

**INTERGOVERNMENTAL AGREEMENT
ON A NATIONAL WATER INITIATIVE**

Between the Commonwealth of Australia and the Governments of New South Wales,
Victoria, Queensland, South Australia, the Australian Capital Territory
and the Northern Territory

PREAMBLE

1. Water may be viewed as part of Australia's natural capital, serving a number of important productive, environmental and social objectives. Australia's water resources are highly variable, reflecting the range of climatic conditions and terrain nationally. In addition, the level of development in Australia's water resources ranges from heavily regulated working rivers and groundwater resources, through to rivers and aquifers in almost pristine condition.
2. In Australia, water is vested in governments that allow other parties to access and use water for a variety of purposes – whether irrigation, industrial use, mining, servicing rural and urban communities, or for amenity values. Decisions about water management involve balancing sets of economic, environmental and other interests. The framework within which water is allocated attaches both rights and responsibilities to water users – a right to a share of the water made available for extraction at any particular time, and a responsibility to use this water in accordance with usage conditions set by government. Likewise, governments have a responsibility to ensure that water is allocated and used to achieve socially and economically beneficial outcomes in a manner that is environmentally sustainable.
3. The 1994 Council of Australian Governments' (COAG) water reform framework and subsequent initiatives recognised that better management of Australia's water resources is a national issue. As a result of these initiatives, States and Territories have made considerable progress towards more efficient and sustainable water management over the past 10 years. For example, most jurisdictions have embarked on a significant program of reforms to their water management regimes, separating water access entitlements from land titles, separating the functions of water delivery from that of regulation, and making explicit provision for environmental water.
4. At the same time, there has been an increase in demand for water, and an increased understanding of the management needs of surface and groundwater systems, including their interconnection. There has also been an enhanced understanding of the requirements for effective and efficient water markets. The current variation in progress with water reforms between regions and jurisdictions, and the expanded knowledge base, creates an opportunity to complement and extend the reform agenda to more fully realise the benefits intended by COAG in 1994.
5. The Parties agree to implement this National Water Initiative (NWI) in recognition of the continuing national imperative to increase the productivity and efficiency of Australia's water use, the need to service rural and urban communities, and to ensure the health of river and groundwater systems by establishing clear pathways to return all systems to environmentally sustainable levels of extraction. The objective of the Parties in implementing this Agreement is to provide greater certainty for investment and the environment, and underpin the capacity of Australia's water management regimes to deal with change responsively and fairly (refer paragraph 23).

6. The Parties acknowledge that the NWI builds on the 1994 strategic framework for the efficient and sustainable reform of the Australian water industry (the 1994 COAG framework), as amended in 1996 to include groundwater and stormwater management revisions and by the Tripartite agreement in January 1999. The Parties are committed to meeting their commitments under the 1994 COAG framework and continuing to meet the objectives and policy directions of the 1994 COAG framework in a way that is consistent with the objectives and actions set out in this Agreement.
7. Other natural resource management initiatives having a significant water focus and subject of separate agreements by the Parties, particularly the National Action Plan for Salinity and Water Quality and the Natural Heritage Trust, play an important and complementary role in improving the sustainable management of water in Australia. Continued implementation of the National Water Quality Management Strategy will also complement the outcomes of this Agreement. To the extent that there is any inconsistency between the agreements, the National Water Initiative should take precedence.

IMPLEMENTATION

8. The Parties agree that actions under this Agreement will be implemented in accordance with the timetable at Schedule A and in accordance with implementation plans to be developed by each jurisdiction within 12 months of signing this Agreement, to reflect their particular circumstances. The Parties will make substantial progress towards implementation of this Agreement by 2010.
9. The implementation plans will:
 - (i) describe how the actions and timelines agreed in the IGA are to be achieved, including milestones for each key element of the Agreement (paragraph 24 refers);
 - (ii) describe the timing and process for making any consequential changes to *water plans* and the *water access entitlements* framework (paragraph 26 refers);
 - (iii) be developed cooperatively between States and Territories which share water resources to ensure appropriate co-development of those actions which are of a cross-jurisdictional nature, including registries, trading rules, water products, and environmental outcomes; and
 - (iv) be made publicly available.
10. The Parties agree to the establishment of a National Water Commission (NWC) to assist with the effective implementation of this Agreement. The NWC will accredit implementation plans to ensure consistency with the timetable at Schedule A.
11. The Parties agree that the scheduled 2005 assessment of States' and Territories' National Competition Policy water-related reform commitments will be undertaken by the NWC.
12. This Agreement contains a number of interrelated actions. It is recognised that some actions have already commenced in some jurisdictions. The Parties intend that where necessary to achieve the objectives of the Agreement, actions required may be modified on the basis of further information or analysis.
13. Relevant Parties will review existing cross-jurisdictional water sharing agreements to ensure their consistency with this Agreement, and identify those instances where any new cross-jurisdictional agreements may be required to give effect to this Agreement.

14. In relation to the Murray-Darling Basin (MDB):
- i) relevant Parties agree to review the 1992 Murray-Darling Basin Agreement, where necessary, to ensure that it is consistent with this Agreement; and
 - ii) a separate agreement to address the overallocation of water and achievement of environmental objectives in the MDB ('the MDB Intergovernmental Agreement') will operate between the Commonwealth Government and the Governments of New South Wales, Victoria, South Australia and the Australian Capital Territory. The MDB Intergovernmental Agreement will be consistent with the objectives, principles and actions identified in this Agreement.

COMMENCEMENT

15. The provisions of this Agreement will commence for each jurisdiction as it becomes a signatory to the Agreement.

INTERPRETATION

16. In this Agreement words and phrases that are italicised are to be interpreted by reference to the glossary at Schedule B(i).
17. Recognising the importance of a common lexicon for water use and management, the Parties acknowledge the desirability of adopting within their respective water management frameworks, the words and phrases, and their interpretations, contained in Schedule B(ii).

ROLES AND RESPONSIBILITIES

18. The Natural Resource Management Ministerial Council (NRMMC) will be responsible for:
- i) overseeing implementation of this Agreement, in consultation with other Ministerial Councils as necessary and with reference to advice from COAG; and
 - ii) addressing ongoing implementation issues as they arise.
19. The National Water Commission (NWC) will be responsible for providing advice to COAG on national water issues and to assist in the implementation of this Agreement. The NWC's institutional structure and role are set out in Schedule C.
20. The States and Territories are responsible for implementing this Agreement within their respective jurisdictions, consistent with their implementation plans (paragraph 9 refers).
21. The Parties are responsible for ensuring there is adequate engagement of relevant stakeholders in the implementation of this Agreement (paragraphs 95 - 97 refer).
22. The Commonwealth Government will assist in implementation of this Agreement by working with the States and Territories.

OBJECTIVES

23. Full implementation of this Agreement will result in a nationally-compatible, market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes by achieving the following:
- i) clear and nationally-compatible characteristics for secure *water access entitlements*;
 - ii) transparent, statutory-based water planning;

- iii) statutory provision for *environmental and other public benefit outcomes*, and improved environmental management practices;
- iv) complete the return of all currently overallocated or overused systems to *environmentally-sustainable levels of extraction*;
- v) progressive removal of barriers to trade in water and meeting other requirements to facilitate the broadening and deepening of the water market, with an open trading market to be in place;
- vi) clarity around the assignment of risk arising from future changes in the availability of water for the *consumptive pool*;
- vii) water accounting which is able to meet the information needs of different water systems in respect to planning, monitoring, trading, environmental management and on-farm management;
- viii) policy settings which facilitate water use efficiency and innovation in urban and rural areas;
- ix) addressing future adjustment issues that may impact on water users and communities; and
- x) recognition of the connectivity between surface and groundwater resources and connected systems managed as a single resource.

KEY ELEMENTS

24. Agreed outcomes and commitments to specific actions are set out on the basis of the following key elements:
- i) Water Access Entitlements and Planning Framework;
 - ii) Water Markets and Trading;
 - iii) Best Practice Water Pricing;
 - iv) Integrated Management of Water for Environmental and Other Public Benefit Outcomes;
 - v) Water Resource Accounting;
 - vi) Urban Water Reform;
 - vii) Knowledge and Capacity Building; and
 - viii) Community Partnerships and Adjustment.

