1 Introduction

Water reform is one of the most complex and challenging of the reform commitments of Australian governments under the national competition policy (NCP) package. It may be one of the most rewarding, however, in terms of favourable economic and environmental outcomes if the reform package is completely and successfully implemented.

The water reform commitments originated in 1994, when the Council of Australian Governments (CoAG) adopted a strategic framework for the reform of the Australian water industry. That framework was subsequently incorporated into the Agreement to Implement the NCP and Related Reforms in April 1995, linking progress on water industry reforms with NCP payments.

The inclusion of water reform in the NCP agreements was a catalyst for beneficial change in the water industry. The water reform framework has since been amended and enhanced, but its basic objective—to produce an economically viable and ecologically sustainable water industry—remains in place.

The framework shares the economic efficiency objectives of the rest of NCP, through its provisions for water pricing and cross-subsidies, investment in new schemes, trading in water entitlements and institutional reform. It is unique, however, in also having explicit environmental objectives and obligations. As such, the framework takes an integrated approach that addresses the environmental, economic and social issues associated with water use.

The water industry and its impacts

The water industry had assets of over $90 billion (valued at replacement cost) in 1999 (PC 1999).[1] Water is one of Australia's largest industries, with assets estimated to be of a similar magnitude to those of the electricity, telecommunications and airline sectors.

The provision of water and wastewater services to the largest urban areas in Australia produced $4.6 billion in revenue in 2000-01 and $792 million in dividends for the government owners of the service providers (WSAA 2001a).

[1] The estimated replacement cost in 2000-01 of the assets of the major urban water providers alone was $50 billion.

Wastewater treatment and disposal and recycling activities still form only a minor component of the industry, but their share is increasing. In 2000-01, 7.8 per cent of wastewater was reused—a large increase from 4.9 per cent in 1996-97 (WSAA 2001a).

The water industry, in value added terms, is more than one quarter the size of the manufacturing and the agricultural sectors, almost half the size of the electricity industry and three times the size of the gas industry. The potential economic gains from improvements in its performance are considerable.

Bulk and urban water suppliers are predominantly State and local government owned, while the management of many rural irrigation schemes is being devolved to their irrigators. The policy and institutional environment for the industry is becoming more conducive to private sector involvement, including through the leasing out of facilities and contracting of out services.[2]

Water extraction and use has continued to grow rapidly. From 1985 to 1996-97, total use increased by 65 per cent (much the same as the increase in real gross domestic product (GDP) over the same period). Use for irrigation grew by 76 per cent, urban/industrial consumption increased by 55 per cent and rural use rose by 2 per cent. Australians now use around 24 000 gigalitres of water each year. Around 80 per cent comes from surface water and 20 per cent comes from groundwater sources (PC 2002). Surface water predominates in all States and Territories except Western Australia and the Northern Territory.

The agricultural sector accounts for 70 per cent of water use in Australia, followed by households (8 per cent), mining and manufacturing, and gas and electricity (both 6 per cent), and other service industries (2 per cent) (WSAA 2001b).[3] Broadacre farming uses more than half of the water consumed by the whole of the agricultural sector.

Australia's water supply exceeds that of most other countries in per person terms, but Australia also has a high level of water consumption per person. Further, water supplies are not abundant in the areas of highest demand.

The pressure on demand and insufficient regard for the environmental impacts of water use have led to widespread and extensive degradation and depletion of Australia's water resources. Excessive extraction of water has stressed river systems, resulting in losses of productive land, poor water quality and reduced biodiversity. The following are some measurable consequences.

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[2] United Water and Riverland Water, for example, are large private contractors to SA Water. United Water manages and operates Adelaide's water supply and wastewater treatment. Its cost of operations on its commencement was 20 per cent below the historical costs of the operations that it took over from SA Water.

[3] The remaining 8 per cent represents delivery losses and unaccounted for losses of water.

- More than half of assessed river basins have excessive turbidity and nutrients, and 32 per cent of assessed basins have excessive salinity (National Heritage Trust 2001).

- Around 26 per cent of surface water management areas are (or close to) being overused, compared with sustainable flow regime requirements. Thirty per cent of groundwater management areas are (or close to) being overused compared with their estimated sustainable yield. A similar proportion are fully allocated or overallocated (National Heritage Trust 2001).

- Algal blooms result in some reservoirs being unsuitable for drinking water supply or recreation for over 25 per cent of the time. The annual cost of the blooms to water consumers is reported at over $150 million (Australian State of the Environment Committee 2001).

- The latest National Land and Water Resources Audit found that one third of the assessed river length has impaired aquatic biota; over 85 per cent of the assessed river reaches are significantly modified in terms of environmental features; over 80 per cent of the reaches are affected by catchment disturbance; and over half of the river reaches have modified habitat.

Implementation of the reform framework

When adopting the water reform framework in 1994, CoAG stated that the reforms could be implemented within five to seven years, although it acknowledged that the speed and extent of reform depended on the availability of financial resources to facilitate structural adjustment and asset refurbishment.

The CoAG agreement established completion dates for the major reforms (1998 for urban water pricing, the institutional reforms, water trading and allocations for the environment, and 2001 for reform of rural water pricing), but some of these deadlines were later extended. In particular, the timetable for environmental water allocations was extended to 2001 for stressed rivers and 2005 for all river systems and groundwater.

The initial timetable was optimistic; it underestimated the reform task. Significant constraints on the implementation of the reform framework include:

- the complexity of some of the reforms (for example, those that require much research and analysis before effective application);

- the need for extensive consultative and educative processes;

- the demands that the reforms have placed on governments, institutions and stakeholders, including financial demands; and

- the low base from which many of the reforms were initiated.

Jurisdictions are introducing the reforms at different rates and in some different ways. Variances in implementation reflect differences in jurisdictions' starting points (in their legislative frameworks for water, for example) and in the health of their river systems; the diversity of administrative and legislative environments across States and Territories; and differences in the interests and strengths of the relevant stakeholder groups.

Progress in implementation of the reforms has been satisfactory generally, given unforeseen difficulties and the implications of some reforms for the interests of key stakeholders. CoAG (2002) noted that 'substantial progress' was being made on the national water reforms, but that 'water management is currently in a transition phase as jurisdictions implement new water allocation arrangements'.

The reforms

Jurisdictions' fulfilment of their environmental obligations under the reform framework is assuming greater importance as the economic and efficiency objectives of water reform come to be realised. Further, as the problem of degradation of many of Australia's river systems remains acute, the need to progress the environmental aspects of the reforms is becoming more urgent.

The following sections outline the stage that governments have reached in implementing the various reforms, and the outcomes of the reforms.

Proper pricing of rural and urban water

Proper pricing is to be achieved through consumption-based pricing (where cost effective); full cost recovery; removing cross-subsidies, or making them transparent; and disclosing water services supplied at less than full cost, ideally paying suppliers for community service obligations (CSOs).

Price reform in the cities and the major nonmetropolitan urban areas is virtually complete, with the result that most Australians in large urban areas now face water prices that reflect the amount of water they use and that reward conservation. Most larger urban water suppliers now practise or are implementing full cost recovery. All are achieving, or seeking to achieve, positive rates of return. Progress towards reform by the smaller, local government-owned water businesses has been slower. Price reform has generally led to higher prices, but the consequential fall in consumption has meant lower water bills.

- The average bill of customers in urban areas declined in real terms by around 5.5 per cent over the five years ending 2000-01 (WSAA 2001a).

- Consumption-based pricing rather than pricing based on property values is giving customers appropriate price signals and control over the size of their water bills. It is establishing equal treatment of customers using similar amounts of water.

The cross-subsidies between different customer classes have been marked. In the past, commercial and industrial users paid considerably more for water than households paid; for example, the average commercial establishment paid 15 times more for its water than paid by the average household in 1990-91 (IC 1992).

- Water reform is changing this situation. Real prices paid by low and medium water use businesses in Sydney fell by 75 per cent and 65 per cent respectively over the 10 years to 2000-01; high water use businesses were subject to real water and sewerage price increases of around 9 per cent. Prices paid by average industrial customers in Adelaide fell by 8 per cent over the same period (PC 2002).

Price reform in rural areas is less complete. Water is around 8 per cent of total farm costs, on average, so higher prices can be a sizeable additional impost for water-intensive activities.

Where possible, irrigators are being charged for their water use on a volumetric basis. Cross-subsidies between users are being eliminated and the remaining ones are being made transparent. Some jurisdictions are moving faster than others towards full cost pricing, but the situation is complicated by government subsidies to rural water providers. Full implementation of the water reforms depends on the removal (or full transparency) of government subsidies and the efficient management and operation of irrigation schemes.

Investment in new rural water schemes

New schemes and extensions to existing schemes need to be economically viable and ecologically sustainable before they may proceed. No large new dams have been commenced since the water reform framework was put in place, but this principle has been tested by proposals for a dam (which did not proceed) and for extensions to existing schemes. It has been prominent in deliberations on new schemes and will be a consideration for new dams being contemplated in Queensland and Tasmania.

Institutional role separation

This principle requires the function of water service provision to be separated from the roles of water resource management, standard setting and regulation.

The process of separation clarifies the roles and responsibilities of the institutions, allows them to focus on their core business and minimises the scope for conflicts of interest. The changes allow accountability and transparency to be established, and introduce a structural basis for the application of other, relevant NCP principles.[4] All jurisdictions except South Australia and Western Australia now have independent prices oversight of most of the major suppliers. Western Australia has committed to introduce this measure.

Delivery of water services

The objective of this principle is efficient service delivery on a commercial basis and at the level of international best practice. The principle also involves devolving the management of rural water districts to their irrigators.

All metropolitan water businesses now have a more commercial focus. They are involved in an annual benchmarking project that allows their performance to be compared with other service providers (WSAA 2001a). Such comparisons provide an important incentive for businesses to improve their performance. In the rural sector, irrigators have greater involvement in the management of rural water districts

Improving the commercial focus and performance of water businesses helps to ensure that the potential benefits from water reforms are realised. These benefits are large. Modelled macroeconomic effects of the CoAG water reforms were estimated to improve labour productivity by 16 per cent and capital productivity by 5 per cent across the water industry (PC 1999).

Allocations of water for the environment

A major focus of the water reform framework is on producing better environmental outcomes. Given the severity of the problems, however, gains from the reforms will take longer to achieve, be expensive initially and be more challenging than the other elements of the reform framework. Further, a still limited knowledge base means that the nature and extent of the environmental improvements will be less predictable than other outcomes from reform. More recently, gaining acceptance for environmental reform has been made more difficult by lower water allocations on account of drought in some areas.

[4] These are the principles relating to independent prices oversight of government business enterprises, competitive neutrality, structural reform of public monopolies, legislation review and access to services provided by significant infrastructure facilities.

Against this background, one of the most complex and contentious features of the water reform framework is jurisdictions' obligation to legally recognise allocations of water for the environment and to follow that through with actual allocations based on the best possible scientific research.

Jurisdictions have made progress toward satisfying their environmental commitments. Given financial considerations, the still developing science for determining allocations, and the effects of allocations on users' interests, however, progress has been slow and not always conformed with the timetable established in the reform framework. Some jurisdictions have not done as well as others in meeting their obligations.

The National Competition Council's assessment of jurisdictions' compliance with their reform commitments for 2002 is described later in this chapter and in the chapters on the individual States and Territories. The following are examples of measures to improve the environment.

- The most concrete measure taken so far is the establishment in 1995 of a cap on diversions of water from river systems in the Murray–Darling Basin. Prior to the cap, water consumption had been increasing at almost 8 per cent each year, and could have further increased by an estimated 14 per cent had the then river management rules been allowed to continue. Importantly, the cap does not prevent new developments in the basin, provided that water for those developments is obtained via improved water use efficiency or purchases from existing developments.

- More recent initiatives have been the agreement to restore flows along the Snowy River to 28 per cent of its natural regime (for details, see NCC 2001) and the Murray–Darling Basin Ministerial Council's decision (April 2002) that a business case for the recovery of 350, 750 or 1500 gigalitres of environmental flows for the River Murray. Issues of equity, property rights and water trading will be considered in the formulation of the latter initiative (see chapter 10, for details of this and other decisions of the Ministerial Council designed to address environmental degradation in the Murray–Darling Basin).

- During 2002, the Victorian and South Australian governments agreed to devote $25 million in total to improving the environmental health of the River Murray. The joint effort by these governments aims to reduce salinity, improve water quality and save water. The objective is to achieve up to 30 gigalitres of environmental flows.

Integrated resource management and water quality

One objective of the water reform framework is the use of integrated approaches to natural resource management, fully recognising the interdependency of the different natural resource components, including water. Jurisdictions have also agreed to develop the National Water Quality Management Strategy by adopting market-based and regulatory measures

dealing with water quality monitoring, catchment management policies, and town wastewater and sewerage disposal.

In November 2000, CoAG endorsed a Commonwealth proposal to develop a National Action Plan for Salinity and Water Quality.

Box 1.1: The National Action Plan for Salinity and Water Quality

The National Action Plan for Salinity and Water Quality provides for total expenditure of $1.4 billion to address salinity and water quality problems in 21 priority regions across Australia. It is beginning to help address environmental issues, particularly dryland salinity. All States have signed the intergovernmental agreement that sets out the overarching commitments and obligations of the national plan.

Jurisdictions have agreed to and substantially progressed key policy tools to support the implementation of the national action plan. These tools include national criteria for accrediting integrated regional natural resource management plans, a national framework for natural resource management standards and targets, and a national monitoring and evaluation framework.

Funding for priority projects in South Australia has been provided (totalling $15 million out of the planned total joint commitment of $186 million). The Commonwealth and Victorian Ministers approved in February 2002 foundation funding, priority actions and capacity building activities costing almost $18 million (from their total joint commitment of $304 million). More recently, the Commonwealth and New South Wales governments agreed to jointly commit almost $400 million to practical measures to address salinity and improve water quality in New South Wales.

At its April 2002 meeting, CoAG agreed to accelerate the implementation of the national plan.

