

**TRANSPARENCY STATEMENT**  
**URBAN WATER PRICES IN SOUTH AUSTRALIA**  
**2004-05**



**Government  
of South Australia**



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2004-05

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**TRANSPARENCY STATEMENT — Part A**  
**URBAN WATER PRICES IN SOUTH AUSTRALIA**  
**2004-05**



**Government  
of South Australia**

January 2004



### OVERVIEW OF THE TRANSPARENCY STATEMENT

This inaugural Transparency Statement on urban water pricing in South Australia reflects a new openness in policy considerations for the setting of water prices. It aims to:

- provide greater transparency in the setting of 2004-05 water prices in South Australia, in accordance with the South Australian Government's Honesty and Accountability Policy
- document the extent to which the South Australian Government's 2004-05 water pricing decision has complied with Council of Australian Governments (CoAG) principles
- record, document, and report on the processes involved in the South Australian Government's 2004-05 water pricing decision, including the matters that were considered in that process.

The South Australian Government is a signatory to the Competition Principles Agreement and related reforms and, hence, is committed to adopting the CoAG principles.

Previous water pricing decisions by South Australian governments have been broadly consistent with the CoAG principles. However, in the 2004-05 price setting process, the Government specifically considered CoAG's principles in a more structured manner, as outlined in this Transparency Statement. As the CoAG principles are not fully prescriptive, the Government has made some interpretative decisions in their application while remaining consistent with those principles.

The South Australian Government considers that it has complied with CoAG's guidelines in the setting of 2004-05 water prices to the extent possible at this time. Nevertheless, there are a number of important matters that are subject to review.

Two substantive reviews of the ownership structure of all public non-financial corporations and of water pricing (which includes efficient resource pricing) are already taking place. Further consideration of efficient operating, maintenance and administrative expenses, contributed assets and weighted average cost of capital, will be delayed until the completion of these reviews.

The South Australian Government believes it has clear jurisdiction over the activities of its business enterprises and, further, that it is responsible for achieving an appropriate balance between economic efficiency and other policy matters of broader community concern.

Accordingly, the Government's decision on 2004-05 water prices, although consistent with CoAG principles, was heavily influenced by broader community concerns, particularly equity, social justice and regional matters.

The South Australian Government's decision late last year was to increase 2004-05 water tariffs on average by 3.5% consistent with the Adelaide consumer price index, excluding electricity price increases. To reduce the impact of this increase on low

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income earners, the Government also increased by \$5 the maximum remission for pensioners, raising the maximum pensioner rebate on water rate charges under the *Rates and Land Tax Remission Act 1986* to \$95 per year.

To ensure maximum public confidence in the rigorous nature of the 2004-05 water pricing decision, the South Australian Government is requesting that the Essential Services Commission of South Australia (ESCOSA) independently review the Government processes and the adequacy of the application of CoAG principles in the Government's 2004-05 water pricing decision.

This Transparency Statement (Part A) will assist ESCOSA with its independent review.

ESCOSA comments, independent of the South Australian Government, would become Part B of this Transparency Statement.

The Part A of the Transparency Statement provides a substantial amount of detail that would be useful for some stakeholders. However, because other stakeholders might prefer to review just the highlights of price setting, an insert will be produced for broad distribution to every household in their water bill.

A South Australian Government decision on wastewater prices applicable in 2004-05 is required in May 2004 and will be the subject of a separate Transparency Statement.

It is expected that annual statements on water and wastewater pricing decisions would be published in future.



