

B10.1 Introduction

B10.1.1 Water Reform Commitments

B10.1.1.1 Background

Australia is now in its sixth year of implementing significant reforms to the water industry. The water resources policy agreed to by all Australian governments has and will continue to fundamentally change the way water is allocated, delivered and paid for. The reforms traverse the urban and rural sectors of the industry, including wastewater. They embrace ecological and economic objectives to ensure water is used sustainably and efficiently.

Storing, transporting, treating and disposing of water is an industry as much as any other utility. The water industry's assets are of a similar magnitude to the electricity, telecommunications and airline sectors. Provision of water and wastewater services to the largest urban areas in Australia consumes some \$41 billion of assets, and providers accrue \$4.4 billion in revenue from domestic customers and \$1 billion in profits for government owners. Irrigation water is estimated to add over \$3 billion to Australia's annual agricultural output.

The way in which water is stored, extracted, delivered, used and disposed of can have profound ecological and economic effects. Residential consumers who do not pay for water according to the amount they use have few incentives to use water wisely such as mending a leaking tap. Where service providers seeking to maximise profits also have responsibility for deciding how to manage a water catchment, economic pressures may impact on the catchments' health. The disposal of wastewater and stormwater pollutants in ocean outfalls has caused considerable concern and debate amongst affected communities. The use of water needs to recognise that the value of water as an input to agricultural industries varies from \$70 a megalitre in rice production to about \$200 in the sugar industry and in excess of \$600 for vegetable growers.

Salinity provides perhaps the most graphic example of the interplay of water use and the demands of modern Australia. Salt exists naturally in the soil. However, rising water tables, caused in part by land clearing and irrigation, has led to a \$700 million loss in land capital values, an estimated \$130 million lost in annual agricultural production. There are 2.5 million hectares of severely salt-affected land today and potentially more than 15 million hectares in 50 years. Salinity damages land and freshwaters, affecting the diversity and number of many native plants and animals in affected ecosystems. It has resulted in reduced water quality for downstream users, water that may be too salty to drink and salt affected irrigation water that may the limit type of crops which can be grown. Salinity damages roads and buildings and corrodes pipes and fittings.

B10.1.1.2 The Council of Australian Governments' water reform policy

In 1994, the Council of Australian Governments (COAG), agreeing *'that action needs to be taken to arrest 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'*, adopted a water reform framework (the strategic framework) to *'achieve an efficient and sustainable water industry'*. The strategic framework recognised the diverse structures that existed across the water industry while providing an integrated approach to water resource management.

A meeting of the National Competition Council, High Level Steering Group, Committee on Regulatory Reform and representatives of the Australian and New Zealand Environment and Conservation Council in January 1999 (the Tripartite meeting) clarified elements of the strategic framework relating to institutional arrangements, pricing and groundwater. The Tripartite meeting also proposed an extension to the timeframe for jurisdictions to implement water allocations and trading reforms. The Tripartite meeting reflected the ongoing commitment of all jurisdictions to reforms while highlighting the complexity in implementing various strategic framework commitments. These clarifications have been approved by Senior Officials and presented by the Prime Minister to the Council of Australian Governments. The National Competition Council has assessed progress of States and Territories on the basis of these adjustments to the strategic framework.

The strategic framework includes the following commitments:

- pricing reform based on the principles of consumption-based pricing, full-cost recovery and removal or publication of subsidies and cross-subsidies. For urban water services the achievement of this reform is to be achieved by 1998 and for rural water supply by 2001;
- implementation of water allocations or entitlements, including allocations for the environment as a legitimate water user, separated from land title. This will facilitate trade of water and its reallocation to higher value uses. The strategic framework originally envisaged that arrangements would be in place and considerable progress made by 1998. Environmental allocations for overallocated or stressed rivers are now required by 2001. Substantial completion of agreed implementation programs is required by 2005. The Council has published States' implementation programs in the assessments;
- by 1998, the structural separation of the roles of service provision from water resource management, standard setting and regulatory enforcement;
- future investment in new rural schemes or extensions to existing schemes being undertaken only after appraisal indicates it is economically viable and ecologically sustainable;
- the implementation of integrated catchment management and water quality guidelines; and
- educating Australians about the need for water reform and consulting about the way reforms will be implemented.

10.1.1.3 Some Achievements

States, Territories and local governments have achieved significant reforms in providing water and wastewater services to consumers since the strategic framework was agreed. In part, the changes are an evolutionary response to the many economic and ecological issues facing the water industry. In part, they can be attributed to the integrated approach adopted by the strategic framework to harness change across a most diverse industry. Some of the changes can also be attributed to the process of competition policy reform occurring across governments.