Governments are now taking integrated approaches to natural resource management and, in the process, spending much more on research.

- Just $300 000 was spent on a 1985 review of Australia's water resources and water use. In contrast, a sizeable proportion of the $29 million spent on the 2001 National Land and Water Resources Audit was directed to water research.

Plentiful water supply in some areas in the past and inefficient pricing regimes provided little or no incentive for research into supplying and using water more efficiently and sustainably. The increased focus on research is producing better decisions on water issues and the adoption of innovative solutions. It is providing the information required to set and achieve environmental goals. Much more remains to be done in this area, however.

While progress against the CoAG commitments has not been entirely satisfactory, there are positive developments in water conservation and in the recognition and addressing of environmental problems. In rural areas the reforms are helping move the focus away from increasing the quantity of water available and towards increasing the efficiency of water use as a means of stimulating development.

The emphasis in the reform principles on market-determined outcomes also benefits the environment (although market mechanisms alone are not

sufficient to ensure the required level of environmental protection). Volumetric pricing for urban customers, for example, is inducing water savings through efficiencies in use, and reduced consumption is lowering the cost of treating wastewater and lowering the environmental damage from water use.

- Per person water use in Sydney, Melbourne and Newcastle fell by 7 per cent, 12 per cent and 14 per cent respectively from 1990 to 2000 (WSAA 2001b).[5]

- Per person consumption by customers from a selection of major Australian water utilities fell by 17 per cent over the 10 years to 2000-01 (PC 2002).

As Harris (2002) has pointed out, 'there is a quiet revolution going on—individual farmers, irrigators, manufacturers and many ordinary people are beginning to change their practices, minimise their environmental impacts and focus on quality rather than quantity'.

Water entitlements of rural customers

Jurisdictions have made progress in legislating water allocations for irrigators. They are also committed to the separation of water title from land title and to the clear specification of title (including a registry system).

Nevertheless, the issue of the property right inherent in a water entitlement is receiving increasing attention. Where allocations for the environment reduce supply for consumptive uses, the value of the water right (and, with it, farm values) can be affected, although offsetting impacts would derive from the more certain rights to the water available for rural use.

CoAG (2002) recently re-affirmed the importance of water property rights issues in dealing with the nation's salinity and water quality problems. The Council noted that the implications of changes to water property rights for investment and the impacts of the changes on water users, particularly farmers, also needed to be considered.

- To clarify these issues, jurisdictions agreed to report to CoAG by September 2002 on opportunities for, and impediments to, better defining and implementing water property rights regimes (including water trading markets and, where appropriate, the responsibilities of water users). Jurisdictions will also report on how they are addressing uncertainties about property rights.

[5] The Water Services Association of Australia notes that technological change and education campaigns also contributed to this reduction.

- CoAG has attached a high level of importance to the establishment of an effective and efficient system of property rights for water, and to the need for water users to have certainty of access to water.

Trading in entitlements

The reform framework provides for trading in water entitlements, including cross border trading where it is socially, physically and ecologically sustainable.

Trading in water is undertaken in primarily New South Wales, Victoria and South Australia, and is not extensive. While trading was possible in 40 of the 46 systems reported in the 1998–99 Australian irrigation benchmarking report, permanent and temporary water transfers represented only 7.5 per cent of total water entitlements of the systems where trade took place (High Level Steering Group on Water 2000)

- In New South Wales, in 1997-98 11.5 per cent of the total entitlement to consumptive uses was traded, overwhelmingly through temporary trades and mostly within the particular river system (Department of Land and Water Conservation 1999). The value of the trades was conservatively estimated at $60–100 million.

The volume and value of trade is growing rapidly, however; annual volumes were less than 100 gigalitres during the 1980s, but now are around 800 gigalitres. Further growth will arise from the removal of trade constraints imposed by government regulation and irrigation districts, and the development of better infrastructure for trading, including sophisticated markets, secure title and registry systems. The incentives for water trading are growing; water is becoming more expensive and its supply for consumptive purposes may tighten as a result of drier conditions in some areas and allocations for the environment.

The gains from trading in water entitlements are considerable. These derive from the increase in output as water entitlements flow to their highest value uses.

- Water trading in New South Wales in 1997-98 increased the value of irrigated agriculture by $65 million (Department of Land and Water Conservation 1999). This is a conservative estimate because the availability of water can save a crop in its final stages where otherwise it might have been lost, and the multiplier effects of the addition to agricultural income are not taken into account.

- In Victoria, the annual increase in returns to irrigators as a result of trading is estimated at just under $12 million (Department of Natural

Resources and Environment 2002). This figure does not include the benefits from water traded from Victoria into other States.[6]

Public consultation and education

The water reforms provide for government agencies and service deliverers to consult on proposals for change and other initiatives, and to conduct public education programs (including programs in schools).

The consultations and education programs on water use are leading to more informed communities, customers and other key stakeholders. Community-based groups, such as regional water management committees and customer consultative councils, are now influential in water matters. Initiatives by governments and water suppliers to encourage conservation in water use are having positive impacts.

Overall, these activities are producing more informed decisions. Decisions are more likely to be consensus driven and, therefore, satisfy more interest groups. Achieving effective community consultation is a complex exercise, however, and the Council has observed consultation processes that are less than adequate. In these cases, better community consultation remains on the reform agenda.

Economic outcomes

Beneficial economic impacts from the reforms are arising faster and are more apparent than the environmental outcomes of the reforms. This difference partly reflects the more immediate timetable for implementing the reforms that have economic efficiency objectives, but also reflects the intractability of the environmental issues and the long lead times for the environmental reforms to take effect.

The water reforms constitute an important part of governments' microeconomic reform agendas. Like most other structural policy initiatives of governments, the reforms involve initial costs and dislocation for some. The reforms are expected in the longer term, however, to enhance the sustainability of economic activity that depends on water and improve overall economic growth.

Contributions to economic growth will include:

[6] The department also points to the employment creating impact of water trading. For each 1000 megalitres of irrigation water used on horticulture 30 on-farm, processing and support industry jobs are created. In dairying 15 jobs are created. By contrast, only one job would be lost from the trade of a similar quantity of water out of grazing.

- the more efficient use of resources involved in water provision generally;
- higher value agricultural and other outputs (such as mining) from the redistribution of water to more productive uses through water trading;
- in water-dependent industries such as aquaculture, fewer losses caused by poor water quality;
- improved efficiency in resource allocation resulting from reduced government subsidies to customers and water providers, and fewer cross-subsidies;
- more efficient use of new and existing water assets. The 'economically viable' test for new investments in rural schemes is reducing wasteful investment and ensuring future generations do not have to pay for poor current decisions; and
- increased recreational and tourist activity induced by cleaner (especially fewer algal blooms) river systems and storages.

A recent study (Australian Academy of Technological Sciences and Engineering and the Institution of Engineers, Australia 1999) shows that an 'adaptive management scenario' for water use (which incorporates key features of the CoAG reforms) produces an outcome for various macroeconomic variables in 2020-21 that is little different from the 'trend scenario'. The latter scenario (which envisages water use growth at past rates), however, is found to be unsustainable given constraints on water availability. Under the 'adaptive management scenario', the share of agriculture in the economy remains the same as in the 'trend scenario', although the regional distribution of activities is different, the use of water is more efficient, and there is a shift to more intensive forms of irrigated production.

The PC (1999) estimated that the CoAG water reforms will have a positive, although negligible, impact on GDP, and marginally improve export volumes and post-tax real wages. The study may have underestimated the positive GDP impact because the modelling focused on the metropolitan and nonmetropolitan urban water reforms, and did not account for rural users (which account for 70 per cent of water consumption) or the effects of the reforms to water trading, water rights and the criteria for new water investments.

Moreover, the water reforms are helping to limit the rate of environmental degradation, thus limiting the reductions in productive capacity and the other costs associated with a deterioration in water quality and availability.

Future developments

The environmental aspirations of the water reform framework are the most challenging of its various objectives for governments. They will be an important, continuing focus of assessments by the Council.

More generally, price tensions are resulting as demand for water for consumptive and environmental uses grows in the face of constraints on developing new supplies. The capital cost of a permanent transfer or purchase in the Murray–Darling Basin rose to around $800 per megalitre by the end of the 1990s from levels of around $300 per megalitre in the early part of that decade.

Fortunately, aspects of the water reform framework (such as full cost and volumetric pricing) are helping to moderate demand for water and individuals, business and governments are actively pursuing water conservation and efficiency measures. The water savings from these measures can be significant, as shown by the following examples:

- The planned Wimmera–Mallee pipeline would save 93 000 megalitres of the 120 000 megalitres currently used by that system. The envisaged capital cost ($300 million) or around $3200 per megalitre, however, is considerable.

- A New South Wales cotton farm, by adopting better irrigation techniques, has raised its yields (as a result of less waterlogging) and increased its water use efficiency by 45 per cent, giving an overall lift in annual profit of $100 000 (*Australian Financial Review*, 24 April 2002, p. C5).

- As much as 40 per cent of water channelled for irrigation is lost to evaporation and seepage (Australian Academy of Technological Sciences and Engineering and the Institution of Engineers, Australia 1999). The Cooperative Research Centre for Freshwater Ecology estimated that 15 per cent of irrigation water from the River Murray is lost to seepage. The Land and Water Resources Research and Development Corporation suggests that irrigators should be able to achieve 70–85 per cent water use efficiency, but many (especially flood irrigators) are operating at below 50 per cent efficiency.[7]

[7] Note, however, that some of the 'inefficiencies' consist of irrigation water lost to river systems. For this reason, care needs to be taken in measuring the environmental gains from water efficiency savings.

2002 NCP assessment framework

In December 2001, Senior Officials of CoAG endorsed a proposal to prioritise jurisdictions' water reform commitments across the 2002 to 2005 NCP water assessments. They agreed that the 2002 assessment would largely comprise a follow-up on issues outstanding from the 2001 assessment of jurisdictions' progress across the entire water reform framework. (These are described as **assessment issues**.)

It was also decided that the Council would report on developments in some areas identified for examination in the 2003 NCP assessment. These areas of the water reform framework were not to be assessed in 2002, but progress is reported as a bridge to the 2003 assessment (described as **progress report issues**). (As a general rule, the Council will call for progress reports on key issues in the year before their assessment.) In addition, it was decided that the Council would consider issues raised in submissions from stakeholders.

As part of the preparations for the 2002 NCP assessment, the Council publicly released a framework document (NCC 2002) to:

- set out a clear, transparent basis for the assessment;
- identify the information that jurisdictions should provide to demonstrate compliance;
- outline the scope of the 2002 assessment and issues identified for future assessment, to guide public submissions; and
- provide a basis for early identification and bilateral discussion of reform outcomes that are proving difficult to achieve.

The Council's 2002 water assessment framework is available on the Council's website (www.ncc.gov.au). Background on the source of jurisdictions' obligations and the intentions of the reforms is in the Council's 2001 water assessment framework.

In addition to the annual NCP assessment, the Council may conduct supplementary assessments where they would be of value in furthering the timely and proper implementation of the water reform framework.

Assessment issues

The main issues set down for assessment in 2002 are:

- aspects of full cost recovery by nonmetropolitan urban water and wastewater businesses;

- consumption-based pricing through two-part tariffs in certain jurisdictions;
- aspects of full cost recovery, consumption-based pricing, CSOs and cross-subsidies in relation to the rural water providers of some jurisdictions;
- any new rural water schemes, to ensure they are economically viable and ecologically sustainable;
- aspects of the practices of New South Wales, Victoria and Tasmania in relation to water allocations in water management plans and water property rights;
- jurisdictions' progress in implementing environmental allocations of water, including actions to alleviate the conditions of stressed rivers;
- aspects of the integrated resource management practices of Western Australia, South Australia and Tasmania;
- compliance by Western Australia and South Australia with the National Water Quality Management Strategy; and
- certain issues concerning the public consultation and education obligations of Queensland, South Australia and the Northern Territory.

Progress report issues

The Council also has examined some areas due for assessment in 2003, providing progress reports on:

- the implementation of tax equivalent regimes by metropolitan water service providers, and developments in the factoring of externalities into pricing by urban service providers;
- certain aspects of consumption-based pricing in New South Wales, Queensland and Western Australia;
- the reporting of CSOs by Victoria, Queensland and Tasmania;
- jurisdictions' reporting of cross-subsidies;
- aspects of institutional reform by jurisdictions;
- jurisdictions' progress in devolving the management of irrigation schemes; and
- jurisdictions' implementation of water trading arrangements.

The assessment process

Regular and intensive consultations were held with jurisdictions during the course of the 2002 assessment. The Council's deliberations depend on the availability of extensive information on the issues being addressed, and jurisdictions were mostly helpful in responding to requests for information on progress in implementing their reform obligations.

As in previous years, stakeholders made important contributions to the assessment process. The Council received 17 written submission on a range of water reform issues. (A list of the submissions is at Appendix A.) Where possible, those who provided submissions were met, and the Council received a number of oral submissions in meetings with other groups.

Summary of assessment

The remainder of this chapter summarises, by jurisdiction, the outcomes of the Council's deliberations on the 2002 water reform issues. All assessment issues and some of the major progress report issues are covered in this summary chapter.

New South Wales

Consumption-based pricing – bulk water services

In 2001, the Council had not received information on bulk water services offered by Hunter Water Corporation, Gosford City Council and Wyong Shire Council. In particular, it was not known whether these bodies provided bulk water services and, if so, whether there was sufficient separation from their retail service businesses to enable them to calculate an efficient bulk water price.

New South Wales reports that Gosford City Council and Wyong Shire Council do not have bulk water supply businesses, so a ringfencing issue does not arise for them.

The Hunter Water Corporation supplies bulk water services to two customers. They are charged prices determined by the Independent Pricing and Regulatory Tribunal. The charges are consumption based and structured as two-part tariffs. In the light of additional information provided by New South Wales, the Council considers that this assessment issue has been addressed.

