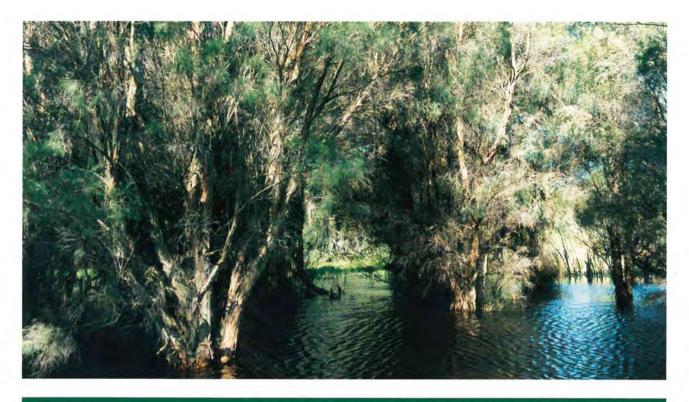


# COAG WATER ALLOCATION AND TRADING INITIATIVES

# A Context Paper for Western Australian Reform Proposals



WATER REFORM SERIES

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# 1. Origins of Allocation Reform

Western Australia is reforming programs for water allocation, water entitlements and trading in entitlements. Need for this arises from:

- the expanding social, economic and environmental issues of sustainable water use and development as demand increases rapidly in the State;
- the need for keeping water resources management abreast or ahead of those issues;
- the fact that the State's basic laws underpinning management of water resources management were made in a different era when many such issues were not evident;
- the inclusion of allocation and trading reforms as one of the more significant elements of the 'Council of Australian Governments' National Water Reform Framework Agreement, 1994.

The attachment of the Water Reform Framework to the National Competition Policy has given added urgency to introduce reforms in allocation and trading of water entitlements. This is because many of the desirable reforms are also binding commitments in the Competition Policy Agreement. These commitments must be met by December 1998 or heavy economic sanctions may be applied by the Federal government.

# **1.1 State Developments Leading to Allocation Reform**

The limitations of the *Rights in Water and Irrigation Act*, the Act underpinning water allocation, have become increasingly apparent. For example, the Act makes no reference to the water needs of the environment, a major factor in the water resource planning and management decisions of today.

The right to use water is managed through licensing. The licence provides a right to use water for a defined purpose, is linked to a defined parcel of land and is not directly transferable. This system has perpetuated traditional water use practices and has restricted opportunity for the market to reward efficient water use, or to encourage transactions which reallocate water to newer and higher value uses. While competition for water resources has not been as great as in other States, the need to introduce an efficient process for resource reallocation has become increasingly important in recent years.

The concept of a trading system in rights to use water (water entitlements) has been a topic of water allocation reform for more than 15 years in Western Australia. It has been discussed extensively with stakeholders in particular areas where competition for water resources is high. However, tradable water entitlements have yet to be given a comprehensive legal framework in Western Australia. Reform of water resources law to allow such transactions between users is now well overdue.

Management of groundwater has been a particularly important issue in this State. Growth in use of groundwater in Western Australia has been spectacular over the past 20 years. Many parts of the world have a history of poorly managed exploitation of groundwater in such circumstances. However, this State, so far, has managed to achieve good sustainable outcomes which benefit both economic development and public trust objectives.

In response to the growing water demand and the need to ensure sustainable use, many non legislative changes to water resources planning, licensing policy and associated procedures have been introduced over the past decade. These have included:

- regional and local allocation and management plans to establish sustainable baselines;
- scientific groundwater and wetlands management criteria;
- incorporation of environmental and social provisions in sustainable limits for licensed withdrawals with particular attention to the issues of groundwater;
- expansion of the use of local licensing committees;
- active consultation with public irrigation users leading to devolution of supply management and an anticipation of processes for tradable entitlements;
- initiation of research for water resources law reform;

- establishment of the Water and Rivers Commission and transfer of allocation powers to its Board and away from the water service provider functions;
- commercialisation of water service provision and transfer of Water Corporation entitlements to a licensing system, as with other users.

The dominant aim of these developments has been to give maximum confidence to users and the community that withdrawals are sustainable and well managed in terms of their economic and social use and in respect to environmental goals.

These significant developments in allocation processes need consolidation and further progress.