The Council's assessments of progress on water reform demonstrate the real commitment to ensuring a sustainable and viable water industry. What follows are some examples of reforms from across jurisdictions.

Cost Reform and Pricing

Prices are perhaps the most significant part of any provider/customer relationship. In the past water prices have not reflected the value of services provided. For example in many areas commercial customers have paid more than the cost of the services received while residential customers have paid significantly less.

Under the strategic framework States and Territories have agreed to restructure water tariffs based on the principles of consumption-based pricing, full-cost recovery, cross-subsidies between customer classes being reduced or eliminated, and remaining subsidies made transparent. While this may lead to increasing some water charges COAG considered that the impact on consumers would be offset by cost reductions from more efficient service provision.

The second tranche assessment has focussed on pricing reforms in the urban sector, including major cities, provincial centres and country towns. All jurisdictions have made progress towards their pricing commitments.

In many cases, water bills have fallen. Pricing reform across the Australian metropolitan water industry has contributed to the more than 16 per cent reduction in water and sewerage bills between 1992-1993 and 1997-1998, and a decline in operating costs of over 18 per cent. Small business water bills in Victoria have decreased by as much as two-thirds through the replacement of property value based pricing with consumption based pricing.

Customers are using less water. A 20 per cent reduction in water use in Brisbane between 1995-1996 and 1997-1998 is attributed to the adoption of metering and pay for use pricing.

Assistance is still available for those who need it. Pricing reform under the strategic framework does not mean that concessions to community groups, pensioners or those in rural or remote communities will be removed. Governments continue to provide substantial assistance to these groups transparently through clearly defined and separately funded Community Service Obligations.

Governments are looking at new projects from both a financial and environmental perspective. This will go a long way to ensuring that mistakes in water management of the past are less likely to be repeated in the future. States have undertaken detailed

assessments of new projects that have resulted in some proposed rural water schemes being found wanting either environmentally or economically, and therefore not built.

Institutional Reform

Service providers are required to deliver water and wastewater services in as commercial a manner as possible. They operate at '*arms length*' from government and are clearly accountable for their financial and operational performance. Governments' role continues through control of standard setting and regulatory functions and resource management. All institutions should have clear and non-conflicting objectives and more transparent accountability mechanisms.

Water Authorities are being broken up into service providers and regulators. In Western Australia the previous Water Authority of Western Australia became the Water Corporation on 1 January 1996. The Water and Rivers Commission was established at this time to manage and protect Western Australia's water. The Office of Water Regulation was also established to administer a licensing scheme that set standards of service for the Water Corporation and other water service providers.

Water Corporations are being given commercial objectives and providing significant dividends to governments. In 1997-1998, the 19 largest urban water service providers, serving around 13 million Australians, paid almost \$800 million to government owners. At the same time water and sewerage bills fell across the industry.

Rural communities are being involved in managing their water services. In Victoria Rural Water Authorities enter into water service agreements with Water Services Committees. Water users elect the members of these committees and the agreements cover areas including water pricing, corporate planning, investment and service delivery. Catchment Management Authorities perform rural resource management functions.

Governments are ensuring appropriate controls remain on their water businesses. In New South Wales the Independent Pricing and Regulatory Tribunal (IPART) sets prices for major urban centres and rural bulk water. The IPART process permits the public and service providers to make submissions on pricing determinations. IPART provides independence and transparency in the price setting process. Service providers are bound by the price determinations. The Independent Pricing and Regulatory Commission in the ACT provides similar integrity in setting the water service charges for ACTEW customers. Independent price oversight has also been introduced in sections of the South Australian and Tasmanian water industries.

Water Allocations and Trading

When water is scarce, clearly defining water property rights and permitting trade in those rights means water can move to its highest value use. When this occurs together with legal recognition of the needs of the environment for water, there is a strong basis on which ecologically sustainable development can proceed. People needing water can buy it from those who are not using all of their entitlement.

The co-operation of the states⁴⁸ of the Murray Darling Basin provides a good example of the integrated nature of water allocation and trading reforms.

Irrigators and other users are being given clear rights in water. A comprehensive system of water property rights separate from land and other rights has in large part been implemented in Victoria. This process has occurred over a number of years. In New South Wales, water rights for most of the Murray Darling Basin are separated from land title. South Australia has also implemented significant reforms to separate water rights from other rights.

In addition, New South Wales, Victoria and South Australia have agreed to cap their diversions from the Murray-Darling Basin to 1993-1994 levels. This was a landmark decision in natural resource management against a background of over 100 years of active development of the Basin's water resources. Queensland is looking to join the other states in capping diversions. The cap strikes a balance between consumptive and environmental needs. It helps ensure security of supply for water users. An independent audit, published by the Murray Darling Basin Commission, reports on compliance with cap commitments, recording achievements and initiatives to meet the cap.

