AUSTRALIAN CONSERVATION FOUNDATION

Nature Conservation Council of NSW

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Submission to Department of Natural Resources on NSW Draft NWI Implementation Plan

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1.0 The Authors

This submission is a joint submission by the Nature Conservation Council of NSW, the Inland Rivers Network and the Australian Conservation Foundation, collectively termed "**the NGOs**" in this submission.

- *The Inland Rivers Network*

The Inland Rivers Network ("**IRN**") is a coalition of environment groups and individuals concerned about the degradation of the rivers, wetlands and groundwaters of the Murray-Darling Basin. It has been advocating for the conservation of rivers, wetlands and groundwater in the Murray-Darling Basin since 1991. Member groups include the ACF; the NCC; the National Parks Association of New South Wales; Friends of the Earth; and the Coast and Wetlands Society.

- *The Nature Conservation Council*

The Nature Conservation Council of NSW ("**NCC**") is the peak conservation group for NSW and serves as the umbrella organisation for more than 120 environmental member groups. NCC works closely with member groups, local communities, government and business to protect, sustain and conserve the NSW environment. NCC co-ordinates and develops NSW-based community education projects, scientific research, conferences, conservation publications and awareness campaigns and also advises key decision-makers at a local, state and national level. NCC has extensive experience in NSW NRM planning processes as an environmental stakeholder. NCC was represented on all water sharing plan committees.

- *Australian Conservation Foundation*

The Australian Conservation Foundation ("**ACF**") is committed to inspiring people to achieve a healthy environment for all Australians. For 40 years it has been a strong voice for the environment, promoting solutions through research, consultation, education and partnerships. It works with the community, business and government to protect, restore and sustain our environment.

2.0 Executive Summary

The National Water Initiative ("NWI") requires that Parties to the Agreement prepare implementation plans that describe how they will achieve certain actions, timelines and processes as set out in section 9 of the NWI using templates as described in the Guidance on the Preparation of Implementation Plans for the National Water Initiative. The NWI itself also requires the signatory States and Territories to ensure open and timely consultation with all stakeholders regarding implementation of the NWI. The environmental NGOs have not been specifically consulted about content of the draft NSW Implementation Plan for the National Water Initiative ("draft NSW IP") or the process of its preparation. We welcome this opportunity to provide feedback although clearly we believe the consultation requirements of the NWI have not been met and that our input should have been sought during the process of preparing the draft NSW IP.

We recognise that all the objectives, outcomes, elements and sub-elements of the NWI are important but some areas are more directly relevant in addressing environmental objectives or concerns than others. We specifically wish to comment on the adequacy with which the specific actions set out in the draft NSW IP fulfil the elements or sub-elements of the NWI which we consider most important for river health, with a view to setting NSW on the right track to achieve fair and ecologically sustainable water sharing arrangements between multiple, competing water users. In particular, comments will be made on the following issues:

- The IP does not provide clear pathways or processes by which overallocation and/or overuse will be adequately addressed;

- The IP needs to detail how overallocation and/or overuse will be addressed in light of activating sleeper and dozer licences;

- The IP deals inadequately with the interconnection of groundwater and surface water;

- The IP must include more detail on how environmental water will benefit from the same security as other consumptive entitlements;

- The IP deals inadequately with floodplain harvesting – more information and realistic milestones are required;

- The MDB Cap needs to be fully implemented on all NSW water sources and address floodplain harvesting;

- Water trading and the use of market mechanisms for addressing water overallocation and/or overuse;

- Identification and management high conservation value areas;

- Urban water and demand management require further attention;

- Water pricing; and

- Community consultation.

Generally, we are concerned with the lack of detail within the draft IP regarding how implementation of the legislation and planning tools developed in NSW will be measured against requirements in the NWI. There are no guidelines in the IP of how the water sharing plans will achieve NWI requirements, or how they will be adapted to ensure that these requirements are met. Further, there is no indication of how the IP is going to be resourced. We are keen to see further detail on monitoring and methods for the adaptation of existing planning frameworks where necessary.

Further, whilst no final NRC targets or NRMMC indicators are currently available, there is no reference to the draft NRC targets released 12 months ago, and there do not appear to be any pathways that work towards them.

The environmental NGOs are keen to build community confidence and support for water reform, but can only do this when satisfied that the pathways to be set out in the IP have a realistic chance of doing this. Whilst the IP outlines the development of plans that deals with water sharing matters and other details, it is the *substance* of these plans that will determine whether over-allocation is addressed. The IP also needs to include more specific references to monitoring and adaptive management that will ensure the plans actually achieve the NWI requirements.

