6 South Australia

Outstanding assessment issues

Pricing and cost recovery

Outstanding issue: South Australia must ensure SA Water's dividend policy is consistent with CoAG commitments

Next full assessment: The Council will assess urban pricing reforms in 2003.

Reference: Water reform agreement, clause 3(a)

Background

In undertaking its 2001 NCP assessment, the National Competition Council recognised the sound financial performance of SA Water and commended 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 future investment by the business. Retained earnings are a recognised and valid source of capital to achieve this goal.

SA Water paid dividends of $175.2 million to the South Australian Government 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.

South Australia confirmed that SA Water's dividend payments to the Government for 1999-2000 were 47 per cent of earnings before interest, tax, depreciation and amortisation (EBITDA). South Australia has since advised that an agreed contribution target rate (dividend and income tax equivalent) of 55 per cent of EBITDA (less stay in business capital) applies from 2001-02. The Council stated that it would review the matter in the future to ensure South Australia's dividend policy is consistent with the Council of Australian Government (CoAG) guidelines, which require that dividends where provided reflect 'commercial realities and simulate a competitive market outcome'.

South Australian arrangements

SA Water paid $135.5 million to the South Australian Government for 2000-01, which equates to 95 per cent of after-tax profits. By basing dividend payments on EBITDA, SA Water's contribution to government (dividend plus income tax) from 2001-02 is based on cash flow rather than accounting profit.

South Australia states that a contribution rate of 55 per cent of EBITDA is determined by benchmarking against other government-owned Australian water utilities, and that the rate is at the upper end of contributions. South Australia has reported that the top rate for these organisations is 60 per cent. In further discussions with the Council, South Australia provided the following justifications for its dividend policy.

- The Minister and Cabinet determine SA Water's asset base in the context of relevant enabling legislation. The primary objective of section 3 of the *South Australian Water Corporation Act 1994* is:

  > *To establish a statutory corporation as a business enterprise with the principle responsibility of providing water and sewerage services for the benefit of the people and economy of the State.*

- The outcome of this objective could be to reduce or increase SA Water's asset base and/or levels of service.

- Unintended reductions (erosion) of the asset base should not occur if SA Water's capital expenditure program is subject to annual budgetary and other deliberations.

- The 'stay in business capital' is identified by SA Water which is taken into account in determining the contribution level and incorporated in budgetary advice to the Minister, Treasurer and Cabinet on contribution levels.

- The disposition of SA Water's cash flow is also considered in budgetary discussions with regard to a cash distribution guideline of 55 per cent of EBITDA less 'stay in business' capital.

- SA Water can fund changes in its asset base from cash provided as retained earnings, capital grants or interest-paying advances as approved by the Treasurer. Developer contributions also add to the asset base. A large proportion of SA Water's capital expenditure relates to upgrading of sewage treatment plants (an environmental improvement program). SA Water's asset replacement needs are quite low, and higher levels of replacement investment expenditure are not expected to be required for several decades.

- No Government funding through the Budget or any other external source is available for unapproved capital expenditure.

- South Australian arrangements have no stricture that total cash payments from SA Water to the Consolidated Account may not exceed 100 per cent of after-tax and/or pre-tax profits in some years.

- The concept of capital structure has little (if any) meaning for a statutory body whose borrowings are guaranteed by the Treasurer. The idea of a competitive capital structure for such a body is even more obscure. The 55 per cent EBITDA contribution distribution policy has been set in terms of a particular debt-to-assets ratio.

Discussion

The information provided in South Australia's 2002 NCP annual report was not sufficient for the Council to determine whether the CoAG commitment has been met. The Council sought further information from South Australia on how its method of calculating dividends meets the CoAG guideline. The two primary considerations are the impact of limited reserves being retained within SA Water for the provision of future investment from retained earnings, and the potential for erosion of the asset base of SA Water.

South Australia has paid very high levels of dividends in the past, often in excess of 100 per cent of after-tax profits. The change to South Australia's dividend policy in 2001, restricting contributions to 55 per cent of earnings before interest, tax, depreciation and amortisation has resulted in a reduction in dividend payments. In 2000-01, however, the dividends paid were still high at 95 per cent of after-tax profits.

South Australia argues that cash flow is used because it avoids complications of accounting adjustments, including prior year adjustments, changes in accounting policy, capitalisation issues and the problematic issue as to what constitutes true economic depreciation. If SA Water moves to a capital structure with a significantly higher debt level (and one that minimises its weighted average cost of capital), then 55 per cent of EBITDA would produce a dividend result much greater than 100 per cent of after-tax profits. South Australia notes that in that event the 55% guideline can be amended.

The water industry can be described as a low market growth sector which is dominated by well established, mature organisations. A characteristic of this environment is relatively minimal capital requirements to meet future market growth, and thus a reduced need for retained earnings. It could have high capital requirements, however, to maintain earnings growth, fund unexpected capital expenditure or major maintenance, or to run campaigns aimed at reducing water use, for example.

It would be reasonable to expect the water industry average for dividend payouts to be high relative to those of high growth, immature organisations, which often retain most earnings. The regular distribution of dividends of greater than 100 per cent of after-tax profits by any organisation would, however, be unreasonable.

Under corporations law, dividends may be paid out of profits only, not out of capital (s. 201). The purpose of this restriction is to protect creditors by maintaining the company's capital.

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. (Profits in this context include accumulated retained profits as well as the current year's profit.)

Not all water authorities are subject to corporations law, but the principles behind that law's approach to dividends are appropriate for them (given the requirement that dividends reflect commercial realities). The Council considers that 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.

The Council notes that the Queensland legislation covering government owned corporations provides a useful guide to dividend policy. Under that legislation, the level of dividend must not exceed profits after provision has been made for tax (or its equivalent), and any unrealised capital gains have been excluded. The Council sees merit in this approach.

Assessment

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 minimise the authority's weighted average cost of capital and ensure that it complies with the CoAG competitive neutrality principles. 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.

Even if this were the intention, such an indirect approach can undermine the transparency of a government's financial arrangements. What are in fact capital transactions may, from the point of view of the community, appear to merely involve recurrent income transfers.

Overall, the Council has concerns about South Australia's dividend policy.

- Basing the policy on EBITDA may result in dividends in excess of 100 per cent of after tax profits being paid. This could have unintended impacts on the capital structure and financial resources of the business.

- The policy does not appear to be designed to address any objectives for SA Water's capital structure.

- South Australia currently does not have independent service quality regulation to protect water consumers from the potentially adverse consequences of a run down in financial viability, though this may change when the proposed Essential Services Commission comes to regulate standards.

- There is no independent price regulation in South Australia to ensure future capital expenditure needs are taken into account in price determination.

South Australia's 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

Outstanding issue: South Australia is to show progress in introducing new arrangements for pricing commercial water, wastewater and trade waste

Next full assessment: The Council will assess urban pricing reforms in 2003.

Reference: Water reform agreement, clause 3(b)

Background

In the September 2000 NCP supplementary assessment, South Australia provided an undertaking to implement the following reform package for commercial prices.

- Free water allowances to be phased out over a five-year period (beginning 2002-03) to result in commercial customers facing the same use charge as applied to other customer groups.

- Free water allowances to effectively disappear in the first year, because water that was previously provided free would be priced at 20 per cent of the charge faced by other users.

- The impact of the reform was expected to be revenue neutral for the commercial sector as the level of property rate applied for access would be reduced to offset the increase in usage charges. The property-based access charge was likely to fall by approximately 25 per cent.