Water Access Entitlements and Planning Framework

Outcomes

25. The Parties agree that, once initiated, their *water access entitlements* and planning frameworks will:
- i) enhance the security and commercial certainty of water access entitlements by clearly specifying the statutory nature of those entitlements;
 - ii) provide a statutory basis for *environmental and other public benefit outcomes* in surface and groundwater systems to protect water sources and their dependent ecosystems;

- iii) be characterised by planning processes in which there is adequate opportunity for productive, environmental and other public benefit considerations to be identified and considered in an open and transparent way;
- iv) provide for adaptive management of surface and groundwater systems in order to meet productive, environmental and other public benefit outcomes;
- v) implement firm pathways and open processes for returning previously overallocated and/or overdrawn surface and groundwater systems to *environmentally-sustainable levels of extraction*;
- vi) clearly assign the risks arising from future changes to the consumptive pool;
- vii) in the case of water access entitlements, be compatible across jurisdictions to improve investment certainty, be competitively neutral and to minimise transaction costs on water trades (where relevant);
- viii) reflect regional differences in the variability of water supply and the state of knowledge underpinning regional allocation decisions;
- ix) recognise indigenous needs in relation to water access and management;
- x) identify and acknowledge surface and groundwater systems of high conservation value, and manage these systems to protect and enhance those values; and
- xi) protect the integrity of water access entitlements from unregulated growth in interception through land-use change.

Actions

26. The Parties agree that the general approach to implementing the entitlements and allocation framework will be to:
 - i) substantially complete plans to address any existing overallocation for all river systems and groundwater resources in accordance with commitments under the 1994 COAG water reform framework by 2005;
 - ii) incorporate the elements of the entitlements and allocation framework in this Agreement that are missing or deficient in existing water entitlement frameworks, into their legislative and administrative regimes by 2006;
 - iii) review any plans developed for the 1994 COAG framework to ensure that they now meet the requirements of this Agreement in terms of transparency of process, reporting arrangements and risk assignment;
 - iv) immediately proceed on a priority basis to develop any new plans, consistent with paragraph 38; and
 - v) apply the risk assignment framework (paragraphs 46-51 refer) once plans are initialised under this Agreement.
27. Recognising that States and Territories retain the vested rights to the use, flow and control of water, they agree to modify their existing legislation and administrative regimes where necessary to ensure that their water access entitlement and planning frameworks incorporate the features identified in paragraphs 28-57 below.

Water Access Entitlements

28. The *consumptive use* of water will require a water access entitlement, separate from land, to be described as a perpetual or open-ended share of the *consumptive pool* of a

specified water resource, as determined by the relevant *water plan* (paragraphs 36 to 40 refer), subject to the provisions at paragraph 33.

29. The allocation of water to a water access entitlement will be made consistent with a *water plan* (paragraph 36 refers).
30. Regulatory approvals enabling water use at a particular site for a particular purpose will be specified separately to the *water access entitlement*, consistent with the principles set out in Schedule D.
31. *Water access entitlements* will:
 - i) specify the essential characteristics of the water product;
 - ii) be exclusive;
 - iii) be able to be traded, given, bequeathed or leased;
 - iv) be able to be subdivided or amalgamated;
 - v) be mortgageable (and in this respect have similar status as freehold land when used as collateral for accessing finance);
 - vi) be enforceable and enforced; and
 - vii) be recorded in publicly-accessible reliable water registers that foster public confidence and state unambiguously who owns the entitlement, and the nature of any encumbrances on it (paragraph 59 refers).
32. *Water access entitlements* will also:
 - i) clearly indicate the responsibilities and obligations of the entitlement holder consistent with the *water plan* relevant to the source of the water;
 - ii) only be able to be cancelled at Ministerial and agency discretion where the responsibilities and obligations of the entitlement holder have clearly been breached;
 - iii) be able to be varied, for example to change extraction conditions, where mutually agreed between the government and the entitlement holder; and
 - iv) be subject to any provisions relating to access of water during emergencies, as specified by legislation in each jurisdiction.
33. The provisions in paragraphs 28-32 are subject to the following provisions:
 - i) fixed term or other types of entitlements such as annual licences will only be issued for consumptive use where this is demonstrably necessary, such as in Western Australia with poorly understood and/or less developed water resources, and/or where the access is contingent upon opportunistic allocations, and/or where the access is provided temporarily as part of an adjustment strategy, or where trading may otherwise not be appropriate. In some cases, a statutory right to extract water may be appropriate; and
 - ii) an ongoing process will be in place to assess the risks of expected development and demand on resources in poorly understood or undeveloped areas, with a view to moving these areas to a full entitlement framework when this becomes appropriate for their efficient management (paragraph 38 refers).
34. The Parties agree that there may be special circumstances facing the minerals and petroleum sectors that will need to be addressed by policies and measures beyond the

scope of this Agreement. In this context, the Parties note that specific project proposals will be assessed according to environmental, economic and social considerations, and that factors specific to resource development projects, such as isolation, relatively short project duration, water quality issues, and obligations to remediate and offset impacts, may require specific management arrangements outside the scope of this Agreement.

Environmental and Other Public Benefit Outcomes

35. Water that is provided by the States and Territories to meet agreed *environmental and other public benefit outcomes* as defined within relevant *water plans* (paragraphs 36 to 40 refer) is to:
- i) be given statutory recognition and have at least the same degree of security as water access entitlements for *consumptive use* and be fully accounted for;
 - ii) be defined as the water management arrangements required to meet the outcomes sought, including water provided on a rules basis or held as a water access entitlement; and
 - iii) if held as a water access entitlement, may be made available to be traded (where physically possible) on the temporary market, when not required to meet the *environmental and other public benefit outcomes* sought and provided such trading is not in conflict with those outcomes.

Water Planning

36. Recognising that settling the trade-offs between competing outcomes for water systems will involve judgements informed by best available science, socio-economic analysis and community input, statutory *water plans* will be prepared for surface water and groundwater management units in which entitlements are issued (subject to paragraph 38). Water planning is an important mechanism to assist governments and the community to determine water management and allocation decisions to meet productive, environmental and social objectives.
37. Broadly, water planning by States and Territories will provide for:
- i) secure ecological outcomes by describing the *environmental and other public benefit outcomes* for water systems and defining the appropriate water management arrangements to achieve those outcomes; and
 - ii) resource security outcomes by determining the shares in the *consumptive pool* and the rules to allocate water during the life of the plan.
38. The relevant State or Territory will determine whether a plan is prepared, what area it should cover, the level of detail required, its duration or frequency of review, and the amount of resources devoted to its preparation based on an assessment of the level of development of *water systems*, projected future consumptive demand and the risks of not having a detailed plan.
39. States and Territories will prepare *water plans* along the lines of the characteristics and components at Schedule E.
40. In the implementation of *water plans*, the Parties will, consistent with the nature and intensity of resource use:
- i) monitor the performance of *water plan* objectives, outcomes and water management arrangements;
 - ii) factor in knowledge improvements as provided for in the plans; and

- iii) provide regular public reports. The reporting will be designed to help water users and governments to manage risk, and be timed to give early indications of possible changes to the *consumptive pool*.

Addressing Currently Overallocated and/or Overused Systems

- 41. The Parties note that existing commitments under National Competition Policy (ref. COAG Tripartite Agreement Clause 1) arrangements require that allocations to provide a better balance in water resource use (including appropriate allocations to the environment) for all river systems and groundwater resources which have been overallocated or are deemed to be stressed and identified in their agreed National Competition Council (NCC) endorsed individual implementation programs, must be substantially completed by 2005.
- 42. This Agreement will not delay nor extend timeframes for current National Competition Policy commitments.
- 43. The Parties further agree that with respect to surface and groundwater resources not covered by the individual NCC endorsed implementation plans, and subject to paragraph 38, States and Territories will determine in accordance with the relevant *water plan*, the precise pathway by which any of those systems found to be *overallocated* and/or *overused* as defined in the water planning process will be adjusted to address the overallocation or overuse, and meet the *environmental and other public benefit outcomes*.
- 44. Subject to paragraph 41, States and Territories agree that substantial progress will be made by 2010 towards adjusting all *overallocated* and/or *overused* systems in accordance with the timelines indicated in their implementation plans.
- 45. Parties agree to address significant adjustment issues affecting water users, in accordance with paragraph 97.

Assigning Risks for Changes in Allocation

- 46. The following risk assignment framework is intended to apply to any future reductions in the availability of water for consumptive use, that are additional to those identified for the purpose of addressing known *overallocation* and/or *overuse* in accordance with pathways agreed under the provisions in paragraphs 41 to 45 above.
- 47. The Parties agree that an effective risk assignment framework occurs in the context that: the new share-based water access entitlements framework has been established; water plans have been transparently developed to determine water allocation for the entitlements; regular reporting of progress with implementing plans is occurring; and a pathway for dealing with known *overallocation* and/or *overuse* has been agreed.
- 48. *Water access entitlement* holders are to bear the risks of any reduction or less reliable water allocation, under their *water access entitlements*, arising from reductions to the consumptive pool as a result of:
 - (i) seasonal or long-term changes in climate; and
 - (ii) periodic natural events such as bushfires and drought.
- 49. The risks of any reduction or less reliable water allocation under a *water access entitlement*, arising as a result of bona fide improvements in the knowledge of water systems' capacity to sustain particular extraction levels are to be borne by users up to 2014. Risks arising under comprehensive *water plans* commencing or renewed after 2014 are to be shared over each ten year period in the following way:

- i) *water access entitlement* holders to bear the first 3% reduction in water allocation under a *water access entitlement*;
 - ii) State/Territory governments and the Commonwealth Government to share one-third and two-thirds respectively reductions in water allocation under *water access entitlements* of between 3% and 6%; and
 - iii) State/Territory and Commonwealth governments to equally share reductions in water allocation under *water access entitlements* greater than 6%.
50. Governments are to bear the risks of any reduction or less reliable water allocation that is not previously provided for, arising from changes in government policy (for example, new environmental objectives). In such cases, governments may recover this water in accordance with the principles for assessing the most efficient and cost effective measures for water recovery (paragraph 79 (ii) (a) refers).
51. Alternatively, the Parties agree that where affected parties, including *water access entitlement* holders, environmental stakeholders and the relevant government agree, on a voluntary basis, to a different risk sharing formula to that proposed in paragraphs 48 - 50 above, that this will be an acceptable approach.