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## TRANSPARENCY STATEMENT – URBAN WATER 2004-05

### Abbreviations

ACCC	Australian Competition and Consumer Commission
APS	accounting policy statement
CoAG	Council of Australian Governments
CPA	Competition Principles Agreement
CPI	consumer price index
CSIRO	Commonwealth Science and Industry Research Organisation
CSO	community service obligation
DHS	Department of Human Services
DTF	Department of Treasury and Finance
DWLBC	Department of Water, Land and Biodiversity Conservation
EPA	Environment Protection Authority
ESCOSA	Essential Services Commission of South Australia
EBITDA	earnings before interest taxes depreciation and amortisation
IPART	Independent Pricing and Regulatory Tribunal
kL	kilolitre
LRMC	long run marginal cost
NCC	National Competition Council
NCP	National Competition Policy
PNFCs	public non-financial corporations
ODV	optimised deprival value
QCA	Queensland Competition Authority
TER	tax equivalent regime
SAIPAR	South Australian Independent Pricing and Access Regulator
SA Water	South Australian Water Corporation
UIG	Urgent Issues Group
WACC	weighted average cost of capital
WSAA	Water Services Association of Australia
WWTP	wastewater treatment plant



# 1 Introduction

## 1.1 Purpose

This Transparency Statement makes available for broad public scrutiny the processes and the many matters that have been considered by the South Australian Government in setting 2004-05 water prices.

It has three main purposes.

Its first purpose is to provide greater transparency about the setting of 2004-05 water prices by the South Australian Government — in accordance with the Government's policy on honesty and accountability in government — for the information and benefit of South Australian urban water customers, in particular. (SA Water's urban water customers are reticulated domestic and rural water users but are predominately in urban areas throughout the State.)

Consumers can now be more aware of the complex issues that are taken into account by the Government when setting prices and can be confident that its pricing decision was based on a robust approach.

Secondly, the Transparency Statement aims to document the processes undertaken by the Government in its 2004-05 water pricing decision.

Thirdly, the Transparency Statement aims to document the extent to which the Government's 2004-05 water pricing decision has complied with the Council of Australian Government's (CoAG) principles as outlined in the Competition Policy Agreement (CPA) and related reforms. CoAG is the peak inter-governmental forum in Australia with the role of monitoring and implementing policy reforms of national significance. The South Australian Government is represented at CoAG by the Premier and is a signatory to the CPA. The Government has, over a number of years, been steadily working towards implementing these reforms, known as the National Competition Policy (NCP).

The National Competition Council (NCC), established in 1995 by all Australian governments, assesses a government's progress in implementing the NCP and makes recommendations to the Federal Treasurer on NCP competition payments to the various jurisdictions. Consequently, the Transparency Statement discusses and focuses on the relationship of the South Australian Government's pricing decision to CoAG principles and their application in this particular pricing decision.

This Transparency Statement should assist the Essential Services Commission of South Australia (ESCOSA) with its independent review. It will be published on the Government and SA Water websites.<sup>1</sup>

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<sup>1</sup> [www.treasury.sa.gov.au](http://www.treasury.sa.gov.au); [www.sawater.com.au](http://www.sawater.com.au)

### 1.2 Description of SA Water

The South Australian Water Corporation (SA Water) is established under the *South Australian Water Corporation Act 1994* and subject to the provisions of the *Public Corporations Act 1993*. Its primary functions as set out in the *South Australian Water Corporation Act 1994* are to provide services for the:

- supply of water by means of reticulated systems
- storage, treatment and supply of bulk water
- removal and treatment of wastewater by means of sewerage systems.

SA Water provides water and wastewater services to residential, retail and industrial customers throughout South Australia's metropolitan, country and rural areas. In providing these services SA Water also manages three public-private service and maintenance contracts. The largest of these is a 15-year contract with United Water to manage, operate and maintain the metropolitan water and wastewater systems. Riverland Water also operates 10 water filtration plants for SA Water in regional South Australia. The final contract is for the operation of the Aldinga Wastewater Treatment Plant.

SA Water operates in accordance with its Charter<sup>2</sup>, which has been prepared by the Treasurer and the Minister for Administrative Services following consultation with SA Water as required by the *Public Corporations Act 1993*.

SA Water has also recently upgraded its Customer Service Charter<sup>3</sup>, which outlines the standards of service that customers might expect from SA Water.