The Murray-Darling Basin Commission has co-ordinated a pilot interstate water trading project. In an environment where no further water is available for extraction, this is permitting water to move to areas where it is highly valued.

In Victoria there was significant intrastate water trading in 1997-1998; some 20 000 ML of water was permanently transferred and another 250 000 ML water temporarily traded. A recent conservative estimate of annual gains to the New South Wales economy from water trading was about \$65 million.

Environment and water quality

The strategic framework acknowledges the importance of allowing enough water to remain in our rivers and streams to achieve a healthy sustainable riverine environment.

The problems of stressed rivers are being addressed. Different jurisdictions have each adopted their own approach towards the goal of attaining healthy rivers, streams, wetlands, groundwater systems and other water systems. To varying degrees common threads in the approaches developed include establishment of environmental flow requirements, strategies for reducing withdrawals in over-allocated systems, support for Integrated Catchment Management approaches, and implementation of the National Water Quality Management Strategy.

Local groups are involved in making decisions. In NSW, community based groups have negotiated and implemented environmental flow rules on all regulated rivers.

⁴⁸ New South Wales, Victoria, South Australia, Queensland and the Commonwealth are all party of the Murray-Darling Basin Agreement and participate in the Murray-Darling Basin Commission and Ministerial Council. The ACT participates, since 1998, in relevant affairs of the Commission and Ministerial Council.

Most unregulated rivers have been classified as to their stress and this will influence decisions such as the priority for development of management plans.

Governments are addressing water quality through whole of catchment approaches. In Victoria Catchment Management Authorities develop and co-ordinate Regional Catchment Strategies in conjunction with other stakeholders such as landcare groups and local councils. Detailed work programs address issues such as salinity, pest plants and animals and the effects of irrigation.

The National Water Quality and Management Strategy is being developed in response to growing community concern about the condition of the nation's water and the need for environmentally sustainable management. Nationally consistent approaches are being developed to address the key issues in water quality management that impact on the environment. Policies, principles and national guidelines are being drafted by specialist working groups with community input to enable the development and implementation of State and regional goals and action plans.

Public Consultation and Education

In order to gain public recognition of the need for urgent action to reform the water industry and acceptance of the solutions proposed in the strategic framework, governments have engaged in extensive consultations with the whole community, including irrigation farmers, residents, environmental groups and students.

In Western Australia, the proposed reforms to water entitlements and trading have been the subject of mailouts, public meetings and ongoing discussions stretching over some 18 months.

Waterwatch is a national community waterway monitoring and environmental education program that promotes water quality monitoring. It involves Commonwealth, State and local governments, school communities, the business sector and other organisations and creates a community ownership ethic for catchment wide land and water management. As a result of growing community participation, the program has developed into a network of more than 1 800 groups regularly monitoring at 4 000 sites across Australia, building a picture of the health of waterways and catchments.

B10.1.2 Assessing water reform

Process of assessment

COAG adopted the strategic framework at its meeting in February 1994. The National Competition Council was charged with assessing the implementation of the strategic framework along with other National Competition Policy reforms in April 1995.

Since that time, the Council has worked with jurisdictions to increase understanding of the water reform commitments and develop an assessment process that is co-operative, sensible and fair.

For example, the Council secretariat participated in the Standing Committee of Agriculture and Resource Management Taskforce (Taskforce) between 1996 and 1998. Achievements of the Taskforce included the conduct of voluntary reviews of reform implementation and the development of full cost recovery guidelines. In 1998, the High Level Steering Group comprising Chief Executives of water agencies replaced the Taskforce to provide further focus in water reform.

All Heads of Government received the Council's letter in June 1998 clarifying the Council's interpretation of a number of technical matters in the strategic framework. In December 1998 the Council again wrote to all Heads of Government providing an assessment document in which all relevant elements of the strategic framework and the Council's interpretation of commitments were included.

As noted above, in January 1999 the Council participated in the Tripartite meeting with representatives of all States and Territories.

The Council has engaged in bilateral discussions with every State and Territory in completing this assessment. Those discussions have enabled information sharing, clarified further reform commitments and provided an effective forum to discuss issues arising in the assessment process. All jurisdictions have been provided with draft assessments for comment and correction. The Council believes that this '*no surprise*' assessment process engenders confidence in both the assessments themselves and any conclusions drawn or recommendations made by the Council.

