rules, that aim to maintain the Lower Lakes at flood height for most of the year (0.75 AHD).

In correspondence to the Ramsar secretariat in 2006, it was identified that significant changes are noted in this site 20-30 years prior to the site's listing under Ramsar, which puts such changes around 1955. This is roughly 15 years after completion of the barrages in the Lower Lakes that converted the estuarine area of the Lower Lakes into permanent freshwater lakes.

The area is highly developed in parts with substantial development occurring around the perimeter of parts of Lakes Alexandrina and on Hindmarsh Island. **This raises some challenges** in how Government regulators or an independent authority (eg MDBA) assesses social and economic impacts in relation to the application of the Water Act 2007.

For example the weighting of consideration to **Australia's food production interests**, against localized interests of **substantial housing development**, which may/may not include the desire to maintain static lake levels to maximize marina access and/or water front scenarios.

Environmental considerations to meet ecological objectives and address sand accumulation in the Murray Mouth, may require amendments to the construction and operations of the 7.6 kms of concrete barrages and fluctuating lake levels in drought years.

Under this scenario, **Governments have a range of choices**. They can **balance the needs of the environment by applying a range of solutions**, for example modifying the operations of the barrages in drought or low flow periods, **or alternatively**, they can aim to **maintain current operating conditions which benefit housing developments** and seek to obtain additional water from upstream sources as has appeared to occur, in the release of the Guide to the Basin Plan by the MDBA.

Section 21 (3) (c) of the Act reference to ecological character descriptions therefore becomes increasingly relevant.

**A plan of management that aimed to maintain the status quo and achieve ecological outcomes largely by sourcing increased flows to an area, rather than taking a holistic view of management, could be detrimental to Australia's overall interests.**

A combined Ramsar site may also have a complex range of factors affecting its environmental condition.

The Coorong, particularly the Southern Lagoon, **had the majority of its freshwater flows redirected away from the Coorong, as a result of the South East of South Australia drainage scheme**. This land reclamation scheme was undertaken from 1863 to 1975 and redirected freshwater flows away from the Coorong, directly out to the Southern Ocean.

A more recent drainage scheme, the Upper South of South Australia, Salinity and flood mitigation strategy, funded through Natural Heritage Trust (NHT) has further altered drainage patterns.

A condition of NHT funding for the recent Upper South East Drainage Scheme in South Australia, is that no more than an average of 40,000 ML of fresh water per annum can be put into the Southern Lagoon of the Coorong. **This is a rule imposed by the Federal Government to ensure that the hyper saline conditions noted at the time of the site's Ramsar listing in 1985, will remain in place.**

This raises the **curious position**, where the Water Act 2007 and the subsequent Guide to the Basin Plan, aims to increase end of system fresh water flows by a minimum of 2000 GL for the benefit of the Coorong, Lower Lakes and Murray Mouth.

**But a rule is in place that limits freshwater inflows from traditional pathways within South Australia.**

The Southern Lagoon of the Coorong, did not predominantly source its flows from the Murray River. The Northern Lagoon is only partially influenced by Murray River flows and these flows have been transformed by the construction and operations of the barrages. Today the Northern Lagoon remains only partially influenced by Murray River flows and this is dependent on wind and tide conditions.

Professor Gell in a report for the Department of Water, Land and Biodiversity Conservation , South Australian noted:

*“at no time in 300 years before European settlement has the Coorong been noticeably influenced by flows from the Murray River”*

This submission raises this particular issue to identify that the Water Act 2007 (21, (1), (2) & (3) is entirely open to interpretation .

*(note: further information see pages 10-15, 33, 64-79 Water Planning & the Environment)*

**e) any amendment that would be required to ensure that economic, social and environmental factors are given equally weighted considerations in developing the Basin Plan**

Prior to the senate committee recommending amendments to the Water Act 2007, it is imperative that all legal opinion sought by Government, be made publicly available.

This should include publicly available all aspects of legal advice sought, including original documentation seeking legal opinion, legal opinion given to the Government, the Murray Darling Basin Authority and other related department.

In the event that Government refuses to disclose all material relating to legal opinion sought by Government, then the Senate Committee should recommend that the High Court of Australia be required to provide written legal advice. This advice should then be made available publicly.

Final recommendations from the Committee should not be concluded until legal opinion is resolved.

**f) any other matter**

The Water Act 2007 is inconsistent with previous Federal and State Government's approach to Total Catchment Management.

The Act is designed to ensure that flow volumes alone are the primary mechanism to achieve and determine river health.

It is difficult to understand why such a reversal in policy has occurred other than new political issues for 'end of system' flow volumes have prevailed.

During the prolonged drought, regional communities have further lost faith in 'claims by environment advocates'. A key failing of Australia's environmental policies has been an accompanied lack of protocols and scrutiny in relation to the basis of policy development.

Scientific literature can be inadequate, incomplete or can be used in a manner outside its original purpose.

The use of unpublished data in the development of the Basin Plan also departs from accepted principles in the use of scientific literature.

**The Act does not specify a standard for environmental decision making and as such, cannot fulfill its obligations under the objects of the Act, in regard to social and economic outcomes.**

**The Water Act 2007 was a political response during a major drought scenario where Australian rivers reverted to their natural dry phase.** The drought cannot be attributed to poor water planning or the failures of current State or Federal River operators.

It is widely understood that cost effective and notable successes in natural resource management policy are based on collaborative partnerships between Government and the community. This is particularly importance in relation to designing and implementing policy or actions on the basis of shared understanding and genuine need.

This ensures sound policy development and continued community support.

The Water Act 2007 has not recognized any principles for community collaboration or participation and has significantly departed from a sound policy development base.

The formation of the Act has centralised power to the Federal Government, where remote decisions have occurred in the absence of appropriate science or knowledge.

The Act has departed from Australia's own National Strategy for Ecological Sustainable Development and the agreed principles of the National Water Initiative – principles that assure a balance of social, economic and environmental factors.

The nature of decisions on the environment, are interpretational and can continue to evolve. Therefore social and economic implications will also continue to evolve over an undefined period.

It could be argued that the range of problems identified in this submission specifically relate to decisions of the Murray Darling Authority itself and not the Act

This is not the case and is it is apparent from the strong community reaction to the Guide to the Murray Darling Basin Plan, that the Act has serious deficiencies.

This submission encourages the Act to be repealed and rewritten.



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