### 1.3 Structure of Transparency Statement

In this Transparency Statement, Chapter 2 outlines the processes that have been followed in setting urban water prices in South Australia for 2004-05 and in preparing this Transparency Statement. It also discusses the forthcoming referral to ESCOSA.

Chapter 3 outlines the CoAG Strategic Framework on urban water pricing, how the NCC has interpreted these principles and the NCC's assessments of South Australia's compliance with the reform agenda.

Chapters 4 and 5 discuss the methodology adopted in setting water prices in South Australia for 2004-05 and how this methodology conforms to the CoAG Strategic Framework.

Chapter 6 presents the South Australian Government's decision on water prices to be implemented in 2004-05.

Chapter 7 presents the financial analysis supporting the 2004-05 water pricing decision.

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<sup>2</sup> Available in the SA Water's Annual Report

<sup>3</sup> Available from SA Water's website – [www.sawater.com.au](http://www.sawater.com.au)

## 2 Processes

### 2.1 Introduction

This chapter outlines the processes undertaken by the South Australian Government in its 2004-05 water price setting decision and the matters the Government considered in reaching that decision.

### 2.2 Institutional framework

One of the CoAG principles for institutional reform is that:

the roles of water resource management, standard setting and regulatory enforcement and service provision be separated institutionally (NCC, 1998, p 106).

As noted at the 1999 Tripartite Meeting<sup>4</sup>, the NCC indicated that separate Ministers would be an appropriate form of separation, although not the only form.

In recognition that SA Water is a monopoly water service provider, the South Australian Government transferred responsibility in the early 1990s for advice on water resource management policy to a separate government agency, now the Department of Water Land and Biodiversity Conservation (DWLBC). Water resource management policy decisions within Government are thus separated from the service provider, SA Water, except to the extent that SA Water retains some responsibility for administering policy on water conservation by its customers.

In accordance with this separation principle, the Minister for Administrative Services is responsible for SA Water providing water and wastewater services. The Minister for the Environment and Conservation and for the River Murray is responsible for water resource management policy.

The separation principle continued into the 2004-05 water price setting decision and preparation of this Transparency Statement. The Minister for Administrative Services, as the Minister responsible for SA Water, brought to Cabinet matters relating to water price setting, including the methodology.

The Treasurer is generally responsible for considering the financial and economic implications of South Australian Government policy decisions. Accordingly, the Treasurer is responsible for budget deliberations and financial performance monitoring related to SA Water's functions. The Treasurer is also the Minister responsible for ESCOSA.

Late last year, the South Australian Government, through Cabinet, approved the 2004-05 water prices.

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<sup>4</sup> A meeting between representatives of senior officials, Committee on Regulatory Reform, Steering Group, Australian and New Zealand Environment and Conservation Council, and NCC on 14 January 1999.

### Conclusion and Recommendation 1

The South Australian Government considers that it has separated the role of water resource management from the role of service provision at both ministerial and agency levels to the extent possible at this time.

Water pricing decisions are made by the Government through the Cabinet process and in accordance with the CoAG principles.

### 2.3 Process for water price setting

On 20 October 2003, the South Australian Government approved the processes to be adopted, and the timeframes involved, for setting 2004-05 water prices. Cabinet also considered the processes and timeframes for preparing this Transparency Statement. The document considered by Cabinet is set out in Appendix 1 (timeframes achieved have since been added).

On 20 October 2003, the South Australian Government also noted a comparison of current water price setting practice with CoAG principles and NCC assessments (Appendix 2) and endorsed a methodology for setting 2004-05 water prices (Appendix 3). The methodology indicated that the Government would take into account economic efficiency, equity and social policy, and environmental outcomes, within the context of NCP, CoAG principles and previous NCC assessments.

On 1 December 2003, the Minister for Administrative Services brought a submission to Cabinet seeking an increase in 2004-05 water prices, which applied the previously approved price setting methodology. The South Australian Government subsequently approved an increase of 3.5% in average prices for SA Water's urban water customers. The full decision is outlined in Chapter 6.