Indigenous Access

52. The Parties will provide for indigenous access to water resources, in accordance with relevant Commonwealth, State and Territory legislation, through planning processes that ensure:
- i) inclusion of indigenous representation in water planning wherever possible; and
 - ii) *water plans* will incorporate indigenous social, spiritual and customary objectives and strategies for achieving these objectives wherever they can be developed.
53. Water planning processes will take account of the possible existence of native title rights to water in the catchment or aquifer area. The Parties note that plans may need to allocate water to native title holders following the recognition of native title rights in water under the Commonwealth Native Title Act 1993.
54. Water allocated to native title holders for traditional cultural purposes will be accounted for.

Interception

55. The Parties recognise that a number of land use change activities have potential to intercept significant volumes of surface and/or ground water now and in the future. Examples of such activities that are of concern, many of which are currently undertaken without a water access entitlement, include:
- i) farm dams and bores;
 - ii) intercepting and storing of overland flows; and
 - iii) large-scale plantation forestry.
56. The Parties also recognise that if these activities are not subject to some form of planning and regulation, they present a risk to the future integrity of water access entitlements and the achievement of environmental objectives for water systems. The intention is therefore to assess the significance of such activities on catchments and aquifers, based on an understanding of the total water cycle, the economic and environmental costs and benefits of the activities of concern, and to apply appropriate

planning, management and/or regulatory measures where necessary to protect the integrity of the water access entitlements system and the achievement of environmental objectives.

57. Accordingly, the Parties agree to implement the following measures in relation to water interception on a priority basis in accordance with the timetable contained in their implementation plans, and no later than 2011:
- i) in water systems that are fully allocated, *overallocated*, or approaching full allocation:-
 - a) interception activities that are assessed as being significant should be recorded (for example, through a licensing system);
 - b) any proposals for additional interception activities above an agreed threshold size, will require a *water access entitlement*:
 - the threshold size will be determined for the entire water system covered by a *water plan*, having regard to regional circumstances and taking account of both the positive and negative impacts of water interception on regional (including cross-border) natural resource management outcomes (for example, the control of rising water tables by plantations); and
 - the threshold may not apply to activities for restricted purposes, such as contaminated water from intensive livestock operations;
 - c) a robust compliance monitoring regime will be implemented; and
 - ii) in water systems that are not yet fully allocated, or approaching full allocation:
 - a) significant interception activities should be identified and estimates made of the amount of water likely to be intercepted by those activities over the life of the relevant water plan;
 - b) an appropriate threshold level will be calculated of water interception by the significant interception activities that is allowable without a *water access entitlement* across the entire water system covered by the plan:
 - this threshold level should be determined as per paragraph 57(i)b) above; and
 - c) progress of the catchment or aquifer towards either full allocation or the threshold level of interception should be regularly monitored and publicly reported:
 - once the threshold level of interception is reached, or the system is approaching full allocation, all additional proposals for significant interception activities will require a *water access entitlement* unless for activities for restricted purposes, such as contaminated water from intensive livestock operations.

Water Markets and Trading

Outcomes

58. The States and Territories agree that their water market and trading arrangements will:
- i) facilitate the operation of efficient water markets and the opportunities for trading, within and between States and Territories, where water systems are physically

shared or hydrologic connections and water supply considerations will permit water trading;

- ii) minimise transaction costs on water trades, including through good information flows in the market and compatible entitlement, registry, regulatory and other arrangements across jurisdictions;
- iii) enable the appropriate mix of water products to develop based on access entitlements which can be traded either in whole or in part, and either temporarily or permanently, or through lease arrangements or other trading options that may evolve over time;
- iv) recognise and protect the needs of the environment; and
- v) provide appropriate protection of third-party interests.

Actions

- 59. The States and Territories agree to have in place pathways by 2004, leading to full implementation by 2006, of compatible, publicly-accessible and reliable water registers of all water access entitlements and trades (both permanent and temporary) on a whole of basin or catchment basis, consistent with the principles in Schedule F. The Parties recognise that in some instances water service providers will be responsible for recording details of temporary trades.
- 60. The States and Territories agree to establish by 2007 compatible institutional and regulatory arrangements that facilitate intra and interstate trade, and manage differences in entitlement reliability, supply losses, supply source constraints, trading between systems, and cap requirements, including:
 - i) principles for trading rules to address resource management and infrastructure delivery considerations, as set out in Schedule G;
 - ii) where appropriate, the use of water access entitlement exchange rates and/or water access entitlement tagging and a system of *trading zones* to simplify administration;
 - iii) the application of consistent pricing policies (refer paragraph 64 below);
 - iv) in respect of any existing institutional barriers to intra and interstate trade:
 - a) immediate removal of barriers to temporary trade;
 - b) immediate removal of barriers to permanent trade out of *water irrigation areas* up to an annual threshold limit of four percent of the total water entitlement of that area, subject to a review by 2009 with a move to full and open trade by 2014 at the latest, except in the southern Murray-Darling Basin where action to remove barriers to trade is agreed as set out under paragraph 63; and
 - c) jurisdictions may remove barriers earlier than those in (b) above;
 - v) subject to (i) above, no imposition of new barriers to trade, including in the form of arrangements for addressing stranded assets; and
 - vi) where appropriate, implementing measures to facilitate the rationalisation of inefficient infrastructure or unsustainable irrigation supply schemes, including consideration of the need for any structural adjustment assistance (paragraph 97 refers).

61. To support the above actions on trading, the Parties also agree to complete the following studies and to consider implementation of any recommendations by June 2005:
- i) a study taking into account work already underway, on effective market and regulatory mechanisms for *sharing delivery capacity* and *extraction rates* among water users, where necessary to enhance the operation of water markets and make recommendations to implement efficient ways to manage changes in water usage patterns, channel capacity constraints and water quality issues;
 - ii) a study to facilitate cross system compatibility, that analyses the existing product mix, proposes possible choices of product mix, makes recommendations on the desirable model and proposes a transition path for implementation; and
 - iii) a study to assess the feasibility of establishing market mechanisms such as tradeable salinity and pollution credits to provide incentives for investment in water-use efficiency and farm management strategies and for dealing with environmental externalities.
62. Recognising the need to manage the impacts of assets potentially stranded by trade out of serviced areas, the Parties agree to ensure that support mechanisms used for this purpose, such as access and exit fees and retail tagging, do not become an institutional barrier to trade (paragraph 60(v) refers).
63. In regard to the Southern Murray-Darling Basin, the relevant Parties (Commonwealth, New South Wales, Victoria and South Australia) that are members of the Murray-Darling Basin Ministerial Council agree to:
- i) take all steps necessary, including making any corresponding legislative and administrative changes, to enable exchange rates and/or tagging of water access entitlements traded from interstate sources to buyers in their jurisdictions by June 2005;
 - ii) reduce barriers to trade in the Southern Murray-Darling Basin by taking the necessary legislative and other actions to permit open trade and ensure competitive neutrality, and to establish an interim threshold limit on the level of permanent trade out of all *water irrigation areas* of four per cent per annum of the total water access entitlement for the *water irrigation area* by June 2005, including:
 - a) in the case of NSW, making necessary legislative changes to give effect to a Heads of Agreement between Government and major irrigation corporations to permit increased trade, including to remove barriers to trade up to the above interim threshold limit; and
 - b) in the case of Victoria and South Australia, bringing into effect change to permit increased trade including to remove barriers to trade up to the above interim threshold level, in the respective Authorities and Trusts, at the same time that NSW amends its legislation;
 - iii) review the above actions in June 2005 to assess whether all relevant parties have met their obligations to enable achievement of the interim threshold;
 - iv) a study into the legal, commercial and technical mechanisms necessary to enable interstate trade to commence in the Southern Murray-Darling Basin by June 2005;
 - v) review the outcome of 63(ii)(a) by 2007 and, if the actions are shown to be insufficient to ensure the desired level of open trade, to take any further action,

- including legislation, determined necessary to achieve the desired opening of water trading markets in the Southern Murray-Darling Basin;
- vi) the National Water Commission monitoring the impacts of interstate trade and advising the relevant Parties on any issues arising; and
- vii) review the impact of trade under the interim threshold in 2009, with a view to raising the threshold to a higher level if considered appropriate.

