



Australian Government

National Water Commission

Update of progress in water reform

INPUT INTO THE WATER SUB GROUP (WSG) STOCKTAKE REPORT

15 February 2008

Update of progress in water reform

1	Purpose and structure of this report	iii
2	Background to water reform in Australia	1
2.1	The challenge	1
2.2	The water reform agenda	1
2.3	Reform objectives.....	1
2.4	Reform actions and implementation	2
3	Water access entitlements and planning framework	3
3.1	Outcomes expected under the NWI	3
3.2	Progress to date	3
3.3	Ongoing implementation issues and priorities.....	4
4	Water markets and trading	5
4.1	Outcomes expected under the NWI	5
4.2	Progress to date	5
4.3	Ongoing implementation issues and priorities.....	6
5	Best practice pricing and institutional arrangements	8
5.1	Outcomes expected under the NWI	8
5.2	Progress to date	8
5.3	Ongoing implementation issues and priorities.....	9
6	Integrated management of water for the environment	11
6.1	Outcomes expected under the NWI	11
6.2	Progress to date	11
6.3	Ongoing implementation issues and priorities.....	13
7	Water resource accounting	14
7.1	Outcomes expected under the NWI	14
7.2	Progress to date	14
7.3	Ongoing implementation issues and priorities.....	15
8	Urban water reform	16
8.1	Outcomes expected.....	16
8.2	Progress to date	16
8.3	Ongoing implementation issues and priorities.....	17
9	Key findings	19
10	Recommendations	21

ATTACHMENT A

1 Purpose and structure of this report

The purpose of this report is to provide an update of progress in water reform for the Water Sub Group (WSG) to the Council of Australian Governments (COAG) Working Group on Climate Change and Water, as an input to the WSG stocktake report.

The following section provides an overview of the objectives and processes for water reform initiatives to date.

More detail on expected outcomes, progress to date, and remaining implementation issues for key reform areas is then provided in sections 3 to 8.

An assessment of overall progress (taking into account significant developments since the National Water Commission's *Biennial Assessment of Progress in the Implementation of the National Water Initiative* of August 2007 and identification of barriers to full and timely implementation of agreed water reforms is contained in section 9.

Action oriented recommendations for accelerating implementation of key water reforms is presented in section 10.

Attachment A contains the detailed table summarising progress on implementing specific National Water Initiative actions

2 Background to water reform in Australia

2.1 THE CHALLENGE

The basic challenge in water resource management is to meet ever-increasing demands for water, both for consumptive purposes and for the environment, in a sustainable and least-cost way. This challenge is particularly acute in Australia where the availability of the resource is naturally variable in both time and space or where high rates of population growth are anticipated such as south east Queensland and south west Western Australia.

Responding to this challenge requires an adaptive management framework capable of balancing competing demands for water. The need for this framework is critical given the unprecedented drought that has resulted in severe water scarcity across large parts of Australia, both rural and urban, and increased uncertainty about future water availability due to the potential impacts of climate change.

2.2 THE WATER REFORM AGENDA

The need to move management of Australia's water resources onto a more efficient and sustainable footing was first reflected at a national level in the 1994 COAG water reforms. In 1995, COAG agreed to incorporate these water reforms into National Competition Policy and tasked the National Competition Council with assessing governments' progress in implementation. Satisfactory implementation of reforms became a condition for state and territory governments to receive competition payments. However, it was largely left to individual jurisdictions to decide how to implement these reforms and progress was variable.

Recognition of the need for a more integrated and coordinated national approach to water management led to the development of the National Water Initiative (NWI). Agreed in 2004, the NWI represents a shared commitment by the Australian Government and state and territory governments to achieve a nationally compatible market, regulatory and planning based system of managing water resources.

In particular, the NWI provides a framework to address and deliver the more difficult COAG water reform commitments, and focuses on areas in which greater compatibility across jurisdictions in the approaches adopted to water management would enhance outcomes.

There are opportunities to accelerate the implementation of the NWI and improve water management more generally through further measures under the National Plan for Water and other collaborative efforts between different levels of government.

2.3 REFORM OBJECTIVES

Australian governments agreed to the NWI with the expectation that it would optimise economic, social and environmental outcomes from water management, and underpin the capacity of Australia's water management to deal with change responsively and fairly. Full implementation of the NWI is expected to achieve:

- expansion of trade in water bringing about more profitable use and more cost-effective and flexible recovery of water to achieve environmental outcomes;
- more confidence for those investing in the water industry due to more secure water entitlements, better and more compatible registry arrangements, better monitoring, reporting and accounting, and improved public access to information;

- more sophisticated, transparent and comprehensive water planning that deals with key issues such as the major interception of water, the interaction between surface and groundwater systems, and the provision of water to achieve specific environmental outcomes;
- addressing overallocated systems as quickly as possible, including effective management of significant adjustment issues where appropriate; and
- better and more efficient management of water in urban environments, for example through the increased use of recycled water and stormwater.

2.4 REFORM ACTIONS AND IMPLEMENTATION

The NWI sets out outcomes and actions for the ongoing process of national water reform in the areas of:

- Water access entitlements and planning;
- Water markets and trading;
- Best practice water pricing and institutional arrangements;
- Integrated management of water for environmental and other public Benefit outcomes;
- Water resource accounting;
- Urban water reform;
- Knowledge and capacity building; and
- Community partnerships and adjustment.

The structure of this report on progress with water reform is based on the first six of these NWI elements. The remaining key elements of knowledge and capacity building and community partnerships and adjustment are considered in the context of the above elements.

Responsibility for implementing water reforms rests with the NWI parties. Each jurisdiction was required to develop a publicly-available NWI implementation plan, describing how the actions and timelines agreed in the NWI are to be achieved. Where appropriate, these NWI implementation plans were to be developed cooperatively between states and territories that share water resources to ensure appropriate co-development of those actions that are of a cross-jurisdictional nature, including registries, trading rules, and specifying water products and environmental outcomes.

The NWI also led to the establishment of the National Water Commission (the NWC) to assist with the effective implementation of the agreement. The NWC was assigned the role of accrediting NWI implementation plans to ensure consistency. The NWC was also required under the NWI, to undertake a baseline assessment of the water resource and governance arrangements.

The Commission is also required to undertake biennial assessments of progress in implementing the NWI. The Commission released its first biennial assessment of progress in implementation of water reform in August 2007¹. This update report draws heavily on that assessment, but incorporates significant recent developments occurring subsequent to that report. The outcomes expected under the NWI, progress in implementation thus far and priorities for the principal reform components are set out below.

¹ The Commission's biennial assessment is available at www.nwc.gov.au

3 Water access entitlements and planning framework

3.1 OUTCOMES EXPECTED UNDER THE NWI

Effective water planning is fundamental to reforms being driven by the NWI. Water planning assists governments and the community in the adaptive management of surface and groundwater systems in order to meet productive, environmental and other public benefit outcomes. Settling the trade-offs between these competing demands should involve judgements informed by best available science, socio-economic analysis and community input. Accordingly, the NWI requires that statutory-based water plans are prepared for surface water and groundwater management units in which entitlements are issued. It also requires recognition of the connectivity between surface and groundwater resources so that connected systems are managed as a single resource.

In order to meet the NWI commitments, water plans were to be substantially complete for over-allocated systems by 2005. There was also to be substantial progress towards the return of all currently over-allocated or overused systems to sustainable levels of extraction by 2010.

At the same time, a key objective of the NWI is to enhance the security and certainty of water access entitlements by clearly specifying the statutory nature of those entitlements and ensuring that they possess clear and nationally-compatible characteristics. This includes ensuring that entitlements clearly assign the risks arising from future changes to the consumptive pool. It also requires entitlements and planning frameworks that protect the integrity of water access entitlements from unregulated growth in interception through land-use change.

Paragraphs 25 through 57 of the NWI outline the provisions relating to water access entitlements and planning frameworks.

3.2 PROGRESS TO DATE

Almost all states and territories have made good progress in developing water access entitlement and planning frameworks as prescribed by the NWI, particularly in high-priority water systems.

New South Wales, Victoria, Queensland and South Australia have put in place or amended legislation to incorporate elements of the entitlement and planning frameworks prescribed by the NWI. Western Australia is currently reviewing its systems with a view to introducing new legislation into parliament in 2008. Tasmania, the Northern Territory and the Australian Capital Territory are reviewing their legislation to ensure that it meets NWI requirements.

Across all states, there are clear examples of improved planning practices, and of processes in which there have been opportunities for productive, environmental and other public benefit considerations to be identified and considered. For example, considerable resources have been committed to stakeholder engagement and knowledge building to improve water planning and management in northern Australia. South Australia has developed methods for assessing the impacts of plantation forestry on reducing recharge to groundwater systems, and processes to incorporate forestry entitlements into existing water access entitlement frameworks.

However, there is still room for improvement in identifying, quantifying and incorporating environmental outcomes in water plans; and integrating surface and groundwater

management. The slow delivery of water plans is a potential threat to achieving NWI outcomes on a state-wide and national scale.

Almost all states have made statutory provision for environmental and public benefit outcomes within water plans to protect water sources and their dependent ecosystems.

While policies, plans or management frameworks to address over-allocation or stress have largely been put in place, specific results have been less evident and possible over-allocation remains a major concern, particularly in the Murray-Darling Basin. Climate change is anticipated to exacerbate this problem in many areas, highlighting the importance of a more effective assessment of risks to water availability into water planning across the country. The CSIRO Sustainable Yield Project represents the benchmark of a robust, basin-wide estimate of the future availability of water resources, taking into account climate change and other risk. The results of this project, together with other information, will provide a much better basis for informing the development of new sustainable diversion limits for the surface and groundwater systems of the Murray-Darling Basin. However, New South Wales has advised that the roll out of water sharing plans in unregulated systems and in groundwater systems in inland New South Wales has been slowed awaiting the results of the project.

3.3 ONGOING IMPLEMENTATION ISSUES AND PRIORITIES

Despite this generally good progress, some factors are reducing water user and stakeholder confidence in water access entitlements and in the security of water provided for the environment. Areas where further progress is required include:

- Improving the quality and extent of science underpinning water plans – especially understanding the relationships between water and the environment. Continued effort is required to ensure that the best available knowledge and information is available to improve water planning and accountability.
- Better recognising the connectivity between surface and groundwater resources. States have arrangements in place to manage groundwater, although these do not yet amount to sophisticated, integrated planning across surface and groundwater systems. There is still a long way to go to build the knowledge and capacity needed to jointly manage surface water and groundwater.
- Addressing the over-allocation and/or overuse of water resources. There remain divergent interpretations of the concept of sustainable levels of water extraction across jurisdictions, and in a number of states, doubts still remain about the adequacy and timeliness of current responses to over-allocation.
- Significantly improved knowledge, policies and practices in relation to changes in land use activities (such as large scale forestry) that intercept significant amounts of surface water and groundwater.
- Improving water plans to incorporate indigenous issues more effectively.
- Rolling out water plans on the ground. All states have started, and in some cases substantially completed, NWI consistent water planning processes. However roll-out of completed plans continues to be a challenge for governments.
- Significantly improving monitoring and compliance in line with the risk to the water resource. Severe water scarcity across Australia has highlighted the critical importance of water resource monitoring and compliance in effective water resource management.

4 Water markets and trading

4.1 OUTCOMES EXPECTED UNDER THE NWI

Water trading is a centrepiece of national water reform. The potential benefits of water trading in ensuring that increasingly scarce water resources are allocated to their most productive uses have long been recognised in Australia. The 1994 COAG water reforms required the separation of water rights from land, a necessary first step to expand trade in water. The reforms also sought to open up trading arrangements, including interstate trading. COAG subsequently agreed in the NWI to an “expansion of permanent trade in water bringing about more profitable use of water and more cost effective and flexible recovery of water to achieve environmental outcomes”. This was primarily to promote an expansion of the area of coverage and the volume of trade and to overcome the barriers to some forms of water trade. An effective market for water trading provides for flexibility in responding to emerging issues such as drought and climate change.

The expected outcomes from implementing water markets and trading are to:

- facilitate the operation of efficient water markets and opportunities for trading, within and between states, where water systems are physically shared or hydrologic connections and water supply considerations will permit water trading;
- minimise transaction costs on water trades, including through good information flows in the market and compatible entitlement, registry, regulatory and other arrangements across states;
- enable the development of an appropriate mix of water products, based on access entitlements and allocations that can be traded either in whole or in part, or through leasing or other arrangements; and
- recognise and protect the needs of the environment and provide appropriate protection of third-party interests.

Paragraphs 58 through 63 of the NWI outline the provisions relating to water markets and trading.

4.2 PROGRESS TO DATE

Good progress has been made in introducing institutional, legislative and administrative arrangements that enable water trade. New South Wales, Victoria and South Australia have put in place arrangements to allow for interstate trade in water access entitlements and water allocations across the southern Murray-Darling Basin and continue to take steps to remove remaining barriers that may affect trade.

There are positive signs that interstate trade in the southern Murray-Darling Basin is expanding as a result of these significant efforts. The volume of water entitlement traded from Victoria to South Australia in the 2006-07 water year exceeded the total traded from Victoria to South Australia during the eight years of the Interstate Water Trade Pilot.

States have made significant progress in reviewing and modifying rules restricting trade. New legislation has come into effect in New South Wales and Victoria. Private irrigation entities in New South Wales and South Australia have removed barriers on permanent trade out of their areas up to the four percent threshold limit. Victoria has lifted its two percent limit to four percent. The Commonwealth *Water Act 2007* provides for regulating water charges and some specific forms of non-price conduct that may act as a barrier to trade through the making of water charge and market rules and requires the ACCC to monitor compliance with and enforce the rules. The *Water Act 2007* also provides for the

Murray-Darling Basin Authority to review and revise trading rules as part of its development of the Basin Plan.

Two major studies by PricewaterhouseCoopers and the Productivity Commission on developing an optimal design for an effective water market and on the feasibility of establishing market mechanisms to encourage economic efficiency of rural water use respectively have been completed. A work plan picking up the recommendations of the PricewaterhouseCoopers report has been agreed by states to ensure that the actions proposed by the report are addressed.