NWI Element No 1: Water Access Entitlements and Planning Framework

Comments in Relation to Actions 1,1A & 5: Implementation of the Framework & Addressing Overallocation

Water Sharing Plans and Requirement to Address Overallocation

The draft NSW IP states that:

> "NSW commenced 31 WSPs on 1 July 2004 that address existing over-allocation for rivers and coastal groundwater sources".

Unfortunately, we are unable to agree that the WSPs or other plans currently in development are capable of adequately addressing overallocation and/or overuse as required by the NWI.

The real question, as will be seen throughout this submission is whether *implementation* of the Water Management Act 2000, which provides a legislative framework for the establishment of water sharing plans (WSPs) and Macro Plans (in development), is capable of achieving the objectives and outcomes of the COAG reforms and the NWI.

The continued decline in the ecological health of most freshwater systems covered by the current water sharing plans (WSPs) indicates that these instruments are insufficient in themselves to achieve environmentally sustainable water use. For example, entire aquatic ecological communities in the lower Murray River catchment, the lowland catchment of the Darling River and the lowland catchment of the Lachlan River have been listed by the NSW Fisheries Scientific Committee as endangered. Across the state, the provision of environmental water through implementation of the MDB Cap and WSPs have reduced long-term annual diversion by only 7%, and in some of the most degraded rivers such as the Murrumbidgee and Murray Rivers, the impact of environmental flows on diversion is less than 5%[1]. Such magnitudes of change in extractive use are widely recognised as inadequate as a pathway to achieving ecologically sustainable water extraction levels. Professor Peter Cullen for example has previously recommended that as an *interim and initial* measure, a 20% reduction in long-term average annual diversion is required[2].

Recent events in the Macquarie Marshes indicate that more water for the environment is required to address overused systems and secure ecological outcomes. Extremely dry conditions in the Macquarie Marshes (from a lack of flow due to overextraction and exacerbated by drought), meant that the limited quantity of environmental water was unable to reach stressed red gum areas and was only sufficient to maintain a core area of about 15% of the Marshes. Further, bird breeding triggered by the small flush could not be sustained due to

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[1] NCC & IRN, "*Water Sharing Position Paper",* November 2001.

[2] Mussared, D. (1997) "Living on Floodplains", The Cooperative Research Centre for Freshwater Ecology & The Murray Darling Basin Commission.

insufficient environmental water and river flows. Had more water been available to the environment or had the Marshes not dried out so extensively from years of overextraction, it is quite possible that this event could have been sustained[3].

The ongoing environmental decline in many freshwater assets in NSW as a consequence of overallocation or overuse is not adequately addressed in NSWs WSPs. Experts including Professor Richard Kingsford, are generally united in the view that the existing WSPs will not reverse the trend in the absence of clear plans to significantly alter the balance of consumptive and environmental water pools. Since the existing WSPs do not set out firm pathways or open processes for addressing overallocation or overuse in order to achieve its commitments under the 1994 COAG reforms, as evidenced by the National Competition Councils recommendation to the Federal Treasurer to withhold competition payments in 2004, NSW is not fulfilling its obligations under the NWI. It is essential that the IP identify clear pathways and milestones for addressing overallocation and provide timelines by which these processes will be developed and implemented.

Requirement to Enhance the Knowledge Base and Incorporate Adaptive Management Provisions into WSPs

The characteristics of environmental water allocations should reflect the ecological needs of the river, wetland etc for which they are allocated. The specific needs of freshwater assets will vary greatly depending on many factors and the frequency, duration, magnitude and seasonality of different flow components including overbank flows, low flows, summer freshes etc is crucial for maintaining or restoring the ecological values that characterise the assets.

We are concerned that some water recovery processes in Australia generally are proceeding without any understanding or consideration of what the ecological needs of the asset in question are and they are failing therefore to recover water with the right sort of characteristics, in terms of level of security, capacity for carry-over in dams etc.

With specific reference to NSW, the water sharing planning process failed to ask crucial questions regarding the magnitude, timing, duration, seasonality and variability of environmental flows that are required to protect environmental values and ensure ecologically sustainable water use, resulting in grossly inadequate proposals for environmental flow requirements. Consequently, the WSPs fail to adequately address whether the balance of consumptive and environmental water entitlements are sufficient to achieve objectives and outcomes of the NWI and the extent to which any required change is required. Rather, we feel that the planning process has generally served to 'lock in' the *status quo* in terms of water allocation, irrespective of whether systems were

[3] Amy Hankinson & Bev Smiles, Macquarie Marshes Environmental Flow Reference Group members, January 2006.

clearly overallocated or overused. This situation has been exacerbated by the fact that under current plans unless compensation is paid or water is purchased, there is currently no other opportunity to address overallocation in NSW until 2014.