When reaching this decision, Cabinet considered the outcome of consultations with relevant agencies: DWLBC, Department of Human Services including the SA Housing Trust, Department of Treasury and Finance, Department of the Premier and Cabinet, Department for Business, Manufacturing and Trade, Department for Environment and Heritage, Environment Protection Authority and Office for Regional Development

In accordance with the *Waterworks Act 1932*, water prices to apply to most SA Water customers in 2004-05 were gazetted in the South Australian Government Gazette on 4 December 2003. The commercial property rate will not be gazetted until June 2004 when up-to-date property valuations would allow a rate to be determined consistent with the increase for commercial customers approved by the Government.

### 2.4 Matters considered by Cabinet

In setting 2004-05 water prices, the South Australian Government recognised the need to achieve economically efficient outcomes and considered a number of complex economic issues arising from the CoAG principles.



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As a representative on CoAG and a signatory to the CPA and related agreements, including the CoAG Strategic Framework on Water Resource Policy, the Government is committed to adopting CoAG principles and has been progressively implementing those relating to water reform over a number of years. Previous water pricing decisions have generally been consistent with CoAG principles. In setting 2004-05 water prices, the Government explicitly addressed CoAG principles and NCP obligations in a more structured manner. The framework of principles required by CoAG was presented to Cabinet and it has been explicitly applied and detailed in a formal methodology.

The South Australian Government has adopted CoAG principles to the extent possible at this time, given time constraints and the need to consider and resolve a range of complex issues, some of which are subject to current or future reviews. These matters will continue to be addressed over time by the Government.

The Government balanced its consideration of economic efficiency matters against community benefit, equity, social justice, and environmental and regional matters, within the CoAG framework.

### Conclusion and Recommendation 2

The Government considers that it has achieved a balance between economic efficiency and community benefits, equity, social justice and environmental and regional policies in its 2004-05 water pricing decision and has complied with CoAG principles to the extent possible at this time.

The South Australian Government is responsible for achieving an appropriate balance between economic efficiency and broader community considerations in all its major policy decisions.

## 2.5 Transparency Statement

The South Australian Government considers that it has achieved appropriate separation and balance, but has agreed to a review by ESCOSA of the 2004-05 price setting processes and the adequacy of the application of CoAG principles, particularly as a means of achieving the transparency of process sought by the NCC.

### 2.5.1 Part A

Part A of the Transparency Statement **documents and provides an overview of the processes** and the methodology involved in the South Australian Government decision on 2004-05 water prices to be applied to SA Water's urban water customers. It also discusses how the water price decision conforms to the principles outlined in the CoAG Strategic Framework for the reform of the Australian water industry (part of the CPA).

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The Department of Treasury and Finance prepared the Transparency Statement on behalf of the Treasurer. Officers from the Department of the Premier and Cabinet and DWLBC were consulted in its preparation by participating in an informal working group. SA Water was involved but only to the extent that it provided factual and contextual advice.

The statement does not relate to wastewater pricing decisions, which would not generally be made until May 2004 for the 2004-05 year.

### **2.5.2 Referral to ESCOSA**

In accordance with Section 35 of the *Essential Services Commission Act 2002*, the Treasurer is referring a review to ESCOSA of the 2004-05 water price setting processes.

As outlined in Appendix 4:

- a) The Commission is to inquire into the processes undertaken in the preparation of advice to Cabinet, resulting in Cabinet making its decision on the level and structure of SA Water's urban water prices for 2004-05, with respect to the adequacy of the application of CoAG pricing principles;
- b) In undertaking this inquiry, the Commission is to consider the "Transparency Statement - (Part A) Urban Water Prices in South Australia 2004-05" dated January 2004;
- c) In considering the processes undertaken for the preparation of advice to Cabinet, the Commission is to advise on the extent to which information relevant to the CoAG principles was made available to Cabinet.

ESCOSA's comments would become Part B of this Transparency Statement.