Water trading, within and between states, is proving very effective in reallocating scarce water supplies. The 2007 report, *The Economic and Social Impacts of Water Trading*, jointly commissioned by the National Water Commission, Murray-Darling Basin Commission, and the Rural Industries Research and Development Corporation, finds that reform has contributed to a significant expansion in water trading activity. The report finds that although it is difficult to untangle the effects of trade from a background of drought, commodity markets and rural adjustment, trade has clearly assisted existing industries to manage change, and has been critical to new, large-scale agricultural development. Importantly, the report also finds that without water trading many existing enterprises would not have survived the current drought.

Significant effort has already been made to implement statutory registers to handle the registration and trade of water access entitlements consistent with the NWI in New South Wales, Victoria, Queensland, South Australia and Tasmania. Victoria's newly developed integrated registry system came on line in July 2007.

Progress has also been made regarding the use of water markets for more cost effective and flexible recovery of water to achieve environmental outcomes. The Murray-Darling Basin Commission used the Pilot Environmental Water Purchase to secure 20 gegalitres (see also section 6) and other jurisdictions have announced intentions to similarly use water markets for purchases on behalf of the environment.

In addition, a review of urban water market and entitlement frameworks is underway as required under the NWI and is scheduled for completion by mid 2008.

4.3 ONGOING IMPLEMENTATION ISSUES AND PRIORITIES

The growth of trading within and between states in recent years has brought into sharp focus the need for greater market efficiency. This can be achieved by improving pricing and information disclosure to promote transparency, improving market confidence in water intermediaries, streamlining transaction processes, and reducing approval times for water trades. There have been some significant delays reported in the 2007-08 season in the Murray-Darling Basin due to the high volume of applications to trade and capacity constraints in approval authorities. Substantial effort is being put into inter-jurisdictional processes to reduce transaction costs and transaction processing times. To realise the benefits of water markets, improving market function should be a priority area for coordinated action this year to ensure similar problems are not experienced in the 2008-09 water year.

While water trading is being shown to provide numerous benefits to individuals, communities, the environment and the economy, there remain a range of community and industry concerns associated with trading water and governments' participation in water markets. Better monitoring and communication of the impact of water trade on all stakeholders across regional economies and communities is required to ensure support for this critical area of reform. Under the NWI, the Commission is required to monitor the impacts of trade and is currently undertaking work in this area.

Concerns have been expressed that the four percent interim threshold limit on trade out of irrigation areas may limit the scope for environmental water purchases — either by preventing additional environmental purchases or by meaning that environmental purchases will crowd out other inter-regional trades. If the amount of water already targeted for environmental purposes is to be recovered, the four percent limit will need to be addressed. In considering this matter, the States will need to recognise the agreed outcomes of the NWI.

Ongoing structural change in rural and regional areas may warrant governments' more proactive involvement in addressing adjustment issues. The nature of such involvement may usefully be directed by national principles for the design of adjustment programs. The current NWI has little to say about this.

To improve water market performance and, in particular, support timely and low-cost water transfers across irrigation area boundaries and state borders, continued effort is required to enhance the compatibility of individual southern Murray-Darling Basin registers (as operated by states and private irrigation entities). Changes are being made to, and planned for, entitlement registers in many states and private irrigation entities over the coming year or so. In addition, the water data and information requirements of the BoM under the Commonwealth *Water Act 2007* mean states will need to consider the linkages of their accounting systems to their entitlement registers and the ready accessibility of this information. This highlights the increasing importance of compatible and reliable water registers of all entitlements and trades.

Priority areas for further advancing water trading are:

- Streamlining transaction processes.
- Improving the capacity of the various authorities and entities to process trades.
- Improving confidence in water intermediaries.
- Improving water market transparency.
- Continued steps to remove barriers to trade.
- Implementation of compatible registers.
- The development of the Australian Competition and Consumer Commission (ACCC) role in development of water market rules and monitoring compliance against these rules.
- The NWC continuing to monitor and report on the impacts of trade to inform the 2009 review of permanent trading restrictions.

5 Best practice pricing and institutional arrangements

5.1 OUTCOMES EXPECTED UNDER THE NWI

Appropriate pricing of water and water-related services plays a key role in providing signals to users on using the resource efficiently and in ensuring that services and resource management activities are adequately funded. The expected outcome from the implementation of the water pricing actions of the NWI is for states to have water pricing and institutional arrangements that:

- promote economically efficient and sustainable use of water resources, water infrastructure assets and government resources devoted to the management of water;
- ensure sufficient revenue streams to allow efficient delivery of the required services;
- facilitate the efficient functioning of water markets in both rural and urban settings;
- give effect to the principle of ‘user-pays’ and achieve pricing transparency in respect of water storage and delivery in irrigation systems and cost recovery for water planning and management; and
- avoid perverse or unintended pricing outcomes.

Paragraphs 64 through 77 of the NWI outline the provisions relating to best practice pricing and institutional arrangements.

5.2 PROGRESS TO DATE

States have made progress in implementing the various aspects of NWI commitments relating to best practice pricing and associated reforms.

A Steering Group on Water Charges (chaired by the NWC and including representatives of the NWI Parties and economic regulators) is progressing implementation of various parts of the best practice pricing element of the NWI. This group has developed draft principles for: recovering capital expenditure; setting urban water tariffs; recovering the costs of water planning and management; and setting prices for recycled water and stormwater for reuse. It is expected that the draft principles will be considered by the Natural Resource Management Ministerial Council in 2008.

The principles have been developed to meet the NWI commitment to implement consistent approaches to charging for water storage and delivery services in the urban and rural sector and to implement consistent approaches to charging for water planning and management activities. If endorsed, the implementation of the principles will be negotiated between the NWC and each state and territory. Once implemented, the principles will form the basis on which water charges are set within jurisdictions. Further, as discussed in section 4.2, the Commonwealth *Water Act 2007* provides a stronger regulatory regime for rural water charges within the Murray-Darling Basin. Jurisdictions have asked for more clarity on the implications of the ACCC’s role under the *Water Act 2007*.

Key areas of progress include:

- All states have implemented consumption-based pricing in both rural and urban systems as required under the NWI. Where consumption-based pricing has not been adopted, as is the case for some retail urban water providers in Tasmania, a case has been made that the introduction of consumption-based pricing was not at that time cost-effective.

- States have made varying progress in terms of cost recovery for water planning and management, ranging from relatively well-developed cost recovery arrangements in New South Wales, through suspended arrangements in Queensland, to less developed policy positions in South Australia and Western Australia.
- All states are developing consistent approaches to pricing and attributing costs of water planning and management through the Steering Group on Water Charges.
- Progress has also been made by some states (New South Wales and Victoria) and nationally to develop pricing policies for recycled water and stormwater. Western Australia has developed a State Water Recycling Strategy which is currently being considered by the Western Australian Government and will include pricing elements.
- All states have demonstrated that they have processes in place to undertake assessments of economic viability and ecological sustainability of investment in new or refurbished infrastructure prior to the investment occurring, as required under the NWI.
- The first national performance monitoring report of major and non-major urban water utilities was released in May 2007, meeting the NWI commitment to make independent, public and annual reports on their performance. The second such report will be released in the second quarter of 2008 and, for the first time, will include comparative indicators that will enable comparison between different utilities. The inaugural performance report for rural water service providers will be released in the second quarter of 2008.

5.3 ONGOING IMPLEMENTATION ISSUES AND PRIORITIES

Two areas in which progress on pricing has been slow include:

- Cost recovery for water planning and management still lags behind NWI commitments in a number of states (notably Queensland, with suspended arrangements, and South Australia and Western Australia with less developed policy positions).
- For rural and regional water supply, progress on cost recovery is mixed across states, with only Victoria able to demonstrate that the government-owned rural and regional water providers have achieved lower-bound pricing and are on a path towards the upper bound. State Water in New South Wales has also essentially met this commitment.

In periods of extended drought, there may be a case for governments to provide some fee relief so long as it is transparent and time-limited. Nevertheless, clear and stable arrangements for recovering water planning and management costs are needed to ensure ongoing capacity for managing the resource.

Efficient and sustainable pricing arrangements will become increasingly important in the face of a significant wave of government investment in urban water supply augmentation and some rural investments. Priorities for future action to improve pricing arrangements include:

- Development of clear arrangements for recovering costs of water planning and management and further exploration of the scope for market-based/pricing responses to address externalities arising from water use.
- Establishment of the ACCC's role in providing advice on water charging rules for rural water within the Murray-Darling Basin.

- A range of broader reforms not directly specified under the NWI including:
 - stronger prices oversight arrangements in some jurisdictions;
 - institutional and market arrangements (especially in urban areas) that deliver competition and choice in water services and water products;
 - exploration of more responsive pricing to signal scarcity in urban areas, including more sophisticated metering and tariff structures; and
 - exploring the feasibility of a national pricing regulator or a pricing regulatory regime with national application.

6 Integrated management of water for the environment

6.1 OUTCOMES EXPECTED UNDER THE NWI

The outcome for integrated management of environmental water under the NWI is to identify the environmental and other public benefit outcomes being sought for water systems and to develop and implement management practices and institutional arrangements that will achieve those outcomes. Importantly, this incorporates adopting and implementing the principles developed under the NWI for recovery of water in over-allocated and overused systems and return to sustainable levels of extraction.

The expected outcomes from undertaking the agreed NWI actions are to have:

- environmental and other public benefit outcomes for water systems identified with as much specificity as possible in water plans;
- management practices and institutional arrangements in place to achieve environmental outcomes;
- accountable environmental water managers established and equipped with the necessary authority and resources to provide sufficient water at the right times and places to achieve identified outcomes, including across state boundaries where relevant; and
- cost-effective measures to provide water for environmental outcomes.

Paragraphs 78 and 79 of the NWI outline the provisions relating to integrated management of environmental water.

6.2 PROGRESS TO DATE

Management and institutional arrangements

All governments now have management and institutional arrangements in place to achieve environmental management outcomes. In New South Wales, these arrangements have been developed in association with broader changes in institutional arrangements. In some other states existing institutions have been strengthened while new authorities have also been formed, such as the River Murray Environmental Manager in South Australia.

The arrangements vary depending on the broader nature of the water management regime and generally recognise key differences between regulated and unregulated water systems, the water system scale, and level of risk to the resource.

The new *Water Act 2007* establishes a Commonwealth Environmental Water Holder with statutory responsibility to procure and manage water for the purpose of protecting or restoring the environmental assets of the Murray-Darling Basin and other areas where the Commonwealth holds water. Under this arrangement, environmental water is to be managed in accordance with an environmental watering plan agreed as part of the Basin Plan.

In some states, progress has been made in specifying environmental outcomes and tying management practices to achieving these outcomes. For example, Victoria's state-wide river health strategy and regional river health strategies identify environmental assets and outcomes and propose actions to meet specified outcomes.

Arrangements and progress in relation to water recovery

Various management and institutional arrangements are in place where required and a range of mechanisms are being used to recover water, including investment in water use efficiencies and direct purchase of water entitlements. Selecting the most appropriate mechanisms for water recovery is a complex and challenging task with important economic and social dimensions in addition to the environmental requirements.

The Murray-Darling Basin has been a major focus of water recovery measures to date. A number of water recovery projects have been developed under The Living Murray Initiative. The Living Murray Initiative was established in 2002 to help improve the health of the River Murray. In 2004, the Murray-Darling Basin Ministerial Council committed \$500 million (\$200 million from the Australian Government) over five years to recover 500 gigalitres of water for environmental use at six icon sites.

The Living Murray Initiative currently has three projects listed on the Eligible Measures Register that are focused on purchasing water on the market. These projects seek to recover up to a total of 195 gigalitres of water with budgets totalling \$331 million. Jurisdictions have indicated that these projects are essential if the Living Murray Initiative is to reach its volumetric and financial targets.

Examples of water recovery measures include the Great Darling Anabranch pipeline project in NSW which will save up to 47 gigalitres of water. Other examples include the recent Murray-Darling Basin Commission Pilot Environmental Water Purchase (PEWP) project that involved purchasing up to 20 gigalitres of water from willing sellers in key parts of the Murray-Darling Basin. Water is also being recovered across jurisdictions under the Joint Government Enterprise for the Snowy and Murray Rivers. Projects funded under the Water for Rivers program also feature in this context.

At a state level, New South Wales is implementing the RiverBank program, Wetlands Recovery project, and Pipeline NSW (water efficiency investments) and the Cap and Pipe the Bores program in the Great Artesian Basin. Victoria has established the Environmental Water Reserve and has committed to water recovery programs to provide additional water for 16 stressed rivers. Outside the MDB, Western Australia has a number of formal and informal practices in place to recover water, including negotiated reductions in consumptive use.

Monitoring River and Wetland Health

The NWC developed the Framework for River and Wetland Health for the Australian Water Resources 2005 assessment and to meet commitments required under the NWI. The framework has applications for water planning and management and for informing a range of programs aimed at recovering water for the environment. The framework can also act to enhance alignment of existing monitoring activities by acting as a 'feedback' mechanism to identify possible correlations, redundancies or gaps in monitoring efforts. The NWC has commenced trials of the framework in Queensland, which are due to be completed in 2010. Proposed trials in other regions (including Western Australia, New South Wales and the wet/dry tropics of northern Australia) are yet to commence.

In the Murray-Darling Basin, the Sustainable Rivers Audit is an initiative of the Murray-Darling Basin Commission and is supported by its state and territory government agencies. Sustainable Rivers Audit data will provide scientific information to underpin improved management practices as well as provide a sound indication of river condition within the Murray-Darling Basin.

6.3 ONGOING IMPLEMENTATION ISSUES AND PRIORITIES

While progress has been made in establishing the institutional arrangements, the NWI outcomes for integrated management of environmental water are not yet being achieved and there is significant community concern about the lack of tangible results on the ground.

Achieving improvements is made difficult by the inadequate specification of the desired environmental and public benefit outcomes. This is primarily due to the shortcomings in water planning processes; in particular, the transparency of trade-offs between environmental and consumptive water uses and the adequacy of the science underpinning water plans. The inability to provide adequate specification of desired outcomes leads to difficulty in monitoring and consequent lower levels of accountability that undermine adaptive management processes.

Increased rigour is required in specifying environmental outcomes and the associated water requirements. There needs to be a sustained effort to draw from the best available science to complement improvements to the knowledge that underpins management practices. In addition, more systematic monitoring and measurement of river health outcomes is required to provide a firm basis for adaptive management decision-making at a state and national level. The work currently being done (under Natural Resource Management Ministerial Council (NRM Ministers)) on formal provision for high conservation value freshwater areas, should address whether more specific arrangements to manage for high conservation values need to be in place in some states and nationally.