### **1.2 COAG National Competition Policy** Water Reform Commitment - Allocation

In 1994, the State Premiers and Prime Minister in COAG (Council of Australian Governments) agreed -

... "that action needs to be taken to arrest the widespread natural resource degradation in all jurisdictions occasioned, in part, by water use and that a package of measures is required to address the economic, environmental and social implications of future water reform," and

... "to implement a strategic framework to achieve an efficient and sustainable water industry..."

In its 1994 decisions, COAG agreed to a National Framework for Water Reform in which provisions for comprehensive systems of water allocation and tradable water entitlements were key elements (see Appendix 1).

In 1995 COAG attached the foregoing water reform framework to the National Competition Policy. This made delivery of the allocation and trading reforms by December 1998 a legally binding agreement in which the State will miss out on very substantial annual competition payments if found in default. The key binding elements of the agreement in terms of allocation are:

- **implement comprehensive systems** of allocation with clear specification of the water entitlement
- · separate water entitlement from land title
- **use best science** for setting sustainable environmental provisions
- arrange a better balance of withdrawal and environmental use in stressed or over-allocated rivers
- consider environmental contingency provisions as a precaution against unnecessary environmental risk
- **institute trading arrangements** in water allocation and facilitate trading
- establish consistency where cross border trading is possible.

Other provisions of the National Framework also have some bearing on allocation. Most particularly the cost recovery principles have bearing on the issue of licence charges associated with water entitlements. Recovery of resource management costs associated with allocations is mandatory in relation to water supply headworks, and it was mandatory for ARMCANZ to consider and give policy advice on cost recovery associated with groundwater use.

### **1.3 ARMCANZ National Policy Guidelines**

Following agreement on the Water Reform Framework and its incorporation into the Competition Policy in 1995, the national Council of Ministers responsible for water resources (ARMCANZ) established policies designed to aid consistency and assist States to implement the allocation reforms soundly and effectively. ARMCANZ also collaborated with the Environmental Ministers (ANZECC) to establish principles for the provision of water for ecosystems.

Two policy guidelines were established.

The first guideline "A National Framework for the Implementation of Property Rights in Water", was published by ARMCANZ in 1995. The guideline gave particular attention to establishing a basis for tradable entitlements and emphasised the **importance of planning systems behind the definition of entitlements.** The guiding principles of that document, endorsed by ARMCANZ are attached (Appendix 2).

The second guideline, "National Principles for the Provision of Water for Ecosystems" was published by ARMCANZ and ANZECC in 1996. The principles were focused on helping define a system of environmental provisions within a comprehensive system of water allocation designed to sustain ecological processes and biodiversity. The policies also addressed over committed systems and a principle of taking action, including reallocation, where environmental water requirements cannot be met. The principles, endorsed by the Councils, are attached (Appendix 3).

In 1996, as a specific requirement of the Competition Policy, ARMCANZ produced policy advice on groundwater. This advice was subsequently agreed and endorsed by COAG as part of the Water Reform Framework 1996. This latter agreement is a serious commitment by State governments, but is outside the deadlines and sanctions of the Competition Policy. **Significant among the policy commitments of this groundwater policy is a commitment to cost recovery.** The policy agreement is attached in Appendix 4.

# **1.4 Relevant Developments in Other States and Countries**

Problems experienced outside Western Australia can also be instructive, especially where they have not yet occurred on any significant scale locally.

One such jurisdiction where some hard and useful lessons have been learned over a long period of water market operation is California. There, a long history of litigation over water has led to some useful principles in reconciling market and property rights with public trust matters such as environmental sustainability.

In Australia, New South Wales has widespread problems of over - commitment. Measures being adopted there to restore balance are of interest. The ARMCANZ Task Force on COAG Water Reform is hoping to use this experience as an aid to identifying some national implementation principles for use in over-committed systems which are environmentally stressed.

# 2. A Comprehensive System of Allocation-Foundations & Structure

### 2.1 Structural Elements and Dependencies

A comprehensive system of allocation and trading provides fair and workable processes to balance society's broad and public trust objectives including sustainability, environmental health and economic efficiencies with rights for individual and enterprise water withdrawals and use.

Such a system has many interrelated elements, described in the sections following.

## 2.2 Water Rights Laws

The foundation of a comprehensive system is laws in water rights.

Australian and Western Australian laws in water rights are based in English common law. There is a substantial history of application and precedent, and in the main has served us reasonably well. However, many issues in contemporary water resources management were not anticipated when the basic laws were framed.