### **3 The CoAG Strategic Framework and the NCC's interpretation**

#### **3.1 Introduction**

In February 1994, CoAG endorsed the *CoAG Strategic Framework* for the efficient and sustainable reform of the Australian water industry, and agreed to its implementation over a five to seven year period. The reforms cover an extensive range of water resource policy issues including allocations to the environment and urban water pricing.

This Transparency Statement focuses on the CoAG principles that are particularly relevant to pricing urban water services. This chapter outlines and discusses the CoAG Strategic Framework and the subsequent interpretations and assessments of the framework by the NCC.

#### **3.2 The CoAG Strategic Framework — 1994**

The CoAG Strategic Framework emphasises the principles of consumption-based pricing, full cost recovery, the removal or transparency of cross-subsidies, and the full disclosure of community service obligations (CSOs), in which services are provided to customers at less than full cost.

CoAG agreed to adopt a two-part tariff for water services — an access charge and a usage charge — where cost effective. CoAG also agreed that water service providers should earn a real rate of return on the written down replacement cost of assets and that an expert group should be formed to investigate asset valuation methods and cost recovery definitions. See Box 1 for relevant clauses of the CoAG Strategic Framework.

#### **3.3 Full cost recovery**

The Expert Group<sup>5</sup>, which reported to CoAG on asset valuation and full cost recovery, argued that CoAG had initially adopted a limited definition of full cost recovery for urban water service providers because of the complexities of valuing resource degradation. It concluded that the relevant objective for water businesses is full economic cost recovery, and not the recovery of accounting costs (see comparison in Table 1).

The full economic cost recovery scenario (Table 1) includes an estimate of the opportunity cost of capital, or the return foregone as a result of the service provider's investment in the assets. It also includes an estimate of the cost of externalities, or the unpriced impacts of the consumption and production of water on the environment (eg salinity).

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<sup>5</sup> The Expert Group was Chaired by Sir Eric Neal and consisted of representatives from the States and the Commonwealth and the Murray–Darling Basin Commission.

**Box 1: Relevant clauses of the CoAG Strategic Framework 1994 — Urban Water Pricing**

In relation to water resource policy, CoAG agreed:

2 to implement a strategic framework to achieve an efficient and sustainable water industry comprising the elements set out in (3) ... below.

3 In relation to pricing:

- (a) in general —
  - i. to the adoption of pricing regimes based on the principles of consumption-based pricing, full-cost recovery and desirably the removal of cross-subsidies which are not consistent with efficient and effective service, use and provision. Where cross-subsidies continue to exist, they be made transparent, ...;
  - ii. that where service deliverers are required to provide water services to classes of customer at less than full cost, the cost of this be fully disclosed and ideally be paid to the service deliverer as a community service obligation;
- (b) urban water services —
  - iii. to the adoption by no later than 1998 of charging arrangements for water services comprising of an access or connection component together with an additional component or components to reflect usage where this is cost-effective;
  - iv. that in order to assist jurisdictions to adopt the aforementioned pricing arrangements, an expert group, on which all jurisdictions are to be represented, report to CoAG at its first meeting in 1995 on asset valuation methods and cost-recovery definitions, and
  - v. that supplying organisations, where they are publicly owned, aiming to earn a real rate of return on the written down replacement cost of their assets, commensurate with the equity arrangements of their public ownership;

Source: NCC, 1998, p 103–104

**Table 1: Comparison of full economic cost recovery and accounting cost recovery**

<b>Full economic cost recovery</b>	<b>Accounting cost recovery</b>
Operating and maintenance expenses	Operating and maintenance expenses
Administrative costs	Administrative costs
Depreciation	Depreciation
Opportunity cost of capital	Finance costs
Externalities (eg salinity control)	

Source: Expert Group, 1995, p 15

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The Expert Group concluded that water businesses should generate maximum returns without resorting to monopoly pricing and that these returns should include the opportunity cost foregone on an investment, specifically using a weighted average cost of capital (WACC). It also concluded that where full economic cost recovery is not possible, the business should recover sufficient costs to ensure the ongoing commercial viability of the business (Expert Group, 1995, p 33–41).