While institutional arrangements for environmental management have been implemented, the complex interaction of multiple entities in some states means that it can be difficult to identify who is responsible for which part of the environmental or public benefit outcome specified in a water plan. Clearer accountability of these entities to deliver environmental outcomes is required along with good governance, clarity of roles, and close practical coordination between entities.

There are also concerns that established environmental managers might not be equipped with the necessary authority, nor have the capacity and resources, to undertake their tasks as envisaged under the NWI.

Key priorities for improving integrated management of water for the environment include:

- Ensuring environmental managers are equipped with the necessary statutory authority and that the community understands, accepts, and has confidence in this authority. In addition it will be necessary to ensure that environmental managers have the appropriate technical skills and financial resources.
- Ensuring environmental water management activities are considered in the context of broader catchment management.
- Developing more transparent and scientifically based environmental outcomes in water plans – including drawing from the best available science at any point in time.
- Adopting a more harmonised and rigorous national approach to monitoring river health and groundwater.
- Undertaking an evaluation and review of the cost-effectiveness and environmental-effectiveness of the various water recovery mechanisms in the Murray-Darling Basin including an examination of any overlap and duplication among programs.

7 Water resource accounting

7.1 OUTCOMES EXPECTED UNDER THE NWI

Water resource accounting is the application of a consistent and structured approach to identifying, measuring, recording, aggregating and reporting water information including its occurrence, extraction, diversion, storage, trade, use, loss and discharge. Without effective measurement and monitoring, it is difficult to adequately manage the resource.

The NWI recognises that accounting systems and measurement practices between and within states can vary widely and make it difficult to provide a consistent picture of water resources across Australia. The NWI imposes a number of requirements designed to ensure that water accounting is able to meet the information needs of different water systems in respect to planning, monitoring, trading, environmental management and on-farm management. This in turn will build public and investor confidence in the amounts of water being traded, extracted for consumptive use, and recovered and managed for environmental and other public benefit outcomes.

Paragraphs 80 through 89 of the NWI outline the provisions relating to water resource accounting.

7.2 PROGRESS TO DATE

There has been strong national progress for the delivery of water accounting objectives under the NWI.

A major benchmark study of states' water accounting practices was completed in 2006, in accordance with NWI requirements. This study found that, while showing signs of some good progress, water accounting in Australia was at an immature phase and being developed in an ad hoc fashion. NRM Ministers agreed to develop a National Water Accounting Model based on a disciplinary approach similar to financial accounting. The model goes beyond the actions strictly required by the NWI, but is an approach that is likely to achieve a nationally-consistent result as envisaged in the NWI.

Work on sharing information is proceeding steadily through jurisdictional cooperation at the national level. The endorsement by NRM Ministers of the principle of open and efficient water data sharing is a positive step in establishing a shared vision for water data sharing.

The *Water Act 2007* gives the BoM responsibility for compiling and maintaining water accounts for Australia and for issuing national water information standards. The BoM is taking the lead in determining nationally agreed definitions and standards for data to be collected in the Australian Water Resources Information System.

A prerequisite for accurate water accounting is the effective roll-out of meters of an appropriate standard. There is currently no Australian standard for water meters or ancillary data collection systems and the extent of metering is mixed across jurisdictions. The national Metering Expert Group has made good progress on the development of standards for meters used in measurement with the National Measurement Institute. With support from the NWC the NMI has published two of the four essential pattern approval standards, with the final two standards to be published by the end of March 2008.

Based on this work states are continuing to draft their jurisdictional implementation plans outlining how the adoption of metering standards and roll-out of meters will take place in their jurisdiction. These plans are expected to be finalised by 1 July 2008. To assist states to prepare their implementation plans, the Australian Government has invested in an

accelerated stocktake of meters and meter installations across Australia. The stocktake is expected to be completed in February 2008.

7.3 ONGOING IMPLEMENTATION ISSUES AND PRIORITIES

All governments will need to remain closely engaged in the development of accounting and metering standards, and the on-ground implementation of these if the NWI outcomes are to be achieved.

The work on developing a national water accounting system, expected to be completed in 2010, includes the development of national standards for water market accounting, resource accounting and environmental water accounting as well as standards for water accounting information systems. Work on developing a national water accounting system is progressing and a number of states have established pilot projects to test and develop water accounting standards. Making new water accounting and measurement standards operational presents a significant challenge to governments and water users, but represents a key area of reform where acceleration would result in significant benefits to water management and use.

Under the *Water Act 2007*, the BoM is required to publish the national water account in a form readily accessible by the public.

Key priorities for future action include:

- States will need to become increasingly active in the roll-out of metering and accounting standards.
- The BoM will need progressively to issue guidance and other more formal instruments to inform agencies' plans and investments. Jurisdictions report a keen wish for earliest possible notice of the BoM's future directions in water data.
- Significant improvements in monitoring and compliance are needed to underpin investments in improved water accounting, measurement and monitoring.

8 Urban water reform

8.1 OUTCOMES EXPECTED

The objectives for urban water reform outlined in the NWI are to:

- provide healthy, safe and reliable water supplies;
- increase water use efficiency in domestic and commercial settings;
- encourage re-use and recycling of wastewater where cost effective;
- facilitate water trading between and within the urban and rural sectors;
- encourage innovation in water supply sourcing, treatment, storage and discharge; and
- achieve improved pricing for metropolitan water.

The NWI framework of actions aimed at achieving urban water reform is presented in two parts: demand management actions, aimed at increasing urban water use efficiency; and actions that encourage innovation and build capacity to create water sensitive urban cities.

Achieving the desired outcomes for urban water reform will also depend on implementation of the NWI as a whole. Successful urban water reform depends in particular on successful implementation of the water planning framework, opening up water markets and implementing best practice water pricing and institutional arrangements.

As noted below, however, urban water reform has become increasingly imperative since the 2004 signing of the NWI, with the emergence of declining urban water security a significant issue. In addition, current NWI actions do not capture the extent of work currently being undertaken by individual states to address these challenges.

Paragraphs 90 through 92 of the NWI outline the provisions relating to urban water reform.

8.2 PROGRESS TO DATE

Reasonable progress is being made against the urban actions prescribed under the NWI, although in some areas, progress has been slow. This is in part, due to the effort required to coordinate the collaborative NWI urban actions. NRM Ministers have developed a workplan for national urban NWI actions, some of which are coordinated by a Joint Steering Committee on Water Sensitive Cities which comprises representatives from the NWC and representatives from Commonwealth and state and territory agencies.

With respect to demand management actions:

- All States have now enacted legislation corresponding to the Commonwealth *Water Efficiency Labelling and Standards Act 2005* to ensure that the scheme applies consistently across Australia and to confer regulatory powers on the Australian Government.
- An initial review of temporary water restrictions and associated public education strategies has been co-ordinated by the NWC (with the support of NWI Parties) focusing on larger urban centres (those with over 50,000 connections).
- The implementation of cost-effective management responses to supply and discharge system losses (including leakage, excess pressure, overflows and other maintenance needs) is an ongoing action and is largely being implemented by the urban water industry.

With respect to supply augmentation actions, the development of National Guidelines for Recycling (Phase 1 now released and Phase 2 due for release in 2008) has provided guidance to jurisdictions on how recycling of stormwater, grey water, groundwater and wastewater can be safely and sustainably achieved.

A number of states have also undertaken analyses of the potential impacts on water supplies of climate change, and are also making substantial progress in measuring, monitoring and publicly reporting on adaptive management water strategies.

Some progress has also been made towards enhancing innovation and capacity building for the creation of water sensitive cities, with a focus on integrated urban water supply planning and management, water sensitive urban design, and water sensitive urban developments. For example, some progress has recently been made in preparing draft best practice guidelines for the installation of household stormwater and grey water recycling systems and draft national guidelines for evaluating water sensitive urban design options. Further work is being undertaken through the Joint Steering Committee on Water Sensitive Cities to evaluate existing water sensitive urban developments to review the suite of existing and potential incentives to stimulate innovation. The outcomes of both projects are to be considered by the committee mid year and will assist in the identification of nationally coordinated actions to 'mainstream' water sensitive urban design.

Further, a review of the institutional and regulatory arrangements in urban water has commenced in order to facilitate the adoption of integrated urban water management in Australian cities as required under NWI.

While these actions are worthwhile, and are being implemented by governments in such a way as to address some of the broader urban issues, they have been overshadowed by the scale of water challenges now facing Australia's major cities.

8.3 ONGOING IMPLEMENTATION ISSUES AND PRIORITIES

The context of urban water management has changed significantly since the NWI was signed, particularly in relation to the greater awareness that now exists of the vulnerability of urban supply systems to climate variability. However, the NWI outcomes for urban water reform still hold, including to provide healthy, safe and reliable water supplies, increase water use efficiency, encourage innovation in water supply sourcing, treatment, storage and discharge, and to achieve improved pricing.

Despite progress in the urban water sector since the 1994 COAG water reforms, structural reform in the sector has generally not kept pace with that in similar sectors such as gas, electricity or transport. In some states, responsibility for the increasingly sophisticated tasks of urban water delivery remains with small and poorly resourced local government authorities.

Protracted drought conditions experienced across much of the country has challenged urban water management and led to severe and protracted water restrictions, both in major cities and regional centres. Urban water shortages in the current drought and the rush to invest in new urban water infrastructure are evidence that supply planning has not delivered the supply security expected by the community. In many areas of Australia the fundamental NWI outcome of reliable urban water supplies has not been achieved.

States are making significant investment in less rainfall dependent sources of supply to increase water supply security. While less-rainfall-dependent sources of water supply typically come at a higher cost, the value to consumers of water supply security needs to be taken into account. Further consideration of environmental externalities and avoided costs when water is derived from less rainfall dependent sources of supply substitutes water from traditional sources of supply is also required. Further effort is required to ensure that

pricing and institutional arrangements do not act to constrain less rainfall dependent water sources coming on line.

A key challenge facing urban water managers is to meet demand for water in the face of uncertainty while minimising costs to end users and the environment. An adaptive approach to meeting water needs is a key means by which to avoid or defer costs until necessary – for example, investing in drought response measures only as and when required, and making appropriate use of short term measures such as drought restrictions.

The feasibility of establishing a transparent minimum reliability benchmark for water supply for major centres (in regard to expected frequency and severity of water restrictions) developed in consultation with the community should be explored.

In addition to investing to address scarcity and reliability, there is also a need to build resilience for times when water is abundant, including the ability to cope with flooding at a localised and regional scale. Taken together, these needs suggest further action is required to build climate change resilience into Australia's urban centres. An important contributor to this objective is to accelerate the roll-out of water sensitive urban design attributes in new developments and to retro-fit existing schemes as opportunities arise.

Many states are implementing a wide range of additional measures relating to urban water reform that go well beyond the currently limited scope of the urban water reform actions in the NWI. For example, a number of states have commissioned reviews of the institutional arrangements for the urban water sector including reviewing the scope for greater use of competition though further work needs to be done in this area to better understand potential costs and benefits of these arrangements.

These developments reinforce the need to supplement the existing NWI urban reform commitments to better achieve urban water outcomes and to improve urban water supply security across Australia. Such a new co-operative national urban water reform agenda would draw on the reforms already being pursued in some states, and help to guide action by governments into the future.

Elements of an enhanced urban water reform agenda should cover improvements to:

- integrated urban water planning, particularly in an environment of climate change and with aging water and wastewater infrastructure;
- institutional and market arrangements;
- understanding of the scientific and technological advances in recycling;
- communication strategies to promote public acceptance of recycling; and
- on-ground delivery of water supply and demand management options.

9 Key findings

The NWI remains the primary and enduring national blueprint for water reform. Despite considerable change in Australia's water circumstances in the four years since the NWI was first signed, its policy prescriptions continue to be widely accepted as the right ones for Australia.

The implementation of water reform is delivering real improvements in the management, use and understanding of water. Significant progress has and continues to be made across a broad range of areas of water reform. Much of this progress can be attributed to the shared commitment by the Australian Government and state and territory governments under the NWI.

Key achievements include:

- Improved water planning practices in all jurisdictions and substantial completion of water access entitlement and planning frameworks in priority areas.
- Movement of pricing and cost recovery arrangements in the metropolitan water sector to a more efficient and financially sustainable footing.
- Introduction of legislative and administrative arrangements to facilitate trade in water entitlements. Water trading, within and between states, has been very effective in managing water in current difficult circumstances.
- Ongoing development of a National Water Accounting Model that will include national standards for water market accounting, resource accounting and environmental water accounting as well as standards for water accounting information systems.
- The release of the National Performance Report for Urban Water Utilities in May 2007. A similar nationally consistent performance reporting framework has been developed for rural water utilities and the first report will be completed in the second quarter of 2008.
- The release of the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) and the development of the Managing Aquifer Recharge, Stormwater Recycling and Augmentation of Drinking Water Guidelines due for release in 2008.

Despite good overall progress towards efficient and sustainable management of Australia's water resources, there are some areas where sufficient progress has not been made, or where progress has been slow, resulting in slippage against NWI timelines. Specific areas where reforms need to more fully implemented and/or accelerated include the following:

- Over-allocation of water resources continues to be a central national challenge and is not being managed as envisaged by the NWI.
- Progress in rolling out completed and NWI-consistent water plans has been difficult for governments. The extent to which plans recognise connectivity between surface and groundwater needs to be improved. Every effort needs to be made to ensure best available science underpins plans.
- There is a growing need for more effective compliance and enforcement action by governments if the integrity of and public confidence in, Australia's water management is to be preserved.

- More concerted effort is required to enhance the functionality and compatibility of water registers to support water trade across irrigation area boundaries and state borders, and to facilitate the provision of water data and information as required under the new Commonwealth *Water Act 2007*.
- Arrangements for the management of environmental water have not emerged as envisaged in the NWI.
- A more harmonised and rigorous national approach to monitoring river health and groundwater is required.
- For rural and regional areas, progress on cost recovery for water storage and delivery is mixed, and cost recovery for water planning and management still lags behind NWI commitments in a number of states.
- In the face of unprecedented drought conditions, more investment is required to deliver water security through a diverse portfolio of measures — including the consideration of less-rainfall-dependent sources.
- In some areas of Australia, the fundamental NWI outcome of reliable urban water supplies has not been achieved.