As noted earlier, many changes to allocation, planning and licensing processes have been made without recourse to legislative change.

However, soundly based, fully effective implementation of reform in water allocation, suitable for positive progress into the future, needs the updating of water rights law.

A program of research in water law reform was initiated in Western Australia in 1996. Some results are available from this research and will be of assistance in such updating. For those wishing or needing more background in State water resources law a report on "Legal Aspects of Water Resource Management in Western Australia" is in publication through the Water and Rivers Commission.

*Water rights law* is the basic foundation of the system, but no amount of legislation by itself can ensure sustainable rights to users or satisfaction of public trust issues such as environmental, sustainability. Other important and complementary parts of the foundation in a comprehensive system are the *policies* and *plans* which relate the laws to specific hydrological, environmental, economic and social objectives and conditions. On top of this foundation of law, policy and plans is the functional structure of *resource management*, *administration* and *markets* through which the sustainability of individual rights, public trust objectives of community interest and environmental health are supported and balanced (see Fig. 1).

Each of these structural elements will see adjustment and adaptation in the reform program. Some brief discussion of their relevance follows.

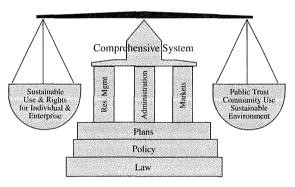


Figure 1: Foundation of a Balanced Allocation System

# 2.3 Policy and Plans

Development in policy and planning has been an active field in Western Australia over the past decade. It has been motivated by the same needs as are driving the national water reform program and by the State's opportunity, no longer commonplace on the global scene, to avoid over commitment by good forward planning.

Although popularly regarded as a State with limited water, Western Australia has a lower level of water resource exploitation than States on the east coast and South Australia. This has given opportunity to lay down a strong base of planning and policy to have resources allocated sustainably from the outset rather than experiencing all the socio-political pain and difficulties of having to restore sustainable draws after unplanned over-commitment has occurred. Nowhere is such practice more important than with groundwater, which is a major part of the Western Australia water economy, and where over-commitment can happen more easily, and with more insidious results, than with surface water resources.



The planning and policy base which has evolved in Western Australia, and which reform will seek to refine and consolidate, is a comparatively sophisticated one. It is based strongly on the policy outlook that sustainability is the key to both user and environmental confidence. It also recognises that sustainability is not just an issue of setting limits on withdrawal, but needs to influence wider State planning and development to act to conserve the quality of water resources in relation to their assigned uses.

Given this outlook, water allocation is commonly described in Western Australia as a three tiered process:

- regional (and sub-regional) plans identifying beneficial uses to be protected for socio-economic purposes and for maintenance of ecosystems and biodiversity;
- management plans for specific resources setting specific rules for sustainable withdrawal from a source and, in the future, defining physical/environmental limitations on the market transfers of water entitlements;
- user licensing, within the planning framework, to define conditions of use to ensure a sustainable regime for the specific source, including efficient water use.

This policy and planning process has been supported by active processes of scientific investigation and consultation which are also being consolidated through the reform program.

# **2.4 Resource Management - Assessment, Monitoring and Action**

Sustainable water entitlements need to be supported by a continuing program of active management of resources including resource assessments and periodic reviews, monitoring of resource behaviour and investigation of problems. Furthermore, appropriate action must be taken where sustainability, purpose of use or the environment are threatened by unforseen or conflicting activity.

This active management of allocation is commonly taken for granted in water reform discussions. However, its continuing quality and improvement is one of the vital requirements if any water entitlement is to have continuing worth. These water resource management processes must be adequate to recognise the potential impacts of a range of external influences ranging from drought and climate variation or change, to polluting activities or catchment changes which affect the recharge/discharge processes.

The institutional reforms in water administration in Western Australia are designed to deliver these needs efficiently and effectively. However, resource management does incur costs and the matter of cost recovery, through appropriate charging, has been brought to the fore by the COAG Water Reform Framework /Competition Policy agreement, and has been further developed by COAG agreements outside the Competition Policy (see Appendix 4).

# **2.5 Markets and Trading in Water Entitlements**

The use of markets to help move scarce water resources, without coercion, to more efficient and higher value uses has to date been very limited in Western Australia.

Some trading on a short term basis has been practised for many years between users in public irrigation systems. However, there is potential, in the not too distant future, for users in groundwater systems to be interested in trading and for trading to include permanent transfers, possibly to other classes of users.