Consumption-based pricing – two-part tariffs

In 2001, the Council had concerns about the rate of progress by some nonmetropolitan urban water service providers, particularly Tweed Shire, in reviewing the cost effectiveness of two-part tariffs and winding back free water allowances. At that time, Tweed Shire had not conducted a review to demonstrate whether two-part tariffs were cost effective.

For 2002, therefore, the Council was looking for significant progress by nonmetropolitan urban water service providers (primarily by Tweed Shire) in reviewing the cost effectiveness of two-part tariffs, winding back free water allowances, and taking action if these reforms were found to be cost effective.

New South Wales has received written notification from Ballina Shire Council, Tweed Shire Council, Forbes Shire Council, and Parkes Shire Council confirming the elimination of across the board free water allowances and the implementation of full usage-based tariffs from 1 July 2002. Orange City Council has adopted two-part tariff pricing with a reduced general water allowance for landowners responsible for nature strip maintenance. New South Wales also reports that Bathurst Council implemented a fixed annual charge and an inclining block tariff during 2001-02.

New South Wales also advises that it has given priority over the past 12 months to encouraging noncomplying, large nonmetropolitan urban providers to move to two-part tariff pricing. New South Wales has continued its policy of encouraging smaller nonmetropolitan urban providers to move to two-part tariff pricing, where it is cost effective.

The Council is satisfied that New South Wales has made progress on the outstanding 2001 assessment issue, which required progress, primarily in relation to Tweed Shire Council, in reviewing the cost effectiveness of two-part tariffs and winding back free water allowances. Tweed Shire Council and other large councils, which had previously not moved to full usage based pricing, have provided commitments which satisfy these requirements. Tweed Shire is committed to eliminating free water allowances and the implementation of full consumption-based tariffs from 1 July 2002. The Council is satisfied that this issue has been met for this assessment. Further, New South Wales continues to make progress with a number of the larger local councils on this issue.

The Council, however, notes that a significant number of councils with more than 1 000 connections are yet to satisfy the CoAG commitment in relation to two-part tariffs, which was due for completion by the end of 1998. The Council expects this commitment to be virtually complete by the time of the 2003 NCP assessment.

In particular, the Council expects all remaining nonmetropolitan urban water providers with more than 1000 connections to have made a commitment to

introducing two-part tariffs or adopting other usage based pricing policies which meet the CoAG requirements[8] within an appropriate timeframe where cost effective, and a significant reduction in the use of free water allowances and property value based charging.

Because of the low rate of compliance among smaller local governments, it is the Council's view that New South Wales needs to pursue a strategy to improve performance of these councils over the next 12 months. The Council notes in this regard that New South Wales has taken positive action by releasing the *Water Supply and Trade Waste Pricing* brochure. In order to meet the requirement to have implemented two-part tariffs by June 2003, New South Wales will need to implement such a strategy by the end of 2002 at the latest, in order for local governments to be in a position to make the necessary commitments by June 2003.

Consumption-based pricing – trade waste

While the Council has recognised that in most cases volumetric charging for wastewater is not cost effective, volumetric pricing should be considered for large dischargers or businesses with high strength waste in order to provide an incentive to minimise waste. In 2001, the Council found that trade waste charges were not extensively used in New South Wales and that the absence of such charges could lead to nontransparent and inefficient cross-subsidies between large and small dischargers.

New South Wales reports that, in general, local governments levy waste charges when discharges from commercial or industrial premises reach certain threshold levels. The Council notes the recent release of new guidelines for the operation of trade waste sewerage services and streamlined administrative arrangements for trade waste regulation in New South Wales. However, evidence that thresholds are being set in a manner that promotes efficiency was not provided by New South Wales. The State has taken some measures to promote volumetric charging, including new pricing guidelines for water supply, sewerage and trade waste.

The new pricing guidelines for water supply, sewerage and trade waste are an advance in the processes used by New South Wales. The Council, however, ultimately needs to assess the outcomes of reform. For this reason, the Council will revisit the extent of adoption of trade waste charges in the 2003 NCP assessment for urban pricing. New South Wales has made sufficient progress in winding back property value based charges for nonmetropolitan providers for this assessment.

[8] The Council will look at the structure of these tariffs in 2003 to ensure they are consistent with CoAG commitments.

Consumption-based pricing – Sydney Water Corporation

In 1996, Sydney Water Corporation eliminated domestic property value based charges for water services and commenced phasing out the use of property values for commercial water charging.

The 1999 assessment reported that remaining property value based tariffs would be eliminated by 2002. For the current assessment, the Council required an update on progress in phasing out property based charges.

The current IPART determination for Sydney Water Corporation is due to end in June 2003. New South Wales expects there would be a further decline in the use of property values for pricing in the next determination. The Council is satisfied that the 2001 NCP commitment is being met.

Full cost recovery – rural price paths

In its 2001 assessment, the Council concluded that New South Wales had not met its commitment to achieve full cost recovery by rural water schemes or to provide a timetable for achievement. The Council committed to reassess this issue in 2002, when it expected guidance to be available from New South Wales on price paths for achieving full cost recovery.

In December 2001, the Independent Pricing and Regulatory Tribunal announced caps on annual price rises for bulk water supplied by State Water, a ringfenced business unit within the Department of Land and Water Conservation. The Tribunal's 2001 three year bulk water determination sets an increase in State Water's recovery of costs from 61 per cent in 2000-01 to 74 per cent in 2003-04. Further, the Council has found that when this figure is disaggregated by water source, the regulated rivers (80 per cent of all water use in New South Wales) will be achieving 94 per cent of costs by the end of the determination period. Only 31 and 32 per cent for unregulated and groundwater sources respectively, however, will have met full cost recovery commitments. The Council recognises that full cost recovery for rural water supply will be largely an issue for unregulated and groundwater sources in future assessments.

The Council also notes that that the cost-base is likely to increase over time, due to the increasing need to mitigate environmental impacts. New South Wales has argued that this added variable makes an end date for full cost recovery difficult to determine. Whilst New South Wales has not proposed an end date for reaching full cost recovery, the Council has confidence in the mechanisms used in New South Wales to achieve it, particularly the independent role of the Tribunal in reaching full cost recovery which is tempered by the ability of customers to absorb these costs. The Council will reassess this issue in 2004 where it will expect New South Wales to have

continued to pursue rural full cost recovery with the same previously displayed rigor.

A key issue for 2003 will be institutional reform arrangements between the Department of Land and Water Conservation and State Water as this may impact on determining the individual elements of full cost recovery. The New South Wales Government is proposing to conduct an independent review of the governance structure of State Water. Consequently, the Council has delayed its assessment of whether New South Wales has met the institutional reform commitments. This will be a significant issue for New South Wales in the 2003 NCP assessment.

Water allocations and property rights

In 2001, the Council had insufficient information to determine whether New South Wales had fully addressed its property rights obligations. The Council considered suspending the State's 2001-02 NCP payments, given the importance of property rights reforms and the delays in finalising these arrangements. Because the New South Wales Government committed to a comprehensive action plan for reform, however, the Council considered that the best approach was to allow an additional time period for implementation.

The Council called for a re-examination of progress by New South Wales through a supplementary assessment (January 2002) and as a key issue for the June 2002 assessment. The Council signalled its intention to consider payment recommendations if New South Wales had made insufficient progress by that time.

The January 2002 supplementary assessment considered the proposed form of the register of water entitlements. It concluded that the register model being developed was sound and that the consultation being undertaken was sufficient.

The property rights elements assessed in 2002 are: the water sharing plans; the State water management outcomes plan; the information systems for the interim register; and licence conversions and licence and approval policies and processes. All these elements are important for defining water property rights.

In conducting the 2002 NCP assessment, some groups were continuing to express serious concerns about aspects of the New South Wales system of implementing water property rights reform. Irrigators, for example, are concerned about the certainty of their water allocations. The banking sector is concerned about mortgage security with the conversion to a new licensing system, because the owner of the land may not be the owner of a water licence. While there is broad support for the register, media articles have noted stakeholders' demands for a register to be established similar to that conducted by the Land Titles Office.

The State water management outcomes plan targets have not been finalised. New South Wales will not be able to confirm any targets until the Government has finalised the plan. The current target to reduce (or phase down) the total volume of water specified on licences to no more than 200 per cent of the long-term average diversion limit in surface water systems is still under consideration. The targets are being developed in consultation with communities, having regard to social and economic factors as well as scientific factors. If a large number of committees raise concerns about the same target then New South Wales may need to revisit the targets in finalising the State water management outcomes plan. The Council will need New South Wales to provide information to indicate that the final cap target is reasonable given the natural variability in the availability of water and high variability of use.

By the end of June 2002, 36 of the 39 draft water sharing plans had been made public. The Council has examined a number of the plans. The property rights approach in these plans is to set plan and cap limits for diversions over the life of the plan.

The Council's approach to property rights looks for all States to deliver certainty in ownership of the property right and surety as to its characteristics. The registry system is important, particularly for ownership. Further, the State water management outcomes plan, the water sharing planning process and the licence conversion process are important for defining property rights.

Water sharing plans, once finalised, will be legally binding for the next 10 years. The plans will provide security of access for environmental water and for all water users during the 10-year term. Licence holders will be able to claim compensation if their water access is reduced during a plan's term where the plan's bulk access regime is varied for unspecified purposes.

The Council is satisfied with the rollout by New South Wales of its new water property rights arrangements and considers that it is making every effort to comply with its CoAG commitments. For the 2001 NCP assessment, New South Wales provided a timetable of property rights commitments to be implemented over two years – the State is on track with implementing each element.

At this stage, however, the Council considers that there is insufficient information to conclude that New South Wales has complied with all its NCP commitments in this area for this assessment. There have been further delays, although New South Wales has been doing all it can to address this particularly difficult issue, and is making significant progress in meeting each of the relevant requirements.

The Council has examined the draft water sharing plans and considers that some of them are likely to change significantly before finalisation, given that they contain some aspects that are inconsistent with the Water Management Act 2000, State Government policy and that the targets in the State water management outcomes plan are yet to be finalised. The Council also notes that there has been some problems with the process involved in implementing

this first round of plans, but recognises the enormity and complexity of the task of reforming the New South Wales water management system. These process problems have complicated the transition to a new property rights system.

The water sharing plans represent significant progress in the management of water resources in New South Wales. Water management committees have undertaken considerable work in considering the gamut of issues raised and the nature of trade-offs that may be required. The Council recognises that the process of balancing the wide ranging views and opinions of interest groups with the technical information required for decision making is difficult.

The Council intends to conduct further assessments of the performance of New South Wales on this issue.

- The Council will conduct a supplementary assessment before the end of 2002 to consider the final State water management outcomes plan, the final water sharing plans and the first round of annual implementation programs. As part of that assessment, the Council wants to discuss with New South Wales the process and timeframe to develop the next round of water sharing plans.

- Progress against the property rights timetable will continue to be a key issue for New South Wales in the 2003 NCP assessment.

Provision for the environment – the State water management outcomes plan

In the 2001 NCP assessment, New South Wales notified its intention to develop a water management outcomes plan to set the overarching policy context, targets and strategic outcomes for the development, conservation, management and control of the State's water resources. The plan would set a clear direction for water management action and ensure that environmental, economic and social river flow objectives were specifically addressed.

In 1997, the New South Wales Government asked the water management committees to recommend a package of environmental flow rules. An upper limit on the impact the rules could have on irrigation supplies was set at 10 per cent of the long term average cap figure. Flow targets set by the State water management outcomes plan would be referred to water management committees to ensure the water sharing plans comply. If an environmental target is adopted, the Council would need to be convinced of the scientific basis for the target. The Council undertook to assess this issue in the 2002 NCP assessment.

The Council has found that the New South Wales water reform process recognises that the science of water management is constantly improving. The State's legislation and the water sharing plans being developed recognise

that a truly scientific approach must incorporate active adaptive management.

The Council's 1999 assessment forecast a 7 per cent reduction in diversions in the long term as a result of the 1998 interim environmental flow rules. The interim State water management outcomes plan shows the actual impact on diversions of the flow rules, ranges from 3 per cent (for the Namoi River) to 17 per cent (for the Macquarie River), and up to 5 per cent for the remaining rivers. The plan contains targets that call for a 10 per cent improvement in the frequency of 'end of system' flows where this is less than 60 per cent of predevelopment levels. At the time of writing, draft water sharing plans for the Namoi, Lachlan, Murrumbidgee, and Gwydir regulated rivers provide a marginal improvement in environmental allocations, but still are some way from reaching some of the targets in the State water management outcomes plan.

At the time of writing, the targets in the State water management outcomes plan were being reviewed. Some changes to the plan are expected, with many of the changes designed to clarify the intent of the targets. The revised targets will go back to water management committees with a view to the plan being finalised in September 2002. The Government believes that the changes made in finalising the State water management outcomes plan will not affect the viability of the water sharing plans.

The State water management outcomes plan sets both long term outcomes and five year management targets for water resource management. It is a guide for planning. The targets do not seek to establish an ultimate position or standard for each water sharing plan but rather to establish a significant but practical step in the process of continuous improvement. Not all targets will be relevant to every plan. The State water management outcomes plan process is being run in parallel with the water planning process on an iterative basis.

Given likely further movement on the targets between the interim State water management outcomes plan and the final plan, the Council has insufficient information to conclude that the State water management outcomes plan targets meet the State's NCP commitments. The Council does, however, support the direction the plan is taking. It will assess the final State water management outcomes plan as part of a 2002 NCP supplementary assessment to be conducted by the end of the year, including how the plan's targets are incorporated in the final water sharing plans.

Provision for the environment – water sharing plans

In 1999, the Council assessed the 1998 New South Wales interim environmental flow arrangements for all regulated rivers. The Council was satisfied that New South Wales had met minimum commitments to act on stressed rivers.

For the 2002 assessment, the Council undertook to examine the first round of New South Wales water sharing plans (which aim to improve the outcomes of the interim environmental flows decided in 1998 and establish new environmental flow provisions for key unregulated and groundwater systems). The Council would assess the timeliness and quality of the reforms in these plans against the national principles for the provision of water for ecosystems.