There is a range of barriers to the full and timely implementation of water reforms. These include a serious and growing shortage of skilled water resource professionals to support water reforms and the necessary investments, ‘policy bans’ by some governments on certain urban water supply options, and in some cases a lack of clarity on the specific reforms required and the accountability for delivering them.

Full and timely implementation of the NWI reforms is required to deliver a nationally consistent framework capable of meeting Australia’s water challenges. Each element of the NWI is an integral and complementary part of the overall reform blueprint and further progress in implementation is required across the board to achieve the broad objectives of the NWI. In addition, with respect to urban water, the NWI needs to be supplemented with an additional set of reform commitments.

In light of the significant change to the context of water reforms since the NWI was agreed, and capacity constraints across jurisdictions, there is a strong case for improving implementation by clarifying roles and responsibilities across governments and service delivery entities, and reviewing timelines and priorities for implementation and associated resourcing requirements.

10 Recommendations

It is recommended that:

- COAG develop as a matter of urgency, a detailed workplan to promote consistent efforts across the country to fully implement the NWI reforms and in particular:
 - develop a shared national understanding of sustainable levels of extraction and responses to over-allocation;
 - for water planning to include more effective assessments of risk to water availability arising from climate change and interception activities;
 - improve understanding of groundwater, and planning and management of groundwater-surface water interaction;
 - improve understanding of water interception activities and develop a nationally consistent approach that assists states to bring major interception activities into their water planning and entitlement regimes, consistent with the NWI;
 - review arrangements for the management of environmental water to ensure clear authority and accountability, better resourcing and skilling of environmental water managers, utilisation of best-available science, clear specification of environmental outcomes and better linkages into water planning processes;
 - improve river health and groundwater ecosystem monitoring to enable states to incorporate information from this monitoring into their adaptive management frameworks;
 - accelerate movement towards adoption of the terminology agreed in the NWI, and the development of compatible (or common) registers of water entitlements to facilitate water trade and access to information; and
 - undertake a comprehensive evaluation of the cost-effectiveness and interactions of the various water recovery mechanisms.
- The agreed actions under the NWI be expanded to include:
 - the development and adoption of the National Water Accounting Model as additional actions required under the NWI in order to allow for ongoing monitoring and assessment as part of the implementation of the NWI;
 - a supplementary set of urban water actions including improved urban water planning, ensuring consideration of all supply options, best practice climate change scenario planning, clearer articulation of supply risk and levels of water supply security in plans, improved institutional and market arrangements, guidance for governments' financial and planning involvement in supply augmentation and water efficiency projects, and on-ground delivery of water supply and demand management options; and
 - the development of national principles for the design of adjustment programs, to guide governments' involvement in addressing adjustment issues in rural and regional areas.
- COAG consider how the policies, institutions and incentives for delivering these reforms can be best structured to provide for more consistent, accelerated implementation, including:
 - the need for greater specificity/guidance in the reforms rather than high-level objectives which provide considerable latitude for interpretation that may dilute

or undermine the effectiveness of the reform measures in achieving their objectives;

- the need for clearer definition of roles and responsibilities for water reforms, which will improve the efficiency of delivery and accountability between and within different governments and service delivery agencies;
- devoting greater resources and emphasis to monitoring and independent assessment of the success or otherwise of the reform measures adopted and to identify where additional work and resources are required;
- the targeted use of financial or other incentives to encourage collaboration in, and acceleration of implementation of reforms; and
- strengthening the partnership between the Australian Government, the states and service delivery agencies in pursuing nationally consistent reforms and targeting those areas where national co-ordination will deliver greatest benefit.

Attachment A

Abbreviations for attachment 1

Abbreviation	Meaning
ACCC	Australian Competition and Consumer Commission
ACT	Australian Capital Territory
ACTEW	ACTEW Corporation Limited—ACT
ANCID	Australian National Committee on Irrigation and Drainage
BOM	Bureau of Meteorology
CFEV	Conservation of Freshwater Ecosystem Values
COAG	Council of Australian Governments
DNR	Department of Natural Resources—NSW
DSE	Department of Sustainability and Environment—Victoria
DWLBC	Department of Water Land and Biodiversity Conservation
EPHC	Environment Protection and Heritage Council
ERA	Economic Regulation Authority—WA
ESC	Essential Services Commission—Victoria
ESCAWRI	Executive Steering Committee for Australian Water Resources Information
ESCOSA	Essential Services Commission of South Australia
GPOC	Government Prices Oversight Commission
HCVAE	high conservation value aquatic ecosystems
ICRC	Independent Competition and Regulatory Commission—ACT
IPART	Independent Pricing and Regulatory Tribunal—NSW
JSCHEG	Joint Steering Committee on Health and Environmental Guidelines
JSCWSC	Joint Steering Committee for Water Sensitive Cities

Abbreviation	Meaning
NCP	National Competition Policy
NRMMC	Natural Resource Managers Ministerial Council
NSW	New South Wales
NT	Northern Territory
NWI	National Water Initiative
QCA	Queensland Competition Authority
QLD	Queensland
RNWS	Raising National Water Standards
ROP	Regional Operating Plan
SA	South Australia
SEQ	south-east Queensland
SGWC	Steering Group on Water Charging
WA	Western Australia
WAPs	water allocation plans
WAR	water allocations register
WMP	water management plan
WRF	Water Reform Framework
WRP	water resource plan
WSP	Water sharing plan
WSUD	Water sensitive urban design

Element: water access entitlements and planning						
3.1.2.1a action: implementation of framework—substantial completion of plans to address any existing overallocation for all river systems and groundwater resources in accordance with commitments under the 1994 COAG WRF (26(i))						
Relevance: part of prescribed approach					NWI date: by end-2005	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	There are 31 plans in place in 2004—remainder expected to commence from 2006-07.		✓			Five groundwater plans commenced late 2006—the last plan to commence mid-2007. Update: There are 38 statutory water sharing plans in place covering 90% of water extraction in NSW. Six major inland groundwater aquifer groundwater plans commenced in 2007-08 and the Patterson Regulated River plan commenced on 1 July 2007. Another two plans have completed their public exhibition process. The first two macro plans have also been placed on public exhibition.
Victoria	No commitment outstanding.	✓				
Queensland	Master plan indicates completion from 05/06 to 08/09.		✓			Seventeen out of 22 plans identified in 1999 implemented to WRP stage, 10 completed to ROP stage. Largely on track with 2005 NCP assessment planning schedule. Update: Three new plans have since been approved, hence total plans approved is now 20 out of 22 identified.
South Australia	No commitment outstanding.		✓			Fifteen plans for systems covered by COAG 1994 commitments completed. All plans now being reviewed.
Western Australia	No time commitment given.			✓		Timetable now set for completion of plans identified in 1999—four groundwater and one priority surface water plan implemented. Update: Seven groundwater plans and one priority surface water plan have been completed.
Tasmania	No time commitment given.		✓			Five of 16 plans identified in 1999 as requiring plans have been completed. Tasmania has modified its planning approach on the basis of risk.
Northern Territory	No commitment outstanding.	✓				No overallocated systems. Annual audit of allocations from July 2007.
Australian Capital Territory	No commitment outstanding.	✓				No overallocated systems.
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.1b action: implementation of framework—legislative and administrative regimes amended to incorporate the elements of the entitlements and allocation framework in this agreement						
Relevance: part of prescribed approach					NWI date: by end-2006	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Legislation in place by 1 July 2004.	✓				
Victoria	Legislation in place by July 2004.		✓			Progressive incorporation of legislation into administrative arrangements—northern Victoria by July 2007. Update: Northern Victoria complete, expect southern by July 2008
Queensland	Legislative framework complete. Administrative system merged by 2006.	✓				
South Australia	Natural Resources Management Act 2004 covers.		✓			Bill introduced to parliament to separate access entitlements from regulatory approvals. Update: The <i>NRM Amendment Act</i> to incorporate elements of the water access entitlements and allocation framework received assent in July 2007.
Western Australia	Current system under review. Streamlined legislation by 2009.			✓		Review of existing system commenced end-2006. Substantial consultation required before legislation process can commence. Update: External consultation groups have been established and discussion has commenced on new legislation as it progresses through Parliamentary Counsel.
Tasmania	Review of <i>Water Management Act</i> and related legislation commenced mid-2005.		✓			Minor legislative amendments as required to be considered by parliament in late 2007. Update: Legislative changes to be considered by parliament in the first half of 2008
Northern Territory	Review current legislation and make recommendations by Dec 2006.			✓		Review of legislation broadened and delayed. Consideration by cabinet expected after April 2008.
Australian Capital Territory	Review of <i>Water Resources Act</i> in 2006.		✓			Substantially in progress.
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.2 action: water access entitlements to be defined and implemented						
Relevance: part 1 – essential to security, certainty and tradability of entitlements						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	All commenced. Stressed systems (Group A) complete by June 2007. Final group by June 2009.		✓			80% of NSW's water resources covered by Group A, additional 10% by five groundwater plans. Update: All commenced. Stressed systems (Group A) completed by February 2007. Final group by June 2009. Additional 10% covered by six inland alluvial groundwater plans (see above).
Victoria	Defined and implemented in northern Victoria by July 2007 and in southern Victoria by July 2008. Groundwater yet to be scheduled.		✓			Northern Victoria covers 80–90% of use.
Queensland	Subject to WRP/ROP Master Plan last date for completion 08/2009.			✓		NWI-compliant entitlements established in 10 plan areas covering 50% of the state, including some 7500 tradable entitlements in seven plan areas.
South Australia	Delivered through implementation of Water Resources Act 1997 and Natural Resources Management Act 2004.		✓			Bill to separate entitlements from water use regulation as required under NWI introduced to parliament.
Western Australia	Review completed by December 2008.			✓		Unbundling to be completed as statutory water management plans are rolled out.
Tasmania	All current entitlements converted. Future subject to further development of water management plans.		✓			
Northern Territory	Convert existing licences to NWI September 2006 to March 2007.				✓	Due to delays, licence conversion will not commence until after April 2008.
Australian Capital Territory	Completed.	✓				
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.3 action: water to meet environmental and other public benefit outcomes identified in water plans to be defined, provided and managed (35)						
Relevance: part 2—essential to meet environmental outcomes						NWI date: immediate
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	All commenced—complete for Group A (2004), Group B plans commenced 2006—expect all complete by 1 July 2008.		✓			Eighty per cent of NSW's water resources covered by Group A; additional 10 per cent by Group B (commenced 2006). Update: Group B plans all commenced 2007-08. Department of Environment and Climate Change responsible for managing environmental water.
Victoria	Commenced 2004 all completed except for Goulburn System expected July 2007.		✓			Environmental water reserves provide statutory recognition.
Queensland	Statutory provision exists through <i>Water Act 2000</i> . Provision of environmental water subject to planning master plan.		✓			Ninety per cent of QLD is covered by WRPs. Seventeen out of 22 plan areas already have environmental flow objectives specified. Update: Three new plans have since been approved.
South Australia	All statutory level, environmental and consumptive uses are on an equal footing.		✓			Applies to currently prescribed areas. Update: Applies to currently prescribed areas. In addition, water for the environment in non-prescribed areas is given statutory recognition under the <i>Natural Resource Management Act 2004</i> .
Western Australia	Review and implement from December 2008.			✓		Update: Review and implementation following legislative amendments to be introduced in 2008.
Tasmania	Statutory provision exists.			✓		Work to enhance capability for delivering holistic environmental outcomes commenced—expected completion December 2008.
Northern Territory	Required under existing planning and policy frameworks. Adjustments made to existing legislation by September 2006.		✓			Legislation amendments in 2008 may identify environmental and other public benefit outcomes and their management requirements more explicitly.
Australian Capital Territory	Completed.	✓				
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.4 action: prepare water plans consistent with NWI						
Relevance: part 3—essential to sustainability of resource base and ability to adapt to change						
NWI Date: systems fully allocated by end-2007, all others by end-2009						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Group A plans commenced in July 2004. Five Group A Ground Water Plans commenced in Late 2006. Last Group B plan complete by June 2007. Final group by June 2009.		✓			Consistent with NWI. Update: Five Group A Ground Water Plans commenced in late 2007– 6th plan in 2008. Final group by June 2009.
Victoria	Scheduled for completion as per NWI requirements.		✓			Water plans in most systems. Improvements to water plans progressing through the roll out of Sustainable Water Strategies. Update: Central Region Sustainable Water Strategy complete, Northern Region Sustainable Water Strategy discussion paper released.
Queensland	Scheduled in accordance with master plan consistent with NWI requirements. Planning will be completed by 2009.		✓			Master plan has identified priority for planning of those systems under greatest pressure. No systems for which planning has been completed are at fully allocated levels. Update: No systems for which planning has been completed are at fully allocated levels, with the possible exception of the Condamine-Balonne.
South Australia	Consistent with NWI requirements.		✓			
Western Australia	Review and implement from December 2008.			✓		Update: Review and implementation following legislative amendments to be introduced in 2008.
Tasmania	Consistent with NWI requirements.			✓		Tasmania is implementing a risk-based approach to adopting formal plans accompanied by a comprehensive management framework for all water systems.
Northern Territory	Consistent with NWI requirements.		✓			Existing policy delivers NWI-compliant plans. All plans are to be reviewed against NWI Schedule E and revised as required.
Australian Capital Territory	Complete.	✓				
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.5 action: substantial progress toward adjusting all overallocated and/or overused systems						
Relevance: part 4—ensures resource base sustainability and that entitlement security is not undermined					NWI Date: 2010	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Overallocated systems dealt with through agreed plans.			✓		Timing of plans consistent with NWI. Entitlement reduction has occurred in groundwater plans, and long-term extraction limits set in all 31 WSPs. Update: Entitlement reduction has occurred in inland groundwater plans which commenced in late 2007 or early 2008, and long-term extraction limits set in all 38 WSPs.
Victoria	Plans for dealing with overallocated systems consistent with NWI.			✓		Specific plans for adjusting overallocation through water recovery indicated. Update: Foodbowl modernisation program announced, 75 gigalitres to be recovered for the environment.
Queensland	No systems identified as overallocated.			✓		Groundwater still to be considered as part of planning activities. Update: Bundaberg Groundwater amendment to Burnett WRP finalised, Pioneer, Lockyer, Callide and Isaac-Connors groundwater amendments underway.
South Australia	Review of WAPs for overallocation underway consistent with NWI requirements.		✓	✓		WAPs in place or in development for significant water resources. Five resources prescribed in addition to 1999 commitments. WAPs for two potentially overallocated resources under review. Update: WAPs in place or in development for significant water resources. Five resources prescribed in addition to 1999 commitments. Of 20 prescribed resources, two systems are known to be over-allocated. Processes are underway to agree pathways to address over-allocation in these systems by 2010.
Western Australia	Under review.			✓		Update: Process commenced. Audit of surface water and groundwater licenses is well progressed. Allocation limits are being reviewed as part of current planning processes.
Tasmania	Overuse addressed through water use sustainability project and enhancements to the regulatory framework for management of groundwater.		✓			
Northern Territory	No system identified as overallocated.	✓				Licences specify upper limit on extractions and pumping restrictions to maintain environmental outcomes.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Australian Capital Territory	No system identified as overallocated.	✓				
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.6 action: risk assignment framework implemented						
Relevance: part 5—provides greater certainty, security and equity for adjustment						NWI Date: immediate
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Risk assignment framework applied pre 2014. Post 2014 amendments by end-2006.		✓			<i>Water Management Act 2000</i> adopted post 2014 risk assignment provisions in its 2005 amendment. Operational framework to be developed.
Victoria	Risks assigned by negotiation with parties. Risk sharing framework enshrined in <i>Water (Resource Management) Act 2005</i> .	✓				
Queensland	Pre 2014 consistent. Post 2014 adjustments to legislation Authorised by August 2007.			✓		
South Australia	All plans to be reviewed. Risk assignment framework to be reviewed in 2010.			✓		
Western Australia	System under review. Legislation scheduled for 2008. Update: Framework currently under development and will be implemented following legislative amendments.			✓		Administrative arrangements to be implemented as plans are developed. Update: Framework is being developed including through targeted stakeholder consultation. Administrative arrangements to be implemented as plans are developed.
Tasmania	Current system complies pre-2014. Post 2014 scheduled for 2013.			✓		
Northern Territory	Risk currently assigned. Need for change reviewed.			✓		Risk is currently assigned to licence holders through upper limits on extractions. Risk assignment will be addressed in <i>Water Act</i> review in 2008.
Australian Capital Territory	Need for risk assignment under review.			✓		
Commonwealth	Develop process for addressing any outstanding policy issues.			✓		
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.7 action: plans to address Indigenous water issues						
Relevance: part 6—ensuring that Indigenous interests are taken into account						NWI Date: immediate
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Indigenous water issues consistent with NWI requirements.		✓			<i>Water Management Act 2000</i> and WSPs provide Aboriginal cultural and commercial entitlements.
Victoria	Indigenous water issues consistent with NWI requirements.	✓				Processes for addressing Indigenous issues have been incorporated into the water planning framework.
Queensland	Indigenous water issues consistent with NWI requirements.		✓			Update: <i>Cape York Peninsula Heritage Act 2007</i> makes provision for water allocations to assist indigenous communities meet their social and economic aspirations.
South Australia	Indigenous issues will be taken into account in review of WAPs.			✓		State-wide Aboriginal Advisory Committee established.
Western Australia	Indigenous water issues currently taken into account and will be addressed as part of the current review.			✓		Update: Indigenous water issues currently taken into account in water planning .Legal advice has been sought regarding Indigenous access/rights. Legislative amendments will address native title.
Tasmania	Process in place to review by end-2006 requirements for Indigenous access.			✓		Relevant legislation currently being reviewed. NWI implementation will need to be consistent with this review.
Northern Territory	Indigenous water issues consistent with NWI requirements. Legal views on native title to be sought.		✓			Existing planning accommodates Indigenous water issues. Legal advice regarding native title will be sought mid-2008.
Australian Capital Territory	Indigenous views sought in planning process—no issues to address.	✓				
Commonwealth	Provide legal advice on native entitlement.			✓		
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water access entitlements and planning						
3.1.2.8 action: implement measures to address interception from land use change						
Relevance: part 7 – ensure entitlements issued are not undermined					NWI Date: no later than 2011	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Process to deal with interception through floodplain harvesting, farm dams and large scale plantation forestry has started.			✓		Farm dams policy to limit overland flow on individual properties to 10% of the long-term average runoff. Update: A floodplain harvesting policy has been drafted and will be subject to public consultation in the first half of 2008.
Victoria	Process to deal with interception through storage and large scale plantation forestry has commenced.			✓		
Queensland	Processes to deal with interception of overland flows are in place.		✓			Moratoriums in place for areas of identified risk of increased take of overland flows. Licensing of overland flows in the Lower Balonne area.
South Australia	<i>Natural Resources Management Act 2004</i> provides basis to deal with interception.		✓			Further processes in place to deal with potential need to investigate interception with respect to forestry and land use. Update: Regulations to manage the direct extraction impacts (in addition to the recharge impacts) of commercial forestry introduced in July 2007.
Western Australia	Process in place as part of the planning work underway.			✓		Update: The Department of Water is developing a policy position on interception by plantation forestry, in consultation with external stakeholders and is also participating in a national working group on interception.
Tasmania	Process in place to gain better understanding and develop risk management strategy.			✓		Work in progress to model impact of land use changes on water availability at the catchment level.
Northern Territory	Measures in place to deal with interception.			✓		Process underway to determine interception threshold levels of the Katherine/Daly region.
Australian Capital Territory	Measures in place to deal with interception.	✓				
Commonwealth	Not applicable.					Commonwealth to take lead and in coordination with CSIRO work on interception via large scale plantation forestry. Update: Discussion paper identifying key issues prepared for NWI Committee February 2008 meeting consideration.
NRMMC Workplan	Review in 2006, to determine if there is scope for NRMMC to assist in coordination.				✓	