Hence we are of the opinion that the draft IP does not fulfil obligations under the NWI regarding overallocated systems by simply stating that WSPs have been developed. There must be an avenue for NSW to adapt their management regimes when this evidence does become available if they are to comply with NWI requirements. In particular, the IP must go into greater detail of how they will monitor and adapt plans to ensure that overallocation is being properly addressed.

Failure of WSPs to Ensure Security of Environmental Flows

Furthermore, many of the environmental water allocations that the WSPs provide are not secure, but are vulnerable to other extractive uses in many circumstances. This is discussed in more detail under NWI Element 1, Action 3 below. Therefore, the WSPs fail in this regard to provide water that has at least the same degree of security as water access entitlements for consumptive use and is accordingly inconsistent with NWI commitments.

Requirement to Specify How the WSP Framework Will Recognise the Interconnectivity of Surface and Groundwater Flows

As separate WSPs exist for groundwater and surface water respectively, sustainable levels of extraction in these interconnected systems cannot be ensured under the current WSP framework and therefore fail to achieve NWI objectives and outcomes that recognise the connectivity between surface and groundwater resources and their management as a single resource . Similarly, Macro Plans are being developed separately for surface water and groundwater sources and are likely to perpetuate the problems outlined above. There is little indication within the draft IP about how issues of interconnectivity will be adequately addressed given these problems with the current framework.

Requirement to to Ensure there is Compliance with the Environmental Water Rules

There have also been serious failures by regulators to ensure compliance with, or implementation of, the environmental water rules and extraction rules that do exist in WSPs. This is a major impediment to achieving sustainable water extraction. There is an urgent need for immediate on-ground reinforcement of the environmental flows agreed in WSPs, and the IP needs to provide details of how it will be resourced to ensure compliance with these rules.

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Failure to Adequately Address Floodplain Harvesting

As with river flows, overland flow extraction must be capped at ecologically sustainable levels. The draft IP also needs to clearly link the urgent need for the management of floodplain harvesting with the NWI requirement to return overallocated systems to sustainable management. Further comments about floodplain harvesting are made below under Action 8: Interception Activities.

Failure to Properly Implement Existing 'Cap' Obligations

The Murray-Darling Basin Cap has not been fully implemented in NSW, despite being established over a decade ago. The NSW Government agreed on a Barwon-Darling Cap in July 2005 but it has not yet been implemented and we understand that water extractions in the system remain well above the Cap level. It is unreasonable to further delay implementing the Cap in light of ongoing environmental decline and water users' need for investment certainty. Unfortunately, not only has the Cap not yet been implemented, but a number of the elements of the strategy limit the Cap's overall effectiveness including:

- The 173 GL up-front credit is a blatant Cap violation and provides an unjustified privilege to this valley that no other valley in the southern MDB has benefited from;
- Continuous accounting potentially allows irrigators to extract very large volumes of water in a single year. If any single year were to be a dry(ish) year, there could be serious environmental consequences;
- Allowing a 173GL/year credit provides insurance against climate change for irrigators and irrigators alone. Assuming that the next 100 years are climatically much like 1891-1997, then having a 173GL/year credit works as an average. However, if the next 100 years are drier than 1891-1997, as predicted by climate change studies the 173GL/year average is too high and would erode the security of the environment's water.

Need to Address Impacts of Sleeper and Dozer Licences on Levels of Extraction

Many water sharing plans perpetuate the volumetric allocations that existed under the previous (*Water Act 1912*) scheme, which were developed using modelling that took into account all existing entitlements. This has created a difficult situation where "sleeper" and "dozer" licences are activated (given their increased value on the market), placing additional pressures on the rivers and exacerbating overallocation. Unfortunately, had water access entitlements been based on a share of the available water resource rather than entitlements, the problems caused by the activation of these licences would not have occurred. Allocating consumptive water users a share of water from the ecologically sustainable consumptive pool would have recognised the need to share water between the environmental and other users on a sustainable basis. If this

discrepancy is not adjusted, the IP needs to detail how it will adequately manage the activation of these licences in tandem with addressing overallocation.

Need for More Coordinated Interstate Management – Border Rivers

A large number of off-stream storages have been built in recent years and the infrequency and small magnitude of flows within the Lower Balonne is of great concern to NSW. Criticism has also arisen following the recent water reform process in Queensland, with issues of process and inadequate consultation raised, as well as strong concerns regarding the levels of extraction permitted or at least acquiesced to. The negative impacts of this development and the reform process have been felt acutely by graziers in the Lower Balonne and the environment.