Best Practice Water Pricing and Institutional Arrangements

Outcomes

64. The Parties agree to implement water pricing and institutional arrangements which:
- i) promote economically efficient and sustainable use of:
 - a) water resources;
 - b) water infrastructure assets; and
 - c) government resources devoted to the management of water;
 - ii) ensure sufficient revenue streams to allow efficient delivery of the required services;
 - iii) facilitate the efficient functioning of water markets, including inter-jurisdictional water markets, and in both rural and urban settings;
 - iv) give effect to the principles 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;
 - v) avoid perverse or unintended pricing outcomes; and
 - vi) provide appropriate mechanisms for the release of unallocated water.

Actions

Water Storage and Delivery Pricing

65. In accordance with NCP commitments, the States and Territories agree to bring into effect pricing policies for water storage and delivery in rural and urban systems that facilitate efficient water use and trade in water entitlements, including through the use of:
- i) consumption based pricing;
 - ii) full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities, where feasible and practical; and
 - iii) consistency in pricing policies across sectors and jurisdictions where entitlements are able to be traded.
66. In particular, States and Territories agree to the following pricing actions:
- Metropolitan*
- i) continued movement towards *upper bound pricing* by 2008;

- ii) development of pricing policies for recycled water and stormwater that are congruent with pricing policies for potable water, and stimulate efficient water use no matter what the source, by 2006;
- iii) review and development of pricing policies for trade wastes that encourage the most cost effective methods of treating industrial wastes, whether at the source or at downstream plants, by 2006; and
- iv) development of national guidelines for customers' water accounts that provide information on their water use relative to equivalent households in the community by 2006;

Rural and Regional

- v) full cost recovery for all rural surface and groundwater based systems, recognising that there will be some small community services that will never be economically viable but need to be maintained to meet social and public health obligations:
 - a) achievement of *lower bound pricing* for all rural systems in line with existing NCP commitments;
 - b) continued movement towards *upper bound pricing* for all rural systems, where practicable; and
 - c) where full cost recovery is unlikely to be achieved in the long term and a Community Service Obligation (CSO) is deemed necessary, the size of the subsidy is to be reported publicly and, where practicable, jurisdictions to consider alternative management arrangements aimed at removing the need for an ongoing CSO.

Cost Recovery for Planning and Management

- 67. The States and Territories agree to bring into effect consistent approaches to pricing and attributing costs of water planning and management by 2006, involving:
 - i) the identification of all costs associated with water planning and management, including the costs of underpinning water markets such as the provision of registers, accounting and measurement frameworks and performance monitoring and benchmarking;
 - ii) the identification of the proportion of costs that can be attributed to water access entitlement holders consistent with the principles below:
 - a) charges exclude activities undertaken for the Government (such as policy development, and Ministerial or Parliamentary services); and
 - b) charges are linked as closely as possible to the costs of activities or products.
- 68. The States and Territories agree to report publicly on cost recovery for water planning and management as part of annual reporting requirements, including:
 - i) the total cost of water planning and management; and
 - ii) the proportion of the total cost of water planning and management attributed to *water access entitlement* holders and the basis upon which this proportion is determined.

Investment in new or refurbished infrastructure

69. The Parties agree to ensure that proposals for investment in new or refurbished water infrastructure continue to be assessed as economically viable and ecologically sustainable prior to the investment occurring (noting paragraph 66 (v)).

Release of unallocated water

70. Release of unallocated water will be a matter for States and Territories to determine. Any release of unallocated water should be managed in the context of encouraging the sustainable and efficient use of scarce water resources.
71. If a release is justified, generally, it should occur only where alternative ways of meeting water demands, such as through water trading, making use of the unused parts of existing entitlements or by increasing water use efficiency, have been fully explored.
72. To the extent practicable, releases should occur through market-based mechanisms.

Environmental Externalities

73. The States and Territories agree to:
- i) continue to manage environmental externalities through a range of regulatory measures (such as through setting extraction limits in water management plans and by specifying the conditions for the use of water in water use licences);
 - ii) continue to examine the feasibility of using market based mechanisms such as pricing to account for positive and negative environmental externalities associated with water use; and
 - iii) implement pricing that includes externalities where found to be feasible.

Institutional Reform

74. The Parties agree that as far as possible, the roles of water resource management, standard setting and regulatory enforcement and service provision continue to be separated institutionally.

Benchmarking Efficient Performance

75. The States and Territories will be required to report independently, publicly, and on an annual basis, benchmarking of pricing and service quality for metropolitan, non-metropolitan and rural water delivery agencies. Such reports will be made on the basis of a nationally consistent framework to be developed by the Parties by 2005, taking account of existing information collection including:
- i) the major metropolitan inter-agency performance and benchmarking system managed by the Water Services Association of Australia;
 - ii) the non-major metropolitan inter-agency performance and benchmarking system managed by the Australian Water Association ; and
 - iii) the irrigation industry performance monitoring and benchmarking system, currently being managed by the Australian National Committee on Irrigation and Drainage.
76. Costs of operating the above performance and benchmarking systems are to be met by jurisdictions through recovery of water management costs.

Independent pricing regulator

77. The Parties agree to use independent bodies to:
- i) set or review prices, or price setting processes, for water storage and delivery by government water service providers, on a case-by-case basis, consistent with the principles in paragraphs 65 to 68 above; and
 - ii) publicly review and report on pricing in government and private water service providers to ensure that the principles in paragraphs 65 to 68 above are met.

Integrated Management of Environmental Water

Outcome

78. The Parties agree that the outcome for integrated management of environmental water is to identify within water resource planning frameworks the *environmental and other public benefit outcomes* sought for water systems and to develop and implement management practices and institutional arrangements that will achieve those outcomes by:
- i) identifying the desired *environmental and other public benefit outcomes* with as much specificity as possible;
 - ii) establishing and equipping accountable *environmental water managers* with the necessary authority and resources to provide sufficient water at the right times and places to achieve the *environmental and other public benefit outcomes*, including across State/Territory boundaries where relevant; and
 - iii) optimising the cost effectiveness of measures to provide water for these outcomes.

Actions

79. Recognising the different types of surface water and groundwater systems, in particular the varying nature and intensity of resource use, and recognising the requirements to identify *environmental and other public benefit outcomes* in water plans, and describe the water management arrangements necessary to meet those outcomes (paragraph 35.ii) refers), the States and Territories agree to:
- i) establish effective and efficient management and institutional arrangements to ensure the achievement of the *environmental and other public benefit outcomes*, including:
 - a) environmental water managers that are accountable for the management of environmental water provisions and the achievement of *environmental and other public benefit outcomes*;
 - b) joint arrangements where resources are shared between jurisdictions;
 - c) common arrangements in the case of significantly inter-connected groundwater and surface water systems;
 - d) periodic independent audit, review and public reporting of the achievement of *environmental and other public benefit outcomes* and the adequacy of the water provision and management arrangements in achieving those outcomes;
 - e) the ability for environmental water managers to trade water on temporary markets at times such water is not required to contribute towards

environmental and other public benefit outcomes (consistent with paragraph 35(iii));

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

Water Resource Accounting

Outcome

80. The Parties agree that the outcome of water resource accounting is to ensure that adequate measurement, monitoring and reporting systems are in place in all jurisdictions, to support public and investor confidence in the amount of water being traded, extracted for consumptive use, and recovered and managed for *environmental and other public benefit outcomes*.

Actions

Benchmarking of Accounting Systems

81. Recognising that a national framework for comparison of water accounting systems can encourage continuous improvement leading to adoption of best practice, the Parties agree to benchmark jurisdictional water accounting systems on a national scale by June 2005, including:
- i) state based water entitlement registering systems;
 - ii) water service provider water accounting systems;
 - iii) water service provider water use/delivery efficiency; and
 - iv) jurisdictional/system water and related data bases.

Consolidated Water Accounts

82. Recognising that robust water accounting will protect the integrity of the access entitlement system, the Parties agree to develop and implement by 2006:

- i) accounting system standards, particularly where jurisdictions share the resources of river systems and where water markets are operating;
 - ii) standardised reporting formats to enable ready comparison of water use, compliance against entitlements and trading information;
 - iii) water resource accounts that can be reconciled annually and aggregated to produce a national water balance, including:
 - a) a water balance covering all significant water use, for all managed water resource systems;
 - b) systems to integrate the accounting of groundwater and surface water use where close interaction between groundwater aquifers and streamflow exist; and
 - c) consideration of land use change, climate change and other externalities as elements of the water balance.
83. States and Territories agree to identify by end 2005 situations where close interaction between groundwater aquifers and streamflow exist and implement by 2008 systems to integrate the accounting of groundwater and surface water use.