Tradable water entitlements are a central and binding commitment of the COAG Water Reform and must be enabled, by December 1998, for sources where utilisation is high enough to create demand for trade.

Movement to tradable entitlements is a world-wide development in water management being encouraged by international bodies, such as the World Bank, particularly in countries experiencing water deficiency. In a few parts of the world, and perhaps most significantly in California, there is much longer experience which can be drawn upon to maximise the benefit as reform progresses in this State.

Proper provision in other parts of the comprehensive allocation system are essential prerequisites to effective market operation. Establishment of market rules consistent with specific hydrological and environmental circumstances will need to be created in management plans for each source where trading is to be provided in response to potential future demand. Rules for tenure of licence and adjustment of the allocated amount where sustainability is threatened (due to drought, environmental stress, or climate variation/change), need to be given a clear basis in plans, law and licence conditions.

#### 2.6 Administration and Regulation

Administration and regulation necessary to support both water entitlements systems and a water market include processes for:

- consideration of licence applications;
- issue and transfer of licences;
- monitoring and ensuring compliance including sanctions if necessary;
- handling appeals;
- adjusting conditions or quantum (the allocated amount) of licences where the resource is stressed by drought or change.

For these and other exercise of administrative powers in allocation, suitable independence and transparency are a necessary part of accountability.

State water reform has moved these responsibilities and powers, along with other aspects of allocation, away from the service providers and to the Water and Rivers Commission. The Board of the Water and Rivers Commission has been appointed to give independence and accountability as the decision making body in water licences and as the body accountable to the Minister for preparing allocation plans. Appeals are to the Minister who, if agreement cannot be achieved through mediation, normally establishes a tribunal to advise him on the appeal in relation to established principles and policy.

Commonly, consultation and transparency in licence administration are also enhanced by the use of Advisory Committees for sources which have many "competing" users. These committees are usually drawn from local users and local government. They may have members from other departments such as Environmental Protection, if considered appropriate and necessary.

Use has also been made of an Allocation Committee, created by the Board to give additional expert, consistent and independent review to plans, policy and difficult licensing decisions with a Statewide perspective. Continued refinement to ensure public confidence in administration of allocation will be important to the reform process. Consistent administration will be important to community and market confidence. However, the introduction of a market will also help administration by transferring some contentious reallocation tasks from administrators to the market place.

# 3. Implementing Allocation Reform in WA

The allocation and trading reform is one of the central binding commitments of the COAG Water Reform Framework and Competition Policy. It is also one of the more complex reforms from the point of view of discussion and implementation.

Many of the reforms occurring as a result of the COAG agreement are essentially consolidations, refinements, or extensions of established practice. The exceptions are trading in water entitlements and cost recovery.

However, the complexity of detail in existing water rights law and the many facets of the existing water allocation system will make communication about the necessary changes and related dialogue on their effects very demanding.

It will be important in that dialogue to understand that certain reforms are not only desirable but are compulsory under the Competition Policy. With such reforms it is the detail and manner of implementation which is open to debate but not the basic fact of implementation.

# 3.1 Binding Components Under Competition Policy

The binding elements of allocation reform under the Competition Policy are those summarised in Section 1.2 and set out in an extract from the Agreement in Appendix 1.

Establishment of tradable entitlements is dominant among these elements in terms of change from existing practice, and in terms of urgency (because it would be most satisfactorily implemented through legislative amendment which involves greater lead time).

#### 3.2 Negotiable Components of Reform

Although the fact of COAG reforms in section 3.1 is not negotiable, the detail of implementation is open for discussion to achieve the best possible implementation appropriate for State circumstances.

Also, there are associated reforms, such as some proposals in water rights law reform, which although highly desirable are not tied to the Competition Policy and have more room for negotiation.

# 4. Discussion Papers Outlining Details of Reform Proposals

The dialogue with stakeholders in implementing the Allocation and Trading Reforms will be helped by the release of discussion papers outlining draft reform proposals.

A series of Water Reform discussion papers will be prepared and comments sought wherever this is seen as helpful along the path of implementation. However, the following discussion papers are either currently in preparation or are already issued.