NSW is in a difficult position in seeking an equitable arrangement with Queensland that looks to address over-allocation and achieve environmental outcomes, given that it cannot dictate to Queensland what is considered an equitable arrangement in NSW. However, it is fundamental for the ongoing survival of communities and freshwater ecosystems in the area that NSW develop a strong and sustainable management arrangement with Queensland as soon as possible.

Summary – Requirement for the Inclusion of Firm Pathways, Open Processes and Milestones

Whilst the legislative and administrative regimes may reflect elements of the NWI, their implementation under the current WSPs is not consistent with the NWI since they will fail to achieve crucial NWI objectives and outcomes including; the return of overallocated or overused systems to environmentally-sustainable levels of extraction, providing adequate adaptive management provisions, dealing with future risks in a way that will protect the integrity of environmental flows and protecting the integrity of water-access entitlements from unregulated growth in interception through land-use change.

The NWI requires the Parties to implement firm pathways and open processes for addressing overallocation and/or overuse and that the IPs should articulate milestones against which progress can be measured. The draft IP or the WSPs do not articulate meaningful targets, timelines and milestones for returning the State's stressed rivers to health, nor do they provides for clear, effective mechanisms to enforce these existing outcomes.

Comments in Relation to Action 3: Water to Meet Environmental and Other Public Benefits

Security of Environmental Water

The question of whether environmental water has the same degree of security as water access entitlements for consumptive use is a contentious one. Although the principles of the *Water Management Act 2000* states that the environment is to be given first priority, in practice this is only relevant where orders for irrigation and environmental water conflict at the dam gauge. It is our understanding that this has never actually occurred. Further, recent amendments to the *Water Management Act 2000* say that "water that is not committed after the commitments to basic landholder rights and for sharing and extraction under any other rights have been met" can be committed as environmental water (section 8 (1A)(c). Note also subsections (a) and (b) in the Act). It is the view of the NGOs that provision of an unknown amount of 'left over' water for the environment does *not* provide environmental water with the same degree of security as other entitlements, and we fail to see how this sufficiently secures ecological outcomes.

Similarly, it is the view of the NGOs that for environmental water to have the same security as water access entitlements for consumptive use it must also be 'exclusive', as required under paragraph 31 of the NWI. Currently environmental water is not exclusive, as once it has been used for a specific defined purpose (e.g. wetting River Red Gums), in many situations this water will then become part of the consumptive pool once again. This severely limits the ability of already limited environmental water to provide a wide range of essential functions along the full length of a river, and it fails to recognise the purpose of providing water for the environment.

For NSW to meet its requirements under the NWI it must make legislative arrangements for the exclusivity of environmental water – for that water to be 'tagged' as environmental water for the full length of the river or system.

It does not follow that through the commencement of river and groundwater plans that secure ecological outcomes have been provided for or that appropriate arrangements to secure these outcomes have been defined. The inclusion of targets, timelines and milestones in the IP is an essential part of defining the appropriate water management arrangements to secure ecological outcomes.

High Conservation Value Freshwater Systems

Comments on the NWI requirements for the establishment of management and institutional arrangements where needed to sustain HCV areas are contained within NWI Element No 4 below.

Comments in Relation to Action 7: Water plans to Address Indigenous Water Issues

The Environmental NGOs are unable to assess the extent to which NSW is fulfilling its obligations under the NWI in this regard. We note however that even today, the final extended deadline for comment on the draft NSW IP, the Coordinator of the Murray Living Darling Rivers Indigenous Nations (MLDRIN) was unaware that the draft IP had been released and was available for comment. We consider this to be a further example of NSW's failure to fulfil its NWI obligations to open and timely consultation with all stakeholders.

Comments in Relation to Action 8: Interception Activities

Interception of overland flow through activities such as floodplain harvesting and farm dams is a major issue in NSW that needs to be addressed urgently. In NSW and Queensland the development of private property rights in water has occurred without addressing the issue of floodplain harvesting and works on floodplains. This is of great concern to environmentalists and downstream water users including floodplain graziers.

As with river flows, overland flow extraction must be capped at ecologically sustainable levels and we do not believe this is the case in many catchments in NSW. For example, in the *Special Cap Audit: Gwydir Valley NSW Border Rivers*, floodplain harvesting diversions in 1997/98 were estimated to be approximately 30 GL above that extracted from the river. Where the initial cap is ecologically unsustainable, water should be recovered and returned to the environment using the full suite of water recovery mechanisms set out in the NWI.

Overland flow is linked to downstream river flow. It makes an important contribution to natural flow variability and the connectivity of floodplains with river channels. Harvesting overland flow for storage and subsequent irrigation use has huge implications for downstream river and wetland health, as well as on downstream users, and must be addressed immediately.