- Over half of the State's commercial customers could expect a reduction in their water bill, with the five-year phase-in period assisting those experiencing an increase to adjust to the change.

- An intention not to expand the use of property values beyond commercial water and wastewater charges.

In the 2001 NCP assessment, the Council identified the following issues to be assessed in the 2002 NCP assessment.

For commercial water, South Australia is continuing to implement the CoAG reform commitments consistent with the timetable in the supplementary NCP assessment of September 2000. The Council will continue, however, to monitor closely the implementation of these reforms.

For commercial wastewater, South Australia's finding that consumption-based wastewater charges are not cost-effective means that volumetric pricing is inappropriate. The Council remains concerned, however, that this has the potential to result in nontransparent cross-subsidies which are not consistent with CoAG commitments especially as property values remain as the basis for allocating costs among customers. The current pricing arrangements in South Australia therefore make the transparent consideration of the issue virtually impossible. The Council's concerns regarding the use of property values could be addressed through the establishment of a more open and transparent pricing-setting process. Possible options include establishing an independent price regulator and/or a public price-setting process, including submissions to the Government and a publicly available report.

For trade waste, the Council supports the removal of the discharge allowance provided by the exemption from charges below acceptance limits. Capping charges by discounting the fixed charge (based on property value) could be preferable, however, to discounts on the volumetric charge as proposed by South Australia. While this may decrease the certainty of revenues, it would avoid reducing the incentive to minimise the amount and toxicity of the waste discharged. It would also minimise any distortions arising from the use of property values. Overall, the Council considered the new trade waste arrangements represented a significant improvement on the existing system. South Australia advised that the charging structure and implementation program would be refined after consultation with industry.

Commercial water arrangements

South Australia has advised that the *Waterworks (Commercial Land Rating) Amendment Act 2001* was passed to remove free water allowances that apply to commercial customers. As expected, the change will be implemented on a revenue-neutral basis from 2002-03, with full water use charges for these customers to be phased in over five years.

The implementation timetable is provided in the legislation. A discount policy will be applied over the five years (80 per cent in year 1; 60 per cent in year 2; 40 per cent in year 3; 20 per cent in year 4; and 0 per cent in year 5). A letter was sent to all SA Water commercial customers in the first quarter 2002, explaining the effects of the change. Under the legislated transitional arrangements, a discount will apply to the water used up to the allowance for discounted water. The discount is applied to the basic water use prices that apply to all other customers in 2002-03.

Table 6.1: Commercial water use charge, 2002-2003

Consumption (kilolitres)	*Standard charge (cents per kilolitre)*	*80% discounted standard charge (cents per kilolitre)*
0–125	40	8
Above 125	97	19.4

Source: Government of South Australia (2002)

Commercial customers will face, on average, a 2 per cent increase in charges in year 1. At the end of five years, there will be a flat property-based charge and a much higher usage based charge.

Discussion and assessment

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. 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.

While the Council is satisfied with South Australia's progress towards 2002 NCP commitments, the Council will re-assess progress with urban pricing reform in the 2003 NCP assessment.

Wastewater and trade waste arrangements

Arrangements to implement the new broader trade waste charges are well advanced (see box 6.1 for a list of the key aspects of the charges). Effective from 1 July 2002, the charges are subject to transitional arrangements, including phase-in discounts until 1 July 2006.

During 2001, South Australia consulted the major trade waste dischargers to whom the charges will be applied. The charges have since been incorporated in the conditions of the industrial trade waste discharge permits that are

being negotiated with the individual dischargers. Around 45 dischargers are involved.

The permits have a three-year term and therefore do not encompass the full implementation period. Full implementation will take effect during the term of subsequent permits. The trade waste charges are indexed for the second and third years of the current permit.

Box 6.1: Key aspects of the trade waste charging arrangements

The charges apply to category 3 trade waste dischargers only, which are defined as having annual discharges that exceed:

- 20 megalitres of flow per year; or
- 20 tonnes of biochemical oxygen demand per year; or
- 20 tonnes of suspended solids per year.

The charges are directly linked to total pollutant mass (as measured by biochemical oxygen demand and suspended solids) and volume discharged. The basic charges reflect the avoidable costs imposed by trade waste discharges. A 50 per cent surcharge on this rate applies for high concentration flows.

Property rates continue to apply to the dischargers, but a 50 per cent discount on trade waste charges is provided to the maximum value of one third of the property rate.

Source: Government of South Australia (2002)

South Australia reports that some dischargers have lowered their discharge levels as a result of this reform by undertaking a level of pretreatment. Others have exited the market. Permits incorporating the charges have been finalised for all dischargers.[1]

Full implementation of the charges for all category 3 customers, based on predicted discharge levels, would raise $3.6 million in 2002-03. Revenue collections from the new trade waste charges in 2002-03, however, are expected to be $0.7 million. This is due to most dischargers receiving discounts as part of the phase-in arrangements, and two dischargers having pre-existing agreements with the Government that exempts them from payment of the new charges for the term of their agreements.

Discussion and assessment

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 continues to be concerned, however, that property values are being used as a basis for allocating costs among customers, albeit reducing in proportion to total cost.

[1] One minor discharger requires further negotiation with SA Water.

This process has the potential to result in nontransparent cross-subsidies that are not consistent with CoAG commitments.

As is the case for commercial water pricing, in the absence of an independent process for reviewing prices, the Council will continue to monitor prices in South Australia in future NCP assessments, particularly those that contain components based on property values due to the risk of nontransparent cross-subsidies. The establishment of a more open and transparent price setting process would address the Council's concerns regarding the use of property values. Possible options include establishing an independent price regulator and/or a public price-setting process, including submissions to the Government and a publicly available report. (For a more detailed comment, see the section on institutional reform).

The Council is satisfied that South Australia has made adequate progress to meet its 2002 wastewater and trade waste NCP commitments. For the reasons outlined above, however, the Council will re-assess charging arrangements in South Australia in the 2003 NCP assessment for urban pricing reform.

New rural schemes

Outstanding issue: Governments have agreed that all investments in new rural water schemes or extensions to existing schemes should be undertaken only after appraisal indicates that the scheme/extension is economically viable and ecologically sustainable.

The Council will consider evidence from South Australia to demonstrate the ecological sustainability of the Loxton rehabilitation project, the Lower Murray rehabilitation proposal, and proposals for the Barossa and Clare valleys following any final decision to proceed with these projects.

Next full assessment: The Council will examine government investments in the year in which the government decides to proceed with a new rural scheme, to ensure the twin tests of economic viability and ecological sustainability have been met.

Reference: Water reform agreement, clause 3(d)(iii).

Background

In the 2001 NCP assessment, the Council was satisfied that South Australia had met its commitments in relation to new investment. It found South Australia's appraisal processes to determine the economic viability and ecological sustainability of new investment met CoAG commitments.

However, in 2001, South Australia was considering two proposals (at various stages of development) for the supply of irrigation water to existing high value adding irrigation areas. It has continued to transfer the remaining two Government-owned irrigation areas to irrigation trusts managed by the irrigators. As part of the transfer process, each district's water supply infrastructure is refurbished.

At the time of the 2001 NCP assessment, the Council noted the Government's progress on the following four projects.