### 3.4 The CoAG guidelines

The Agriculture and Resource Management Council of Australia and New Zealand endorsed the Expert Group report and guidelines for the application of the CoAG Strategic Framework in future pricing determinations on 27 February 1998.

These CoAG guidelines and comments (Box 2) were subsequently endorsed by all Premiers and Chief Ministers.<sup>6</sup> On the basis of the Expert Group's recommendations, the CoAG guidelines outlined the two core principles of:

- avoiding monopoly rents
- maintaining the ongoing commercial viability of the business.

The guidelines require that both principles should be based on efficient resource pricing and business costs and include taxes and tax equivalent regimes (TERs) where appropriate.

#### 3.4.1 *Avoiding monopoly rents — maximum revenue outcome*

The principle of avoiding monopoly rents is consistent with the Expert Group's definition of full economic cost recovery. The CoAG guidelines stipulate that in order to avoid monopoly rents the water business should recover efficient business costs, taxes, externalities, provision for asset consumption and the opportunity cost of capital — calculated using a WACC.

Therefore full economic cost recovery conceptually defines an upper bound for a water business's revenue generation — called the 'maximum revenue outcome'.

Consistent with Expert Group thinking, the CoAG guidelines also recommend that the deprival method be used to determine asset values, where justifiable.

#### 3.4.2 *Ongoing commercial viability — minimum revenue outcome*

The principle of maintaining the ongoing commercial viability adopted in the CoAG guidelines is consistent with the Expert Group's definition of accounting cost recovery except that it includes:

- externalities, defined as 'environmental and natural resource management costs attributable to and incurred by the water business'
- adoption of the annuity approach to determine the necessary cash to maintain the ongoing service capacity of the assets

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<sup>6</sup> Noted at the Tripartite Meeting on 14 January 1999 (see footnote 4)

**Box 2: Guidelines for applying Section 3 of the Strategic Framework and Related Recommendations in Section 12 of the Expert Group report**

1. Prices will be set by the nominated jurisdictional regulators (or equivalent) who, in examining full cost recovery as an input to price determination, should have regard to the principles set out below.
2. The deprival value methodology should be used for asset valuation unless a specific circumstance justifies another method
3. An annuity approach should be used to determine the medium to long-term cash requirements for asset replacement/refurbishment where it is desired that the service delivery capacity be maintained
4. To avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or TERs (tax equivalent regime), provision for the cost of asset consumption and cost of capital, the latter being calculated using a WACC.
5. To be viable, a water business should recover, at least, the operational, maintenance and administrative costs, externalities, taxes or TERs (not including income tax), the interest cost on debt, dividends (if any) and make provision for future asset refurbishment/replacement (as noted in (3) above). Dividends should be set at a level that reflects commercial realities and stimulates a competitive market outcome.
6. In applying (4) and (5) above, economic regulators (or equivalent) should determine the level of revenue for a water business based on efficient resource pricing and business costs.
7. In determining prices, transparency is required in the treatment of community service obligations, contributed assets, the opening value of assets, externalities including resource management costs, and tax equivalent regimes.

**Terms requiring further comment in the context of these guidelines (these comments form part of the CoAG Strategic Framework)**

- The reference to *or equivalent* in principles 1 and 6 is included to take account of those jurisdictions where there is no nominated jurisdictional regulator for water pricing.
- The phrase *not including income tax* in principle 5 only applies to those organisations which do not pay income tax.
- *Externalities* in principles 5 and 7 means environmental and natural resource management costs attributable to and incurred by the water business.
- *Efficient resource pricing* in principle 6 includes the need to use pricing to send the correct economic signals to consumers on the high cost of augmenting water supply systems. Water is often charged for through a two-part tariff arrangement in which there are separate components for access to the infrastructure and for usage. As an augmentation approaches, the usage component will ideally be based on the long-run marginal costs so that the correct pricing signals are sent.
- *Efficient business costs* in principle 6 are the minimum costs that would be incurred by an organisation in providing a specific service to a specific customer or group of customers. Efficient business costs will be less than actual costs if the organisation is not operating as efficiently as possible.