Environmental Water Accounting

84. The Parties agree that principles for environmental water accounting will be developed and applied in the context of consolidated water accounts in paragraph 82.
85. The Parties further agree to develop by mid 2005 and apply by mid 2006:
- i) a compatible register of new and existing environmental water (consistent with paragraph 35) showing all relevant details of source, location, volume, security, use, environmental outcomes sought and type; and
 - ii) annual reporting arrangements to include reporting on the environmental water rules, whether or not they were activated in a particular year, the extent to which rules were implemented and the overall effectiveness of the use of resources in the context of the environmental and other public benefit outcomes sought and achieved.

Information

86. States and Territories agree to:
- i) improve the coordination of data collection and management systems to facilitate better sharing of this information;
 - ii) develop partnerships in data collection and storage; and
 - iii) identify best practice in data management systems for broad adoption.

Metering and Measuring

87. The Parties agree that generally metering should be undertaken on a consistent basis in the following circumstances:
- i) for categories of entitlements identified in a water planning process as requiring metering;
 - ii) where water access entitlements are traded;
 - iii) in an area where there are disputes over the sharing of available water;

- iv) where new entitlements are issued; or
 - v) where there is a community demand.
88. Recognising that information available from metering needs to be practical, credible and reliable, the Parties agree to develop by 2006 and apply by 2007:
- i) a national meter specification;
 - ii) national meter standards specifying the installation of meters in conjunction with the meter specification; and
 - iii) national standards for ancillary data collection systems associated with meters.

Reporting

89. The Parties agree to develop by mid 2005 and apply national guidelines by 2007 covering the application, scale, detail and frequency for open reporting addressing:
- i) metered water use and associated compliance and enforcement actions;
 - ii) trade outcomes;
 - iii) environmental water releases and management actions; and
 - iv) availability of *water access entitlements* against the rules for availability and use.

Urban Water Reform

Outcome

90. The Parties agree that the outcome for urban water reform is to:
- i) provide healthy, safe and reliable water supplies;
 - ii) increase water use efficiency in domestic and commercial settings;
 - iii) encourage the re-use and recycling of wastewater where cost effective;
 - iv) facilitate water trading between and within the urban and rural sectors;
 - v) encourage innovation in water supply sourcing, treatment, storage and discharge; and
 - vi) achieve improved pricing for *metropolitan* water (consistent with paragraph 66.i) to 66.iv)).

Actions

Demand Management

91. States and Territories agree to undertake the following actions in regard to demand management by 2006:
- i) legislation to implement the Water Efficiency Labelling Scheme (WELS) to be in place in all jurisdictions and regulator undertaking compliance activity by 2005, including mandatory labelling and minimum standards for agreed appliances;
 - ii) develop and implement a 'Smart Water Mark' for household gardens, including garden irrigation equipment, garden designs and plants;

- iii) review the effectiveness of temporary water restrictions and associated public education strategies, and assess the scope for extending low level restrictions as standard practice; and
- iv) prioritise and implement, where cost effective, management responses to water supply and discharge system losses including leakage, excess pressure, overflows and other maintenance needs.

Innovation and Capacity Building to Create Water Sensitive Australian Cities

92. The Parties agree to undertake the following actions in regard to innovation:
- i) develop national health and environmental guidelines for priority elements of *water sensitive urban designs* (initially recycled water and stormwater) by 2005;
 - ii) develop national guidelines for evaluating options for water sensitive urban developments, both in new urban sub-divisions and high rise buildings by 2006;
 - iii) evaluate existing 'icon water sensitive urban developments' to identify gaps in knowledge and lessons for future strategically located developments by 2005;
 - iv) review the institutional and regulatory models for achieving integrated urban water cycle planning and management, followed by preparation of best practice guidelines by 2006; and
 - v) review of incentives to stimulate innovation by 2006.

Community Partnerships and Adjustment

Outcome

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

Actions

95. States and Territories agree to ensure open and timely consultation with all stakeholders in relation to:
- i) pathways for returning overdrawn surface and groundwater systems to environmentally sustainable extraction levels (paragraphs 41 to 45 refer);
 - ii) the periodic review of *water plans* (paragraph 398 refers); and
 - iii) other significant decisions that may affect the security of *water access entitlements* or the sustainability of water use.
96. States and Territories agree to provide accurate and timely information to all relevant stakeholders regarding:
- i) progress with the implementation of *water plans*, including the achievement of objectives and likely future trends regarding the size of the consumptive pool; and

- ii) other issues relevant to the security of *water access entitlements* and the sustainability of water use, including the science underpinning the identification and implementation of *environmental and other public benefit outcomes*.
97. The Parties agree to address significant adjustment issues affecting *water access entitlement* holders and communities that may arise from reductions in water availability as a result of implementing the reforms proposed in this Agreement.
- i) States and Territories will consult with affected water users, communities and associated industry on possible appropriate responses to address these impacts, taking into account factors including:
 - a) possible trade-offs between higher reliability and lower absolute amounts of water;
 - b) the fact that water users have benefited from using the resource in the past;
 - c) the scale of the changes sought and the speed with which they are to be implemented (including consideration of previous changes in water availability); and
 - d) the risk assignment framework referred to in paragraphs 46 to 51.
 - ii) The Commonwealth Government commits itself to discussing with signatories to this Agreement assistance to affected regions on a case by case basis (including set up costs), noting that it reserves the right to initiate projects on its own behalf.

Knowledge and Capacity Building

98. This Agreement identifies a number of areas where there are significant knowledge and capacity building needs for its ongoing implementation. These include: regional water accounts and assessment of availability through time and across catchments; changes to water availability from climate and land use change; interaction between surface and groundwater components of the water cycle; demonstrating ecological outcomes from environmental flow management; improvements in farm, irrigation system and catchment water use efficiency; catchment processes that impact on water quality; improvements in urban water use efficiency; and independent reviews of the knowledge base.
99. There are significant national investments in knowledge and capacity building in water, including through the Cooperative Research programme, CSIRO Water Flagship and Land and Water Australia, State agencies, local government and higher education institutions. Scientific, technical and social aspects of water management are multi-disciplinary and extend beyond the capacity of any single research institution.

Outcome

100. Parties agree that the outcome of knowledge and capacity building will assist in underpinning implementation of this Agreement.

Actions

101. Parties agree to:
- i) identify the key knowledge and capacity building priorities needed to support ongoing implementation of this Agreement; and
 - ii) identify and implement proposals to more effectively coordinate the national water knowledge effort.

VARIATION

102. This Agreement may be amended at the request of one of the Parties, subject to the agreement of all the Parties.
103. All Parties agree to notify and consult each other on matters that come to their attention that may improve the operation of the Agreement.

MONITORING AND REVIEW

104. The Natural Resource Management Ministerial Council (NRMMC) will:
 - i) commencing in 2005 provide annual reports to COAG on progress with the actions being taken by jurisdictions in implementing this Agreement; and
 - ii) in consultation with the National Water Commission (NWC), develop by mid 2005, a comprehensive national set of performance indicators for this Agreement. The indicators should, where possible, draw on existing indicators and include initialisation of *water access entitlements*, environmental water, water use efficiency, water pricing and water trading.
105. The NWC will:
 - i) undertake a baseline assessment of the water resource and governance arrangements, based on existing work by the Parties and undertaking further work only where required;
 - ii) accredit implementation plans to be developed by each jurisdiction, in accordance with paragraph 9, by mid-2005;
 - iii) assess the implementation plans towards achieving the objectives and outcomes of this Agreement within agreed timeframes on the basis of its baseline assessment above and jurisdictions' self assessment of their respective implementation plans;
 - iv) report to COAG on accreditation of the implementation plans by 2006; and
 - v) report to the Commonwealth Government on compliance with any outstanding commitments under the 1994 COAG framework.
106. The NWC will, commencing in 2006-07, undertake:
 - (a) biennial assessments of progress with the NWI Agreement and State and Territory implementation plans, and advice on actions required to better realise the objectives and outcomes of the Agreement;
 - (b) a third biennial assessment in 2010-11 in the form of a comprehensive review of the Agreement against the indicators developed by the NRMMC referred to in paragraph 104(ii) above, and an assessment of the extent to which actions undertaken in this Agreement contribute to the national interest and the impacts of implementing this Agreement on regional, rural and urban communities; and
 - (c) biennial assessments of the performance of the water industry against national benchmarks, in areas such as irrigation efficiency, water management costs and water pricing.
107. The NWC reports to COAG will be publicly available.
108. Drawing on the NWC assessment in 2010-11, COAG will review the objectives and operation of the NWC in 2011.