The Council considers that some plans may change significantly between the draft and the finals, particularly given that the State water management outcomes plan targets are still to be finalised and that the Minister's notes raise a range of issues. The Council is therefore not in a position to assess whether the final water sharing plans comply with CoAG commitments. This is not due to lack of effort on the part of New South Wales, but because the plans must be finalised before the Council can reach a definite conclusion. The Council is therefore unable to assess at this time whether the water sharing plans comply with CoAG commitments.

The water sharing plans will build on the environmental flow rules already in place on the regulated rivers. The Council therefore thinks it is not unreasonable, given the State's efforts, to allow New South Wales extra time to properly complete this important reform. These efforts include embarking on the most comprehensive stressed rivers assessment process undertaken in Australia, passing legislation capable of providing significant outcomes for the environment, and progressing a process for delivering water plans for more than 80 per cent of the State's water resources. The Council will defer examination of the final water sharing plans to a supplementary assessment to be conducted by the end of 2002.

To aid all parties in the possible directions of the 2002 supplementary assessment, the Council believes it is useful to point out some observations on the process so far and to identify where a number of plans may evolve in a way that might not comply with CoAG commitments. The Council notes that the plans have not been finalised and that the New South Wales Government is working with committees to address these issues. The Council has limited its comments to those aspects of plans that are considered to be problematic.

In the 2001 NCP assessment, the Council deferred its assessment of New South Wales progress on stressed rivers against the national principles for the provision of water for ecosystems. For this 2002 NCP assessment, the Council has again decided to defer an assessment of progress against the national principles until the final water sharing plans are in place. A full assessment of the final plans against the national principles will occur in the 2002 supplementary assessment. On the basis of the draft water sharing plans that have been publicly released, the Council can infer that some plans in their present state may not meet the requirements of the national principles.

With regard to the plans, the Council has raised concerns about timeframes for achieving sustainable resource use and the lack of transparency in water sharing decisions. New South Wales will need to address these matters in

finalising the plans and they will be key areas for consideration in the 2002 NCP supplementary assessment to be conducted by the end of the year.

The Council believes that the proposed provisions in some draft plans may lead to a marginal improvement in the conditions of stressed river ecosystems. For the end of 2002 NCP supplementary assessment, the Council expects to see final plans contain environmental allocations that ultimately provide for an improvement in the condition of the rivers. The Council draws particular attention to the Namoi and Murrumbidgee river draft water sharing plans as needing modification before the Council can be satisfied the State has met its NCP obligations.

In relation to monitoring and performance indicators for the plans, at the time of writing the New South Wales Government was yet to develop generic performance indicators for each water source,[9] and so all drafts contain Minister's notes that these indicators are still to be finalised. These performance indicators have implications for the development of monitoring arrangements to deliver the objectives of the water sharing plans. These performance indicators will also be assessed in the 2002 supplementary assessment, as a key issue for the delivery of the final water sharing plans.

Victoria

Full cost recovery – urban

In 2001, the Council concluded that a number of nonmetropolitan urban providers (referred to in Victoria as regional urban water authorities) were not operating on a commercially viable basis as defined by the CoAG guidelines. The Victorian Government noted its intention to announce a price path that would establish full cost recovery within three years. Victoria also announced that an Essential Services Commission would be created as an independent economic regulator to oversee the implementation of the price paths.

The Council noted that demonstration of further progress on full cost recovery, particularly among the regional urban water authorities, would be a significant issue for its 2002 assessment.

In late June 2001, the Minister for Environment and Conservation released details of a new framework for water pricing. It caps prices that Victorians will pay for water over the three years to June 2004. Victoria states that the

[9] These are being developed and will include indicators for low flows, moderate to high flows, ecological health (generally or for specific ecological communities or habitats), water quality, the economic benefits of consumptive water use, equity among licence classes, basic rights, and town water supplies.

price framework provides an appropriate balance between the need to meet the economic imperative of responsible financial management and the social imperative of protecting customer interests by minimising pricing impacts. It was introduced following extensive industry and community consultation.

Victoria expects all regional urban water authorities to be operating between the lower and upper CoAG pricing bounds by the end of the 2004 price path. The methodology used to calculate price paths for the regional urban water authorities appears to be consistent with the CoAG pricing principles.

Full cost recovery – rural

For the 2001 NCP assessment, Victoria provided indicative information only on the level of full cost recovery by the rural water authorities. For Goulburn–Murray Water, the largest rural authority, 25 of 34 schemes were recovering an amount consistent with the lower bound of the CoAG pricing guidelines. Goulburn–Murray Water advised that the nine schemes that were not operating on a commercially viable basis (10 per cent of Goulburn-Murray's total rural services), would be shown to be commercially viable for 2000-01.

Victoria has now provided information indicating that some districts supplied by Goulburn–Murray Water are still not recovering full costs. For the fourth consecutive year, sales revenue was well below normal due to drought conditions reducing the amount of water available in the Goulburn system. In 2001, Goulburn–Muray Water reviewed and revised its tariffs to achieve full cost recovery.

Victoria is in the process of developing several initiatives that will enhance its approach to cost recovery in the rural sector. While the role and responsibilities of the Essential Services Commission for the rural water sector are yet to be determined, a proposals paper foreshadowed special arrangements to apply to the rural water authorities. These authorities, in consultation with their rural customer committees, will prepare and submit pricing proposals (consistent with a set of pricing principles defined by the Government) to the Essential Services Commission for review. Where the principles are complied with, the Essential Services Commission will recommend to the Government that it accept the proposed prices. Where proposed tariffs are not consistent with the pricing principles, the Essential Services Commission will recommend to the Government that it reject the prices and that the rural water authority be required to submit revised tariffs.

Victoria's 2002 NCP annual report stated that an asset valuation practice statement which adopts the deprival value concept has been developed. For the time being, the new accounting policy excludes water businesses due to uncertainty about the application of fair value measurement of the infrastructure assets they hold. Consultation with these businesses will be undertaken to resolve these issues.

Victoria reports that an initial draft of the guidelines for renewals annuities was developed late in 2001. Further work is required, however, before consultation with rural water businesses can commence. The Council will reassess the situation when Victoria has finalised its approach.

Renewal annuities are the preferred method to reflecting the future requirement for refurbishing and replacing water and wastewater infrastructure assets. The Council is satisfied that Victoria's draft guidelines for renewals annuities reflect the CoAG pricing commitments. These are, however, non-prescriptive guidelines subject to change, and the extent of adoption of this methodology by water and wastewater businesses remains to be seen.

Victoria states that, on average, all rural water services achieve full cost recovery. Victoria also intends the Essential Services Commission to oversight the prices of all rural water authorities from 2004. Given Victoria's intention that recent changes in its pricing policy will reduce temporary under recovery in some schemes in the Goulburn-Murray region, the Council will conduct a progress report on this issue in 2003.

Full cost recovery – rural dividend payments

In its 2001 assessment, the Council noted that dividends paid by rural water authorities were not based on the CoAG commercial principles – these state that dividends should be set at a level that reflects commercial realities and simulate a competitive market outcome.

Victoria has committed to work on a commercially based dividend framework, and will consult with the rural and regional urban water authorities as part of that process. While there is no commitment for rural water authorities, Victoria intends that a framework for dividends will apply to regional urban water authorities for 2002-03.

The Council has not received sufficient information from Victoria to determine whether the current methodology for determining dividends and actual dividend payments are consistent with commercial principles. Given Victoria's intention to develop a dividend framework, the Council will reassess Victoria's progress on dividend payments for both regional urban water authorities and rural service providers in 2003.

Rural full cost recovery – community service obligations and cross-subsidies

In its 2001 NCP assessment, the Council was concerned about the lack of transparency in community service obligations (CSOs) among rural water authorities. It accordingly suggested that the noncommercial elements of the rural water authorities be separately identified and reported.

The Council was also of the view that Victoria had yet to meet cross-subsidy commitments in full. While progress in reforming cost recovery and consumption based pricing had decreased the scope for nontransparent cross-subsidies, a more rigorous consideration of this issue was needed to meet CoAG commitments. At that time, Victoria advised that it would consider the issue of identifying and reporting cross-subsidies over the twelve to eighteen months period following the 2001 NCP assessment, with a view to establishing a preferred approach before the Essential Services Commission assumed responsibility for regulating water prices. Victoria will also require rural water businesses to report CSOs in their annual reports, commencing in 2001-02.

In its 2002 NCP annual report, Victoria indicates that it is yet to develop guidelines on the identification, measurement and reporting of cross-subsidies. It may do so, however, subject to finalising new regulatory arrangements to transfer prices oversight to the Essential Services Commission.

While the regulatory arrangements for the Essential Services Commission have yet to be finalised, Victoria expects the pricing principles under the framework will ensure that cross-subsidies are identified and transparent. If the Essential Services Commission regulation reveals significant cross-subsidies between services and/or customers, Victoria will reconsider the need for guidelines for its water businesses.

The Council is satisfied with the actions Victoria proposes for the reporting of CSOs by rural water businesses. The Council remains concerned, however, about the lack of a rigorous consideration of cross-subsidisation. In 2001, Victoria advised that it would consider the issue over the next 12–18 months. There has been no progress on this commitment over the past 12 months, but Victoria argues that there are few, if any, rural cross-subsidies.

The Council recognises that some mechanisms are now in place to reduce the occurrence of cross-subsidies in the rural water sector. The Council will reassess this issue in 2003.

Water allocations and property rights

In June 2001, the Council found that Victoria's system of water property rights met the CoAG commitments. The Council considered, however, that progress in the rollout of Victoria's implementation program of bulk entitlements, streamflow management plans and groundwater management plans had been slower than anticipated. The Council undertook to reassess Victoria's progress in June 2002.

An issue that emerged in 2001 concerned the cumulative impacts on property rights and the environment of the capture of surface runoff by farm dams. At that time, Victoria was in the process of developing a policy on this issue, so the Council committed to reassess this issue in 2002.

For the 2002 NCP assessment, the Council also undertook to assess the property rights aspects of Victoria's proposed river health strategy. Further, the Sunraysia rural water authority had announced that the tenure of private diverters' licences would be reduced from 15 years to five years on renewal. The Council was concerned that this decision effectively undermined irrigators' property rights.

The Council considers that the Farm Dams Act 2002 is a significant achievement by Victoria in reaffirming water property rights and addressing environmental river health. Prior to the Act, there was no mechanism to control irrigation dams constructed off waterways to capture overland flow. Landholders could build farm dams on their properties to capture such flow with no consideration of the effect on downstream users. The Council commends Victoria on the manner in which it has addressed its commitment.

Victoria's progress on its bulk entitlement program and streamflow management plans has further slowed. No more plans have been finalised beyond the three that were endorsed and in operation in June 2001. Nevertheless, the Victorian river health strategy has set some robust targets for completing the bulk entitlement program and advancing the key streamflow management and groundwater management plans.

The Victorian river health strategy requires winter sustainable diversion limits to be in place by December 2002 and proposes that overall sustainable catchment limits be in place by 2005 for all catchments and aquifers. Limiting extractions protects the security of existing consumptive users and environmental flows, and provides for the sustainable use of groundwater systems. The Council considers that the system of diversion and catchment limits proposed by Victoria provides a suitable mechanism to protect the environment from excessive diversions and to ensure water users understand the limits of the available resource.

Victoria is progressing arrangements with the Sunraysia Rural Water Authority, although the path to resolving this issue remains uncertain.

The Council is satisfied that Victoria has addressed property right issues and will re-examine progress in this area in 2004.

Provision for the environment

In 2001, the Council concluded that Victoria had made insufficient progress in increasing environmental allocations and restoring the health of its stressed rivers. In that assessment, however, Victoria committed to a comprehensive program over three years to address its most stressed rivers. By June 2002, Victoria was to have completed a publicly endorsed river health strategy and begun implementing action plans for its stressed rivers.

Given the delays and the importance of allocating sufficient water to Victoria's stressed rivers, the Council made the reassessment of this issue a

priority for 2002. The Council signalled its intention to consider payment recommendations if Victoria made insufficient progress.

In March 2002, the Victorian Government released the draft Victorian river health strategy for public consultation. The strategy was developed to protect and restore Victorian rivers over the long term.

A key question for this assessment was how Victoria sets an appropriate environmental flow regime. Clarifying current entitlements to divert water for consumption sets bulk entitlements, which are legal entitlements under the Victorian system. Environmental flow needs are then assessed and a trade-off is made based on an analysis of the predicted environmental benefits and the impact on the security of users. Victoria has argued that this process complies with the CoAG requirement of achieving a better balance in water resource use (including allocations for the environment).

Victoria also advised that for catchments that are relatively undeveloped with ecologically healthy rivers, the Government's emphasis is on protecting existing environmental values. In rivers where the water resources are highly developed and generating significant economic activity, the emphasis needs to be on achieving an appropriate balance between the needs of the environment and consumptive users.

Another key issue is the nature of the trade-offs made in deciding what the environment receives. In making a decision on an appropriate environmental flow regime that either does not meet (or does not meet in the short term) the scientifically recommended one, Victoria's view is that the community has agreed to accept a higher level of environment risk and/or a certain level of environmental degradation as a consequence. It is the Council's view, however, that to do this properly there needs to be independent science that models scenarios that identify levels of risk to the environment to allow the community to make informed choices.

The Council has been concerned to ensure the risks to the environment posed by the negotiated environmental flow regimes are explicitly and transparently acknowledged. The Council has seen the terms of reference for the recently announced independent technical review panel that is to provide advice on environmental flow requirements to consultative committees. The environmental flow studies, the draft water management plans, and the reports of the independent technical review panel will be made publicly available. The Victorian Government has also committed to include in the draft guidelines to be used by consultative committees the need for plans to incorporate a description of the risks both to the environment and to the users of an agreed flow regime. The Council has also sought to ensure that the Victorian system provides for a balance of broader community interests.