- *The Loxton rehabilitation project.* This project involved significant government financial contributions, with the Commonwealth and State each providing 40 per cent of the total cost. In 2001, the Council was satisfied the project met the economically viable criterion but received no evidence of the project's ecological sustainability. It sought this evidence for the 2002 NCP assessment.

- *The Lower Murray Reclaimed Irrigation Area rehabilitation project.* Work continued on both the economic viability and ecological sustainability aspects of proceeding with this investment. For the 2002 NCP assessment, the Council aimed to assess both the economic viability and ecological sustainability appraisals if this project proceeded.

- *Proposals to supply additional water to the Barossa and Clare valleys.* The Barossa project is a private sector venture, and did not involve a financial contribution from Government, so the Council was satisfied the proposals were economically viable. The water allocation plans for these regions considered a number of environmental impacts of these developments. For the 2002 NCP assessment, the Council requested any environmental impact statement for these projects.

For the 2002 NCP assessment, therefore, the Council sought further information and evidence to demonstrate the ecological sustainability of the Loxton rehabilitation project, the Lower Murray rehabilitation proposal and the proposals for the Barossa and Clare valleys, following any final decision to proceed with these projects.

South Australian arrangements

Loxton rehabilitation project

The Loxton Irrigation District is one of the last major irrigation areas to be converted to self-management. All formal approvals and processes were completed in 1998, including a floodplain health study as part of the assessment of the project's environmental sustainability. The details to establish the area as a private irrigation district were completed in December 2000, and formal handover occurred on 1 July 2001.

The floodplain health study, A*ssessment of the Impact of the Loxton Irrigation District on Floodplain Health and Implications for Future Options,* was commissioned by the Local Action Planning Group for the Loxton Irrigation Advisory Board. PPK Environment & Infrastructure conducted the study, which considered the environmental impacts of the four options for rehabilitating the Loxton Irrigation Area as shown in Table 6.2.

Table 6.2: Rehabilitation options for the Loxton Irrigation Area

	Ecological outcomes
Option 1 (no rehabilitation)	Continuing degradation at base of cliffs (the main irrigation area), floodplain and Katarapko Island
Option 2 (partial rehabilitation)	Reduction of water at base of cliffs and potential for regeneration Little beneficial impact on rest of floodplain and Katarapko Island
Option 3 (full rehabilitation)	Reduction of water at base of cliffs and potential for regeneration
Option 4 (full rehabilitation and new development)	As for option 3, little or no impact on rest of floodplain Potentially large beneficial impact on basin vegetation on Katarapko Island Continuing regeneration

Source: PPK Environment & Infrastructure (1997)

Reducing the negative impact of irrigation on the surrounding environment of Loxton is a component of the Loxton rehabilitation program. The Loxton Rehabilitation Steering Committee is preparing a report on how the impact on the environment has changed as a result of upgrading the irrigation infrastructure. The Committee supported a Central Irrigation Trust proposal for a project to collect data on irrigator infrastructure and management practices. The data will be assessed against an earlier benchmark survey[2] on management practices, with the objective of establishing a set of complementary measures. These measures could include on-farm environmental management practices that are now possible as a result of the rehabilitation. Groundwater levels will be reported too, with monitoring wells having been installed over the time of the rehabilitation program.

Lower Murray rehabilitation project

In the Lower Murray Reclaimed Irrigation Area, the Government owns and operates nine of 24 irrigation schemes, covering a total 120 growers and representing 70 per cent of the irrigation area. The region has a dairy focus and is flood irrigated.

To help review options for the future management of the region, South Australia has appointed an Irrigation Advisory Board (drawn from irrigators) to provide advice. The board is appointed under the *Irrigation Act 1994* and reports to the Minister for the River Murray. The South Australian Water Policy Committee, in overseeing the privatisation of the Lower Murray Reclaimed Irrigation Area, appointed a Steering Committee. This Committee has worked with the Board, and undertaken studies. These studies included an assessment of the economic viability and environmental sustainability of flood irrigated dairying on the Lower Murray Swamps.

[2] Compiled by the Loxton/Bookpurnong Local Action Planning Group.

A funding study has just been completed, with the outcome to determine the option chosen for the rehabilitation of the Lower Murray Reclaimed Irrigation Area.(Note this report has not been publically released). The Government will consider a package of recommendations, including devolution options, before the end of 2002.

The project depends on the adoption of the River Murray Water Allocation Plan in July 2002. Under this plan, the area will be subject to new property rights arrangements. The plan will adjust volumetric allocations and result in new licences in 2002 in accordance with the Murray–Darling Basin Cap on diversions. The plan also covers the water requirements for environmental land management, conversion of 'opportunity licences', water trading rules, the introduction of metering, penalties for exceeding allocations, and links to the timing of rehabilitation and self-management.

Barossa project

Barossa Infrastructure Limited is a consortium of several large wine companies and grape growers. The consortium obtained development approval in November 2001 and has completed construction of a 240 kilometre, privately funded pipeline to distribute River Murray water throughout the Barossa. The pipeline will provide River Murray water to the region for economic development. The project aims to deliver to the Barossa region some 5000 – 7000 megalitres per year. The water will be purchased from the River Murray tradeable water rights market and delivered to the pipeline via SA Water infrastructure. The consortium has a water licence and has applied for an allocation to divert water from the River Murray, in accordance with the requirements of the *Water Resources Act 1997*.

All customers of the pipeline will be required to obtain a permit to use water in the Barossa in accordance with the Northern Adelaide and Barossa Board's Catchment Water Management Plan. The permit will apply monitoring and reporting requirements to all users of water from the scheme.

The consortium commissioned an environmental assessment review for the project to assess issues associated with importing water into the Barossa. These issues included the impacts on regional groundwater tables, the effects on the salt budget and the creation of perched water tables. The report found that any adverse effects could be minimised or avoided with efficient irrigation practices. The South Australian Department of Water Resources provided input into the review and negotiated with the consortium on monitoring and reporting requirements for the operation of the project.

In October 2001, the then Minister for Water Resources and Barossa Infrastructure Limited signed a deed of agreement. The deed requires the consortium to install 14 groundwater monitoring wells at selected locations throughout the Barossa, to construct a surface water monitoring station along Greenock Creek and to upgrade existing surface water monitoring stations at Mingays Water Hole on the Light River. The consortium is required also to pay annual fees for the operation of the monitoring sites.

Clare Valley project

This project has yet to proceed. South Australia has advised that a decision to proceed on this project will not occur before August 2002. As with the Barossa project, the Clare Valley involves the purchase of allocations from the River Murray, with the water being pumped via a pipeline to the area. The project involves the interconnection of two existing SA Water pipe networks, with the additional benefit of an increased security of supply to rural areas through some redundancy in the pipe network.

Discussion and assessment

In relation to the Loxton rehabilitation project, the Council was provided with three reports: *Groundwater Modelling of Irrigation Management Options, Groundwater Modelling of Groundwater/River Interaction* and *Assessment of the Impact of the Loxton Irrigation District on Floodplain Health and Implications for Future Options*. These reports consider the future impacts on groundwater levels, salt loads to the river, and induced discharge to the degraded river floodplain of future management options for the Loxton Irrigation Area. The reports recommend that if irrigation efficiencies can be improved by 80 per cent, then the salt loads can be reduced by 50 per cent. The Council notes that the draft River Murray Water Allocation Plan sets water efficiency targets of 85 per cent for the region, which is in accordance with these studies. The Council is satisfied these studies demonstrate that South Australia has met commitments to ensure the ecological sustainability of the rehabilitation project.