Because the history, institutional structures and physical environment varies greatly across the country, there are different reform issues in each State and Territory. Therefore, there are differences between the jurisdictions in the type of information and the issues discussed in these assessments.

Overall, the second tranche assessment has focussed on looking at the systems and structures States and Territories have in place and assessing whether they will deliver real benefits to the water industry in the future. In the third tranche assessment the Council will also be looking for further evidence to demonstrate that these benefits have been realised.

Council recommendations

The water industry is incredibly diverse. Water resources include groundwater and surface water, ephemeral and continuous flow rivers and streams and regulated and unregulated systems. Providers include government departments and statutory corporations, local government and private companies. Some rivers are overallocated while others are virtually pristine. Some catchments are used for a variety of agricultural, community, recreational and water supply uses while others are used primarily for water supply and nature conservation.

This means that the way in which reforms have been implemented has differed from jurisdiction to jurisdiction. The Council's assessments reflect this.

The assessments also emphasise further progress of water reform. Where the Council is not satisfied that a reform commitment has been met, States and Territories have identified a path to implement change. Slippages in the implementation of the

strategic framework have not resulted in the Council recommending deductions in competition payments. In relation to some specific commitments, the Council will undertake a supplementary assessment of reform progress. However, where the strategic framework may have been breached, the Council has suspended part of the competition payments pending further information and assessment.

B10.1.3 Summary of jurisdictions' assessments

Cost Reform and Pricing

Urban full cost pricing

New South Wales, Victoria, Western Australia, South Australia, Tasmania and the ACT have achieved substantial full cost recovery throughout most city and town areas.

Queensland was unable to provide the Council with information for many water service providers, although some local governments are well advanced in achieving reforms. Guidelines have been developed to assist local governments in implementing appropriate tariffs. The Northern Territory's primary service provider did not recover the cost of water and sewerage businesses in 1997-1998, however a significant improvement is forecast for 1998-1999.

Urban consumption based pricing

Access and use charges for water services have been implemented in Victoria, Western Australia, the Northern Territory and the ACT. Access and use charges for water services have also been implemented throughout much of New South Wales, Queensland and South Australia, although there remain significant free water allowances in some areas. In Queensland issues involving the implementation of tariff reform recommendations still need to be resolved. Tasmania has experienced delays in implementing two part tariffs although the State government has undertaken to put in place two part tariffs where cost effective.

Property based sewerage tariffs have been replaced with a cost reflective charge in Victoria, the ACT, the Northern Territory and throughout most of New South Wales and Queensland. Western Australia, South Australia and Tasmania have in large part retained property based charges, although Western Australia has identified a timetable to remove these pricing structures.

Victoria, New South Wales, Queensland and Tasmania have identified metropolitan bulk water charges. Vertically integrated water service providers in Western Australia, South Australia and the Northern Territory have not identified bulk water charges but a process is underway to achieve this.

Removal of cross-subsidies

Cross-subsidies between customer classes have on the whole been removed from pricing structures in the ACT. New South Wales, Victoria, Western Australia and

South Australia have removed many cross-subsidies and where they remain processes have been identified to review and reform tariffs.

The progress of reform in Queensland, the Northern Territory and Tasmania is less certain, although Queensland has developed guidelines to assist local governments to identify cross-subsidies.

Community Service Obligations

Clearly identified and targeted community service obligation (CSO) payments are made to water service providers in New South Wales, Victoria, Western Australia, South Australia and the ACT. The Northern Territory has recently refined its CSO framework.

Queensland was unable to provide the Council with details of many CSO payments. The Tasmanian government is working with local governments to develop an appropriate CSO framework.

Rate of Return

Service providers in most jurisdictions earn positive rates of return. The position is less clear in Queensland, where there is insufficient information presently available. Improvements are expected in the Northern Territory and Tasmania has initiated measures to promote performance.

Assessment of economic viability and ecological sustainability of rural schemes

New investments in rural water schemes in most jurisdictions are the subject of robust appraisals regarding economic viability and ecological sustainability.

There are concerns regarding the assessment and/or implementation of recommendations for a number of recent infrastructure projects in Queensland. The Council is working with Queensland prior to finalising its recommendations in respect of these schemes.

Devolution of management of irrigation schemes

Irrigators in most jurisdictions now manage or own their irrigation infrastructure, or work co-operatively with government agencies. Queensland and Tasmanian arrangements are currently subject to review.

Institutional Reform

Separation of functions

In many sections of the water industry throughout Australia, the functions of regulation, standard setting and resource management have been removed from service providers. The assessments recognise the considerable progress to date, notably in sections of the New South Wales, Victoria, Western Australia, South Australia and the ACT water industries. The Council is of the view, however, that there remains significant work to be done.