While generally satisfied with the mechanisms in the Victorian river health strategy, the Council has been concerned that the timeframes may be too long. The strategy provides two stages to provide water for the environment in developing individual river health strategies, but it is the Council's view that the consultative committees may need to consider the two stages

simultaneously, especially for the stressed rivers of high value identified in regional river health strategies.

With regard to the nominated stressed rivers program, Victoria has advised that there are a number of flow rehabilitation studies under way, and it is not possible to commit to stage 2 funding at this stage until the costs are known and weighed against the environmental benefits. Victoria expects, however, to deliver stage 2 flow regimes in more than the nominated rivers over the next three years.

The Council is satisfied that the mechanisms contained in the river health strategy provide the tools for Victoria to meet its stressed rivers commitment. The 2001 commitment to develop an overarching river health strategy has been met. The Council will assess the first round of five stressed river plans in the 2003 NCP assessment against the stage 1 and 2 mechanisms of the river health strategy. To prepare for that assessment, the Council's Secretariat will hold quarterly consultative meetings with Victorian officials to monitor progress in developing these plans in accordance with the proposed reform path.

Compliance with principle 3

Principle 3 of the national principles for the provision of water for ecosystems requires the legal recognition of environmental water provisions.

In 2001, the Council found that the Water Act explicitly recognises environmental conditions on bulk entitlements, but the environmental allocations set by streamflow management plans were not statutorily based. For the 2002 NCP assessment, the Council undertook to review this issue.

The Farm Dams Act 2002 has provided statutory backing for the provisions of streamflow and groundwater management plans. The Minister may now decide to accept or reject a plan if it is not consistent with the legislation, or the proper process has not been followed. The Council is satisfied that the changes embodied in the Farm Dams Act 2002 address principle 3 and meet the outstanding issue raised in the 2001 NCP assessment.

Compliance with principle 5

Principle 5 states that where environmental water requirements cannot be met due to existing uses, action (including re-allocation) should be taken to meet environmental needs.

In the 2001 NCP assessment, the Council found that the streamflow management plans and bulk entitlement mechanisms were insufficient in providing environmental water requirements for the stressed rivers. For this assessment, the Council committed to reassess progress against principle 5 in

the light of the Victorian river health strategy and the three year action plan for stressed rivers that appeared in the 2001 NCP assessment.

It is the Council's view that the bulk entitlement and streamflow management plan processes alone will not be sufficient to meet this principle. Nevertheless, Victoria has agreed that the consultative committees may simultaneously consider and recommend stage 2 proposals for stressed rivers identified to be of high value in regional river health strategies. The Council will therefore be looking for Victoria to invest in stage 2 proposals, with priority consideration being given to rivers in the nominated three year stressed rivers program.

In 2001, Victoria was given an extension of time to meet its commitments on stressed rivers. In future NCP assessments, the Council will need to assess whether the environmental outcomes in individual plans are being delivered, given that the State has yet to meet the 2001 commitment for action on stressed rivers. Progress on the initial five stressed river plans will be a key issue for Victoria in the 2003 assessment.

Compliance with principle 6

Principle 6 states that further allocation of water for any use should only be on the basis that natural ecological processes and biodiversity are sustained.

In 2001, the Council found that Victoria was meeting principle 6. The Water Act requires a water authority to consider the impact on the environment and other users before issuing a licence. An emerging issue in 2001, however, was the cumulative impact of winterfill dams on water resources. The Farm Dams Review recommended processes to deal with this impact. In indicating its intention to reassess compliance with principle 6 in 2002, the Council advised that it would examine the Government's response to the 2001 Farm Dams Review recommendations.

As a result of the Farm Dams Act, streamflow management plans and groundwater management plans will specify monitoring and compliance conditions, and rural water authorities must publicly report on compliance with the provisions of plans. The Council, accordingly, is satisfied that Victoria is meeting principle 6 and has addressed the outstanding 2001 issue.

Queensland

Full cost recovery – urban

Queensland has reported that all local governments with more than 5000 retail water connections, but outside the big 18 local government areas, have now implemented, or are committed to implementing full cost pricing. For

local governments with between 1000 and 5000 connections, the Council's 2001 NCP assessment noted that there were still a significant number that were either still considering full cost pricing or that had decided not to introduce it.

The Queensland Government has now reported a significant improvement in reform implementation by these local governments – all but one have decided to implement full cost recovery. There are 125 local governments in Queensland. Of these only six have neither implemented water reforms nor committed to their implementation. Of these six, five are small service providers with less than 1000 connections.

Queensland has achieved a high degree of success through the Government's Business Management Assistance Program. There has also been a substantial increase in the level of understanding within local government about the reforms and their benefits. The Council considers that Queensland has met its 2002 NCP commitments for the implementation of full cost recovery by local government.

Full cost recovery – water boards

At the time of the Council's 2001 assessment, information on cost recovery levels for certain water boards was only available for the period prior to commercialisation. The Council then proposed to look for competitive neutrality adjustments, such as tax equivalent regimes and commercial rates of return, by these boards in its 2002 assessment.

The information provided by Queensland indicates that prices for both Gladstone Water Board and Mount Isa Water Board include competitive neutrality adjustments and a positive rate of return, and therefore meet the CoAG commitments. The Townsville–Thuringowa Water Board has indicated its intention to comply with the CoAG full cost recovery obligations.

Consumption-based pricing

In the 2001 NCP assessment, the Townsville Council failed to demonstrate that it had objectively analysed the cost effectiveness of two-part tariffs and provided a public interest justification on why it would not implement price reforms. Two years had passed since the Council first expressed its concerns and this matter was still unresolved. Consequently, the Council recommended a permanent reduction in Queensland's NCP payments of $270 000 from 2001-02.

The Council stated it would reconsider Townsville's approach to two-part tariffs in its 2002 NCP assessment, and whether a continued reduction in NCP payments was warranted.

Townsville City Council commissioned independent consultants to carry out a second assessment of the two-part tariff pricing policy. The Council has reviewed this assessment and raised several concerns with the Queensland Government. The findings of the second report are currently being assessed by the Queensland Competition Authority as part of its assessment of local governments' progress in implementing competition reforms. The Authority will be assessing whether Townsville's second report meets the requirements set down in the Government's guidelines for evaluating two-part tariffs, and whether the report's recommendations rejecting two-part tariffs are supported by rigorous analysis.

There has been some progress on this issue since the 2001 NCP assessment, and the Council supports the Queensland Government's decision to have the Queensland Competition Authority review the report. It is now three years, however, since the Council first expressed its concern regarding this issue and hence the Council has found that Townsville is still non-compliant. The implications of this issue for Queensland's NCP payments are considered in the Council's findings and recommendations section in volume 1 of the NCP assessment report.

Consumption-based pricing – trade waste charges

At the time of the 2001 NCP assessment, the Council understood that some local governments levied trade waste charges but no details of the charging arrangements had been provided. The Council stated that it would further consider the issue of trade waste charges in its next assessment.

Queensland has advised that legislation requires local governments operating sewerage systems to develop a trade waste environmental plan by 1 July 2003. To support this legislation, Queensland has produced a model trade waste environmental plan.

Under the plan, local governments are encouraged to operate their trade waste services on a full cost recovery basis. All local governments must have a complying trade waste environmental plan in place by 30 June 2003 if they operate a sewerage business. Advice indicates that the model plan has widespread industry support and is seen as the benchmark for sewerage business pricing throughout Queensland.

Fifteen of the big 18 local governments are operating a charging structure similar to the model plan. The remaining three are in the process of adopting a policy and pricing structure similar to the plan.

The Council is satisfied that Queensland has a program in place to encourage the adoption of trade waste charges, that the program is being implemented by local government and that Queensland has a mechanism to review and assess the level of implementation. The Council concludes that Queensland has met this reform commitment.

Allocations – provision for the environment

In 2001, the Council concluded that Queensland had generally met its environmental commitments with the exception of the Condamine–Balonne Basin. The Council found emerging evidence that the basin is a stressed river system. It examined the adequacy of the three options contained in the draft Condamine–Balonne water resource plan (WRP) to address the environmental problems identified, but concluded that if any of the three options were implemented it may be appropriate to recommend a substantial penalty in the 2002 NCP assessment for noncompliance with reform commitments.

For the 2002 NCP assessment, the Council was expecting to see a final WRP for the Condamine–Balonne consistent with CoAG water reform commitments.

In September 2000, a comprehensive moratorium was placed on the starting of any new works on the Condamine–Balonne catchment that would lead to an increase in the taking of water, either in watercourses or as overland flow water. This moratorium has effectively put an interim cap on the capacity to divert and store water in the basin.

A satisfactory Condamine–Balonne WRP is critical for Queensland's compliance with the water reform framework, and as a means to set Queensland's diversion limits under the Murray–Darling Basin cap. Work is currently underway on attaining appropriate environmental allocations of water in the Condamine-Balonne Basin. In this context, the State Government has commissioned a six-month independent review of the science associated with the impact on the environment from water use in the Basin and committed to act on the findings of the review.

At the time of writing, the Queensland Government released a salinity hazard map for Queensland's section of the Murray–Darling Basin, including the Condamine–Balonne Basin. The map shows some 26 million hectares of land have the potential to develop significant salinity problems in the next 30–50 years. Extensive public consultation with key stakeholders was underway to develop urgent solutions to the problem. This consultation is to culminate in a forum on 2 August 2002 to discuss solutions. The Government stated that without urgent changes to land practices, serious salinity problems will threaten the environment as well as the existence of towns such as Dirranbandi and St George in the Condamine–Balonne Basin. The Queensland Government has recognised that salinity is but one issue that must be addressed in the broader context of water, vegetation management and land use issues.

Queensland has been discussing a wide range of possible options for addressing these issues with the Commonwealth and the New South Wales Governments. As noted above, options include the Queensland Government acquiring Cubbie Station, Australia's biggest cotton producer, as part of its efforts to restore the Condamine–Balonne river system. The volumes of water

extracted and stored, and the way water is used will be considered. Further, the suitability of certain land uses and the need for industry incentives, readjustment, and restructuring will also be assessed. Any Queensland proposal is expected to provide end of valley flows for the Narran Lakes in Northern New South Wales, a wetland of international importance, a national park on the Queensland-New South Wales border and other areas of national importance.

A question the Council has raised during this assessment is what Queensland would do in the event the Commonwealth did not provide any assistance. Queensland advised that it would then have to reconsider its approach.

The Council notes that the Condamine–Balonne is a Queensland river system and it is Queensland's obligation to address its stressed condition. Given that a proposal to address this issue is presently being considered by governments, the Council has decided, on balance, that there are grounds for delaying judgement until more information is available. The Council has therefore decided it appropriate to conduct a supplementary NCP assessment on the Condamine–Balonne WRP in February 2003.

The Council considers this is an appropriate approach given that evidence emerged only in 2001 that the basin was stressed and given the efforts being made by the Queensland Government to address this issue.

Nevertheless, the river system is stressed and should insufficient progress be made on this issue by the time of the supplementary assessment the Council would consider an NCP payments recommendation.

Burnett Basin WRP

In 2001, the Council examined the Burnett Basin WRP and found that it met CoAG commitments. In December 2001, however, the Queensland Government passed legislation that amended a number of the environment objectives in the WRP. The Council needed to re-examine the modified WRP to be satisfied that it still complies with Queensland's CoAG commitments.

The Queensland Government has argued that the legislative amendments resulted in small changes to a handful of objectives in the original Burnett Basin WRP, and that those changes have not, in any way, threatened the integrity of the WRP or its effectiveness as a tool for managing the water resources of the Burnett Basin.

The Council notes that while the modifications have not altered the stated general outcomes of the WRP, they enable an additional 66 000 megalitres per year to be allocated for consumptive use, resulting in an alteration to the plan's ecological outcomes. In this regard, Queensland has indicated that it is considering measures to address this alteration.

It is the Council's view that the revised WRP incorporates a minor level of change in the medium and high water flow objectives. In a number of instances, however, the flow objectives have moved further away from those presented as the environmental flow limits, and this is a potential concern.

The Council does not consider that the modification of the WRP means the Burnett is now a stressed system. Given that the amended WRP has resulted in only minor changes from the outcomes contained in the original WRP, the Council reaffirms its 2001 finding that the WRP complies with CoAG commitments. To be certain, however, the Council will review the provisions of the forthcoming Burnett Basin resource operation plan (ROP). This is consistent with the Council's findings in the 2001 assessment in relation to the Burnett WRP. The Burnett ROP will need to show how it will achieve the general and ecological outcomes stated in the WRP to ensure that ecologically sustainable outcomes will be realised.

Compliance with national principle 4

Principle 4 of the national principles for the provision of water for ecosystems states that 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 while recognising the existing rights of other water users.

The 2001 NCP assessment found that no ROPs were advanced enough for examination at that time, so the Council deferred examination of compliance with this principle until the 2002 NCP assessment when the Fitzroy Basin ROP was expected to be in place.

Queensland has advised that work is progressing to release a draft ROP for the Fitzroy Basin in August 2002. Some 40 submissions on the proposal are being considered. The ROP will be released for three months public consultation. Subject to any further studies that may be necessary, the ROP process is expected to be finalised in early 2003.

The Council will re-examine future ROPs for the Fitzroy Basin, and possibly the Burnett Basin, against principle 4 in its next NCP assessment.

Compliance with principle 5

Principle 5 states that where environmental water requirements cannot be met due to existing uses, action (including re-allocation) should be taken to meet environmental needs.

The 2001 NCP assessment concluded that the Council would look to Queensland's response on the development of a new Condamine–Balonne WRP to assess whether the State had met principle 5. Queensland committed

to treat this issue as a priority, so the Council undertook to review the WRP against principle 5 in 2002.

The new WRP will contain the new environmental flow objectives. The Council will assess developments and compliance with principle 5 in the February 2003 supplementary assessment of the new Condamine–Balonne WRP.

Compliance with principle 8

Principle 8 states that environmental water provisions should be responsive to monitoring and improvements in understanding of environmental water requirements.