Signed for and on behalf of each of the parties by:

The Honourable John Winston Howard MP)
Prime Minister of the Commonwealth of Australia)

The Honourable Robert John Carr MP)
Premier of New South Wales)

The Honourable Stephen Phillip Bracks MP)
Premier of Victoria)

The Honourable Peter Beattie MP)
Premier of Queensland)

The Honourable Michael Rann MP)
Premier of South Australia)

Jonathon Donald Stanhope MLA)
Chief Minister of the Australian Capital Territory)

The Honourable Clare Martin MLA)
Chief Minister of the Northern Territory)

25 June 2004

SCHEDULE A: TIMELINE FOR IMPLEMENTATION OF KEY ACTIONS

Key Actions	Date	IGA paragraphs	Responsibility
<i>Implementation</i>			
▪ Establish a National Water Commission	end 2004	10	All Parties
▪ Jurisdictions to develop implementation plans.	June 2005	8	States ¹
▪ Substantial progress towards implementation of this Agreement	2010	8	All Parties
<i>Water access entitlements and planning framework</i>			
▪ Implementation of the 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 water reform framework	end 2005	26 (i)	States
- Legislative and administrative regimes amended to incorporate the elements of the entitlements and allocation framework in this Agreement	end 2006	26(ii)	States
▪ Water access entitlements to be defined and implemented	immediate	28-34	States
▪ Water to meet environmental and other public benefit outcomes identified in water plans to be defined, provided and managed.	immediate	35	States
▪ Water plans to be prepared along the lines of the characteristics and components at Schedule D based on the following priorities:			
- plans for systems that are overallocated, fully allocated or approaching full allocation;	end 2007	39-40	States
- plans for systems that are not yet approaching full allocation	end 2009	39-40	States
▪ Substantially complete addressing overallocation as per NCC commitments.	2005	41	States
▪ substantial progress toward adjusting all <i>overallocated</i> and/or <i>overused</i> systems	end 2010	43 - 45	All Parties
▪ Risk assignment framework to be implemented immediately for all changes in allocation not provided for in overallocation pathways in water plans	immediate	46-50	States
▪ Water plans to address indigenous water issues	immediate	52 - 54	States
▪ Implementation of measures to address water interception by land use change activities on a priority basis in accordance with water plans	no later than 2011	55 - 57	States
<i>Water markets and trading</i>			
▪ Adoption of publicly accessible, compatible systems for registering water access entitlements and trades consistent with Schedule F:			
- pathways leading to full implementation; and	end 2004	59	States
- full implementation.	end 2006	59	States

¹ For purposes of this Schedule “States” is an abbreviation for “States and Territories”

Key Actions	Date	IGA paragraphs	Responsibility
<i>Water markets and trading (cont.)</i>			
- Establish compatible institutional and regulatory arrangements that facilitate trade, including arrangements consistent with principles in Schedule G - re institutional barriers to trade - remove barriers to temporary trade - remove barriers to permanent trade up to an annual threshold of 4 percent - review impact on trade of interim threshold - full removal of barriers to trade	end 2007 immediate immediate (except for southern MDB) 2009 end 2014	60 60(iv)(a) 60(iv)(b) 60(iv)(b)	States States States States
- Complete the following studies and consider implementation of any recommendations: - review of water products - new approach to sharing delivery capacity and extraction rates among users - feasibility of establishing market mechanisms such as tradeable salinity and pollution credits to provide incentives for investment in water-use efficiency and farm management strategies and for dealing with environmental externalities	June 2005 June 2005 June 2005	61(i) 61(ii) 61(iii)	All Parties All Parties All Parties
- Relevant Parties (Commonwealth, NSW, Victoria and SA) agree to: - take necessary steps to enable the use of exchange rates and/or tagging for interstate trade; - reduce barriers to trade in southern MDB and establish an interim limit on permanent trade out of water irrigation areas of 4 percent per annum - NSW make legislative changes to remove barriers and permit increased trade up to the interim limit; - Vic and SA make change to remove barriers and permit increased trade up to the interim limit - review actions to assess whether relevant parties have removed barriers to achieve interim limit - study into mechanisms necessary to enable interstate trade - review outcome of actions by NSW - NWC monitor impacts of interstate trade - review the impact on trade under the interim threshold.	June 2005 June 2005 June 2005 June 2005 June 2005 June 2005 end 2007 ongoing end 2009	63(i) 63(ii) 63(ii)(a) 63(ii)(b) 63(iii) 63(iv) 63(v) 63(vi) 63(vii)	relevant Parties relevant Parties NSW Victoria and SA relevant Parties relevant Parties relevant Parties NWC relevant Parties
<i>Best practice water pricing and institutional arrangements</i>			
Complete commitments under the 1994 COAG Water Reform Framework to bring into effect pricing policies for water storage and delivery in rural and urban systems	end 2004	65	States

Key Actions	Date	IGA paragraphs	Responsibility
<i>Best practice water pricing and institutional arrangements(cont.)</i>			
▪ <u>Metropolitan</u> - Continued movement towards <i>upper bound pricing</i>; - development of pricing policies for recycled water and stormwater; - review and development of pricing policies for trade wastes; and - development of national guidelines for water accounts. ▪ <u>Rural and Regional</u> - full cost recovery for all rural surface and groundwater based systems: - continued movement towards <i>lower bound pricing</i> per NCC commitments; and - achievement of <i>upper bound pricing</i> for all rural systems, where practicable.	end 2008 end 2006 end 2006 end 2006 ongoing ongoing	66(i) 66 (ii) 66 (iii) 66 (iv) 66 (v)(a) 66 (v)(b)	States States States States States States
▪ Consistent approaches to pricing and attributing costs of water planning and management	end 2006	67	States
▪ Investment in new or refurbished water infrastructure to continue to be assessed as economically and ecologically sustainable before being approved	ongoing	69	States
▪ Release of unallocated water	ongoing	70 - 72	States
▪ Environmental externalities managed through a range of regulatory measures	ongoing	73	States
▪ <u>Benchmarking efficient performance</u> - independent, public, annual reporting of performance benchmarking for all metropolitan, non-metropolitan and rural water delivery agencies - develop nationally consistent report framework	ongoing 2005	75 76	States All Parties
▪ <u>Independent pricing regulator</u> - independent pricing bodies to set and review prices or pricing processes for water storage and delivery and publicly report.	ongoing	77	All Parties
<i>Integrated management of environmental water</i>			
▪ Recognising the different types of surface water and groundwater systems: - effective and efficient management and institutional arrangements to ensure the achievement of the environmental outcomes; and - where it is necessary to recover water to achieve environmental outcomes, to adopt the principles for determining the most effective and efficient mix of water recovery measures.	immediate ongoing	79(i) 79(ii)	States States

Key Actions	Date	IGA paragraphs	Responsibility
<i>Water resource accounting</i>			
▪ Benchmarking of accounting systems	mid 2005	81	All Parties
▪ Consolidated water accounts			
- Develop and implement robust water accounting	end 2006	82	All Parties
- Identify situations where close interaction between surface and groundwater exist	end 2005	83	All Parties
- Implement systems to integrate the accounting of surface and groundwater	end 2008	83	All Parties
▪ Environmental water accounting:			
- develop an environmental water register and annual reporting arrangements; and	mid 2005	85	All Parties
- apply the environmental water register and annual reporting arrangements.	mid 2006	85	All Parties
▪ Implement information measures	ongoing	86	All Parties
▪ Metering and measuring actions:			
- develop metering and measuring actions; and	end 2006	88	All Parties
- implement metering and measuring actions.	end 2007	88	All Parties
▪ National guidelines on water reporting:			
- develop national guidelines on water reporting; and	mid 2005	89	All Parties
- apply national guidelines on water reporting.	end 2007	89	All Parties
<i>Urban water reform</i>			
▪ Implementation of demand management measures, including:			
- implementation and compliance monitoring of WELS, including mandatory labelling and minimum standards for agreed appliances;	end 2005	91(i)	States
- develop and implement 'Smart Water Mark' for garden activities;	end 2006	91 (ii)	States
- review effectiveness of temporary water restricts and associated public education strategies, and consider extending low level restrictions to standard practice; and	end 2006	91 (iii)	States
- implement management responses to water supply and discharge system losses including leakage, excess pressure, overflows and other maintenance needs.	end 2006	91 (iv)	States
▪ Encourage further innovation in urban water use including:			
- develop and apply national health and environmental guidelines for water sensitive urban designs for recycled water and stormwater;	end 2005	92(i)	All Parties
- develop national guidelines for evaluating options for water sensitive urban developments in both new urban sub-divisions and high rise;	end 2006	92 (ii)	All Parties
- evaluate existing water sensitive urban icon developments;	end 2005	92 (iii)	All Parties
- review institutional and regulatory models for integrated urban water cycle planning and management and develop best practice guidelines;	end 2006	92 (iv)	All Parties
- review incentives to stimulate innovation.	end 2006	92 (v)	All Parties