A decision to proceed on the Lower Murray rehabilitation project has yet to occur. Based on the end-of-2002 timeframe for a decision, this issue (including appraisal of both the economic viability and ecological sustainability of the project), will be a 2003 assessment item if the project proceeds.

In relation to the Barossa Infrastructure project, no new water allocations have been created to supply the consortium users. Instead, allocations will be purchased from the trading market to ensure the proposal is consistent with all necessary management plans for the Murray–Darling Basin. South Australia briefed the Council on the environmental aspects of the pipeline proposal. The initial project did raise some environmental issues, but the consortium has addressed these matters. The Council's considers that the project complies with the CoAG commitment for ecological sustainability.

A decision to proceed with the Clare Valley project has yet to occur. If the project proceeds, then the Council will assess the ecological sustainability of the project in the 2003 NCP assessment.

Provision for the environment

Outstanding issue: The Council will report on South Australia's progress, including the outcomes of the Stressed Resources Assessment Review, to examine the current knowledge of environmental water needs and definitions of stress.

Next full assessment: The Council will assess allocations for the environment in 2004 and provide a stocktake of progress against a jurisdiction's implementation program to identify remaining areas for assessment in 2005 when the program is to be complete.

Reference: Water reform agreement, clauses 4(b–f)

Background

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 being 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.

South Australia's approach in this area is different from the approach taken in the eastern States. Because South Australia's systems generally are unregulated systems or groundwater, volumetric allocations are considered to be inappropriate; instead, licence conditions are set to control how and when people use water. South Australia has a policy of establishing water for the environment through legally binding mechanisms established by water allocation plans once a resource is prescribed.[3]

Catchment water management plans deal with the environmental water needs of stressed river systems in unprescribed areas. Management actions described in the plan may allow for the control of dam construction through permit conditions. If monitoring shows tighter controls are needed, then the resource may be prescribed.

[3] Previous NCP assessments outlined the process of prescription. In brief, prescribing a water source under the Water Resources Act regulates the amount of water that a licensee can take from a water source. This is necessary to ensure water is allocated so it can meet the reasonably foreseeable future water needs of users while also protecting the environment. Once a resource is prescribed, any person seeking to extract water requires a licence. The relevant catchment management board develops a water allocation plan to establish the conditions that the Minister attaches to licences.

South Australian arrangements

Stressed resources assessment review

The nature of the relationships between hydrology and ecology is especially unclear in temporary and ephemeral streams, which are a predominant feature of South Australia. Water-dependent ecosystems in South Australia rely either on seasonal wetting from larger rivers (the River Murray for example), ephemeral streams or shallow groundwater systems. Little information is available on the latter two sorts of systems, which comprise the majority of water-dependent ecosystems.

South Australia has, to date, largely identified stressed water resources by assessing the development pressures on the resource, rather than assessing the ecological health or state of the ecosystems that depend on the resource. In the River Murray and some groundwater systems, state-type indicators such as salinity and water level have also been used to identify resources under stress. A response based on pressure indicators is considered to be proactive.

South Australia has recognised that the science to define the level of stress in a water resource requires investigation and that rivers may be stressed by a variety of 'stressors' such as overextraction or water quality. The stressed assessment review will account for a range of ecological and hydrological factors, with water extraction being important but not the only factor in evaluating if resources are 'stressed'. South Australia's approach is to address each element that makes up aquatic ecosystems rather than water quantity alone.

The stressed resources assessment review has received funding for 2002-03 and will be used to determine a common method for defining stress. At the time of writing, the project was about to get under way. The review will help determine the requirements for monitoring across the state. A 12-month timeframe has been allocated for the review and the outcomes will be considered when the current water management plans are reviewed, with first reviews expected to begin in 18 months.

Other developments

The Ministers for Water Resources, and Environment and Heritage jointly launched a draft Wetlands Strategy for South Australia, as called for by the State Water Plan 2000, in January 2002. The development of other strategies and action plans identified in the State Water Plan is now the focus of attention, with the Department for Water Resources forming a strategic link in leading these interdepartmental teams.

In 2002, a new Department of Water, Land and Biodiversity Conservation was created in the portfolio of Environment and Conservation. This agency

now has prime responsibility for water resources management including operation of the Water Resources Act. The Department of Water, Land and Biodiversity Conservation heads a Water for the Environment Coordinating Committee, which is developing a Water for the Environment Strategic Plan for South Australia. This plan will address the roles, responsibilities, research, monitoring, and communication needs of the extensive programs under way across the State. It will lead to a greater integration of effort and the generation of strategic knowledge.

South Australia is continuing to improve its knowledge of environmental water requirements. The following new investigations and research activities commenced after June 2001.

- The Onkaparinga River studies include the research project on environmental water provisions, as outlined in the Onkaparinga Catchment Water Management Plan. The first stage (to determine environmental water requirements) is to be completed by September 2002, followed by a three-month period to turn the science into considered policy outcomes (to determine environmental water provisions).

- Environmental flow projects for the River Murray include fish passage through the Barrages, weir manipulation for enhanced watering of wetlands, the Lower Lakes and Coorong Water Management Study, the Murray Mouth Sediment Modelling Project, the Lower Murray Scientific Panel Study, and the Barrages Environmental Flow Scientific Panel Study.

- The South-East studies include wetlands waterlink projects (to provide habitat corridors between wetlands), the grazing impacts on wetlands, the impact of groundwater drains on seasonal wetlands, and a hydrological assessment of south-east swamps.

Draft water allocation plan for the River Murray

In October 2001, the River Murray Catchment Water Management Board released the draft water allocation plan for the River Murray prescribed watercourse. 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 proposes up to 200 gigalitres each year for wetland management purposes. Wetlands play a critical role in maintaining water quality and improving the biological health of the River Murray. There are more than 1100 wetlands along the River Murray valley and over half of these are considered to be of high conservation value. The principal wetlands of conservation significance in South Australia are the Coorong, Lake

Alexandrina and Lake Albert wetlands. The Chowilla wetland is listed on the Ramsar register as a wetland of international significance.[4]

The water allocation plan provides for water to be allocated among wetlands and includes criteria that control how the water can be used. Any management activities that alter flows to or from a wetland will be subject to a wetland management licence. Salinity effects, water use, flow alterations and overall benefits to wetland health will be assessed during the licensing process.

Water shall be allocated for wetland management only if its use will have, or is likely to have, environmental benefits. These benefits could include the reintroduction of a wetting and drying regime, increases in native flora and fauna, improvements in water quality, improvements in the habitat for native fauna, the mitigation of any threatened species, improved connectivity between the river and floodplain, the promotion of nutrient exchange and the extension of the duration of wetland inundation.

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 natural median. The median flow target of 7025 gigalitres over the life of the plan would improve the flow to 55 per cent natural median and enhance river health.[5]

The draft water allocation plan also allocates an additional 22.2 gigalitres per year for environmental land management in the Lower Murray Reclaimed Irrigation Areas. The purpose of this allocation is to minimise the effects of rising saline groundwater.

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.

Discussion and assessment

The Water for the Environment Strategic Plan has yet to be developed and the stressed resources assessment review has only now commenced. South

[4] The Ramsar wetlands are those listed under the 1971 Convention on Wetlands as wetlands of international importance.

[5] 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.