Poor measurement and metering mean that the total amount of water diverted under this practice is not known and the low to zero cost of harvesting such water has driven its uncontrolled development over a very short period of time. In the Gwydir River catchment for example, storage capacity has increased from a practically negligible amount at the beginning of the 1970s to in excess of 400 GL today. Further, although required under the COAG agreement, floodplain harvesting is not currently capped.

Excessive floodplain harvesting is responsible, amongst other things, for the reduction in river flow to the Gwydir wetlands causing a decline in the quantity and quality of native vegetation, reduction in native fish, frogs, reptiles and waterbird breeding events. The decline in the environmental values of aquatic ecosystems like The Gwydir Wetlands is contrary to Australia’s obligations under the Ramsar Convention. Similar effects are seen in other wetlands downstream

of areas where floodplain harvesting occurs including the Narran Lakes, the Lowbidgee floodplain and the Macquarie Marshes.

The draft IP refers to a draft floodplain harvesting policy. It is positive that NSW appears to be seeing this as a priority, but further detail of how NSW intends to meet these requirements should be included within the IP to demonstrate how they meet NWI requirements and to ensure that their processes are transparent and accountable. The policy must also refer to all flood-works so that their implications for catchment management can be assessed.

It is important that floodplain licences are developed within the MDB cap and the NGOs acknowledge NSW's intentions to do this. However it is also important that the licences are issued with clear reference to sustainable extraction limits and are capped according to entitlements and not diversions (or interceptions in this case).

The NGOS are concerned that it is a little unrealistic to aim to have written *and* implemented the floodplain harvesting policy by the end of 2005, particularly given the difficulty of the task and the current lack of capacity within government departments in regional areas to regulate floodplain harvesting and floodplain works. The NGOs appreciate the NSW Government's intentions to prioritise a floodplain harvesting policy, but recognise that there will need to be a significant investment of resources for this issue to be adequately dealt with.

Unregulated harvesting is generating a new suite of overextracted rivers and wetlands and exacerbating existing problems for both the environment and other water users that rely on healthy ecosystems, including floodplain graziers as exemplified by the Macquarie Marshes and problems highlighted by the recently formed Sustainable Floodplain Communities Association. Future plans must be adequately enforced to ensure that they effectively manage harvesting. Consequently, the draft NWI IP fails to fulfil the objectives and outcomes of the NWI related to protecting the integrity of water-access entitlements from unregulated growth in interception through land use change.

NWI Element No 2: Water Markets and Trading

The Environmental NGOs recognise that water trading can be neutral or benefit the environment in a number of ways but also note the existence of risks in trading water entitlements. We urge that caution, openness and transparency be accompanied by frequent and ongoing assessment of the cumulative impact of water trading and a commitment to protect the environment from any unintended negative impacts.

We note in particular that the development of property rights and water markets to allow trading in water extraction licences provides a new and important

opportunity for governments to enter the market and purchase water which can then be returned to the environment to address overextraction. This opportunity to adopt market mechanisms for water recovery is recognised in the NWI, clause 79(ii):

> ii) where it is necessary to recover water to achieve modified *environmental and other public benefit outcomes*, to adopt the following principles for determining the most effective and efficient mix of water recovery measures:
>
> a) consideration of all available options for water recovery, including:
>
> – investment in more efficient water infrastructure;
>
> – purchase of water on the market, by tender or other market based mechanisms;
>
> – investment in more efficient water management practices, including measurement; or
>
> – investment in behavioural change to reduce urban water consumption;
>
> b) assessment of the socio-economic costs and benefits of the most prospective options, including on downstream users, and the implications for wider natural resource management outcomes (eg. impacts on water quality or salinity); and
>
> c) selection of measures primarily on the basis of cost-effectiveness, and with a view to managing socio-economic impacts.

We are concerned by the resistance that some parties to the NWI and the Living Murray Initiative are expressing about the use of market mechanisms to address overextraction. We see no grounds for adopting such an ongoing position. Market mechanisms can and should be used as one element in a portfolio of water recovery mechanisms to address overextraction.

For example, the MDBC estimates that the intergovernmental agreement to return an average 500GL/year of environmental flow to the River Murray under the 'First Step' of the Living Murray Initiative will not be achieved within the 2009 timeframe if only infrastructure and efficiency based water recovery methods are used (see figure below).