#### CONTEXT

 (a.) COAG Water Allocation and Trading Initiatives — A Context Paper for Western Australian Reform Proposals. (This Paper)

#### WATER LAW

- (a.) Water Reform in Western Australia Allocation and Transfer of Rights to Use of Water
- (b.) Objectives to be Included in the Water Resources Law

#### PLANNING AND POLICY

- (a.) A Water Resource Allocation Planning System and Structure for Tradable Water Entitlements
- (b.) Environmental Water Provisions

# 5. Consultation Arrangements

Consultation with the community is an essential part of the process for detailing and implementing water reform in relation to water allocation and trading.

The following sections summarise plans for consultation with groups, organisations or individuals within the community who wish to take part.

### 5.1 Aims of Consultation

The aims of the program are:

- *to inform* sections of the community and water users with an interest in water allocation of the draft reform proposals;
- to solicit community and user views on the reforms;
- *to identify* issues of community and user concern which need to be addressed;
- *to modify* proposals in response to community input, consistent with the intent of the COAG reform policy and in ways which promote improved water resources management.

### 5.2 Consultation to June 1997

The general principles and proposals in water allocation and trading reform will in various degrees already be familiar to many or most water users in the community. They will also be familiar to many community groups and associations, including user associations and environmental groups. The principles have been a matter of dialogue for many years, particularly in meetings, discussions and papers supported by the former Water Authority and Water Resources Council.

More recently such consultation has continued on an issue basis, mostly between the Water and Rivers Commission and irrigators and suppliers. There is now a need to rejuvenate such dialogue around specific reform proposals.

### 5.3 Opportunities for Consultation

Consultation is being coordinated by the Commission. Consultation is to concentrate on the resource management principles and legislative changes necessary to meet the requirements of the COAG Water Reform Policy Framework. These proposals are included in the paper entitled *Water Reform in Western Australia* — *Allocation and Transfer of Rights to Use of Water*. Water Reform Discussion Paper No., WRS 1 July 1997.

The Commission will make all the discussion papers widely available and will welcome community and user comment on all aspects of the reforms.

The planning processes and administrative arrangements that support the resource management principles and legislative powers will be particularly important to many stakeholder groups. Discussion on these aspects can proceed over a longer time frame.

Seminars are planned to introduce the reforms, hear initial reactions to the draft proposals from key stakeholder groups, and plan subsequent consultation, such as workshops and special stakeholder meetings. Consultation will be conducted in regional centres throughout the State where water resource allocation is a major issue.

As papers are released the Commission will distribute copies to all people who have expressed an interest in contributing during the consultation phase. Written comment and direct input at workshops will be encouraged. The Commission will also arrange specific consultation with peak industry groups and major stakeholder organisations.

The Commission will welcome any community or user groups who wish to organise and arrange group discussion and feedback.

## **5.4 Contacts for Further Information**

The following contacts are available for:

- general enquiries;
- requests for copies of discussion papers;
- timetables for information and workshop sessions;
- arranging specialist discussion sessions.

#### Mail

Water and Rivers Commission Attention: Rod Banyard Manager, Strategic Projects Policy and Planning Division 3 Plain Street, EAST PERTH WA 6004 E-Mail Address water.reform@wrc.gov.wa.au

Internet Home Page http://www.wrc.wa.gov.au/water\_reform

Phone Contact Brigit Cosgrove (08) 9278 0300

A final report will be published and made available at the end of the consultation period.

# APPENDIX 1 COAG Framework Agreement on Water Resource Policy — February 25, 1994

# **Extract of Clauses Relevant to Allocation and Trading**

## 3. In relation to pricing:

### (a) groundwater

(i) advice to jurisdictions on groundwater management and pricing

that management arrangements relating to groundwater be considered by Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) by early 1995 and advice from such considerations be provided to individual jurisdictions and the report be provided to COAG;

# 4. In relation to water allocations or entitlements:

# (a) comprehensive water allocation systems backed by property rights separate from land

the State Government members of the Council, would implement comprehensive systems of water allocations or entitlements backed by separation of water property rights from land title and clear specification of entitlements in terms of ownership, volume, reliability, transferability and, if appropriate, quality,

### (b) formal allocations including environment

where they have not already done so, States, would give priority to formally determining allocations or entitlements to water, including allocations for the environment as a legitimate user of water,

# (c) regard to ANZECC/ARMCANZ work on environmental allocation

in allocating water to the environment, member governments would have regard to the work undertaken by ARMCANZ and Australian and New Zealand Environment and Conservation Council (ANZECC) in this area,

# (d) best scientific information for environment and restore health in over-allocated rivers

that the environmental requirements, wherever possible, will be determined on the best scientific information available and have regard to the inter-temporal and inter-spatial water needs, required to maintain health and viability of river systems and groundwater basins.