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water markets and trading						
3.1.2.1 action: publicly accessible, compatible, water access entitlement and trading registers						
Relevance: efficient water markets, transaction costs of trades minimised					NWI Date: full implementation by end-2006	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Group A entitlements on register by June 2006. All others by June 2010.		✓			Register complies with national characteristics. Licences will be uploaded when WSPs are completed and licences issued. Outstanding issues around characteristics of registers inside irrigation corporations. Update: Bondi Group developing nationally compatible register for Irrigation Corporations – Murrumbidgee Irrigation not included.
Victoria	Establish single web-based nationally compatible register system by July 2007.		✓			New register will comply with national characteristics— will go live on 1 July 2007 for northern Victoria. Update: New register for northern Victoria active, southern Victoria to be completed by July 2008.
Queensland	QLD WAR established for all allocations issued for completed plans.		✓			WAR complies with national characteristics.
South Australia	Steps to achieve compatibility incorporated into plan July 2006. Implementation of compatible register ongoing.		✓			Register complies with national characteristics. Outstanding issues around characteristics of registers inside irrigation trusts. Update: Business plan being developed for new integrated registry system following unbundling of entitlements. Issues around Irrigation Trusts under consideration.
Western Australia	National characteristics will be incorporated into plan for implementation by end-2008.			✓		Update: Objectives and initiatives have been identified in a preliminary business case (awaiting approval). Business Plan for new register system under development and will be implemented following legislative amendments.
Tasmania	Existing Water Information Management System register reviewed and actions to achieve consistency implemented by December 2007.		✓			Register will comply with national characteristics. Update: Interim actions to achieve consistency taken. Consideration being given to development of a new integrated register system.
Northern Territory	Establish new registry system 12 months after endorsement of guidelines.			✓		Drafting instructions to establish registry prepared. <i>Water Act</i> amendments expected in 2008. Update: Consideration being given to a fully integrated registry system.
Australian Capital Territory	Steps taken to ensure that register will comply with agreed national characteristic.		✓			
Commonwealth						
NRMMC Workplan	Establish Registers Working Group to develop characteristics of compatible registers.	✓				Endorsed by NRMMC November 2005. Work ongoing.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water markets and trading						
3.2.2.2 action: compatible institutional and regulatory arrangements to facilitate trade						
Relevance: facilitate the operation of efficient water markets and the opportunities for trading						
NWI Date: compatible arrangements by end-2007 – immediate removal of barriers to temporary and permanent trade						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Trading consistent with Schedule G, barriers to temporary trade removed, removal of barriers to border rivers temporary trade and irrigation corps permanent trade by July 2006		✓			Ongoing cross-border compatibility issues. Interim interstate trading commenced permanent trading on 1 July 2007. Irrigation companies will have access and termination fees in place by 1 July 2007. Update: Interstate trade enabled. NSW Irrigation Corporations introduced access and termination fees by 1 July 2007. Significant volumes of trade between Vic, NSW and SA.
Victoria	Participate in COAG water trading group to develop compatible arrangements. Remove limits on trade to four per cent July 2006.		✓			Further refinement required to improve the efficiency of the market. Southern MDB market now functional. Update: Significant volumes of trade between Vic, NSW and SA.
Queensland	Finalise Border Rivers ROP 2006. Trading arrangements consistent with Schedule G in basins with completed ROP's.		✓			Introduction of permanent trading staged with finalisation of planning processes for a basin. Participation in COAG interstate group. Update: Finalisation of Border Rivers ROP temporarily delayed due to release of CSIRO Sustainable Yield report and discussions with Commonwealth on clearance to release ROP. Commencement of trade will then be dependent on finalisation of NSW. Water Sharing Plan.
South Australia	Relevant institutional and regulatory arrangements in place end-2007.		✓			Ongoing cross-border compatibility issues. Significant volumes of trade between Vic, NSW and SA.
Western Australia	Development of a compatible water trading system to be developed from 2008.			✓		Being addressed through legislative reforms, to be introduced to state parliament in 2007. Update: Amended legislation to be introduced in 2008.
Tasmania	Review existing arrangements for compatibility with Schedule G by September 2006.		✓			Existing arrangements are considered compliant with Schedule G.
Northern Territory	Incorporate review Schedule G into review of <i>Water Act</i> and regulations September 2006.			✓		Trade only applicable to one declared area. Informal policies considered compliant with Schedule G.
Australian Capital Territory	WAR permits permanent and temporary trade. There has been no demand for trade.		✓			Cooperation in development of compatible institutional and regulatory arrangements.
Commonwealth	Chair the COAG interstate trading group.		✓			Update: <i>Water Act 2007</i> gives ACCC power over water charge and market rules.
NRMMC Workplan	Not directly applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water markets and trading						
3.2.2.3 action: complete water trading studies and consider recommendations						
Relevance: facilitate the operation of efficient water markets and the opportunities for trading						NWI Date: June 2005
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
						Whilst the consideration of the recommendations of studies has been completed by states and territories, the implementation of recommendations may still be in progress.
New South Wales	Work with NWI Committee to consider recommendations and develop a workplan of actions.	✓				
Victoria	Participate in activities of COAG Water Trading Group to manage studies – consider outcomes.	✓				
Queensland	Review water studies and prepare appropriate actions in light of recommendations.	✓				
South Australia	Work with NWI Committee to consider recommendations and develop a workplan of actions.	✓				
Western Australia	Consideration given to outcome of studies.	✓				The majority of recommendations relevant to WA addressed through new legislation.
Tasmania	Outcomes considered where they are applicable to Tasmania.	✓				
Northern Territory	Review outcomes of studies for relevance to NT.	✓				NT has responded to recommendations arising from water trading studies through COAG water trading group.
Australian Capital Territory	Support activities of COAG Water Trading Group to manage studies.	✓				
Commonwealth	Lead group to undertake studies and develop workplan for implementation of actions to facilitate trade.	✓				
NRMMC Workplan	Undertake studies consider recommendations develop workplan for NRMMC approval by end-2006.	✓				Studies completed.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water markets and trading						
3.2.2.4 action: undertake a range of actions to facilitate trade within and between southern MDB states						
Relevance: facilitate the operation of efficient water markets and the opportunities for trading in the MDB						
NWJ Date: June 2005						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Legislation to permit tagging, irrigation companies to open trade to four per cent by end-2005.	✓				Active participant in COAG Water Trading Group and MDB Interstate Trade Board to resolve issues relating to facilitating interstate trade. Interim interstate trading commenced. Permanent trading from 1 January 2007. Irrigation companies will have access and termination fees in place by 1 July 2007. Update: Interstate trade enabled. Significant volumes of trade between Vic, NSW and SA.
Victoria	Legislation and full implementation of interstate trade by July 2007. Four per cent limit raised by July 2006.	✓				Active participant in COAG Trading Group and MDB Interstate Trade Board to resolve issues relating to facilitating interstate trade. Interim interstate trading commenced. Permanent trading from 1 January 2007. Update: Significant volumes of trade between Vic, NSW and SA.
South Australia	Consult with trusts on opening trade to four per cent by June 2005. Review legislation December 2006. Investigate tagged trading by 2007.	✓				Active participant in COAG Trading Group and MDB Interstate Trade Board to resolve issues relating to facilitating interstate trade. Compliant with four per cent interim threshold. Introduced Bill to enable participation in interstate tagged trading from 1 July 2007, signatory to three bilateral agreements relating to interim interstate tagged and exchange rate trading. Permanent trading from 1 January 2007. Update: Significant volumes of trade between Vic, NSW and SA.
Commonwealth	Work with states. Coordinate review and monitoring processes.					Convenor of COAG trading group and participant in MDB interstate trade board to resolve issues relating to facilitating interstate trade. Update: Water Act 2007 gives ACCC power over water charges and market rules.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.1a action: pricing policies for water storage and delivery in rural and urban systems—complete commitments under the 1994 COAG WRF						
Relevance: facilitate efficient water use and efficient functioning water markets					NWI Date: full implementation by end-2004	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Completed end-2004.	✓				
Victoria	“	✓				
Queensland	“	✓				
South Australia	“	✓				
Western Australia	“	✓				
Tasmania	“	✓				
Northern Territory	“	✓				
Australian Capital Territory	“	✓				
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.1b action: pricing policies for water storage and delivery in rural and urban systems—metropolitan—continued movement towards upper-bound pricing						
Relevance: facilitate efficient water use						NWI Date: end-2008
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Completed movement towards upper-bound pricing.	✓				
Victoria	“	✓				
Queensland	Will complete movement towards upper-bound pricing by 2008.		✓			Update: The Queensland government has announced that it will not be seeking a commercial, risk based rate of return on those assets built in accordance with the <i>Water Amendment Regulation</i> in response to unprecedented drought and a declared water supply emergency in SEQ. The government will be seeking a return that reflects the cost of debt. Queensland advise that the decision to adopt a cost of debt return reflects the significant price impact for the community due to such an unprecedented acceleration of infrastructure development under an emergency regulation.
South Australia	“		✓			In-principle revenue direction for five years to June 2012 that will move towards upper revenue bounds.
Western Australia	Ongoing.		✓			Major metropolitan providers are pricing at the upper bound.
Tasmania	Will complete movement towards upper-bound pricing by 2008.		✓			
Northern Territory	Ongoing.			✓		A path towards achieving upper-bound pricing is not yet in place.
Australian Capital Territory	Completed movement towards upper-bound pricing.	✓				
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.1c action: pricing policies for water storage and delivery in rural and urban systems—development of pricing policies for recycled water and stormwater						
Relevance: facilitate efficient water use					NWI Date: end-2006	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Pricing policies for recycled water and stormwater to be developed by DNR by December 2005.		✓			Completed for recycled water pricing (IPART has developed pricing principles for recycled water and sewer mining). The IPART principles could also be applied to stormwater.
Victoria	Pricing policies for recycled water and alternative supplies have been developed by DSE and ESC.		✓			Completed for recycled water pricing (the ESC has developed a broad set of pricing principles for recycled water). No pricing policies for stormwater identified.
Queensland	Stormwater management is being examined as part of the overall state water reform agenda. A review of recycling is being carried out through the QLD Water Recycling Strategy. Both due end-2006.			✓		This is due to be considered as part of proposed recycling legislation by end of 2007 which will include health and continuity of supply matters. Update: due to be considered as part of proposed recycling legislation by end of 2008.
South Australia	The government intends to review its recycled wastewater pricing policies. Completion of review dependent on timing of development of principles for pricing potable water by the SGWC.		✓	✓		Current practices are consistent with the report prepared for the SGWC. Update: The need for a review of recycled water pricing policies has been overtaken by the development of draft national principles by the SGWC. SA's pricing is consistent with the draft national principles for pricing of stormwater and recycled water.
Western Australia	Review and development of pricing policies due mid-2007.			✓		Will consider pricing policies for recycled water and stormwater developed by the SGWC. Update: Being considered as part of the State Water Recycling Strategy.
Tasmania	Not completed—was due end-2006.			✓		Tasmania currently has a taskforce reviewing ways of achieving major long-term improvements in water and sewerage services. The development of pricing policies for recycled water and stormwater will await the outcome of the Taskforce's investigations.
Northern Territory	Not completed—was due end-2006.			✓		No formal pricing framework applies for recycled water or stormwater.
Australian Capital Territory	Completed.		✓			The ICRC sets prices for recycled water.
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.1d action: pricing policies for water storage and delivery in rural and urban systems—review and development of pricing policies for trade wastes						
Relevance: facilitate efficient water use						NWI Date: end-2006
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	DNR to develop principles by the end of December 2005.	✓				NSW has comprehensive policies in place for the pricing of non-residential sewerage and trade waste. These are documented in the Water Supply, Sewerage and Trade Waste Pricing Guidelines 2005 and the Liquid Trade Waste Management Guidelines 2005.
Victoria	DSE has undertaken a review of the trade waste management framework.		✓			Review has made recommendations on principles for pricing of trade waste and other aspects of trade waste management. These are currently under consideration.
Queensland	Guidelines for councils have been issued. Development of further trade waste pricing options has commenced—due end-2006.			✓		This activity has been deferred for consideration with full package of pricing. Qld Update: A comprehensive pricing policy is being developed for the SEQ water grid to include recycled water and trade waste consideration.
South Australia	Completed review and development of pricing policies for trade wastes.	✓				
Western Australia	Water Corporation has a formal pricing structure for trade wastes. Review and development of pricing policies for trade waste by mid-2007. Will consider these together with any policies developed by the SGWC by July 2007.			✓		Policy intended to be cost reflective of the treatment of wastes, is scheduled for review by the Economic Regulatory Authority (WA).
Tasmania	The major metropolitan councils providing trade waste services have pricing structures in place, or are planning to introduce them. A formal review of trade waste guidelines will take place in 2008.			✓		
Northern Territory	Not completed—was due end-2006.				✓	A trade waste management regime is currently in place and was due to be reviewed in 2006, however, not clear as to whether a formal pricing framework applies.
Australian Capital Territory	Not completed—was due end-2006.				✓	
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.1e action: pricing policies for water storage and delivery in rural and urban systems—development of national guidelines for customers' water accounts						
Relevance: facilitate efficient water use and achieve pricing transparency					NWI Date: end-2006	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Participate in national NRMMC NWI Working Group process.		✓			Further research to investigate the benefits of improved billing practices to water utilities.
Victoria	“		✓			“
Queensland	“		✓			“
South Australia	“		✓			“
Western Australia	“		✓			“
Tasmania	“		✓			“
Northern Territory	“		✓			“
Australian Capital Territory	“		✓			“
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					EPHC approved guidelines November 2006.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.1f action: pricing policies for water storage and delivery in rural and urban systems—rural and regional—achievement of lower-bound pricing and movement towards upper-bound pricing where practicable						
Relevance: facilitate efficient water use and trade in water access entitlements						NWI Date: ongoing
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Ongoing.		✓			Most rural and regional water providers have implemented lower-bound pricing and, are moving towards upper-bound pricing where practicable. Update: State Water Corporation moving towards upper bound pricing.
Victoria	Ongoing.	✓				Both rural and regional water providers in Victoria are at the lower bound, and are on a path towards the upper bound.
Queensland	Ongoing.		✓			Majority of SunWater schemes achieving lower-bound pricing, or are on a path to achieving lower-bound pricing. Regional water providers are being encouraged to move towards upper-bound pricing.
South Australia	Ongoing.		✓			Performance of regional water businesses is not reported separately. However, SA notes that regional urban pricing conforms to movement towards the upper revenue bound.
Western Australia	Ongoing.			✓		There is still some work to achieve lower-bound pricing in rural water systems. Water Corporation is phasing in lower-bound pricing for rural customers. Regional (non-major urban) water providers are at the lower bound.
Tasmania	Ongoing.		✓			Still some work to do for at least one irrigation scheme, and for a number of local councils to move them towards the lower bound. Update: Tasmania making significant progress towards major institutional change for urban water pricing and delivery, in line with the NWI.
Northern Territory	Not commenced for regional. Not applicable for rural.				✓	Cost recovery for regional water providers except Alice Springs is below the lower bound. No significant public or private rural water providers.
Australian Capital Territory	Not applicable.					
Commonwealth						Update: <i>Water Act 2007</i> gives ACCC power over water charges and market rules.
NRMMC Workplan						