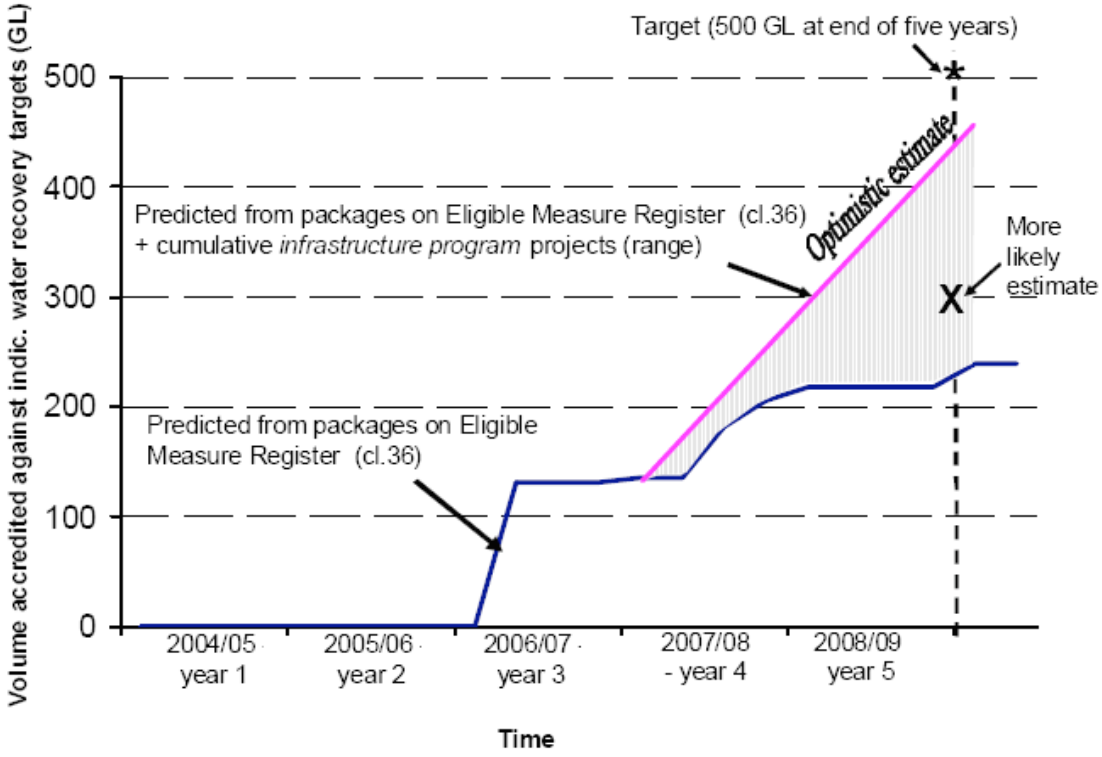

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Figure showing the predicted volume of water capable of being recovered from infrastructure and efficiency measures currently identified by the parties to the 'First Step' (Graph from Attachment 3 to the MDB Ministerial Council 38 Communique).

Despite this, the MDB Ministerial Council rejected calls from the South Australian Government, the Australian Floodplain Association, environmental NGOs, leading scientists - including Professor Peter Cullen amongst others - to adopt the use of market mechanisms for water recovery and instead only requested the MDB Commission to provide advice on market based options at the next Ministerial Council meeting in April 2006.

We encourage all Parties to the NWI to ensure the environment benefits from the expansion of water markets and in particular that NSW and Victoria resolve the issues that still impede interstate trading in relation to the River Murray so that legitimate market mechanisms may be used efficiently to help achieve the intergovernmental 'First Step' targets.

Structural adjustment methods outlined in the recent paper by Young and McColl - "*Managing Change: Australian structural adjustment lessons for water*" - discusses the need to change water resource allocation so that it more accurately reflects resource constraints and scarcity, and will enhance the longevity of rural communities through more sustainable practices. Their paper also discusses methods for acquiring environmental water with positive

repercussions for rural areas. These adjustment methods include the use of market mechanisms.

Recent work by ABARE Economics[4] discusses water 'options' contracts as a particular market mechanism for returning water to the environment as part of a portfolio of environmental water entitlements with tangible benefits for irrigation licence holders as well as the environment.

Market mechanisms should be actively embraced by all parties to the NWI as a mechanism for water recovery for the environment. This is especially so where market mechanisms provide substantially more cost effective opportunities for water recovery and therefore maximise return for the taxpayers' investment. We urge all Parties to the NWI to prevent any barriers to trade that may allow corporations or other licence holders to refuse to sell water to the environment.