In cases where river systems have been over-allocated, or are deemed to be stressed, arrangements will be instituted and substantial progress made by 1998 to provide a better balance in water resource use including appropriate allocations to the environment in order to enhance/restore the health of river systems.

### (e) environmental contingency allocations

in undertaking this work, jurisdictions would consider establishing environmental contingency allocations which provide for a review of the allocations five years after they have been determined, and

# (f) environmental requirements before development

where significant future activity or dam construction is contemplated, appropriate assessments would be undertaken to, inter alia, allow natural resource managers to satisfy themselves that the environmental requirements of the river systems would be adequately met before any harvesting of the water resource occurs.

# 5. In relation to trading in water allocations or entitlements:

#### (a) water use to maximise national welfare

that water be used to maximise its contribution to national income and welfare, within the social, physical and ecological constraints of catchments,

#### (b) trading arrangements be instituted by 1998

where it is not already the case, that trading arrangements in water allocations or entitlements be instituted once the entitlement arrangements have been settled. This should occur no later than 1998,

#### (c) consistent cross border trading arrangements

where cross-border trading is possible, that the trading arrangements be consistent and facilitate cross-border sales where this is socially, physically and ecologically sustainable, and

#### (d) develop institutional arrangements for trading

that individual jurisdictions would develop, where they do not already exist, the necessary institutional arrangements, from a natural resource management perspective, to facilitate trade in water, with the provision that in the Murray-Darling Basin the Murray-Darling Basin Commission be satisfied as to the sustainability of proposed trading transactions.

# APPENDIX 2 Extract from ARMCANZ Policy Position Paper, Water Allocations and Entitlements: A National Framework for the Implementation of Property Rights in Water — October 1995

## Principles Establishing a Strategic Framework for the Implementation of Property Rights in Water

- 1.That all consumptive and non-consumptive water entitlements be allocated and managed in accordance with comprehensive planning systems and based on full basin-wide hydrologic assessment of the resource.
- 2. That water entitlements and institutional arrangements be structured so as not to impede the effective operation of water markets and such that, as far as practible, trading options associated with property rights in water reside with the individual end users of water.
- 3. That water entitlements be clearly specified in terms of:
- rights and conditions of ownership tenure;
- share of natural resource being allocated (including probability of occurrence);
- details of agreed standards of any commercial services to be delivered;
- · constraints to and rules on transferability; and
- constraints to resource use or access.
- 4. That acceptable rules on the holding and trading of environmental flow entitlements be resolved by jurisdictions at the same time as determining the appropriate balance between consumptive and non-consumptive uses of water.

- 5. That, where interstate trading of water entitlements is possible, jurisdictions cooperatively develop on a catchment basis compatible approaches for (or at least clear conversion mechanisms between):
- planning systems and basin-wide hydrologic assessment methods;
- water entitlement specifications;
- · pricing and asset valuation arrangements;
- · water entitlement trading arrangements; and
- provisions for environmental and other instream values.
- 6. That in implementing and initialising property rights in water, jurisdictions call on water users, interest groups and the general community to be involved as partners in catchment planning processes that affect the future allocation and management of water entitlements.
- 7. That governments give urgent priority to establishing the regulatory arrangements that are necessary to implement and support the strategic framework.

# APPENDIX 3 Extract from ARMCANZ/ANZECC Policy Position Paper, National Principles for the Provision of Water for Ecosystems — July 1996

### Goal

The goal for providing water for the environment is to sustain and where necessary restore ecological processes and biodiversity of water dependent ecosystems.

## **Principles**

### Basic premise of principles

1. River regulation and/or consumptive use should be recognised as potentially impacting on ecological values.

#### Determining environmental water provisions

2. Provision of water for ecosystems should be on the basis of the best scientific information available on the water regimes necessary to sustain the ecological values of water dependent ecosystems.

### Provision of water for ecosystems

- 1. Environmental water provisions should be legally recognised.
- 2. In systems where there are existing users, provision of water for ecosystems should go as far as possible to meet the water regime necessary to sustain the ecological values of aquatic ecosystems whilst recognising the existing rights of other water users.
- 3. Where environmental water requirements cannot be met due to existing uses, action (including reallocation) should be taken to meet environmental needs.
- 4. Further allocation of water for any use should only be on the basis that natural ecological processes and biodiversity are sustained (i.e., ecological values are sustained).