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.2a action: consistent approaches to pricing						
Relevance: facilitate efficient water use and efficient functioning of water markets					NWI Date: April 2006	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Participate in national NRMCC NWI Working Group process.			✓		Dependent on timing for development of principles through the SGWC. Expected to go to NRMCC November 2007. Consistent pricing requirements have been met to date. Update: Principles now expected to go to NRMCC in 2008. Implementation to be negotiated between the NWC and each state and territory.
Victoria	“			✓		“
Queensland	“			✓		“
South Australia	“			✓		“
Western Australia	“			✓		“
Tasmania	“			✓		“
Northern Territory	“			✓		“
Australian Capital Territory	“			✓		“
Commonwealth	“			✓		
NRMCC Workplan	April 2006.			✓		

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.2b action: consistent approaches to pricing and attributing costs for water planning and management						
Relevance: ensures that costs of undertaking water planning and management activities are appropriately attributed to water users to facilitate efficient water use and efficient functioning water markets NW Date: end-2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Dependent on timing for development of principles through the SGWC.			✓		NSW to date has effectively met all proposed consistent pricing requirements.
Victoria	“			✓		Completed in Victoria. Consistency across states still progressing through NWC intergovernmental forums.
Queensland	“			✓		Progressing implementation. Charges were to be introduced on 1 January 2006. Suspended pending development of nationally-consistent approaches. Update: Charges introduced on 1 January 2006 were suspended in March 2006, with the previous charges reinstated on 1 July 2006. The suspension will remain in place until the development of nationally-consistent approaches is complete.
South Australia	“			✓		DWLBC has commenced an evaluation of cost recovery for water planning and management costs.
Western Australia	“			✓		The Department of Water has commenced development of a process whereby water administration fees will be passed on to water users. Update: Water licence administration fees were introduced in December 2007.
Tasmania	“			✓		Continued implementation of consistent approaches to pricing for planning and management through ongoing review of water licence fees.
Northern Territory	“			✓		
Australian Capital Territory	“			✓		
Commonwealth	“					Update: <i>Water Act 2007</i> gives ACCC power over water charges and market rules.
NRMMC Workplan	Not applicable.					Being progressed by SGWC

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.3 action: investment in new or refurbished infrastructure						
Relevance: to promote economically efficient and sustainable use of water resources						NWI Date: ongoing
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Ongoing.	✓				
Victoria	Ongoing.	✓				
Queensland	Ongoing.	✓				
South Australia	Ongoing.	✓	✓			SA has reviewed the Guidelines for the Evaluation of Public Sector Initiatives. SA Water reviews its risk assessment framework on a regular basis. The risk assessment framework includes tools to assess the potential impacts arising from economic, environmental and social sustainability risks identified during the risk assessments conducted for capital works and other initiatives. The government is reliant on private sector commercial practices for economic sustainability. Update: Revised Treasurer's Instruction no.17 Evaluation of and Approvals to Proceed with Public Sector Initiatives (effective 1 July 2007) and the associated Guidelines for the Evaluation of Public Sector Initiatives require appropriate consideration of economic and environmental matters.
Western Australia	Ongoing.	✓				
Tasmania	Ongoing.	✓				
Northern Territory	Ongoing.	✓				
Australian Capital Territory	Ongoing.	✓				
Commonwealth	Not applicable			✓		
	Update: Ongoing					Update: The Commonwealth's role in directing investments to modernise Australia's irrigation infrastructure under the <i>Water Act 2007</i> is relevant to this NWI commitment.
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.4 action: managing the release of unallocated water						
Relevance: provide appropriate mechanisms for release of unallocated water to promote economically efficient and sustainable use of water resources						
NWI Date: ongoing						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Completed – December 2006.			✓		Indication in implementation plan that a policy for release of unallocated water will be implemented by December 2006. Early drafting has commenced.
Victoria	Ongoing.	✓				
Queensland	Ongoing.	✓				
South Australia	Ongoing.		✓	✓		Plans must specify criteria for allocating water from the relevant resource. SA has commenced a project to ensure that any releases are consistent with the NWI requirement. Update: SA is reviewing current arrangements to ensure that any releases are consistent with the NWI.
Western Australia	Ongoing.			✓		Still some work to do in this area. It is noted that allocation policies are being reviewed over the next six months. Update: Allocation policies are being reviewed in conjunction with current planning processes.
Tasmania	Ongoing.		✓			A review of guidelines to assess applications for new water allocations from watercourses during winter is due for completion in 2009.
Northern Territory	Not applicable.	✓				No action is seen as necessary against this NWI item in the NT as future plans will not have 'unallocated water'.
Australian Capital Territory	Not applicable.	✓				Considered to be 'not applicable' to the ACT given that unallocated water is released as environmental flows.
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.5 action: management of environmental externalities						
Relevance: promote economically efficient and sustainable use of water resources.						NWI Date: ongoing
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Ongoing.		✓			Continues to participate in the SGWC
Victoria	Have introduced requirement for authorities to pay an environmental contribution. Other work is ongoing.		✓			Further work to be done to demonstrate relationship between the environmental contribution and environmental externalities. Reviewing environmental contributions paid by water authorities—due Mid-2008.
Queensland	Ongoing.		✓			Externalities will continue to be addressed through regulatory planning instruments.
South Australia	Ongoing.			✓		Further work to be done in a number of areas. Update: Dependent on timing of the development of principles through NWIC.
Western Australia	Ongoing.			✓		Methods developed by the SGWC for managing externalities considered in developing region specific rules for management of externalities to be included in statutory management plans.
Tasmania	Implement findings of the State Policy on Water Quality Management by end-2008. Ongoing.		✓			Review of the State Policy on Water Quality Management, and review of the <i>Water Management Act 1999</i> , along with findings of the SGWC in relation to managing externalities, will be used as a basis for determining the most effective and practical approach for managing externalities.
Northern Territory	Ongoing.			✓		Active on SGWC which will consider environmental externalities. Subject to findings of steering group, will build <i>Water Act</i> amendments in during 2008 review.
Australian Capital Territory	Completed.	✓				Managed through a water abstraction charge.
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.6a action: institutional arrangements—benchmarking efficient performance						
Relevance: improve accountability and transparency to encourage economically efficient and sustainable use of water resources and water infrastructure assets						
NWI Date: develop nationally-consistent framework by 2005, annual performance reporting ongoing						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	National Performance Report for Urban Water Utilities released in May 2007
						Update: the second National Performance Report for Urban Water Utilities and the inaugural National Performance Report for Rural Water Service Providers will be released in the second quarter of 2008.
New South Wales	Contribute to the development of a nationally-consistent report framework Ongoing commitment to report on performance of metropolitan, non-metropolitan and rural water delivery agencies.	✓	✓			The Department of Water and Energy will also independently report on the performance of all urban water utilities in NSW. State Water has mandatory reporting. Irrigation companies currently report voluntarily to IPART (State Water) and to ANCID. NSW will consider making requirement of irrigation company licence only if voluntary approach does not work.
						Update: All privately-owned irrigation corporations in New South Wales above the reporting threshold are now reporting. State Water is also reporting under the NWI performance reporting framework.
Victoria	“	✓				The ESC of Victoria will also independently report on the performance of Victorian urban and rural water businesses.
Queensland	“	✓	✓			Non-metropolitan water providers will need to be provided with the necessary directive to report by the QLD Government.
South Australia	“	✓	✓			SA needs to direct Irrigation Trusts to report. Further work is also required to allow for reporting on the performance of the non-metropolitan component of SA Water's operations.
						Update: The Central Irrigation Trust is participating in the rural reporting. SA reports for Mt Gambier and Whyalla in relation to non-metropolitan water delivery performance.
Western Australia	“	✓	✓			WA indicated that rural water delivery agencies may need to be provided with the necessary directive to report by government.
Tasmania		✓	✓			Non-metropolitan water providers will need to be provided with the necessary directive to report by the Tasmanian Government.
Northern Territory	“	✓	✓			
Australian Capital Territory	“	✓				
Commonwealth	“	✓	✓			
NRMMC Workplan	Reporting framework by April 2006.	✓	✓			