Australia has advised that the strategic plan will include a research and development plan, a communications strategy and a monitoring and assessment component. The stressed resources assessment review will be conducted over the next 12 months and the findings will be used for reviewing the compliance of water management plans in 18 months. South Australia has advised that the stressed resources assessment review is unrelated but complementary to the proposed strategic plan.

The Council has taken into account the development of the draft water allocation plan for the River Murray. Finalisation of this plan in July 2002 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.

The Council continues to be satisfied that South Australia is making satisfactory progress and has met NCP commitments for this assessment. The stressed resources assessment review will set the basis for developing South Australia's approach to finding appropriate management responses to stressors. The Council will review the State's stressed resources approach as part of the 2004 NCP assessment of provision of water for the environment.

Compliance with principle 5

Outstanding issue: South Australia needs to show further developments on compliance with principle 5 of the national principles for the provision of water for ecosystems. Where environmental water requirements cannot be met due to existing uses, the State needs to take action (including re-allocation) to meet environmental needs.

In 2001, the Marne and Inman river systems were considered to be stressed, requiring action to re-allocate water to the environment. The Council will report on developments and reassess this principle in 2002.

Next full assessment: The Council will assess allocations for the environment in 2004 and provide a stocktake of progress against a jurisdiction's implementation program to identify remaining areas for assessment in 2005 when the program is to be complete.

Reference: Water reform agreement, clauses 4(b–f)

Background

At the time of the 2001 NCP assessment, evidence indicated that the Marne River in the Mount Lofty Ranges and the Inman River on the Fleurieu Peninsula could be considered to be stressed. The Marne River[6] and potentially other river systems in the eastern Mount Lofty Ranges have become stressed by high levels of water extraction in localised areas. The Inman River has been identified as stressed in terms of water quality (see the section on environment and water quality).

[6] The Marne River in the Adelaide Hills flows into the River Murray.

CoAG commitments required allocations to the environment in stressed and overallocated rivers by June 2001. The Council considered that action to re-allocate water to the environment should occur by 2002, given South Australia's approach to stressed systems, together with information becoming available on the allocation status of the Marne and Inman river systems. The 2001 NCP report called for a reassessment against this CoAG principle in 2002.

South Australian arrangements

The Water Resources Act provides an established process for managing stressed water resources. This includes a range of tools, from moratoriums on increased water use, consultation with the community when potentially stressed and developing areas are identified (to determine the most appropriate management tools) and the prescription of areas. South Australia has an ongoing process for monitoring and assessing water resources to identify stressed resources.

This process is demonstrated by the prescription of the Tintinara Coonalpyn Prescribed Wells Area and Morambro Creek Prescribed Watercourse and Prescribed Surface Water Area (in the Upper South East). The water allocation plans being prepared for these areas will protect water-dependent ecosystems and better manage these water resources.

Prescription is also proposed for the Great Artesian Basin, water resources in the Baroota area, and the Marne River, the North Rhine River and Saunders Creek in the eastern Mount Lofty Ranges. The Minister for Environment and Conservation is consulting with the community to identify the best method to achieve improved water resources management in these areas. Presuming these areas are prescribed, water allocation plans will then be prepared for these resources.

In relation to the Marne river, South Australia has advised that the River Murray Catchment Management Water Board is undertaking a research project looking at science and use information to determine the river's environmental water requirements, as well as other eastern Mount Lofty Ranges watercourses. The method applied to the Onkaparinga River, a Mount Lofty system, could be applied to other rivers in the Mt Lofty Ranges. Application would not be appropriate for the Marne River, however, because it is more seasonal than the Onkaparinga River.

The Minister has declared an intention to prescribe the Marne River and Saunders Creek as a result of concerns about sustainability. The department is undertaking a round of public consultation — due to end in May 2002 but extended — on the need for prescription to set legally binding mechanisms to provide water for the environment in accordance with a water allocation plan. Prescription requires the preparation of a water allocation plan that provides for environmental water requirements. Such a plan takes at least two years

from when a resource is prescribed. Prescribing the Marne River for water extraction stress will result in a metering program for the system.

A notice of restriction on water use in the Saunders Creek has been applied.[7] The River Murray Water Catchment Management Board is also considering prescription for other systems in the eastern Mount Lofty Ranges including the Angas, Bremer, Finniss and Currency Creek systems.

Finally, the draft water allocation plan for the River Murray prescribed water course, once finalised, will be a statutory document under the Water Resources Act. The draft plan seeks to ensure that the water resources of the River Murray prescribed watercourse are allocated and managed in a sustainable manner. It has significant implications for users of River Murray water, particularly irrigators. Irrigators will be required to achieve water use efficiencies of 85 per cent for the Angas–Bremer and River Murray irrigation management zones (by 2003 and 2005 respectively), and 65 per cent for the Lower Murray Reclaimed Areas Irrigation Management Zone (by 2007). Existing water licences will be assessed and re-issued to ensure they comply with the water allocation plan. The plan focuses on irrigator accountability as the single largest group of users. Irrigators will be required to produce an annual report that demonstrates how their licence conditions are being met. The water allocation plan will also give effect to key salinity management policies.

Discussion and assessment

South Australia's decision to prescribe the Marne River and Saunders Creek areas follows investigations that indicate that development and use of these catchments have reached the point where their ability to meet the reasonably foreseeable needs of all water users (including the environment) are at risk.

South Australia provided the Council with a sample letter to landholders in the region, advising of the need for prescription, as well as a series of public information sheets on the prescription proposal. This material shows that farm dam volumes in the region doubled between 1991 and 1999 resulting in median annual surface water runoff being reduced by 24 per cent. This change has resulted in a reduction in the duration of low and medium flow events that are crucial for supporting downstream ecosystems.

The process of prescribing the Marne River and potentially other eastern Mount Lofty catchments will result in the development of water allocation plans for these systems The Council considers that the Marne River and any

[7] The notice of restriction means the existing users of water can continue to operate at current levels of development, but no further or new development requiring additional water should take place. Existing water users will be issued with authorisations to take water, following a detailed assessment of the current level of development.

other eastern Mount Lofty system that will 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

Outstanding issue: South Australia should show developments in integrated catchment management, including the development of catchment water management plans. In 2001, South Australia provided a two-year timetable for the completion of eight catchment water management plans to cover 95 per cent of South Australia. The Council will examine progress against this timetable in 2002 and 2003.

Next full assessment: The Council will assess integrated catchment management reforms in detail in 2003. At that time, the Council will expect the reforms planned in 2001 to have been implemented and any outstanding issues to be resolved.

Reference: Water reform agreement, clauses 6(a–b) and 8(b–c)

Background

In 2001, the Council found that South Australia was well advanced in the development of catchment water management plans by catchment management boards 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 assess progress against this timetable in the 2002 and 2003 NCP assessments.

South Australian arrangements

Catchment water management plans

There are eight catchment water management boards. Two of these, namely the Northern Adelaide and Barossa and the Onkaparinga, had their plans adopted during 2001–02. The Torrens and Patawalonga catchment water management plans were adopted in June 2002, and the River Murray catchment water management plan, currently in draft form, is expected to be in place by December 2002. The River Murray plan will support the implementation of South Australia's River Murray Salinity Strategy and be consistent with South Australia's commitments to the Murray–Darling Basin salinity management strategy.

The remaining three boards are still compiling the research necessary to develop comprehensive plans. The South East Catchment Water Management Plan is likely to be completed by early 2003.

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. This is the first review of the implementation of the plans since the passage of the Water Resources Act.