#### Management of environmental water allocations

7. Accountabilities in all aspects of management of environmental water provisions should be transparent and clearly defined. 8. Environmental water provisions should be responsive to monitoring and improvements in understanding of environmental water requirements.

### Other uses

- 9. All water uses should be managed in a manner which recognises ecological values.
- 10.Appropriate demand management and water pricing strategies should be used to assist in sustaining ecological values of water resources.

### Further Research

11.Strategic and applied research to improve understanding of environmental water requirements is essential.

### **Community Involvement**

12.All relevant environmental, social and economic stakeholders will be involved in water allocation planning and decision-making on environmental water provisions.

# APPENDIX 4 Extract from ARMCANZ/COAG National Water Framework, 1996. Policy Position Paper for Advice to States & Territories, A National Framework for Improved Groundwater Management in Australia — December 1996

## **Background to this Extract**

Produced as a requirement of the Water Reform Framework 1994, and the Competition Policy, a policy paper on groundwater was endorsed by ARMCANZ and COAG in 1996 as part of the Water Reform Framework 1996. The 1996 Framework reflected agreement by COAG to ongoing water reforms. However, such reforms are not part of the Competition Policy contract and do not affect rewards and sanctions of the Competition Policy.

This Extract is the Executive Summary and two of 12 specific recommendations on groundwater from the full paper.

### **Executive Summary**

The Council of Australian Governments has endorsed a wide ranging program of reform of the water industry. This program specifically includes groundwater in recognition of the economic and social importance of the resource and also because of major potential impacts on the wider natural resource basis.

The fundamental importance of groundwater across Australia for irrigation, urban, industrial, domestic and stock uses cannot be over-emphasised. Across the nation, however, there are many groundwater management practices which differ from the spirit of intent of the COAG Water Reform Framework Agreement.

A joint NLP/ARMCANZ report "Towards a National Groundwater Management Policy and Practice, Nov. 1995" addressed gaps and makes a range of recommendations aimed at improving groundwater management.

From the above report this policy discussion paper sets out specific advice to jurisdictions on appropriate arrangements to ensure that groundwater management practices are consistent with the intent of the Framework Agreement and identifies a range of key reforms related directly to the COAG reform agenda:

#### **Policy and Management**

- achievement of efficient sustainable use of groundwater in accordance with a nationally agreed approach to sustainability;
- public identification of the sustainable yield, allocation and use of aquifers, with allocations limited to sustainable levels where appropriate;
- removing restrictions on groundwater use imposed by inefficiently designed or constructed wells;
- establishment of systems to support transferability of groundwater entitlements;
- improved integration of groundwater and surface water management;
- expansion of the National Driller's licensing system;

#### Data and Information

- provision of adequate funding for groundwater investigation in high priority areas;
- requirements for drillers to provide well construction data for all wells drilled;
- management and licensing of high yielding wells;

#### Pricing

 introduction of arrangements to provide for full recovery of direct costs of groundwater management with consideration being given to consequences of differential pricing between surface and groundwater where relevant;

#### **Other Matters**

- identification by the Federal Government of its full costs of groundwater related activities;
- elimination of conflict of interest situations within Government institutional arrangements;
- assessment of opportunities for development of groundwater education programs.



#### **Recommendation 3**

Groundwater and surface water resource management should be better integrated, including approaches to pricing (especially adjacent to public surface water regulated schemes), water allocations and trading to ensure consistency.

#### **Recommendation 9**

The full cost of groundwater management should be identified by the States.

The cost of direct management activities should be recovered from users and, within the context of the overall water cycle, appropriate apportionment of indirect costs be given consideration.

Outside urban water supplies, the remaining subsidies should be transparent where full cost recovery is not achievable. The necessary charges should be implemented progressively by 2001 and particular attention should be given to timely resolution where, and as, trading in groundwater is likely to be demanded by the market.

Public communication on these matters will be important.

With reference to Recommendation 3 above, States should give consideration to the consequences of differential pricing between surface water and groundwater.

States should examine means for meeting the indirect costs of groundwater management, including investigations which are not appropriately apportioned to users; options may include a direct but transparent subsidy.

Recovery of management costs from domestic and stock well owners is to be considered by States as part of their overall cost recovery strategy.

# Notes