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: best practice water pricing and institutional arrangements						
3.3.2.6b action: institutional arrangements— independent pricing regulator						
Relevance: achieve pricing transparency and ensure sufficient revenue streams to allow efficient delivery of the required services						
NWI Date: ongoing						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Completed—IPART carries out for major metropolitan providers.	✓				Comprehensive regulatory framework and guidelines are in place for pricing of water services by the non-metropolitan urban water utilities.
Victoria	Completed—the ESC carries out for all providers.	✓				
Queensland	Completed—the QCA carries out for all providers.	✓				The QCA investigates water prices when matters are referred by the premier and treasurer.
South Australia	Completed—ESCOSA carries out for SA Water.	✓				ESCOSA reviews the process of setting prices for SA Water by the South Australian Cabinet.
Western Australia	Completed—the ERA undertakes this role for the three major metropolitan providers in WA.	✓				ERA reviews the charges set by Water corporation, Busselton Water and AQWEST (previously Bunbury Water Board).
Tasmania	Completed—GPOC carries out for bulk water suppliers and local councils.	✓				GPOC reviews prices charged by bulk water suppliers and local councils.
Northern Territory	Completed—the Utilities Commission carries out this function.	✓				The regulatory minister may seek independent advice from the Utilities Commission in setting prices.
Australian Capital Territory	Completed—the ICRC sets prices for ACTEW.	✓				
Commonwealth	Not applicable.					Update: <i>Water Act 2007</i> gives ACCC power over water charges and market rules.
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: integrated management of environmental water						
3.4.2.1 action: effective and efficient management and institutional arrangements						
Relevance: implement management and institutional arrangements that will achieve environmental and public benefit outcomes sought NWI Date: immediate						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Institutional arrangements are in place.	✓				Arrangements are in place with performance monitoring. Update: Department of Environment and Climate Change responsible for environmental water management and environmental water recovery programs.
Victoria	Institutional arrangements in place.	✓				Addressed through Statements of Obligations for Water Authorities and catchment management areas.
Queensland	Institutional arrangements linked to WRP/ROP development.		✓			Full implementation linked to finalisation of ROPs, so progress / timing of plan roll-out requires monitoring.
South Australia	Institutional arrangements linked to WAP development. Progressing development of arrangements.		✓			
Western Australia	Policies being developed. Implementation post legislation amendments in December 2008. Linked to WMP development.			✓		Review process will be included. Update: Implementation to follow legislative amendments.
Tasmania	Much progress on CFEV and the holistic environmental flow methodology. Linked to WMP development.		✓			Currently updating the Water for Ecosystems Policy to better reflect its contemporary, holistic approach to determining environmental water needs and providing statutory based environmental water.
Northern Territory	Institutional arrangements linked to WAP development.		✓			NT working with QLD and SA to achieve cross border outcomes for Great Artesian Basin, Lake Eyre Basin and Gulf of Carpentaria, and developing policies and legislative elements for Living Rivers Programme.
Australian Capital Territory	Institutional arrangements specified in the existing plan— Think Water Act Water.	✓				The one plan governs all management plans in the ACT.
Commonwealth	Involved in the Living Murray First Step and lead on the HCVAE Task Group.	✓				Provides advice on RNWS projects when required. *Update: Commonwealth Environmental Water Holder for Murray-Darling Basin established in <i>Water Act 2007</i> .
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: integrated management of environmental water						
3.4.2.2 action: principles for recovery of water to achieve environmental outcomes						
Relevance: recovery of water in a manner that is consistent with NWI objectives					NWI Date: ongoing	
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Linked to identifying environmental water in WSPs and water recovery programmes.		✓			Many highly developed systems with competition for water. Update: A range of environmental water recovery programs being progressed with Commonwealth support, including infrastructure and market based.
Victoria	Environmental Water Reserve in all systems. Cap on diversions in stressed systems.		✓			Strategies detailing environmental water to be completed by 2009.
Queensland	Linked to the flow rules developed in WRPs, as opposed to specific entitlements.		✓			No overallocation identified in QLD. Roll-out of plans delays specification of environmental flows. Update: Specification of environmental flows included in development of WRPs.
South Australia	Provided through entitlement regulation in WAPs.		✓			Supports and utilises market options to recover water.
Western Australia	Overallocation dealt with in WMPs with plan development prioritised. Audit of groundwater licences.			✓		Legislation changes in December 2008 will provide secure arrangements. Update: Legislative amendments to be introduced in 2008. Amendments will provide secure arrangements.
Tasmania	Linked to identifying environmental water in WMPs and the CFEV process.		✓			Progressing development of procedures. Validation of conservation management priorities under CFEV is progressing.
Northern Territory	Linked to identifying environmental water in WAPs.		✓			NT indicates there is not a requirement to formally recognise 'principles for recovery of water to achieve environmental outcomes' in the NT.
Australian Capital Territory	There is no identified overallocation in the ACT, and it is not likely in the future so no methods for recovery developed.	✓				Surface water and groundwater managed in conjunction.
Commonwealth	Contributed funding to a number of water recovery programmes.	✓				Programmes contributed to are all within the Murray-Darling Basin. Update: <i>Water Act 2007</i> adheres to principles for recovery of water to achieve environmental outcomes and establishes Commonwealth Environmental Water holder to recover and manage.
NRMMC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water resource accounting						
3.5.2.1. action: benchmarking of water accounting systems						
Relevance: essential pre-cursor to adoption of best practice				NWI Date: mid-2005—report section 3.5.2.1		
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
						This benchmarking activity of the NWI has been completed. Development and implementation of standards are expected to lead to the continual improvement sought by the NWI.
New South Wales	Participate in NWI Working Group to undertake benchmarking and stocktake.	✓				Agreement through NRMMC to participate in next phase of development of national water accounting standards.
Victoria	“	✓				“
Queensland	“	✓				“
South Australia	“	✓				“
Western Australia	“	✓				“
Tasmania	“	✓				“
Northern Territory	“	✓				“
Australian Capital Territory	“	✓				“
Commonwealth	Manage national project.	✓				\$5 million RNWS funding for standards development phase.
NRMMC Workplan	Stocktake and benchmarking completed October 2005. Draft accounting system template to NRMMC by October 2006. States to implement by October 2007.	✓				Stocktake and benchmarking completed mid-2006. NRMMC agreed to adopt Chart of Accounts and workplan to define information requirements and develop a conceptual framework for water accounting and national water accounting standards by June 2009.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water resource accounting						
3.5.2.2 action: consolidated water accounts						
Relevance: robust consolidated water accounts protect integrity of water access entitlement system						
NWI Date: implementation by 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Accounting for all surface water and groundwater sources by 2006. Integrate surface water and groundwater by 2008.		✓			Participation in NRMCC NWI Working Group. Commitment to NRMCC November 2006 decision to develop a national water accounting system for completion in 2009. Update: Water Accounting Development Committee progress on water accounting system. NSW pilot study to support.
Victoria	Develop chart of water accounts and standardised reports 2006. Review groundwater interactions 2007.		✓			“ Update: Water Accounting Development Committee progress on water accounting system. Victoria pilot study to support. A chart of accounts for surface water has been developed. This will inform the development of an accounting framework, including a chart of accounts, for the State’s groundwater by 2009.
Queensland	Implement Water Management System for single point of truth for all water information.		✓			“ Update: Water Accounting Development Committee progress on water accounting system. Queensland pilot study to support.
South Australia	Water Information and Licence Management Application system implemented 2004.		✓			“ Update: Water Accounting Development Committee progress on water accounting system. SA pilot study to support.
Western Australia	Implement integrated surface water and groundwater accounts by 2008.			✓		“ Update: Water Accounting Development Committee progress on water accounting system. WA pilot study to support.
Tasmania	Implement a water accounting and reporting framework December 2008. Develop surface water and groundwater models January 2008.			✓		“
Northern Territory	Participation in NRMCC NWI Working Group.			✓		“
Australian Capital Territory	Integrated surface water and groundwater accounting complete. Participation in NRMCC NWI Working Group.		✓			“
Commonwealth	Manage national project.		✓			Commitment to NRMCC decision. \$5 million provided through RNWS programme.
NRMCC Workplan	Draft Accounting system template to NRMCC by October 2006. States to implement by October 2007.					NRMCC November 2006 decision to work on developing a national water accounting system for completion in 2009.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water resource accounting						
3.5.2.3 action: environmental water accounting						
Relevance: support for environmental access entitlements and requirement for integrated management of environmental water						
NWI Date: develop annual reporting arrangements mid-2005 environmental water registers by mid-2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Environmental water register late 2007.		✓	✓		Participate in NRMCC NWI Working Group. Commitment to NRMCC decision to develop a national water accounting system for completion in 2009. Update: Environmental water register under development.
Victoria	Environmental accounting requirements in water register Aug 2007.		✓	✓		“ Update: Complete for northern Victoria. Aiming to have all environmental entitlements recorded by 2007-08. This will be informed by work on the conceptual aspects of accounting for environmental water.
Queensland	Subject to work of NRMCC NWI Working Group Develop environmental reporting arrangements specifically for rules based approaches.			✓		“
South Australia	Subject to work of NRMCC NWI Working Group. Complete development of net based public register of entitlements including environmental by December 2007.			✓		“
Western Australia	Subject to work of NRMCC NWI Working Group apply environmental water register as required.			✓		“
Tasmania	Subject to work of NRMCC NWI Working Group. Apply environmental water register where necessary. Predominantly rules based.			✓		“
Northern Territory	Participation in NRMCC NWI Working Group. Apply environmental accounting as proposed.			✓		“
Australian Capital Territory	Participation in NRMCC NWI Working Group. Apply environmental accounting as proposed.			✓		“
Commonwealth	Manage national project.			✓		Commitment to NRMCC decision. \$5 million provided through RNWS programme
NRMCC Workplan	Consider in context of work on stocktake, benchmarking and consolidated water accounts.					NRMCC November 2006 decision to work on developing a national water accounting system, including environmental water accounting for completion in 2009.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water resource accounting						
3.5.2.4 action: sharing of information						
Relevance: improved access to information—improved efficiency of collection—ability to manage data at a national level						
						NWI Date: ongoing
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
						Update: Water Act 2007 now gives powers to the Bureau of Meteorology for collecting, holding, managing and disseminating Australia's water information.
New South Wales	Participate in NRMCC NWI Working Group. Work through the ESCAWRI. Implement nationally agreed measures.			✓		NRMCC November 2006 agreed to the principle of sharing data on the internet. ESCAWRI proposes to pilot a creative commons legal licensing framework.
Victoria	“			✓		“
Queensland	“			✓		“
South Australia	“			✓		“
Western Australia	“			✓		“
Tasmania	“			✓		“
Northern Territory	“			✓		“
Australian Capital Territory	“			✓		“
Commonwealth	Establish Australian Water Data Infrastructure Project database. ESCAWRI provides initial report on implementation to NRMCC NWI Committee end-2006.			✓		NWC undertook baseline assessment of Australian Water Resources 2005 Level 1 report September 2006. Level 2 assessment due mid-2007. Update: Level 2 assessment complete. Now responsibility of BoM.
NRMCC Workplan	NRMCC NWI WG requests ESCAWRI to take action under this item—March 2006.			✓		

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water resource accounting						
3.5.2.5 action: consistent metering and measurement						
Relevance: essential requirement – protects integrity of water access entitlement system						
NWI Date: actions implemented by end-2007						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Develop and implement NSW extraction monitoring policy by June 2008.			✓		Participating in NRMCC NWI Working Group on metering.
Victoria	Install meters for >90% of extracted water August 2007.			✓		“
Queensland	Implement a metering framework consistent with NW by end-2004. Participate in NRMCC NWI Working Group on metering.			✓		“
South Australia	Volumetric conversion and meters in south-east July 2007.			✓		“
Western Australia	Gnangara Pilot October 2007. Roll out state-wide metering programme tied to water management planning programme in 2008.			✓		“
Tasmania	Policy for meters on all existing and planned allocation take exists.			✓		“
Northern Territory	All licences in NT require metering of extraction.			✓		“
Australian Capital Territory	All authorised extraction required to be metered and reported.			✓		“
Commonwealth	Coordinate work of metering expert advisory Committee. National measurement institute develops standards. RNWS funding investment in standards.			✓		“
NRMCC Workplan	NRMCC NWI Committee establishes metering group. Standards finalised December 2006. Implement meter standard December 2007.			✓		Standards developed by National Measurement Institute of Australia. NRMCC November 2006 agrees to introduce a mandatory standard for metering of +-5 % for in-field accuracy.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: water resource accounting						
3.5.2.6 action: national guidelines for reporting						
Relevance: protects integrity of water access entitlement system				NWI Date: apply guidelines by end-2007		
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Prepare state-based reports. Participate in national process through NRMCC NWI Working Group.			✓		Agreement through NRMCC to participate in next phase of development of national water accounting standards including national guidelines for reporting. Complete 2009.
Victoria	“			✓		“ Update: Victoria has published State Water Reports for 2003-04, 2004-05 and 2005-06. The State Water Report 2006-07 is being finalised for publication in printed format and online by mid 2008. Victoria will continue to participate in the national process through the NRMCC NWI Working Group and the Jurisdictional Reference Panel.
Queensland	“			✓		“
South Australia	Participate in national process through NRMCC NWI Working Group.			✓		“
Western Australia	“			✓		“
Tasmania	Prepare state based reports. Participate in national process through NRMCC NWI Working Group.			✓		“
Northern Territory	Participate in national process through NRMCC NWI Working Group.			✓		“
Australian Capital Territory	“			✓		“
Commonwealth	“			✓		“
NRMCC Workplan	NRMCC NWI Committee prepare national guidelines for reporting April 2006.					Superseded by stocktake of accounting practice and proposal agreed by NRMCC for development of national water accounting standards.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.1a action: undertake a range of actions to manage demand for water (paragraph 91) – water efficiency labelling						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWI Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Corresponding legislation in force. Study to identify Water Efficiency Labelling and Standards products suitable for minimum standards.	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
Victoria	Corresponding legislation in force.	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
Queensland	“	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
South Australia	“	✓				Water Efficiency Labelling and Standards Act 2006 declared 13 September 2006.
Western Australia	“	✓				Water Efficiency Labelling and Standards Act 2006 declared 16 May 2007.
Tasmania	“	✓				Water Efficiency Labelling and Standards Act 2005 declared 16 December 2006.
Northern Territory	“	✓				Water Efficiency Labelling and Standards Act 2006 declared 16 May 2007.
Australian Capital Territory	“	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
Commonwealth	“	✓				The Commonwealth <i>Water Efficiency Labelling and Standards Act 2005</i> came into effect on 1 July 2005.
NRMMC Workplan	Nationally coordinated action. States to provide progress reports to NRMMC.	✓				