The 2001 NCP assessment found that Queensland was undertaking scientific assessments to determine future monitoring programs to ensure the data collected measure the performance of WRPs. A pilot program was being applied in the Condamine–Balonne Basin and, if successful, would be applied to other river systems in the State. The Council decided to consider the application of principle 8 in the 2002 NCP assessment as further developments occurred.

The Council will reassess the new Condamine–Balonne Basin WRP and the Fitzroy Basin ROP against principle 8 in 2003. The Council may also examine other WRPs and ROPs, monitoring reports and any other relevant documents with regard to this principle.

WRPs for other stressed systems

In 2001, the Council concluded that the process of setting environmental flows is an adaptive one and that the results from Queensland's WRPs, ROPs and monitoring of ecological outcomes were yet to be seen.

Queensland has a moratorium on withdrawals from its portion of the Murray–Darling Basin system, which includes the Border Rivers. The finalisation of the Condamine–Balonne Basin WRP will define Queensland's adoption of the Murray–Darling Basin cap. The Condamine–Balonne Basin accounts for the bulk of the Murray–Darling Basin water sourced from Queensland.

The Condamine–Balonne Basin is the only area in Queensland where a WRP is being developed that is acknowledged as being, or at risk of becoming, stressed or overallocated.

Public consultation

In 2001, the Council found that Queensland continued to actively consult with all stakeholders in all aspects of its reforms and had ongoing consultation and education mechanisms. The Council was satisfied that Queensland had met its commitments in this area.

The Council found, however, a need for greater transparency in the WRP process. For the 2002 NCP assessment, the Council committed to monitor developments in public consultation on WRPs.

In relation to the modified Burnett WRP, the Queensland Government had enacted legislation to amend the Water Act requirement for public consultation, for reasons of administrative expediency, but the Council considers that such processes do not help to instil public faith in the transparency of Queensland's WRP arrangements.

Queensland has re-affirmed its commitment to transparency. In particular, reports required by legislation will now be augmented. The next such report (on the Condamine–Balonne) will include the augmented information. The Council will reconsider this issue in 2003 when it assesses the final Condamine–Balonne WRP.

Progress report issue: new rural schemes – the Paradise Dam

In 2001, the Queensland Government announced an intention to proceed with the design of the Paradise Dam project in the Burnett Basin region. The development proposals include a major dam on the Burnett River (with a capacity of up to 300 000 megalitres) to support agriculture and industrial expansion in the lower Burnett region.

After assessing all relevant material, including over 200 public submissions, the Coordinator-General recommended in October 2001 that the Burnett River Dam proceed. The Coordinator-General determined that the adoption of a series of mitigation measures could adequately address the detrimental impacts of the development. The project has received Commonwealth environmental approvals subject to certain conditions.

Completion of an environmental impact assessment process does not automatically lead to a decision to invest in the project. This decision will occur when the potential investors (public or private sector) have established that appropriate rates of return will be achieved on their investment.

The results of testing have demonstrated that the outcomes specified in the Burnett Basin WRP would be retained following the development of the dam project, given that the flow release strategy associated with the dam will essentially comply with the WRP's environmental flow objectives. Any departures from the WRP objectives are minor.

The Queensland Government allocated $35 million for the Burnett River infrastructure development project in the 2002 State Budget. The Government cited this decision as evidence of its commitment to build a major dam on the Burnett River. A final decision has not been taken, but the Queensland Government has projected a starting date for construction of late 2003 or early 2004.

The Government is aware of its obligations in terms of CoAG water reform that should the dam proceed it will need to be shown it is economically viable and ecologically sustainable.

Western Australia

Provision for the environment

In its 2001 assessment, the Council noted that Western Australia might need to revise its 1999 implementation plan for developing water management plans and environmental provisions, to align it with new data and priorities. The Council indicated that it would continue to monitor both the progress made in developing water management plans and any increased water use that may require particular plans to be completed earlier than scheduled. Western Australia provided an updated implementation plan for the 2002 NCP assessment.

Western Australia continues to progress water allocations for the environment. Its revised program for the implementation of water management plans shows no stressed or overallocated surface water systems that required action by June 2001. The State has until 2005 to fully implement its implementation program. The Council is satisfied that Western Australia has met the 2001 NCP commitment.

Environment and water quality – integrated catchment management

In the 2001 NCP assessment, the Council was concerned with Western Australia's slow progress in implementing actions to address broader catchment management issues. It undertook to review the State's implementation of integrated catchment management in the 2002 NCP assessment.

Western Australia has endorsed an integrated catchment management–natural resource management policy. Partnership agreements between the Western Australian Government and natural resource management groups are in development to provide support, clarify expectations and quantify deliverables.

Since June 2001, there has been some progress in the development of regional strategies. Western Australia has signed an intergovernmental partnership agreement with the Commonwealth as part of the National Action Plan on Salinity and Water Quality. The development of the regional strategies to achieve integrated catchment management objectives, including salinity management, will be negotiated as part of final bilateral agreements under the National Action Plan. The Council is satisfied that Western Australia has met the 2001 NCP commitment.

Environment and water quality – National Water Quality Management Strategy

In 2000, Western Australia developed a State Water Quality Management Strategy as the framework to implement the requirements of the intergovernmental National Water Quality Management Strategy. The endorsement of the strategy meant Western Australia met minimum commitments for the 2001 NCP assessment, but the Council expressed concern at the rate at which the State was adopting the strategy.

In 2001, Western Australia provided the Council with a provisional timetable outlining a process to implement the strategy. Given the delays in implementation, the Council determined that it needed to examine evidence of progress against the timetable over the next three NCP assessments. In the 2001 NCP assessment, the Council stated that it would expect certain outcomes for the 2002 assessment.

Western Australia has since advised that the State Water Quality Implementation Plan was not released in 2001-02 due to priorities associated with the recent drought. Work by Western Australia on ten of the guidelines scheduled for commencement in 2001-02 has not started and is not scheduled to commence in 2002-03 either.

Western Australia has argued there is a need to change the agreed timetable it provided in the 2001 NCP assessment and that it does not believe that noncompliance with the timetable should be the sole basis for assessment of its commitment to implementing the strategy.

Western Australia also submits that it has applied the national water quality management strategy in a variety of practical and meaningful ways outside the program submitted to the Council in 2001. It is also Western Australia's position that development of implementation plans for some of the national guidelines is not warranted at this time given the low numbers of relevant industries in Western Australia.

Western Australia has argued there is a need to change the agreed timetable it provided in the 2001 NCP assessment and that it does not believe that noncompliance with the timetable should be the sole basis for assessment of its commitment to implementing the strategy.

Western Australia has not met the outstanding 2001 NCP commitment and has made little progress against its water quality commitments in the water reform agreements. Western Australia has made no progress against its three-year timetable and has withdrawn from some of the commitments it made. The Council is not aware of any good reasons why the national strategy has not been implemented in Western Australia by now.

While Western Australia's failure would ordinarily attract a recommendation by the Council that part of the State's NCP payment be suspended, the Council is prepared to allow Western Australia more time for the implementation of its water quality commitments and get the program back on track.

The Council has agreed that Western Australia would fully meet its relevant 2002 NCP assessment commitments if it can complete and implement those plans identified by the Council in the 2001 assessment. Such action would give the Council confidence that Western Australia can deliver the outcomes of the national strategy and meet its water quality commitments.

Consultative meetings will be held in December 2002 and March 2003 between the Council's Secretariat and Western Australian officials to ensure sufficient progress is being achieved. It is proposed that a number of milestones be reached by the time of those meetings (see chapter 5).

Should the Council consider insufficient progress has been made by those meetings, it may submit a report to the Treasurer recommending a suspension of some of Western Australia's quarterly NCP payments. In 2003, the Council will consider, as part of the assessment of compliance by all States with the National Water Quality Management Strategy, whether Western Australia continues to make sufficient progress against its commitment.

South Australia

Pricing and cost recovery

In 2001, the Council recognised the sound financial performance of SA Water and commended its efforts to improve service quality and efficiency. It was concerned, however, that the increasing proportion of profits being returned to the Government as dividends may limit the scope for future investment by the business.

SA Water paid dividends of $175.2 million in 1999-2000, representing 124 per cent of profit after tax. The Water Services Association of Australia reported SA Water's 1999-2000 dividend payment as the highest (relative to profits) among the country's large metropolitan services.

The Council stated that it would review the matter in 2002 to ensure South Australia's dividend policy is consistent with the CoAG pricing guidelines, which require that dividends where paid reflect 'commercial realities and simulate a competitive market outcome'. Two primary considerations in this regard are the potential impact of limited reserves being retained within SA Water for the funding of future investment from retained earnings, and the erosion of the asset base of SA Water.

The Council considers that a reasonable upper bound for the dividend distribution policy of a government water service business is the corporations law requirement that dividends may be paid only out of profits, given, among other considerations, the CoAG requirement that dividends reflect commercial realities. The adoption of the limit in the corporations law would safeguard the authorities against being left with insufficient financial resources, which could undermine service quality. This approach would also help satisfy competitive neutrality principles.

In some limited circumstances a dividend distribution that exceeds 100 per cent of the after tax profits of a statutory authority service provider may not have adverse consequences. It may be warranted, for example, by an authority wanting to move to a better capital structure by increasing its debt ratio. Such a move could help minimise the authority's weighted average cost of capital. SA Water's gearing ratio is low (at approximately 23 per cent), but South Australia has not indicated that its dividend policy is a means of moving to a more efficient capital structure.

Overall, the Council has concerns about South Australia's dividend policy. Its approach runs the risk of running down assets, reducing financial viability and reducing service standards below minimum requirements. The Council will be reviewing the dividend payment policies of all jurisdictions in 2003. At that time, it expects that South Australia will have in place appropriate safeguard mechanisms against the potential adverse effects of high dividend payout ratios.

Consumption-based pricing

In the September 2000 supplementary assessment, South Australia undertook to reform the pricing of commercial water. In the 2001 NCP assessment, the Council decided to monitor the implementation of these water pricing reforms. With regard to commercial wastewater, however, South Australia found that consumption-based wastewater charges were not cost-effective. The Council remained concerned that the use of charges based on property values may result in nontransparent cross-subsidies that are inconsistent with CoAG commitments, and that the pricing arrangements made transparent consideration of the issue virtually impossible.

With regard to trade waste, the Council considered that the new trade waste arrangements represented a significant improvement on the existing system.

South Australia is continuing to implement the reforms envisaged in the September 2000 supplementary assessment, consistent with the timetables provided in that assessment. It now has a legislated price path that will eliminate commercial free water allowances over a five-year period.

In the absence of an independent process for reviewing prices, however, the Council will continue to monitor prices in South Australia, particularly those that contain components based on property values because there is a risk of nontransparent cross-subsidies.

Arrangements to implement the new broader trade waste charges are well advanced. South Australia is continuing to implement the reforms envisaged in the supplementary NCP assessment of September 2000, consistent with the timetables developed in that assessment. The Council remains concerned, however, that property values are being used as a basis for allocating costs among customers, albeit reducing in proportion to total cost. This process has the potential to result in nontransparent cross-subsidies that are not consistent with CoAG commitments.

The Council is satisfied that South Australia has made adequate progress in meeting its 2002 wastewater and trade waste commitments. For the reasons outlined above, however, the Council will re-assess commercial charging arrangements in South Australia when it assesses urban price reform in 2003.

New rural schemes

In 2001, South Australia was considering two proposals for the supply of irrigation water to existing high value adding irrigation areas. It had continued to transfer the remaining two Government-owned irrigation areas to irrigation trusts managed by the irrigators and, as part of the transfer process, each district's water supply infrastructure was being refurbished. At the time of the 2001 assessment, the Council noted progress on these four projects. For the 2002 NCP assessment, the Council sought further information and evidence to demonstrate the ecological sustainability of the projects.

In relation to the Loxton rehabilitation project, the Council is satisfied that the studies of the project demonstrate that South Australia has met commitments to ensure its ecological sustainability. In relation to the Barossa Infrastructure project, water allocations will be purchased from the trading market to ensure the proposal is consistent with all necessary management plans for the Murray–Darling Basin. The Council considers that the project complies with the CoAG commitment regarding ecological sustainability. A decision to proceed with the Clare Valley project and Lower Murray rehabilitation project has yet to occur.

Provision for the environment

In 2001, South Australia identified a need to improve knowledge of environmental water needs and definitions of stress. As called for by the State Water Plan 2000, a stressed resources assessment review was to be conducted, with the outcomes to be used to advise the Government on how to identify water resources under stress (or at risk of stress) and how to respond appropriately. This review was expected to occur in late 2001. The Council undertook to report on developments in South Australia's progress, including the stressed resources assessment review, in the 2002 NCP assessment.

The review is to commence in July 2002. A 12-month timeframe has been allocated for it and the outcomes will be considered when the current water management plans are reviewed, with the first reviews expected to begin in 18 months.

South Australia is continuing to improve its knowledge of environmental water requirements, with a number of new investigations and research activities underway. In addition, in October 2001 the River Murray catchment water management board released the draft water allocation plan for the River Murray. The plan sets a total volume of River Murray water that may be allocated each year. Specific volumes are defined for particular uses pursuant to South Australia's compliance with the Murray–Darling Basin Ministerial cap. The plan also proposes a maximum of 200 gigalitres each year for wetland management purposes.

The plan sets a target to increase median flows for South Australia's portion of the River Murray. The current median flow of the River Murray is 4850 gigalitres per year, or 38 per cent of the natural median. The median flow target of 7025 gigalitres over the life of the plan would improve the flow to 55 per cent of the natural median and enhance river health.[10] The water allocation plan is scheduled to be finalised in July 2002.

In addition to the draft water allocation plan, in April 2002 South Australia and Victoria agreed to establish a $25 million joint fund to improve the environmental health of the River Murray. The aim of the fund is to achieve an additional 30 gigalitres of environmental flows for the river. South Australia has committed to provide $10 million to the fund by 1 July 2005.

Finalisation of the draft water allocation plan for the River Murray will complete South Australia's implementation program to establish water allocation plans. Fourteen of the original fifteen water allocation plans were complete in January 2002, with only the River Murray plan remaining.