We acknowledge and support the recent 'Riverbank' announcement by NSW Premier Iemma to invest $105 million to buy water entitlements in inland NSW; prioritising the Macquarie Marshes, Gwydir Wetlands, Lowbidgee Floodplain and the Narran Lakes. This substantial investment should make a significant difference to the long-term future of these stressed river and wetland systems, especially if matching funding is forthcoming from the Australian Water Fund. It is also setting a good precedent for the other MDB states for purchasing water for the environment.

NWI Element No 4: Best Practice Water Pricing

The NWI Implementation Plan says that the NSW Government is committed to full cost recovery. The plan indicates on page 47 and again on page 51 that full-cost recovery has been achieved for most regulated rivers and metropolitan water suppliers. Although the Environmental NGOs welcome the government's commitment to full cost recovery, we would argue that it has not achieved in the majority of the river systems as stated in the draft NSW IP.

It is also understood by the environmental NGOs that 'full cost recovery' as defined by the government only includes contemporary delivery costs and does not reflect 'sunk costs' from the initial capital outlay on dams built in previous years. Given that the government's definition of 'full cost recovery' falls well short of the total investment, this should be an added incentive to achieve 'full cost recovery' as soon as possible.

[4] Hafi, A., Beare, S., Heaney, A. and Page, S. (2005). Water Options for Environmental Flows. www.abareconomics.com/publications/nat_res_managment/2005/e-reports/eReport_WaterOptions.pdf

While some water price increases have been implemented in the past, both the responsible NSW Government agencies and IPART have supported a gradual increase in prices due to their impact on the irrigated agriculture industry. In their current submissions both the Department of Natural Resources and State Water Corporation have committed in principal to achieving full cost recovery but have provided a considerable timeline for its achievement, highlighting the difficulty of implementing the required price increases. State Water Corporation has indicated that immediate recovery of water delivery costs will lead to "significant and unsustainable" price increases in some valleys, (p.113,134), while the DNR noted that in some valleys imposing full cost recovery may be unrealistic, in which case cross-subsidisation or Community Service Obligations may be required (p.31).

While the environmental NGOs recognise that in some valleys immediate implementation or even a phased implementation will have a significant impact, this issue should not prevent implementation of full cost recovery over the current price path. The same comment needs to be made for urban water pricing where full-cost recovery has not yet been implemented to date, and it is not correct to state otherwise. The IP should contain more specific details on when and how full cost recovery will be achieved, with clear milestones to measure performance towards this objective.

NWI Element No 4: Integrated Management of Water for Environmental and Other Public Benefit Outcomes

Environmental Water Managers

Under paragraph 79 of the NWI states are required to establish environmental water managers. Unfortunately there is nothing in the NSW draft IP which refers to the establishment of these positions or what their positions may entail. The NGOs are concerned that NSW intends CMAs to fill these positions, as the CMAs could be compromised given their wide-ranging requirements and the need for the Environmental Water Managers to be clearly accountable for the achievement of environmental benefits.

Recovery of Water for Environmental Outcomes – NSW Wetland Recovery Plan and Riverbank

Whilst we are very critical of the WSPs and do not feel that the existing WSPs and therefore the draft IP is capable of meeting the requirements of the NWI, we warmly acknowledge and support the recent 'Riverbank' announcement by NSW Premier Iemma to invest $105 million to buy water entitlements in inland NSW as discussed above in Water Markets and Trading.

The NGOs support efforts made by the NSW Government to begin to address environmental requirements through the NSW Wetland Recovery Plan, and note the value in purchasing supplementary licences to gain more environmental water. However, whilst this Plan provides a small example of this, the Plan is only a small step towards what is required by the Macquarie Marshes and Gwydir wetlands to achieve long-term health, and further funding needs to be dedicated to these and other ecosystems throughout the state in the future.

High Conservation Value Freshwater Areas

An outcome for the "Water Access Entitlements and Planning Framework" identified under paragraph 25(x) was to "identify and acknowledge surface and groundwater systems of high conservation values, and manage these systems to protect and enhance those values". High conservation value (HCV) freshwater areas are also mentioned in the Actions required for "Integrated Management of Environmental Water", which requires that management and institutional arrangements to sustain HCV areas should be established where needed. Unfortunately there is no mention of how such areas would be identified or managed within the NSW draft IP.

Current WSP arrangements exclude some of the most ecologically significant freshwater assets in NSW from their coverage and therefore fail to provide statutory based environmental flows for wetlands of international as well as national and regional significance. This is clearly unacceptable and contrary to obligations under national agreements including the Ramsar Convention as well as the NWI.