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.1a action: undertake a range of actions to manage demand for water (paragraph 91) – water efficiency labelling						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWJ Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Corresponding legislation in force. Study to identify Water Efficiency Labelling and Standards products suitable for minimum standards.	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
Victoria	Corresponding legislation in force.	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
Queensland	“	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
South Australia	“	✓				Water Efficiency Labelling and Standards Act 2006 declared 13 September 2006.
Western Australia	“	✓				Water Efficiency Labelling and Standards Act 2006 declared 16 May 2007.
Tasmania	“	✓				Water Efficiency Labelling and Standards Act 2005 declared 16 December 2006.
Northern Territory	“	✓				Water Efficiency Labelling and Standards Act 2006 declared 16 May 2007.
Australian Capital Territory	“	✓				Water Efficiency Labelling and Standards Act 2005 declared 9 August 2005.
Commonwealth	“	✓				The Commonwealth <i>Water Efficiency Labelling and Standards Act 2005</i> came into effect on 1 July 2005. Update: \$5million RNWS funding provided to extend the WELS program in 2007. New WELS products continuously updated on a national register.
NRMMC Workplan	Nationally coordinated action. States to provide progress reports to NRMMC.	✓				

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.1b action: undertake a range of actions to manage demand for water (paragraph 91)—Smart Water Mark						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NW1 Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Participate in the activities of the EPHC Working Group. Guidelines for water efficient gardens and plant selection tool on Sydney Water Corporation website.		✓			
Victoria	Participate in the activities of the EPHC Working Group.		✓			Update: Vic introduced the Total Watermark strategy for managing water use efficiency.
Queensland	Participate in the activities of the EPHC Working Group.		✓			Update: Home WaterWise Rebate Schemes implemented to assist make homes and gardens more water efficient. To date, this program has provided rebates totalling more than \$225 million to households installing rainwater tanks, greywater systems and approved water efficient appliances.
South Australia	Participate in the activities of the EPHC Working Group.		✓			
Western Australia	Participate in the activities of the EPHC Working Group.		✓			
Tasmania	Participate in the activities of the EPHC Working Group.		✓			
Northern Territory	Participate in the activities of the EPHC Working Group.		✓			
Australian Capital Territory	Participate in the activities of the EPHC Working Group.		✓			
Commonwealth	Participate in the activities of the EPHC Working Group.		✓			Update: \$500,000 RNWS funding for “Creating Water Smart Gardens and Gardeners Across Australia”.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.1c action: undertake a range of actions to manage demand for water (paragraph 91)—review of water restrictions						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWI Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	Nationally coordinated action at the request of the NRMCC, overseen by the NWI Committee.
New South Wales	Review Water For Life Plan. Establish and administer water savings fund.			✓		Participate in the national review of the effectiveness of temporary water restrictions. Update: Water Savings Fund established in 2006 and rolled into the Climate Change Fund in 2007. Water savings plans developed with top water users and local governments.
Victoria	Introduce permanent water conservation measures for Melbourne. All regional urban Victorian water authorities to develop permanent water saving plans.			✓		Participate in the national review of the effectiveness of temporary water restrictions. Update: Planning Provisions now require all new residential subdivisions be designed to meet the best practice performance objectives for stormwater management and water conservation.
Queensland	Research effectiveness of permanent water restrictions on exterior water use. Develop and release QLD best practice guidelines for permanent low-level restrictions.			✓		Participate in the national review of the effectiveness of temporary water restrictions. Update: Statutory demand management measures introduced in December 2007.
South Australia	Review of impact of water conservation measures on water use trends. Implement permanent water conservation measures. Mandatory rainwater tanks for new dwellings and extensions.			✓		Participate in the national review of the effectiveness of temporary water restrictions.
Western Australia	Regular reviews of water restriction effectiveness and community attitudes.			✓		Participate in the national review of the effectiveness of temporary water restrictions. Update: WA introduced new water efficiency measures on 1 October 2007 including a permanent watering day roster for scheme water users and a limit on the number of days bore owners are permitted to water their gardens. All State government departments, local councils, businesses, company owned mining towns that use large amounts of water and schools will be required to undertake audits to identify ways to be more efficient in their use of water.
Tasmania	Demand management projects funded through Living Environment Programme.			✓		Participate in the national review of the effectiveness of temporary water restrictions.
Northern Territory	Review water restriction policies and associated public education strategies—ongoing.			✓		Participate in the national review of the effectiveness of temporary water restrictions.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Australian Capital Territory	Trial of permanent water savings measures.			✓		Participate in the national review of the effectiveness of temporary water restrictions.
Commonwealth				✓		Work undertaken by the National Water Commission in consultation with states at the request of the NRMCC NWI Committee.
						Update: Draft Report "Review of Water Restrictions Across Australia" due for completion March 2008
NRMCC Workplan	Not on workplan.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.1d action: undertake a range of actions to manage demand for water (paragraph 91)—management responses to system losses						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NW Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Prioritise and implement management responses to system losses. Increase expenditure on detection, renewal, and repair.		✓			
Victoria	Water authorities implement leakage reduction programmes.		✓			
Queensland	Water service providers to submit System Leakage Management Plan to regulator for approval based on regulatory guidelines.		✓			
South Australia	Implement leakage reduction programme—ongoing.		✓			
Western Australia	Trial in pressure management to start March 2007.			✓		Update: The trial started on time and it is being monitored to determine the impact on water and leakage. Initial findings indicate there has been a reduction in water consumption. However, data needs to be collected for at least 12 months to accurately reflect actual usage.
Tasmania	Demand management covered through key performance indicators on water restrictions, system breaks, system losses and consumption.		✓			
Northern Territory	Incorporate leakage performance indicators into water access entitlements for public utilities.		✓			
Australian Capital Territory	No specific action indicated for this ongoing commitment.			✓		
Commonwealth	Not applicable.					
NRMMC Workplan	Not applicable.					

Element: urban water reform

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

3.6.2.2a action: undertake a range of actions in regard to innovation for the creation of water sensitive cities (paragraph 92)—develop guidelines for priority elements—recycled and stormwater						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWI Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
						Update: Draft Stormwater Guidelines to go NRMCC for approval.
New South Wales	Revise NSW single residential greywater guidelines.		✓			NSW chairs the national working group on stormwater reuse. Update: Single residential greywater guidelines revised and published.
Victoria	Participate in activities to develop national guidelines.		✓			Update: Planning Provisions now require all new residential subdivisions be designed to meet the best practice performance objectives, including stormwater and recycling.
Queensland	Participate in activities to develop national guidelines.		✓			Release of QLD Water Recycling Guidelines. Amendment to QLD Urban Drainage Manual.
South Australia	Participate in activities to develop national guidelines.		✓			SA chairs the national working group on recycled water for drinking.
Western Australia	Participate in activities to develop national guidelines.		✓			WA chairs the national working group on managed aquifer recharge.
Tasmania	Participate in activities to develop national guidelines.		✓			
Northern Territory	Participate in activities to develop national guidelines.		✓			
Australian Capital Territory	Participate in activities to develop national guidelines.		✓			
Commonwealth	Support national actions.					
NRMCC Workplan	Development of guidelines overseen by the JSCHEG.		✓			NRMCC and EPHC endorsed phase 1 of guideline development (reuse of sewage effluent and grey water) November 2006. Phase 2 to include 'Recycled Water for Drinking (November 2007)', 'Stormwater Reuse' (November 2007) and 'Managed Aquifer Recharge' (April 2008).

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.2b action: Undertake a range of actions in regard to innovation for the creation of water sensitive cities (paragraph 92)—for assessing options for water sensitive urban development						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWI Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
						Update: Nationally coordinated action. States have provided comments on the draft WSUD Guidelines. Guidelines now to be forwarded to the JSCWSC in Feb 08 for approval to release for community consultation.
New South Wales	Participate in JSCWSC process for developing national guidelines.			✓		
Victoria	Participate in JSCWSC process for developing national guidelines.			✓		Update: Vic WSUD Guidelines adopted. \$20 million is being provided to tackle stormwater pollution.
Queensland	Participate in JSCWSC process for developing national guidelines. Completion of a strategy for water sensitive urban design in south-east QLD.			✓		QLD is chairing the technical working established by the JSCWSC to progress the development of these guidelines.
South Australia	Participate in JSCWSC process for developing national guidelines.			✓		
Western Australia	Participate in JSCWSC process for developing national guidelines.			✓		
Tasmania	Participate in JSCWSC process for developing national guidelines. Tasmanian WSUD manual extended state-wide by December 2006.			✓		
Northern Territory	Participate in JSCWSC process for developing national guidelines. Complete Guidelines for Hot Arid Residential Developments—December 2007.			✓		
Australian Capital Territory	Participate in JSCWSC process for developing national guidelines.			✓		
Commonwealth	Chair JSCWSC.			✓		
NRMMC Workplan	Coordinated by the JSCWSC and reporting to NRMMC and EPHC.			✓		Technical Working Group (TWG) under the JSCWSC are progressing the development of national guidelines for evaluating options for water sensitive urban developments. TWG has approved the draft Guidelines for release to the JSCWSC for industry consultation Jan 08. Expected completion April 08.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.2c action: undertake a range of actions in regard to innovation for the creation of water sensitive cities (paragraph 92)—evaluate ‘icon water sensitive urban developments’ (92iii)						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWI Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
						Nationally coordinated action.
						Update: Icon WSUD sites identified in January 2008. Consultancy has been contracted. Findings due for completion and consideration by the JSCWSC by July 2008.
New South Wales	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		NSW is developing guidelines for Managing Urban Stormwater, including for WSUD was due to be published by 2006.
						Update: NSW is developing guidelines for Managing Urban Stormwater, including for WSUD, which will be published in 2008.
Victoria	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		
Queensland	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		
South Australia	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		
Western Australia	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		
Tasmania	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		
Northern Territory	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		
Australian Capital Territory	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		Finalisation of guidelines for the implementation of WSUD.
Commonwealth	Participate in the JSCWSC process for evaluating water sensitive urban developments.			✓		Lead by the National Water Commission at the request of the NRMCC, overseen by the JSCWSC and reporting to NRMCC.
NRMCC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.2d action: undertake a range of actions in regard to innovation for the creation of water sensitive cities (paragraph 92)—review of institutional and regulatory models for integrated water cycle planning and management (92iv)						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NW Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	Nationally coordinated action.
						Integrated Water Cycle Management Guidelines published.
New South Wales	Participate in JSCWSC process. Integrated water cycle management planning as best practice requirement.			✓		
Victoria	Participate in JSCWSC process. Extension of the 'Pathways to Sustainability' programme to other industrial water users within the metropolitan area.			✓		Metropolitan retail water authorities and Melbourne Water are developing a coordinated metropolitan water supply demand strategy, to be completed by late 2006.
						Update: Coordinated metropolitan water supply demand strategy complete.
Queensland	Participate in JSCWSC process.			✓		A number of QLD activities relate to this issue, including SEQ Regional Plan and Programme, SEQ Regional Water Supply Strategy, Central QLD Regional Water Supply Study, Northern QLD Regional Water Supply Study.
South Australia	Participate in JSCWSC process.			✓		
Western Australia	Participate in JSCWSC process.			✓		Implementation, monitoring and evaluation of urban drainage reform, including the Urban Drainage Initiative, Stormwater Management Manual.
Tasmania	Participate in JSCWSC process.			✓		
Northern Territory	Participate in JSCWSC process.			✓		
Australian Capital Territory	Participate in JSCWSC process.			✓		
Commonwealth	Participate in JSCWSC process.			✓		
NRMMC Workplan	Led by the National Water Commission, overseen by the JSCWSC and reporting to NRMMC.			✓		Issues paper released by NWC February 2007.

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.

Element: urban water reform						
3.6.2.2 e action: undertake a range of actions in regard to innovation for the creation of water sensitive cities (paragraph 92)—review of incentives to stimulate innovation (92v)						
Relevance: increase water use efficiency in domestic and commercial settings; encourage reuse and recycling of wastewater where cost effective NWJ Date: December 2006						
Jurisdiction	Implementation plan commitment	Progress				Remarks
		Completed	Substantially completed	Started	Not started	
New South Wales	Participate in JSCWSC process to review incentives to stimulate innovation. Development of recycled water projects arising out of the Metropolitan Water Plan.			✓		
Victoria	Participate in JSCWSC process.			✓		
Queensland	Participate in the JSCWSC process. Regular review of new programmes established after the 2005 review of major subsidies schemes for water infrastructure.			✓		
South Australia	Participate in the JSCWSC process.			✓		
Western Australia	Participate in the JSCWSC process.			✓		
Tasmania	Participate in the JSCWC process. Projects targeting the adoption of WSUD.			✓		
Northern Territory	Participate in the JSCWSC process. Continue demand management, WSUD and wastewater reuse initiatives in Alice Springs as pilots for extension to other regions.			✓		
Australian Capital Territory	Participate in the JSCWSC process. Investigate feasibility of establishing a fund to encourage innovation in water management. Review of incentives to stimulate innovation.			✓		
Commonwealth	Led by the National Water Commission at the request of the JCWSC, overseen by JSCWSC and reporting to NRMCC.			✓		Update: Project to commence in March 2008.
NRMCC Workplan	Not applicable.					

Update refers to significant change post July 2007. A second tick shaded in yellow denotes movement from one progress category to another (e.g. from started to substantially completed). The original tick remains to demonstrate where progress was up to prior to the update.