A new vision for integrated catchment management

The Integrated Natural Resource Management Bill reported in the 2001 NCP assessment has been withdrawn, and the new 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'. The aim is to bring together:

- water management and allocation plans;
- soil conservation and management issues;
- animal and plant control matters;
- the development and implementation of native vegetation, re-vegetation and biodiversity plans;
- the establishment of, and support for, Friends of Catchment groups; and
- salinity management.

South Australia is committed to establishing a catchment-wide consultation process involving all stakeholders to alleviate land use conflicts. The long-term goals are to maintain the ecological sustainability of each of the State's bioregions and provide certainty of access to all resource users.

A Central Natural Resources Committee will coordinate the individual local boards. The central committee will facilitate adherence to Statewide goals and plans, efficient management of intercatchment issues, access to expertise, reduced overlap and streamlined programs.

Assessment

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 is satisfied that South Australia is on track with the 2001 NCP timetable for developing catchment water management plans, and that it has met the outstanding commitment for this assessment. The Council is mindful that South Australia signed an intergovernmental partnership agreement with the Commonwealth to implement integrated catchment management reforms in priority catchments as part of the National Action Plan on Salinity and Water Quality. The Council will assess all integrated catchment management arrangements for all States in the 2003 NCP assessment.

Environment and water quality: National Water Quality Management Strategy

Outstanding issue: South Australia is to finalise the environmental protection (water quality) policy.

Next full assessment: The Council will assess implementation of the national strategy in 2003.

Reference: Water reform agreement, clause 8(b) and (d)

Background

The State Water Plan 2000 called for the South Australian Government to establish a consistent Statewide approach to the determination of environmental values and protection of water quality across all South Australian waterbodies during 2000-01. This action was to entail the completion of an environment protection (water quality) policy.

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 policy is to apply to all South Australian waters and will provide a consistent framework for protecting water quality across all water bodies, including better use of wastewater by waste avoidance or elimination, minimisation, recycling, waste treatment to reduce degrading impacts, and disposal.

In 2001, the Council found South Australia showed an ongoing commitment to a coordinated approach to water quality management, including the implementation of the National Water Quality Management Strategy. The Council was concerned, however, about the slow pace of finalisation of the draft environment protection (water quality) policy to implement the national

strategy. The Council undertook to reassess this issue in the 2002 NCP assessment and expected the draft policy to be implemented in the meantime.

South Australian arrangements

South Australia has advised that development of the environment protection (water quality) 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 received must be subject to a further round of consultation with bodies prescribed by this Act.

When approved, the policy will become subordinate legislation under the *Environment Protection Act 1993* and will enhance the implementation of the National Water Quality Management Strategy in South Australia. When it comes into effect, the policy will be a key regulatory instrument in South Australia for the protection of water quality in surface water and groundwater. It will ensure all industries, irrespective of scale, operate under uniform water quality conditions.

The State Water Monitoring Coordinating Committee produced a report, *Roles, Responsibilities and Framework for Water Monitoring in South Australia* that agencies have endorsed. This has resulted in the development of an integrated monitoring network between the Department for Water Resources, the Environment Protection Authority, SA Water and the catchment water management boards, which is used to assess the health of water-dependent ecosystems.

In relation to the Inman River, South Australia confirmed the river is stressed in terms of water quality as a result of the discharge of a sewerage treatment works upstream of the mouth at Victor Harbour. A river management plan for the Inman River has been prepared, and SA Water is addressing water quality concerns through an upgrade of the Victor Harbour sewerage treatment works.

SA Water is involved with an Environmental Improvement Program across its wastewater treatment plant network. The wastewater treatment plant for Victor Harbour is currently located on the Inman River. SA Water has undertaken extensive community consultation on the location and type of treatment, as well as the potential re-use options for treated water for irrigation schemes. The need for consultation to ensure community support for the outcome has delayed the implementation of the project. The new plant will no longer discharge into the Inman River, resulting in improvements in water quality in the river. A tender for the construction and operation of the plant has been prepared.

The Environment Protection Agency prepared a report, *The State of Health of the Mount Lofty Ranges Catchments: from a Water Quality Perspective*, which lists initiatives to reduce the risks to water supply. As a result the Mount

Lofty Ranges Watershed Protection Office was formed and funded to oversee the initiatives.

Discussion

In June 2001, the Council was concerned at the slow pace of finalisation of the draft environmental protection (water quality) policy to implement the National Water Quality Management Strategy. The last advice from South Australia in June 2001 was that the Environment Protection Authority was following a statutory process in finalising the policy. Public consultation closed in March 2001 and there was to be two months of agency consultation to review the policy after amendments were made to reflect comments received from public consultation. The policy was to be completed by the end of 2001 before endorsement by the Government.

The Council expected the draft environment protection (water quality) policy to be implemented by June 2002. South Australia is one of the last jurisdictions to adopt this reform. Development of the policy has taken longer than anticipated because a large number of submissions were received during consultation under the Environment Protection Act. Changes made as a result of submissions must be subject to a further round of consultation with bodies prescribed by the Act.

In May 2002, South Australia provided the Council with a timetable (as shown in table 6.3 below) for the completion of the environment protection (water quality) policy. Upon finalisation of the policy, the next stage is the development of modules to implement specific National Water Quality Management Strategy guidelines for freshwater and marine water quality, drinking water, and water quality monitoring and reporting. Draft modules have been developed and government consultation is complete, so the next step is for the drafts to be released for consultation with bodies prescribed under the Environment Protection Act, government agencies, local government and statutory authorities.

Table 6.3: South Australia's timetable to complete the environment protection (water quality) policy

Stage	*Anticipated timeframe*
Release documents for three months consultation. Holding a public hearing.	Completed Completed
Assess submissions and develop any proposed amendments to the draft policy.	Completed
Refer proposed amendments to the policy to the Environment Protection Authority for approval to consult.	Completed
Have Parliamentary Counsel redraft policy in consultation with the Environment Protection Authority[8] for consultation.	February–June 2002
Consult on proposed amendments with prescribed bodies and relevant government agencies, local government and statutory authorities.	July–September 2002
Have Parliamentary Counsel amend the policy. Have the Environment Protection Authority review amendments as satisfactory and resolve any issues with Parliamentary Counsel as necessary.	October – November 2002
Prepare a draft report from the Environment Protection Authority to the Minister. Refer the Report and draft policy to the authority for its approval.	November 2002 meeting of the Environment Protection Authority
Refer Environment Protection Authority's report and draft policy to the Minister for approval.	December 2002
Following Minister's approval, refer approved policy for the Governor's authorisation and gazettal.	December 2002

Source: Government of South Australia (2002, unpublished)

Assessment

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 for this assessment, including the need for full consultation. The environmental protection (water quality) policy will be a significant reform when finally in place. It will apply to all South Australian waters and provide a consistent framework for protecting water quality across the State.

[8] The Environment Protection Authority became an independent agency from 1 July 2002 within the Environment and Conservation portfolio. The EPA is responsible for environment protection (water quality) policy.

The Council notes, nevertheless, that governments first agreed on the policies of the National Water Quality Management Strategy for freshwater and marine water quality in 1992. South Australia is one of the last States to implement reform requirements in this area. It has recognised this delay and committed to a timetable for implementing the policy.

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 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. The development of a new treatment plant should address the water quality concerns for the Inman River. 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.