River and aquifer protection requires a range of tools reflecting the complexity of the issues facing riverine ecosystems. Many are catchment-wide issues that need to be dealt with through broader scale planning and regulation of water management. Developing a system of protected, high-conservation value areas is an essential plank in a good planning framework and would provide in-situ protection of areas from externally driven problems, as well as an opportunity to strengthen broader catchment management tools. A system which recognises and incorporates a range of values, from cultural to environmental also encourages local stewardship and attracts investment into regional communities for example through tourism, co-management by government and communities, regional development and new jobs.

Please find attached the IRN and ACF "*Vision for a Framework under the NWI for the Protection of High Conservation Value Freshwater Areas in Australia*" which we submit as our proposal of a mechanism to implement NWI s. 25 x) and also fulfil Australia's international and national commitments related to aquatic biodiversity conservation and water reform.

NWI Element No 5: Water Resource Accounting

Strengthen integration of surface and groundwater accounting

There are positive elements contained within the NSW draft IP towards the integration of surface and groundwater accounting. However it needs to be made clear that little has been done towards a comprehensive accounting system. For example, as noted in the CSIRO publication "*Robust Reform: Implementing robust institutional arrangements to achieve efficient water use in Australia* "[5], to date the environment has received indirect "benefit" as a result of the way in which water has previously been accounted for in the water cycle; for example, 1000ML licences may have resulted in less than 1000ML actually being extracted by the licensee due to channel capacity & constraints. Further, once applied to land some of the water may return to the river system by runoff or through percolating groundwater.

These issues are not currently accounted for in the water accounting system and as efficiencies increase, these environmental benefits will be lost if not properly accounted for, as landholders are allowed to keep any efficiencies they make through private investment. Also, we again refer to our comments made above regarding the lack of progress in accounting for and managing floodplain harvesting, and the lack of metering of such extraction. These accounting issues must be worked into the planning system, and this needs to be clearly indicated in the IP. Further, current WSPs do not adequately recognise the connectivity between surface and groundwater systems, and separate plans have been made for connected systems. The IP needs to contain clear targets to amend these management plans to enable integrated accounting and management.

NWI Element No 6: Urban Water Reform

Demand management measures

The Environmental NGOs note on page 85 that detailed engineering and environmental studies have been undertaken on identified options for a sustainable and secure water supply. Environment groups to date have only been consulted about studies undertaken for a desalination plant and not of any detailed studies with regards to recycling initiatives that would provide for similar water supply volumes as the proposed desalination plant.

The NWI implementation plans states that engineering, economic, finance and regulatory studies have already been completed for recycling. The NGO's are not aware of the existence of these studies and look forward to being consulted about their content as soon as possible.

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[5] Young MD, McColl JC, November 2003.

The document says that a Metropolitan Recycled Water Strategy is being developed with a goal of achieving 80 gigalitres of recycled water by 2029. It must be clarified whether this is the target amount per year.

The Environmental NGOs are looking forward to the opportunity to provide input into the metropolitan water recycling strategy when this document is developed. To date we have only been informed that a strategy is being developed but we have not had the opportunity to provide any input in the process.

The Environmental NGOs also note that whilst Sydney Water has worked towards demand management targets. To date these targets have not been met and there is a clear need for a more effective, whole of government approach to a demand management program.

NWI Element No 8: Community Partnerships and Adjustment

Transparency and accountability of consultation process

The Environmental NGOs note that we were never officially briefed about the NSW National Water Initiative Implementation Plan. We understand that notice was given through the Natural Resources Advisory Council at the 'Water Matters' workshop in late 2005 that the plan existed and then only a week was provided for brief comments from NRAC stakeholders. No environment representative could be present at the workshop as this was the same week where major reforms were made to the *Water Management Act 2000* and as far as we are aware not other notice was given. Although the period for public comments was subsequently extended until end of January, without officially notifying the environment groups and it appears Indigenous stakeholders about this, we do not consider this adequate fulfillment of NWI consultation obligations.

The NWI clearly requires the Parties to engage relevant stakeholders in the fulfillment of the agreement. In particular, the agreement stipulates that:

> *93. Parties agree that the outcome is to engage water users and other stakeholders in achieving the objectives of this Agreement by:*
>
> > *i) improving certainty and building confidence in reform processes;*
> >
> > *ii) transparency in decision making; and*
> >
> > *iii) ensuring sound information is available to all sectors at key decision points.*

It also provides that:

95. States and Territories agree to ensure open and timely consultation with all stakeholders in relation to:

i) pathways for returning overdrawn surface and groundwater systems to environmentally sustainable extraction levels (paragraphs 41 to 45 refer);

ii) the periodic review of water plans (paragraph 398 refers); and

iii) other significant decisions that may affect the security of water access entitlements or the sustainability of water use.

In our view the NSW Government has failed to comply with these provisions of the NWI agreement with regards to input relating to the IP.