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[10] The Council notes that achievement of these targets may require actions from other Murray–Darling Basin States, because the proportions exceed South Australia's allocation under the Murray–Darling Basin cap.

The Council continues to be satisfied that South Australia is making satisfactory progress and has met its NCP commitments.

Compliance with principle 5

Principle 5 of the national principles for the provision of water for ecosystems provides that where environmental water requirements cannot be met due to existing uses, the jurisdiction needs to take action (including re-allocation) to meet environmental needs.

At the time of the 2001 NCP assessment, evidence indicated that the Marne River and the Inman River may be stressed. The Marne River and potentially other river systems in the eastern Mount Lofty Ranges have become stressed by high levels of water extraction. The Inman River has been identified as stressed in terms of water quality.

CoAG commitments require action, including re-allocation for the environment, in stressed and overallocated rivers by 2001. The Council considered that action to re-allocate water to the environment should occur by 2002 and called for a reassessment against this CoAG principle in 2002.

In relation to the Marne River, South Australia advised that a research project looking at science and use information is being undertaken to determine the river's environmental water requirements, as well as those of other eastern Mount Lofty Ranges watercourses. The Minister has declared an intention to prescribe the Marne River and Saunders Creek as a result of concerns about sustainability. Public consultation — due to end in May 2002 but extended — is being undertaken on the need for prescription to set legally binding mechanisms to provide water for the environment in accordance with a water allocation plan.

If these water resources are prescribed, water allocation plans will be developed for these systems. The Council considers that the Marne River and any other eastern Mount Lofty system that may be prescribed are additions to South Australia's implementation program, so the Council will assess the water allocation plans for these systems as they are completed.

Environment and water quality – integrated catchment management

In 2001, the Council found that South Australia was well advanced in the development of catchment water management plans in the areas surrounding Adelaide. It noted, however, the seemingly slow planning and implementation for catchment management in areas further away. South Australia has advised that the initial focus of catchment water management boards was the preparation of water allocation plans. With these plans now endorsed, the boards are now completing their catchment water management plans. South

Australia provided a timetable for the development of the remaining plans, and the Council undertook to reassess progress against this timetable in the 2002 and 2003 NCP assessments.

The Water Resources Act requires the South Australian Water Resources Council to develop a report on the implementation of the State Water Plan 2000. This will include the development of catchment water management plans. A consistent report card framework has been developed for the review of these plans, and it is being trialled as part of the reporting process. The Water Resources Council will make recommendations to the Minister based on the outcomes of the reviews.

The Government is considering new arrangements for integrated catchment management. The broad vision is to ensure integrated natural resource management is based on the development of water catchment areas and the continuation of 'skill-based boards'.

Since June 2001, South Australia has made some progress in developing catchment water management plans. It is on track to have all plans completed by mid-2003. The Council considers that South Australia has met the outstanding commitment for this assessment.

Environment and water quality – National Water Quality Management Strategy

In 2001, South Australia released a draft environmental protection (water quality) policy to implement the policies and principles that comprise the intergovernmental National Water Quality Management Strategy. The Council then found that South Australia showed an ongoing commitment to a coordinated approach to water quality management. The Council was concerned, however, about the slow pace of finalisation of the policy to implement the national strategy. The Council undertook to reassess this issue in 2002 assessment and expected the policy to be implemented by then.

South Australia has advised that development of the policy has taken longer than anticipated because a large number of submissions were received during the extensive consultation period required under the Environment Protection Act. Changes made as a result of the submissions must be subject to a further round of consultation. In May 2002, South Australia provided the Council with a timetable for the completion of the policy.

The Council notes, nevertheless, that governments first agreed on the National Water Quality Management Strategy for freshwater and marine water quality in 1992. South Australia has not met the outstanding commitment and has made little progress. The Council, however, accepts the Government's reasons for the delay in implementing the reform, including the need for full consultation.

The Council will next assess compliance by all States with the National Water Quality Management Strategy guidelines in the 2003 NCP assessment. In 2003, it will assess South Australia's compliance against the timetable published in this assessment and expects the Government to have released draft modules for public consultation, showing the proposed implementation of specific guidelines for freshwater and marine water quality, drinking water, and water quality monitoring and reporting. If the environmental protection (water quality) policy is not in place for the 2003 NCP assessment, then the Council will need to take this aspect of noncompliance into account in its NCP payments recommendations.

In 2001, the Council found that the Inman River was a stressed system in terms of water quality. The development of a new treatment plant by SA Water should address the water quality concerns with the Inman River.

Progress report issue: institutional reform – structural separation

The Minister for Government Enterprises is the owner of SA Water and has the authority to decide water prices. The Council's 2001 assessment framework noted that if the same Minister is responsible for regulation and service provision, the Council would require information about how any resulting potential conflicts of interest were addressed.

In 2001, the Council concluded that South Australia appears to have processes for transparency in setting and monitoring customer service standards. With pricing, however, there is no similar transparency. This makes it difficult for the Council to be confident that pricing decisions will be consistently based on the principles set out in the CoAG water agreement. The Council accordingly needs to closely monitor all pricing issues in South Australia and review all changes to confirm their consistency with the water reform agreements. This includes continuing to seek information to confirm that cross-subsidies are transparently reported.

All of these issues would be resolved if there were an independent body to review the pricing arrangements and publicly release a report. The government could respond to that report and present a statement of reasons if it decided to adopt an approach divergent from the recommendations of the report. All other jurisdictions have introduced, or have committed to introduce, independent processes for monitoring or regulating prices.

The South Australian Government released a position paper on *Establishing the Essential Services Commission* in June 2002. The paper identifies that the role for the Commission in water will be restricted to providing oversight of the quality and reliability of services provided by SA Water. The government has decided that the economic regulation of water will be excluded from the initial functions undertaken by the Commission.

Tasmania

Full cost recovery – urban

In 2001, the Council was concerned that a substantial number of the largest urban water and wastewater businesses were not operating on a commercially viable basis. The Council committed to revisiting progress by all service providers in 2002, when the Government Prices Oversight Commission would have completed its 2000-01 audit of the commercial viability of local government water providers.

The Council also decided that it would look for further information on Tasmania's progress with asset valuation and competitive neutrality costing.

The Tasmanian Government has since provided the Council with the results of the Government Prices Oversight Commission's audit of local government compliance with its urban water pricing guidelines. The focus of the audit is to determine whether local governments have achieved full cost recovery consistent with the CoAG water reform commitments.

Tasmania provided the Council with full cost recovery information that shows:

- 19 of 28 local government water businesses were commercially viable (as defined by the CoAG guidelines) in 2000-01 — an improvement from 14 for 1999-2000;

- 20 of 27 local government wastewater businesses were commercially viable in 2000-01 — an improvement from nine for 1999-2000.

Despite progress toward full cost recovery by local government water service providers, the Council is concerned that a significant proportion of Tasmania's largest service providers is still not commercially viable. Moreover, of the five large local government service providers highlighted in the 2001 NCP assessment, none operated within the bounds of full cost recovery in 2000-01.

The Council has concerns about the level of transparency in the Commission's audit process. The audit reports provide no detail on the actual costing approaches used by local governments. The results of the audit are not publicly available and no formalised mechanism exists to ensure problems identified by the Commission are rectified.

Given that the Commission's role is to make recommendations only and its report is not made public, it is difficult to see how the current process can generate the momentum to ensure reforms are implemented. The Council is looking for jurisdictions to demonstrate that they have processes in place that will continue to achieve the objectives of water reform beyond the life of the Council's assessment process.

In respect of asset valuation methods, Tasmania has developed guidelines for local governments to apply, but the Council is unaware whether local governments are adopting these methods. It is difficult to compare performance across providers and to determine whether CoAG full cost recovery against the bottom of the pricing band is being achieved.

The Commission's audits discusses asset values only in general terms. Further, Tasmania has not provided sufficient information on asset values or asset valuation methods applied by local government water services for the Council to determine whether the approaches used are consistent with the water reform commitments.

The Council has three key concerns with urban pricing in Tasmania.

- Insufficient information has been provided to make a full assessment of the extent of urban pricing reform.
- Based on the available information, a significant number of local governments still appear to have levels of cost recovery outside the CoAG pricing band.
- There is insufficient transparency in the Government Prices Oversight Commission's audit process to deliver ongoing reform.

The Council recognises that Tasmania has a number of mechanisms in place to support the implementation of water reform by local governments, but the Council's assessment is based on whether these programs and processes are producing outcomes. Nevertheless, the Tasmanian Government has committed to working with the Council to resolve concerns about urban pricing. In a letter to the Council, it noted that in the area of urban pricing it would provide by 31 August 2002:

- A report on local governments' adoption of asset valuation methodologies consistent with CoAG guidelines;
- reasons for choosing alternative valuation approaches being adopted; and
- responses to any assessment issues emerging from this information.

Tasmanian also undertook to provide the strategy that will be adopted to improve the rate of progress in cost recovery for those businesses identified in the Government Prices Oversight Commission audit as either under-recovering or over-recovering their costs. The GPOC audit will be made publicly available by 31 August 2002.

Based on this commitment, the Council has decided that it will conduct a supplementary assessment in October 2002 on all issues raised in this section relating to full cost recovery. The Council is expecting significant outcomes from this supplementary assessment, and believes its expectations are warranted given cost recovery reforms for urban water and wastewater services are now three years overdue.

Consumption-based pricing

In 2001, Tasmania provided a report on local government water service providers' progress against the two-part tariff implementation timetable. In that assessment, the Council was satisfied that Tasmania had continued to achieve progress in implementing two-part tariffs. Given that this reform commitment was initially due by the end of 1998, however, the Council decided to review progress again in 2002. For any delays in implementation, the Council would need a robust justification.

Tasmania has now reported significant progress in two-part tariff reform, with 17 of the 18 schemes now having implemented two-part tariffs, in line with targets. The remaining scheme was due to commence two-part tariffs in July 2002. The lack of transparency in costing, price calculations and community service obligations is, however, resulting in concerns on the part of some customers.

In the 2001 NCP assessment, the Council had not been advised whether any service providers levied trade waste charges. The Council considers that significant gains would result from a rigorous investigation of the introduction of trade waste charges where cost effective.

The Council has found that the application of trade waste charges appears to be *ad hoc*. There is a system of managing waste, but no consistent approach to pricing. The Council strongly urges Tasmania to adopt a trade waste charge that captures those customers who pay less than the incremental cost of discharges into local government sewerage infrastructure. The absence of a charging regime that reflects the quantity and/or toxicity of the waste provides scope for nontransparent cross-subsidies and has the potential to undermine the CoAG-endorsed principle of consumption-based pricing.

Water allocations and property rights

In June 2001, the Council considered that Tasmania's system of water property rights met CoAG commitments. The Council noted, however, the cumulative impacts on property rights and the environment of the capture of surface runoff by Tasmanian farm dams. Tasmania was in the process of developing a farm dams policy to be in place by mid-2002. The Council then undertook to review developments with this policy in the 2002 NCP assessment.

There is no statutory requirement to consider the cumulative impacts of farm dams. Tasmania recognised, however, that it needed to develop, in consultation with stakeholders, a policy to manage these impacts. The aim of the policy is to:

- provide a strategic framework to improve the management of the impacts of incremental dam development; and

- guide decision-makers in assessing the cumulative impacts of new dam permit and water licence applications.

The policy will address the farm dams issue in two ways:

- managing the impact that allocations have on high flushing environmental flows; and

- specifying mitigating physical requirements in the building of dams, such as fish passage.

Public consultation on a discussion paper and policy options will be undertaken in July–August 2002 and the policy is now due for completion by September 2002. Interim guidelines are being used until the policy is finalised.

The Council is satisfied that Tasmania is addressing this issue and has implemented appropriate interim measures while developing a final position. The Council considers that the development of this policy is very important, especially given that the Tasmanian Government has established a $10 million program for water development.

Provision for the environment

The Council noted last year that the South Esk and Meander rivers could be classified as overdeveloped during the summer months. The Council undertook to review the management plans for these rivers to determine whether Tasmania has addressed the issue of allocations for the environment over this critical period.

The Council also noted that the processes for determining environmental water requirements have been slower than Tasmania anticipated. At the time of the 2001 NCP assessment, no water management plans had been developed. While Tasmania was confident that water management plans would be completed by 2005, the Council undertook to reassess this year of Tasmania's progress against the implementation program.

Tasmania has made substantial progress in identifying environmental flow requirements in river systems. The State is currently finalising the Great Forester Water Management Plan, which will be the first such plan to be completed. The environmental flows work was completed and the catchment was deemed to be a good model for the water management planning process.

Tasmania advised that there had been a great deal of opposition to the Great Forester draft plan on the grounds that it would have a severe economic impact on water users. An independent analysis of the impact of the proposed water flow regime in the draft plan was accordingly commissioned.

This consultancy concluded that the increase in environmental flows would reduce the amount of water available to irrigators and potentially reduce

agricultural production by $2.3 million per year at the farm gate level and have flow-on losses of a further $4.7 million and 22 jobs at the State level.

These findings have resulted in Tasmania announcing a review of the Great Forester Plan and a proposed change in the method for developing water management plans in general. As a result, more time and resources than anticipated have been needed for negotiations on the draft Great Forester and other water management plans. The environmental water provisions contained in the draft plan are therefore to be reviewed in light of the study. A working group of major stakeholders has been formed to further consider the plan.

As a result of the controversy surrounding the release of the original draft Great Forester Water Management Plan, some other catchments across the State have shown an unwillingness to engage in developing water management plans until a clearer picture emerges of the Government's direction in reviewing the Great Forester Plan.

The Council has reviewed the consultants report and has some concerns with it and the possible direction Tasmania may be taking in relation to the development of water management plans. The Council is concerned about the precedent that may be created by the plan for the circumstances in which such socio-economic assessments are used. While such studies are a necessary input to the decision-making processes and may help determine transition paths to reform, attempts to use socio-economic arguments to put off or relegate the legitimate needs of the environment could raise a question about Tasmania's compliance with the environmental obligations of the CoAG water reforms.