Key Actions	Date	IGA paragraphs	Responsibility
<i>Community partnerships and adjustment</i>			
Open and timely consultation with all relevant stakeholders in relation to: pathways for returning overallocated systems to sustainable extraction levels, periodic review of water plans, and other significant decisions affecting the security of water access entitlements.	ongoing	95	States
Provision of accurate and timely information to all relevant stakeholders in relation to the progress of water plan implementation and other issues relevant to the security of water access entitlements.	ongoing	96	States
Address significant adjustment issues affecting water access entitlement holders and communities that may arise from reductions in water availability as a result of implementing the National Water Initiative	ongoing	97	All Parties
<i>Knowledge and capacity building</i>			
Identify the key science priorities to support implementation of the National Water Initiative and where this work is being undertaken.	ongoing	101(i)	All Parties
Implement any necessary measures to ensure the research effort is well coordinated and publicised, and any gaps are addressed.	ongoing	101(ii)	All Parties

SCHEDULE B(i): GLOSSARY OF TERMS

The words and phrases that are italicised in this intergovernmental agreement are to be interpreted according to the definitions given below.

consumptive pool – the amount of water resource that can be made available for *consumptive use* in a given water system under the rules of the relevant water plan.

consumptive use – use of water for private benefit consumptive purposes including irrigation, industry, urban and stock and domestic use.

environmental and other public benefit outcomes – environmental and other public benefit outcomes are defined as part of the water planning process, are specified in water plans and may include a number of aspects, including:

- *environmental outcomes*: maintaining ecosystem function (eg. through periodic inundation of floodplain wetlands); biodiversity, water quality; river health targets;
- *other public benefits*: mitigating pollution, public health (eg. limiting noxious algal blooms), indigenous and cultural values, recreation, fisheries, tourism, navigation and amenity values.

Environmental manager - an expertise based function with clearly identified responsibility for the management of environmental water so as to give effect to the environmental objectives of statutory water plans

- the institutional form of the environmental manager will vary from place to place reflecting the scale at which the environmental objectives are set and the degree of active management of environmental water required
- the environmental manager may be a separate body or an existing Basin, catchment or river manager provided that the function is assigned the necessary powers and resources, potential conflicts of interest are minimised, and lines of accountability are clear

environmentally sustainable level of extraction – the level of water extraction from a particular system which, if exceeded would compromise key environmental assets, or ecosystem functions and the productive base of the resource.

exchange rate – the rate of conversion calculated and agreed to be applied to water to be traded from one trading zone and/or jurisdiction to another.

extraction rate – the rate in terms of unit volume per unit time that water can be drawn from a surface or groundwater system. Used in the NWI in the context of a constraint that might exist due to the impact of exceeding a particular extraction rate at a particular point or within a specified system.

lower bound pricing – the level at which to be viable, a water business should recover, at least, the operational, maintenance and administrative costs, externalities, taxes or TERs (not including income tax), the interest cost on debt, dividends (if any) and make provision for future asset refurbishment/replacement. Dividends should be set at a level that reflects commercial realities and stimulates a competitive market outcome.

metropolitan – refers to water and wastewater services provided in metropolitan urban areas having in excess of 50,000 connections.

overallocation – refers to situations where with full development of water access entitlements in a particular system, the total volume of water able to be extracted by *entitlement holders* at a given time exceeds the *environmentally sustainable level of extraction* for that system.

overused – refers to situations where the total volume of water actually extracted for consumptive use in a particular system at a given time exceeds the *environmentally sustainable level of extraction* for that system. Overuse may arise in systems that are overallocated, or it may arise in systems where the planned allocation is exceeded due to inadequate monitoring and accounting.

regional natural resource management plans – plans that cover specific regions like those developed under the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality.

reliability – the frequency with which water allocated under a *water access entitlement* is able to be supplied in full. Referred to in some jurisdictions as “high security” and general security”.

rural and regional – refers to water and wastewater services provided for rural irrigation and industrial users and in regional urban areas with less than 50,000 connections;

sharing delivery capacity – an approach to sharing of an irrigation supply channel capacity (supplemented systems) or a water course capacity (unsupplemented) held by an *entitlement holder* and specified as a percentage share or volumetric supply rate at a particular time.

surface water – water that flows over land and in water courses or artificial channels and is able to be captured and stored and supplemented from dams and reservoirs.

trading zones – zones established to simplify administration of a trade by setting out the known supply source or management arrangements and the physical realities of relevant supply systems within the zone. Trade can occur within and between zones without first having to investigate and establish the details and rules of the system in each zone.

upper bound pricing – the level at which, to avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes (TERs), provision for the cost of asset consumption and cost of capital, the latter being calculated using a weighted average cost of capital WACC.

water access entitlement – a perpetual or ongoing entitlement to exclusive access to a share of water from a specified *consumptive pool* as defined in the relevant *water plan*.

water allocation – the specific volume of water allocated to water access entitlements in a given season, defined according to rules established in the relevant water plan.

water irrigation area – the area under control of an individual water service provider (eg. an irrigation corporation, cooperative or trust, or water authority).

water plan – statutory plans for surface and/or ground *water systems*, consistent with the *Regional Natural Resource Management Plans*, developed in consultation with all relevant stakeholders on the basis of best scientific and socio-economic assessment, to provide secure ecological outcomes and resource security for users.

water sensitive urban design – the integration of urban planning with the management, protection and conservation of the urban water cycle, that ensures urban water management is sensitive to natural hydrological and ecological processes.

water system – a system that is hydrologically connected and described at the level desired for management purposes (eg sub-catchment, catchment, basin or drainage division and/or groundwater management unit, sub-aquifer, aquifer, groundwater basin).

water tagging – an accounting approach that allows a traded *water access entitlement* to retain its original characteristics when traded to a new jurisdiction and/or trading zone, rather than being converted into a form issued in the new jurisdiction and/or trading zone.

SCHEDULE B(ii): NATIONAL DEFINITIONS

Recognising the importance of a common lexicon for water use and management, the Parties recognise the desirability of adopting the following words and phrases, and their definitions, in their respective water management frameworks:

environmental and other public benefit outcomes – environmental and other public benefit outcomes are agreed as part of the water planning process, are specified in water plans and may include a number of aspects, including:

- *environmental outcomes*: maintaining ecosystem function (eg. through periodic inundation of floodplain wetlands); biodiversity, water quality; river health targets;
- *other public benefits*: mitigating pollution, public health (eg. limiting noxious algal blooms), indigenous and cultural values, recreation, fisheries, tourism, navigation and amenity values.

overallocation – refers to situations where with full development of water access entitlements in a particular system, the total volume of water able to be extracted by *entitlement holders* at a given time exceeds the *environmentally sustainable level of extraction* for that system.

overused – refers to situations where the total volume of water actually extracted for consumptive use in a particular system at a given time exceeds the *environmentally sustainable level of extraction* for that system. Overuse may arise in systems that are overallocated, or it may arise in systems where the planned allocation is exceeded due to inadequate monitoring and accounting.

reliability – the frequency with which water allocated under a *water access entitlement* is able to be supplied in full. Referred to in some jurisdictions as “high security” and general security”.

water access entitlement – a perpetual or ongoing entitlement to exclusive access to a share of water from a specified consumptive pool as defined in the relevant water plan.

water allocation – the specific volume of water allocated to water access entitlements in a given season, defined according to rules established in the relevant water plan.

SCHEDULE C NATIONAL WATER COMMISSION

The National Water Commission (NWC) will be established as follows.

Institutional Arrangements: The NWC will:

- be established by the Commonwealth as an independent statutory body;
- have the functions and responsibilities as set out below;
- be funded by the Commonwealth Government;
- have up to seven members including a Chair:
 - appointed for up to 3 years and eligible for re-appointment subject to agreement;
 - with expertise in the areas of: audit and evaluation, governance, resource economics, water resource management, freshwater ecology and hydrology; and
 - with the Commonwealth to appoint four members (including the Chair) and States and Territories to appoint three members; and
- have an office to carry out secretariat services for the Commission and to prepare or manage the preparation of draft Commission reports as directed, including:
 - an Executive Director and a small staff appointed by the Commission at its discretion;
 - the ability to make use of staff employed by a Party with the agreement of the relevant Party; and
 - the ability to use consultants.

Role: To provide advice on national water issues and, in particular, to assist with the effective implementation of the National Water Initiative (NWI) Agreement.