Public consultation

Outstanding issue: The Council noted continued concerns with the level of transparency in water pricing and recommended that this issue be examined in future NCP assessments.

Next full assessment: For all future assessments, the Council will examine public consultation and education measures for the reform priority that falls due for assessment in that year. The Council will therefore re-examine the adequacy of consultation measures relating to urban pricing in 2003.

Reference: Water reform agreement, clauses 7(a–e)

Background

The Council has longstanding concerns about whether in South Australia price setting is sufficiently separated from service provision and whether the process of setting prices is sufficient transparent and consultative. The separation of price regulation from service provision is discussed in the progress report on institutional reform. The water agreements specifically refer to the need for consultation on urban and rural pricing reforms.

As noted under institutional reform, South Australia can meet its CoAG commitments if an independent body reviews price issues and publicly releases its report, and if the government responds to that report and presents reasons for any decision to adopt an approach divergent from the report's recommendations. Such a process would ensure transparency of the decision-making process.

South Australian arrangements

While the new South Australian Government was elected on a platform of establishing an Essential Services Commission (ESC) as an independent regulator for electricity, gas and water, the regulatory approach for water has not been finalised.

Pricing policy has not changed over the past twelve months, although two pricing determinations have been made. Water prices for 2002-03 were gazetted on 7 December 2001. Sewerage prices for 2001-02 were gazetted June 2001 and sewerage prices for 2002-03 will be gazetted before the end of June 2002.

Discussion and assessment

South Australia still has not addressed the issues of price-setting transparency and consultation that were discussed in the Council's 2001 NCP assessment. While establishing independent regulation would potentially resolve this problem, the Council has no details on how this regulatory structure will operate, when it will be implemented or whether alternative mechanisms will be developed to address water pricing issues. Given the government has committed to considering this issue further, the Council does not consider that the issue has NCP payments implications for 2002. The Council will re-assess this issue in 2003, in conjunction with its assessment of institutional reform.

The South Australian government has gazetted some price changes to apply for 2002-03, but they flow from the implementation of pricing policies discussed in the 2001 NCP assessment. They do not, therefore, raise any new NCP assessment issues.

Given the Council's ongoing concerns about the institutional arrangements in South Australia, it will continue to monitor these issues closely in future NCP assessments.

Progress report issues

Urban full cost recovery: externalities

Progress report: Developments in factoring externalities into pricing by urban service providers

Next full assessment: The Council will assess urban pricing reform in 2003.

Reference: Water reform agreements, clause 3(a)(i); Expert Group report on externalities

Background and South Australian progress

South Australia reports that water prices reflect environmental externalities in two ways.

- Water prices internalise catchment management charges by incorporation into the total revenue target that the two-part tariff is designed to raise. SA Water incurs a River Murray levy of 1 cent per kilolitre that is directed to funding projects overseen by the River Murray Catchment Water Management Board. SA Water also makes payments to other catchment water management boards. All of these payments effectively internalise $2.7 million in environmental costs within SA Water's cost structure.

- South Australia argues that water use charges provide a pricing signal that more than compensates for environmental externalities.

The December 1999 green paper *Water Pricing in South Australia: A Discussion Paper* implied that a cost-reflective water use price may be around 65 cents per kilolitre. This price includes some (unspecified) allowance for environmental externalities. The review of water pricing argued that the long-run marginal cost of water for virtually all South Australian urban water supply systems, and certainly for those supplying the vast majority of customers, was well below the upper tier water use price (92 cents per kilolitre for supply above 125 kilolitres per year, at the time of the study). South Australia claims that the difference between the upper tier water price and long-run marginal cost is so large that the pricing signal at the margin more than compensates for environmental externalities.

The Council notes that South Australia, while it may have covered externalities in the costs of water and wastewater services, has no mechanism for transparently accounting and reporting for these externalities in setting prices.

Further, South Australia does not consider the Department of Water, Land and Biodiversity Conservation costs of managing water, or dealing with the environmental costs of urban or rural water use, as part of water pricing. The CoAG guidelines for achieving full cost recovery require prices to include environmental costs, and this will be an assessable issue in the 2003 NCP assessment.

Environmental levy

South Australia's annual sewerage charge incorporates a specific levy for environmental works. Set at 10 per cent, the levy was established to fund SA Water sewerage projects that enhance the environment. The levy has been increased to 11.5 per cent. Of this, a specific environmental levy of 1.5 per cent goes to the Department of Environment and Heritage. The remaining 10 per cent is directed to a range of SA Water projects involving wastewater

collection, treatment and disposal projects that have a beneficial impact on the environment.

Full cost recovery: tax equivalent regimes

Progress report: Developments in implementing tax equivalent regimes for metropolitan service providers

Next full assessment: The Council will assess urban pricing reform in 2003.

Reference: Water reform agreements, clause 3(a)(i); Expert Group report on tax equivalent regimes

Background and South Australian progress

South Australia reports the only change in the tax equivalent regime since the 2001 NCP assessment is the adoption of the national tax equivalent regime. SA Water is still subject to all State taxes (such as payroll tax), and local government rates equivalents. Tax equivalent regimes are applied on pre-tax returns, and are captured in the dividend rate of 55 per cent of earnings before interest, tax, depreciation and amortisation. Table 6.4 shows the tax equivalent regime payments for SA Water in 2000-01.

Table 6.4: SA Water tax and tax equivalent payments, 2000-01

Taxes and tax equivalents	*$ million*
Income	60 133
Land	3327
Rates	842
Sales	166
Total tax and tax equivalent regime payments	64 468

Source: Government of South Australia (2002)

Similar taxes are expected to apply to rural water service providers. As part of the 2004 NCP assessment of rural pricing reforms, the Council will assess the application of tax equivalent regimes in the rural sector.

Consumption-based pricing: cross-subsidies

Progress report: More explicit treatment of cross-subsidies (particularly within irrigation districts)

Next full assessment: The Council will assess urban pricing reform in 2003.

Reference: Water reform agreement, clause 3(a)(i)

Background

Rural: For 2001, the Council had limited information on the extent of cross-subsidies among South Australian rural water users. However, a number of measures taken by South Australia reduced the potential for nontransparent cross-subsidies. While the Council was satisfied that 2001 NCP commitments had been met, it would look for a more explicit treatment of cross-subsidies (particularly within all irrigation districts) when it next assessed progress.

Urban: For 2001, the Council assessed South Australia as having met reform commitments relating to urban cross-subsidy reform. However, the lack of transparency in South Australia's arrangements made open treatment of the issue of cross-subsidies virtually impossible. The Council's intention is to closely monitor South Australia's pricing arrangements in future assessments.

South Australian progress

Rural: South Australia has advised the Council that the Government is not involved in price setting for rural service provision and, given rural service provision is a private sector concern, this issue is not applicable.

Urban: South Australia has not undertaken an open and transparent analysis, and identification of, cases of cross-subsidisation between classes of customer. The establishment of a more open and transparent pricing setting process could address the Council's concerns regarding cross-subsidisation. Options include establishing an independent price regulator and/or a public price-setting process, including submissions to the Government and a publicly available report. (For a detailed comment, see the section on institutional reform)

Institutional reform: structural separation

Progress report: Transparency of the processes for price setting and a review any price issues that emerge.

Next full assessment: The Council will assess institutional reform in 2003.