Most States and Territories have undertaken further reviews of institutional frameworks or have committed to do so. For example, New South Wales is in the process of implementing water reforms recommended by the Sydney Water Inquiry. Victoria has undertaken to review current institutional arrangements. Queensland has developed proposals for licensing water service providers and is considering responses. Western Australia is continuing to review options as regards price regulation. South Australia is transferring plumbing regulation from the service provider. Tasmania has new institutional arrangements before the Parliament. The ACT has completed a comprehensive review of regulatory arrangements for water and is presently consulting on recommendations. The Northern Territory has separated resource management and service provision and is considering options for separating service provision and regulatory functions.

Commercial focus for metropolitan service providers

The Council is satisfied that metropolitan water and wastewater providers in all states and territories have appropriate arrangements to maximise efficiency of service delivery, or will achieve this in the near future.

Participation in performance monitoring and benchmarking arrangements

All states and territories are participating in industry-wide comparison and benchmarking initiatives.

Water allocations and trading

Comprehensive systems of water entitlements

Victoria, South Australia and the ACT have implemented legislation separating water rights from land title.

New South Wales has arrangements that provide for separation in large part, although some water entitlements remain linked to the land; a comprehensive review of water legislation will take place this year. Western Australia has drafted and Tasmania has introduced into Parliament legislation to implement reforms. Queensland has consulted regarding its water law reform proposals and is presently preparing legislation to update existing systems. The Northern Territory has undertaken to amend relevant regulation.

Allocations for the environment

All states and the ACT have developed timetables to review surface and groundwater resources and provide a better balance between consumptive use and environmental needs. Many rivers, streams and aquifers have been reviewed and there is substantial evidence of beneficial environmental outcomes.

The Northern Territory has outlined its program to identify environmental flows but has not provided a finalised timetable. New South Wales, Queensland and Western Australia are still to finalise legislative reforms to facilitate ecological outcomes. Tasmania has introduced the necessary legislation into Parliament.

Arrangements for water trading

Victoria, South Australia and the ACT have in place appropriate legislative provision to permit trade in water resources. New South Wales also provides for extensive trading of water entitlements although further reform has been identified. Western Australia and Tasmania have legislation either drafted or before Parliament. Queensland and the Northern Territory have developed proposals for water trade reforms and are drafting the necessary legislation or regulatory amendments.

Environment and water quality

Integrated Resource Management

There is a wide variety of structures, agencies and policies in place across states and territories to further implement integrated resource management of land and water resources. The development of many arrangements is ongoing, and processes and actions are continuing in consultation or partnership with water users, environmental advocates and local communities.

National Water Quality Management Strategy

All states and territories have contributed the development and implementation of National Water Quality Management Strategy Guidelines.

Public Consultation and Education

The Council has been impressed with the extensive education to consumers of water about the need for reforms. Consultation, in particular about reforms to water rights, has resulted in schemes being created or proposed to address unique needs of diverse communities and industries.

Overall assessment of implementation of water reform

The Council is satisfied that Victoria and the ACT have met reform commitments required for the second tranche.

There will be a supplementary assessment of water reform in New South Wales, Western Australia, Queensland and Tasmania in June 2000 to assess whether legislation to effect water allocation and trading reform has been passed by respective Parliaments. The Tasmanian assessment will also include consideration of institutional reforms included in proposed legislation and progress with pricing reform.

There will be a supplementary assessment of South Australia's commercial water pricing in December 1999 following announcement of the State's retail water pricing policy. Progress on bulkwater, commercial and wastewater pricing will also be assessed in June 2000.

There will be a supplementary assessment in December 1999 of Queensland's progress on reform commitments in relation to urban cost recovery and pricing, and institutional arrangements.

During this time the Council will seek to work through outstanding issues concerning the assessment of economic viability and ecological sustainability of rural schemes. The Council has recommended a suspension of 25 per cent of Queensland's competition payments in respect of this matter.

The Council will also undertake a further review of Tasmania's progress on the implementation of two part tariffs for urban water supply and devolution of irrigation management in December 1999.

Finally, the Council will assess, in December 1999, the Northern Territory's reform progress in relation to urban cost recovery, bulk water pricing, cross-subsidies, water allocations and trading, and institutional reform. The Council will also look for a comprehensive timetable on action to be taken in relation to priority river and ground water systems.

Future assessment of water reform

The Council has now built up a considerable amount of information concerning water reform across States and Territories. Matters of general concern have been noted. Where reforms have not been fully met, governments have committed to further processes. These matters and the remaining aspects of the strategic framework will be closely scrutinised during the period prior to the third tranche assessment.