In particular, the NWC will provide advice to COAG on the following matters:

- a baseline assessment of water resources and governance arrangements nationally, based on existing work by the Parties and undertaking further work only where required;
- accreditation of State and Territory implementation plans developed for the NWI Agreement by each jurisdiction, in accordance with paragraph 9 of the Agreement;
- commencing in 2006-07, biennial assessments of progress with the NWI Agreement and State and Territory implementation plans, and advice on actions required to better realise the objectives and outcomes of the Agreement:
 - the third biennial assessment in 2010-11 will take the form of a comprehensive review of the Agreement;
- the performance of the water industry against national benchmarks, in areas such as irrigation efficiency, water management costs and water pricing; and
- compliance with any outstanding commitments under the 1994 COAG strategic framework for the efficient and sustainable reform of the Australian water industry;

The Parties agree to work cooperatively with the NWC including through providing open access to relevant officers and timely provision of information necessary to assist the NWC in carrying out its role.

In preparing its advice, the NWC will consider the views of stakeholders.

The NWC will provide annual reports of its activities.

All reports of the NWC will be publicly available.

Review of the NWC: In 2010-11, COAG will review the ongoing role and function of the NWC following consideration of its third biennial assessment. A report on the outcome of the review is to be tabled in each House of Parliament by the end of 2011.

SCHEDULE D: PRINCIPLES FOR REGULATORY APPROVALS FOR WATER USE AND WORKS

1. The Parties agree that regulatory approvals enabling water use at a particular site for a particular purpose will:
 - i) be consistent with water legislation and related NRM and planning legislation;
 - ii) be consistent with relevant water plans;
 - iii) take into account environmental, social and economic impacts of use, including on downstream users;
 - iv) clearly state the conditions relating to the approval, including the circumstances and processes relating to variations or terminations of the approval;
 - v) minimise application and compliance costs for applicants;
 - vi) allow for applications to be assessed to a level of detail commensurate with the level of potential impact of the proposed activity;
 - vii) have transparent and contestable processes in place to establish whether a proposed activity is to be approved; and
 - viii) have avenues for appealing approval decisions.
2. The Parties also agree that the authority responsible for regulatory approvals needs to:
 - i) be separate from water users and providers;
 - ii) have the necessary legal authority and resources to monitor and enforce the conditions of a water use or works licence; and
 - iii) have its practices benchmarked periodically with peer authorities in other jurisdictions.

SCHEDULE E: GUIDELINES FOR WATER PLANS AND PLANNING PROCESSES

1. **The following characteristics and components will guide States and Territories in preparing water plans:** Descriptions to include:
 - i) the water source or water sources covered by the plan (ie. its geographic or physical extent);
 - ii) the current health and condition of the system;
 - iii) the risks that could affect the size of the water resource and the allocation of water for consumptive use under the plan, in particular the impact of natural events such as climate change and land use change, or limitations to the state of knowledge underpinning estimates of the resource;
 - iv) the overall objectives of water allocation policies;
 - v) the knowledge base upon which decisions about allocations and requirements for the environment are being made, and an indication of how this base is to be improved during the course of the plan;
 - vi) the uses and users of the water including consideration of indigenous water use;
 - vii) the *environmental and other public benefit outcomes* proposed during the life of the plan, and the water management arrangements required to meet those outcomes;
 - viii) the estimated *reliability* of the water access entitlement and rules on how the consumptive pool is to be dispersed between the different categories of entitlements within the plan;
 - ix) the rates, times and circumstances under which water may be taken from the water sources in the area, or the quantity of water that may be taken from the water sources in the area or delivered through the area; and
 - x) conditions to which entitlements and approvals having effect within the area covered by the plan are to be subject, including monitoring and reporting requirements, minimising impacts on third parties and the environment, and complying with site-use conditions.
2. Where systems are found to be *overallocated* or *overused*, the relevant plan should set out a pathway to correct the *overallocation* or *overuse* (paragraphs 41 to 45 refers).
3. A plan duration should be consistent with the level of knowledge and development of the particular water source; and
4. In the case of ongoing plans, there should be a review process that allows for changes to be made in light of improved knowledge.
5. Further consideration to *include*:
 - i) relevant *regional natural resource management plans* and cross jurisdictional plans, where applicable;
 - ii) an assessment of the level of connectivity between surface (including overland flow) and groundwater systems

- iii) impacts on water users and the environment that the plan may have downstream (including estuaries) or out of its area of coverage, within or across jurisdictions;
 - iv) water interception activities as indicated in paragraphs 52-54;
6. Water planning processes include:
- i) consultation with stakeholders including those within or downstream of the plan area;
 - ii) the application of the best available scientific knowledge and, consistent with the level of knowledge and resource use, socio-economic analyses;
 - iii) adequate opportunity for consumptive use, environmental, cultural, and other public benefit issues to be identified and considered in an open and transparent way;
 - iv) reference to broader regional natural resource management planning processes; and
 - v) consideration of, and synchronisation with, cross-jurisdictional water planning cycles.

SCHEDULE F: GUIDELINES FOR WATER REGISTRIES

The Parties agree that water registers will be established in each State and Territory and will:

1. contain records of all water access entitlements in that jurisdiction, and trades of those entitlements, including their location;
2. be of sufficient standard to achieve the characteristics of secure water access entitlements contained in the Agreement;
3. contain protocols for the protection of third party interests that:
 - (i) require the holder of a registered security interest to be notified prior to any proposed dealings in relation to the water entitlement, and requiring the consent of such interests to any proposed transfers;
 - (ii) allow only authorised dealings;
 - (iii) require the registration of permanent transfers of the water entitlement and encumbrances that affect the entitlement, such as mortgages and other security interests;
 - (iv) enable lenders to procure the registration of their interest independently of the holder of the entitlement (to ensure the rights of the entitlement-holder are sufficiently protected);
 - (v) prioritise competing dealings;
 - (vi) manage time lags between date of lodgement for registration and actual registration of dealings, as such time lags may affect priorities; and
 - (vii) allow for the discharge of the security interest, in conjunction with the transfer of the entitlement to a new registered holder;
 - (viii) ensure that lenders are only affected by a subsequently registered interest where the lender has consented to the subsequent dealing;
 - (ix) assist in the process of identifying water specific or unregistered interests.
4. be administered pursuant to certain procedures and protocols, based on land title office manuals and guidelines that exist in various States and Territories that seek to minimise transaction costs for market participants;
5. be publicly accessible, preferably over the internet, and include information such as the prices of trades and the identity of entitlement holders; and
6. enable resource managers to monitor and accumulate trade and water use volumes accrued under water entitlements in a separate water accounting system.

SCHEDULE G PRINCIPLES FOR TRADING RULES

The Parties agree that water trading rules will be established consistent with the principles below.

1. Water access entitlements may be traded either permanently, through lease arrangements or through other trading options that may evolve over time where water systems are physically shared or hydrologic connections and water supply considerations would permit water trading.
2. All trades should be recorded on a water register (Schedule E refers).
3. Restrictions on extraction, diversion or use of water resulting from a trade can only be used to manage:
 - i) environmental impacts, including impacts on ecosystems that depend on underground water;
 - ii) hydrological, water quality and hydrogeological impacts;
 - iii) delivery constraints;
 - iv) impacts on geographical features (such as river and aquifer integrity); or
 - v) features of major indigenous, cultural heritage or spiritual significance.
4. A trade may be refused on the basis that it is inconsistent with the relevant water plan.
5. Trades must not generally result in sustainable yields being exceeded. That is, trades shall generally not cause an increase in commitments to take water from water sources or parts of water sources or increase seasonal reversals in flow regimes above sustainable levels identified in relevant water plans such that environmental water or water dependent ecosystems are adversely affected;
6. Trades within overallocated water sources (including groundwater sources) may be permitted in some cases subject to conditions to manage long-term impacts on the environment and other users;
7. Where necessary, water authorities will facilitate trade by specifying trading zones and providing related information such as the exchange rates to be applied to trades in water allocations to:
 - i) adjust for the effects of the transfer on hydrology or supply security (transmission losses) or reliability; and
 - ii) reflect transfers between different classes of water sources, unregulated streams, regulated streams, supplemented streams, groundwater systems and licensed runoff harvesting dams.
8. Water trading zones, including groundwater trading zones, should be defined in terms of the ability to change the point of extraction of the water from one place to another, and protection of the environment. The volume of delivery losses in supplemented systems that provide opportunistic environmental flows will be estimated and taken into account when determining the maximum volume of water that may be traded out of a trading zone.
9. Exchange rates will not be used to achieve other outcomes such as to alter the balance between economic use and environmental protection or to reduce overall water use.

10. Trade in water allocations may occur within common aquifers or surface water flow systems consistent with water plans.
11. Trade from a licensed runoff harvesting dam (ie. not a small farm dam) to a river may occur subject to:
 - i) a reduction in dam capacity consistent with the transferred water entitlement;
 - ii) retention of sufficient capacity to accommodate evaporative and infiltration losses; or
 - iii) conditions specified in water plans to protect the environment.