Reference: Water reform agreement, clause 6

Background

The Minister for Government Enterprises is the owner of SA Water and has the authority to gazette prices. The Council's 2001 assessment framework noted that if the regulator and the service provider are responsible to the same Minister, the Council would require information about how any

resulting potential conflicts of interest had been addressed. Consequently, the Council is looking for a transparent process for setting water prices.

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. In 1999 the South Australian Government initiated a review of future water and wastewater pricing options. That review involved a submission process. However, there was no transparency in the process once the review was finalised. Even though some pricing decisions have been made on the basis of the review the South Australian Government does not intend to release the findings of the review. This makes it very difficult for the Council to be confident that pricing decisions will be consistently based on the principles set out in the water agreement. The consequence of this is that the Council will need 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 now and in the future.

All of these issues would be resolved by the ability of an independent body to review the pricing arrangements, publicly release a report and the government to respond to that report and present a statement of reasons when it decides to adopt an approach divergent from the recommendations of that report.

South Australian progress

On the issue of separation of price regulation from service provision, South Australian states that:

> *The NCC has again raised the issue of the transparency in water price setting. South Australia continues to note that the power to set water and sewerage prices resides with the Minister responsible for SA Water, rather than SA Water itself and that the Minister's recommendations are approved by Cabinet, so that the actual decision on prices is made by Cabinet itself.* (Government of South Australia 2002, pp. 50-51)

As outlined in the Council's 2001 assessment, in practice, there has been little transparency in the process for determining prices and this has exacerbated problems the Council has had in a range of areas, including the potential for the price structure to include nontransparent cross-subsidies. All other jurisdictions have, or have committed to introducing, independent processes for monitoring or regulating prices.

The Council also understands that as part of its election campaign the current South Australian government announced that:

> *Labour will create an Essential Services Commission (ESC). This will be an enhancement of the focus and powers of the existing Regulator. The ESC will protect the long-term interests of South Australian consumers with regard to the price, quality and reliability of electricity, and provide oversight of the quality and reliability of gas, water and ports.* (ALP 2002)

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.

In explaining this approach the position paper states that:

> *Given the public ownership of SA Water, it is likely that including the economic regulation of water in the Essential Services Commission will raise policy matters that will require substantial development work and consultation to ensure that an appropriate framework that is consistent with ongoing public ownership is established.*
>
> *Resolution of these matters would represent a considerable delay to the introduction of the Essential Services Commission legislation and is inconsistent with the urgency that the Government places on establishing the Essential Service Commission to ensure that consumers are protected with the advent of electricity FRC [full retail competition] currently scheduled to commence on 1 January 2003.* (Department of Treasury and Finance, South Australia 2002, p.9)

The Council has not received any information from South Australia on the timing of any such review of the appropriate framework for including the economic regulation of water within the responsibilities of the Essential Services Commission. South Australian officials noted that another option being considered is a full review of regulation options after the NCP water review is completed in accordance with the State Water Plan.

Institutional reform: devolution

Progress report: Progress in converting the Loxton Irrigation District to self-management and discussions on the Lower Murray Reclaimed Irrigation Area.

Next full assessment: The Council will formally assess institutional reform in 2003.

Reference: Water reform agreement, clause 3.

Background

At the time of the 2001 NCP assessment the Council recognised that the Loxton Irrigation District is one of the last major irrigation areas to be converted to self-management. All formal approvals and processes were completed in 1998, effectively clearing the way for its establishment as a private irrigation district on 1 July 2001.

The Government also owns and operates eight small irrigation districts in the Lower Murray Reclaimed Irrigation Areas. At the time of the 2001 NCP assessment, the South Australian Water Policy Committee was discussing the future management of these districts with irrigators. The Lower Murray Reclaimed Irrigation Area Steering Committee was undertaking a major economic analysis of options available for possible rehabilitation of the existing infrastructure. This was to form the basis for further negotiations with irrigators, which were expected to take place in late 2001.

The Council noted that in 2002 it would review the process of converting the Loxton Irrigation District to self-management, and the progress of discussions with the Lower Murray Reclaimed Irrigation Area.

South Australian progress

As expected, the Loxton Irrigation District was established as a private irrigation district on 1 July 2001.

In the Lower Murray Reclaimed Irrigation Areas, the Steering Committee has completed its options study into the economic viability and environmental sustainability of flood irrigating dairy, and evaluation of alternative management options for these areas. The study recommendation accepted by the State Government was to rehabilitate continued flood irrigated dairy for the most viable areas after a period of water trade and restructuring. A funding study has also been completed and the outcome of this will determine the extent and method of public funding assistance to irrigators to restructure and rehabilitate the irrigation areas.

A Lower Murray Irrigation Advisory Board funded by the State Government has been drawn from local irrigators. The Lower Murray Reclaimed Irrigation Areas Steering Committee is working with the Irrigation Advisory Board to progress the necessary water use, drainage discharge, and self-management reforms for these areas.

Submission

The Lower Murray Irrigation Advisory Board (2002, submission 8) has argued that devolving management in the Lower Murray Reclaimed Irrigation Areas should be progressed more quickly. While supporting the

process, they argued that the government appeared to be resisting providing a draft agreement necessary to develop a business plan to take over operations and management functions. The government insists on managing projects, such as development works, when this responsibility should be passed on to irrigators. Further, local management should occur as soon as possible so that the local irrigators take greater responsibility for the reform process.

Water trading

Progress report: Additional information and policy developments on the use of restrictions on trading out of irrigation areas

Next full assessment: The Council will assess intrastate trading arrangements in 2003 and interstate trading arrangements in 2004.

Reference: Water reform agreement, clause 5

Background

In the 2001 NCP assessment, the Council raised concerns about the limitations on the volume of water that may be transferred out of some irrigation districts. The Central Irrigation Trust, for example, has placed a 2 per cent limit on the proportion of total entitlements that can be sold out of a given district.

South Australian progress

Trade restrictions were developed by the Central Irrigation Trust to protect its smaller districts where reduced volumes of water within the district may affect infrastructure costs and thus the cost of irrigation water. The trade ceiling on the permanent sale of water out of the irrigation districts has not placed any limitations on temporary transfers of water, which are the most active area of the water trading market on the River Murray.

The irrigation districts are private trusts, run by a board consisting of elected irrigators. The conditions developed by the boards for the operation of the trusts reflect the social constraints on the trusts. The 2 per cent rule has been applied using the articles of association of the private irrigation trusts, and is not a State Government policy. South Australia argues that there is no reason to increase or phase out the threshold for triggering limitations on trade in the Central Irrigation Trust.

The demand for permanent allocations eased substantially over the 6 months to June 2002. This easing reflected two factors: the lack of new irrigation development, and lending institutions not requiring permanent allocations as surety to underwrite irrigation developments. As evidence, the market price for permanent River Murray water allocations over the past year fell from

$1150 to $900 per megalitre, further demonstrating the reduced demand for permanent water allocations.

For permanent trades, South Australia reports the 2 per cent trade ceiling has been reach for approximately 25 per cent of allocations held by the Central Irrigation Trust. The 2 per cent trade ceiling on permanent transfers out of irrigation districts has been reached in five of the smaller irrigation districts (each with less than a 5 gigalitre allocation). The three remaining districts which hold the majority of the water (20 gigalitres or more per district) have not reached their ceilings.

This remains a significant issue, and the Council is looking for the South Australian Government to put in place mechanisms to increase or phase out the threshold for triggering an embargo on trade. These issues will be pursued when intra-state trading is assessed in the 2003 NCP assessment.