The Council is highly concerned at the emergence of this issue across a number of jurisdictions, namely, the use of socio-economic studies based on protecting current consumption putting off or watering down the legitimate needs of the environment, resulting in ongoing environmental degradation.

The Council also does not accept the argument that the science for the environment has to be perfect before environmental provisions are decided. All governments have committed to the precautionary principle. This states that in order to protect the environment, a precautionary approach should be widely applied by States in setting allocations according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to address environmental degradation.

This assessment issue has not been satisfied. Nevertheless, the Great Forester Plan is still a draft and the Council needs to ascertain the extent of the proposed changes to it. Given the precedent value of the Plan, the Council is of the view that another examination needs to occur in the 2003 NCP assessment to consider the final plan any other plans, such as the proposed Meander River plan, as well as the direction Tasmania proposes to take to meet its CoAG obligations. The Council, however, does not want to see

environmental water provisions and the water management plan process diluted by the inappropriate use of socio-economic studies.

Environment and water quality – integrated catchment management

In 2001, the Council found Tasmania had met the minimum NCP requirement against this reform commitment. At that time, the major relevant development was a proposal to prepare a State Natural Resource Management Strategy to coordinate the development of catchment management plans at the regional level. Given the importance of the Strategy, the Council undertook to review developments this year.

Following extensive consultation with stakeholders, the Tasmanian Government finalised and endorsed the Tasmanian Natural Resource Management Framework in February 2002. The framework covers issues such as administrative arrangements at State and regional levels, proposed legislation, natural resource management principles and priorities, and integration with relevant statutory and nonstatutory instruments.

Tasmania is on track to have regional strategies completed and in place by mid-2003. The Council is satisfied that Tasmania has met its outstanding commitment.

Progress report issue: new rural schemes – the Meander Dam

The 2001 State Budget provided $10 million to finalise a Water Development Plan to recommend the construction of new water storages across the State. One of the aims of the plan is to support the Government's objective of doubling the value of Tasmania's primary production over the 10 years to 2008. The 2002 State Budget allocated an additional $4.5 million to progress water development in partnership with private enterprise. The plan was finalised and released in August 2001.

The Tasmanian Government subsequently announced its intention to proceed with the design of the Meander Dam project, 50 kilometres south west of Launceston. The 43-gigalitre dam will inundate 332 hectares of land. The dam has been designated under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

A decision on whether the Meander Dam will proceed cannot be made until 2 August 2002 at the earliest, when all environmental clearances (including those by the Commonwealth Government) are obtained. If all approvals for the dam are forthcoming, Tasmania intends to let the contract for design and construction in August 2002 and aim for construction to be completed by August 2004.

In responding to the consultants report that shows the dam is not financially viable, Tasmania advised the Council that further work will be done to demonstrate the *economic viability* of the dam proposal, including the additional benefits the dam will generate for environmental flows and the public good. The Government is aware of its obligations in terms of CoAG water reform to show that any new investment is economically viable and ecologically sustainable.

A number of submissions expressed concern about the Meander Dam development. The Council will consider and assess these issues in a future NCP assessment if the Tasmanian Government decides to construct the dam.

Based on the above timeframe, the development of the Meander Dam and all issues raised by submissions may be a significant 2003 NCP assessment issue.

Australian Capital Territory

Full cost recovery – urban

ACTEW's (the ACT's electricity and water provider) dividend to the ACT Government in 1999-2000 amounted to the whole of ACTEW's earnings in that year. The previous year's dividend payment also accounted for all of ACTEW's earnings.

Last year, the Council noted its concern that limited reserves were being retained within ACTEW for future investment, including to make provision for population growth or unexpected capital costs, such as a facility breakdown. In such circumstances, ACTEW would have to increase its debt or the Government would have to provide an injection of capital.

In its current assessment, the Council considered whether the ACT's dividend policy is consistent with the CoAG reform commitment that requires dividends, where paid, to reflect commercial realities and simulate a competitive market outcome.

The ACT argues that dividend policy should be driven by the objective of a competitive capital structure. ACTEW's planned debt ratio for the end of 2001-02 is 38 per cent and has been much less in past periods. The 100 per cent dividend policy has assisted in moving ACTEW's capital structure closer to an efficient level based on industry practice. The ACT also argues that ACTEW has numerous options for financing changes to its capital base.

The Council remains concerned about ACTEW's dividend payout ratio of 100 per cent of after tax profits. There are, however, some mitigating factors relevant to the Council's assessment. For instance, the governing legislation and licences for ACTEW set appropriate standards (including investment in replacing, upgrading and maintaining the infrastructure needed to provide

services at those standards) and enforceable penalties for any breach of a service standard. Also, the ACT is using high dividend payouts as a means of capital restructuring. Whilst this practice is not ideal because of its lack of transparency, it is one way of raising ACTEW's debt ratio from the low levels of the past.

Given these considerations, the Council is satisfied that the ACT's current dividend policy is not inconsistent with the CoAG commitment. There is, nevertheless, a question whether full distributions should continue in the longer term and once ACTEW's debt ratio is in line with the market average. The Council will revisit this issue in 2003 when a broad review of dividend policy of all jurisdictions will take place.

Consumption-based pricing

In 2001, ACTEW did not levy trade waste charges. A control was available through the need to apply to ACTEW for permission to discharge trade waste into the wastewater system, and ACTEW could place conditions on the application's approval.

The absence of a charge reflecting both the quantity and quality of the waste provides scope for nontransparent cross-subsidies and has the potential to undermine the CoAG-endorsed principle of consumption-based pricing.

The ACT Government has since reported that ACTEW had previously reviewed the need for such a charge and found it would have no significant impact. This stems predominantly from the absence of industry with substantial discharges in the ACT. ACTEW's trade waste approvals system, however, is now operational and, in a few instances, ACTEW has applied a specific charge tied to the volume and toxicity of the discharge.

The Council agrees with the ACT view that the Government needs to properly evaluate the merits of a charge. The ACT Government has committed to reviewing the merits of a systematic charging arrangement for trade waste. The time period suggested for completing this task is 18 months. Such a period, however, would extend beyond the 2003 NCP assessment, when full implementation of urban pricing reform is required.

To meet the reform commitments for the 2003 NCP assessment, the Council expects the ACT Government to have independently analysed and, if cost effective, developed systematic charging arrangements for trade waste, and have a clear implementation strategy by June 2003.

Northern Territory

Provision for the environment

In 2001, the Council found that the Northern Territory continued to set contingency allocations for the environment in the absence of a scientific basis for determining environmental water requirements. The Northern Territory advised at that time that five major research projects on environmental flows in the Daly and Douglas rivers were expected to report their findings in 2002. This is the only river system in the Northern Territory where significant levels of development are planned. The Council noted that it would monitor developments in this area, including the research results, to ensure provision of water for the environment is being adequately addressed.

The research projects are expected to be finalised by July 2002, and recommendations about specific environmental water requirements will then be made. Northern Territory agencies will consider these recommendations by the end of September 2002. Public workshops will be held in November–December 2002.

The Northern Territory advised in 2001 that unless the findings of the projects show the existing environmental allocations are significantly inadequate, the projects will not have an impact on existing allocations. These contingency allocations have been set on a conservative basis. Any variations to environmental water requirements as a result of the projects would occur as part of the five-year review of the operation of a water allocation plan.

The Council notes that Environment Australia endorsed the approach taken in a project selected from the five as suitable to the circumstances of the Northern Territory. The Council has reviewed the findings of the project and is satisfied that the Northern Territory is meeting its outstanding 2001 NCP commitment.

Public consultation

In 2001, the Council found that the Northern Territory was beginning to develop community materials on the water reform process and water issues generally, including introducing a range of materials for schools. The WaterWise NT program was piloted in 2001 and rolled out in Alice Springs. The aim was to introduce the program progressively to other regional centres.

The primary objectives of WaterWise NT are to raise awareness of the importance of water to communities and natural ecosystems, to improve public awareness of the various impacts of water use on the environment, to introduce water saving programs, and to promote water conservation principles. Official recognition as a WaterWise School is granted and schools receive accreditation for actively contributing to each of the program's

objectives. Public education activities in Alice Springs have been complemented by ongoing consultation with irrigators in the Katherine and Ti Tree regions regarding the Northern Territory's interim policy on environmental flows.

The Council is satisfied that the Northern Territory has made sufficient progress to address this assessment issue.

Murray-Darling Basin Commission

Pricing and cost recovery – rural

The Murray–Darling Basin Commission (MDBC) recovers from its member Governments the full cost of constructing, operating, maintaining and renewing assets. These arrangements ensure the costs borne by the States relate to the level of service received from River Murray Water, the MDBC water business. River Murray Water recovers 75 per cent of the cost of asset refurbishment and replacement from the States.

In 2001, the Council identified two issues with the current MDBC approach to cost recovery and pricing, to be reconsidered in the 2002 NCP assessment:

- the outcomes of the independent audit of cost sharing arrangements, including the issue of transparency in asset management; and
- consumption-based pricing.

The MDBC Ministerial Council considered in April 2002 the recommendations of an independent review of pricing arrangements. The review recommended changes to the current approach to planning and financing capital investment. It also concluded that the current cost-sharing arrangements developed by River Murray Water are appropriate. It argued that there would be little gain, at this stage, from moving to consumption-based pricing for River Murray Water.

The Council considers that the review satisfactorily covered all the pricing issues identified for consideration in the 2002 NCP assessment. The recommendations contained in the review, if implemented, would effectively address these issues. The Ministerial Council has endorsed in principle these recommendations and directed the Commission to develop an implementation program.

The Ministerial Council will not consider the implementation program until November 2002, so the Council cannot confirm how the MDBC will implement the recommendations. Nevertheless, the Council concludes that the MDBC has met its 2002 reform commitments. If the MDBC decides not to adopt some recommendations, it will need to provide a clear public

justification of its alternative approach and demonstrate that the alternative is consistent with CoAG water reform commitments.

The Council notes that the States have very different policies on passing on River Murray Water costs to water users. In New South Wales and Victoria, rural water users are required to pay a significant proportion of the costs passed on from River Murray Water. In contrast, South Australia does not pass on these costs to irrigators. This issue is not one for the MDBC, but the Council will need to consider it further in 2004 when assessing each State's approach to rural water pricing.

Trade

The MDBC has been running a pilot project on interstate trading since 1998. In its 2001 NCP assessment, the Council recognised that the pilot project was a significant advance in interstate trade in Australia. There were constraints, however, on the expansion of the pilot to different regions and types of water right. The Council undertook to reassess in 2002 progress in resolving the property rights issues associated with trade and developing mechanisms to facilitate interstate trade.

The MDBC has not progressed the pilot project. It is, however, focusing on developing water accounting systems to allow it to track trade, develop exchange rates along the river and between different water rights, and adjust the State caps in response to interstate trade. These efforts will allow the MDBC to extend trading across the Basin.

The MDBC, moreover, has now committed at the Ministerial Council level to adopt comprehensive interstate water trading and placed priority on implementing trading arrangements. The Council considers that full interstate trading should be implemented as soon as possible and that the systems that support trading should be efficient and effective. Such systems need to: allow for trading between different water rights in different States; account for the environmental consequences of trade; and facilitate timely trading, including providing access to State-based water registry information in a way that facilitates interstate trades.

The Council concludes that the MDBC has met its 2002 commitments. It expects, however, significant progress in the development and implementation of trading arrangements between now and the next full assessment of interstate trading in 2004.

Progress report issue: water allocations and the environment

The cap on diversions from the Murray–Darling Basin continues to make an important contribution to ensuring environmental flows in the river system.

It is an essential first step in establishing management systems to achieve healthy rivers and sustainable consumptive uses. It represents a balance between the significant economic and social benefits that have been obtained from developing the basin's water resources on one hand and seeking to improve the environmental health of the river system on the other.

The MDBC Ministerial Council formally adopted the cap in August 2000 as part of the Murray–Darling Basin Agreement. Under the Agreement, States' water allocations are independently audited each year and any breaches of the cap are declared by the MDBC and referred to the Ministerial Council.

The Independent Audit Group's 2000-01 review of cap implementation (MDBC 2002) has been completed. The transparency in reporting cap compliance is resulting in pressure on those communities that are over the cap, and also on their governments. When assessing individual compliance with the cap, the Council will continue to raise any review concerns with jurisdictions. The Council will consider the implications for NCP payments where jurisdictions persistently breach the cap and do not rectify those breaches in later years.

The Audit Group found that Queensland has yet to complete its water resource planning process (which will define the cap in Queensland), although the moratorium on the construction of works has slowed water use development.

It also found that the cap has been exceeded in the Namoi Valley, the Barwon/Darling/Lower Darling Valleys and the Lachlan Valley. New South Wales is to address this issue and report to the next MDBC Ministerial Council meeting on action taken to bring diversions into balance, including the period over which this correction will occur.

Progress report issue: provision for the environment

The Council recognises that the complexity of the issues, as well as the number of governments involved, has led to progress on environmental flows for the River Murray being slow. Given the national significance of this issue, however, the Council is expecting tangible progress in future NCP assessments.

The Council expects, in particular, that agreement on and implementation of environmental allocations for the River Murray will be in place by 2005. The MDBC Ministerial Council's decision at its October 2003 meeting on flow options for the River Murray should provide a timeframe in which to deliver environmental flows.

Under the terms of the Ministerial Council decision, the MDBC will develop a business case for the recovery of 350, 750 or 1500 gigalitres of environmental flows for the River Murray. The development of the plan will consider issues of equity, property rights and water trading. A reduction in consumptive use

of 750 gigalitres would equate to about 10 per cent of allocation and 7 per cent of use. It would increase the median flow at the river mouth by about 20–25 per cent to a total of 35 per cent of the river's median natural flow.

Importantly, in deciding to proceed with consultation on the three environmental flow options, the Ministerial Council effectively ruled out the 'no allocation' option.