Source: NCC, 1998, p 112–113

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- dividends set so as to reflect commercial outcomes and stimulate competitive market outcomes
- taxes or TERs included if the business pays income tax.

The principle of maintaining ongoing commercial viability therefore conceptually represents the lower bound for the business's revenue requirements — called the 'minimum revenue outcome'.

### **3.4.3 Transparency**

The principle of transparency in determining prices was also adopted by CoAG in 1994, particularly for CSOs, contributed assets, opening value of assets, externalities including resource management costs and TERs.

## **3.5 Other principles incorporated in the CoAG Strategic Framework**

A number of other principles included in the CoAG Strategic Framework relate specifically to reform of the management of water resources and rural water services. As this Transparency Statement concerns the South Australian Government decision on urban water services, the most relevant principles to this matter have been selected.

### **3.5.1 Institutional reform (Clause 6)**

One CoAG principle is the institutional separation of water resource management, standard setting and regulatory enforcement, and service provision.

South Australia has separated service provision from water resource management (see Chapter 2).

For environmental costs, the Expert Group recommended that:

- costs associated with water resource management be borne by the beneficiary/impactor, except where the broader community is identified as the beneficiary, or where the activity is clearly a government responsibility, in which situations government might pay;
- where parties wish to protect environmental values at levels above that which is deemed to be necessary for sustainability reasons from an environmental perspective, they meet all the costs of this (Expert Group, 1995, p 50 ).

### **3.5.2 Performance monitoring (Clause 6)**

CoAG approved the adoption of performance monitoring and international best practice as principles to be adopted to ensure efficient service delivery (ie quality of the delivered service). Performance monitoring is also relevant for assessing efficient business costs.

### **3.5.3 Commercial focus (Clause 6)**

CoAG agreed that, subject to each jurisdiction's particular circumstances, water businesses should adopt a commercial focus by contracting out, corporatising or privatisation.

### 3.5.4 *Public consultation and education (Clause 7)*

CoAG agreed that public consultation should be undertaken by the service provider before new initiatives are adopted. CoAG recommended the development of public education programs on water use and the benefits of reform.

### Conclusion and Recommendation 3

As a signatory to the Competition Principles Agreement and related reforms, the South Australian Government is committed to adopting the CoAG principles.

As the CoAG principles are not fully prescriptive, the Government has necessarily made some interpretative decisions in their application, while nevertheless remaining consistent with those principles.

### 3.6 NCC interpretation

As part of its third tranche assessment of the implementation of water reform in June 2001, the NCC included the 1994 CoAG Strategic Framework and the NCC's interpretation of that framework. The NCC's interpretation included the following key comments on urban water pricing.

- A two-part tariff comprising a volumetric component and a usage component is to be introduced where cost-effective.
- Free water allowances should be removed.
- Property-based charges do not always reflect the cost of services provided to groups of customers and would be examined to ensure that they do not undermine consumption based pricing.
- Full cost recovery is consistent with the CoAG guidelines and therefore includes externalities.
- While acknowledging the difficulties in identifying, measuring and attributing externalities, a proxy for environmental costs might be acceptable.
- The rationale and size of cross-subsidies should be identified and transparently reported.
- Cross-subsidies should be removed or replaced with a transparent CSO.
- The Baumol Band is as an economic measure of efficient pricing (ie no cross-subsidies between products (water and sewerage) or between users) that is consistent with the CoAG objectives.
- CSOs should be clearly defined, transparently reported and have a consistent public benefit objective.
- Separate Ministers would be an acceptable form of separation of institutional roles, although the NCC would request information on the means of dealing



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with potential conflicts of interests where the regulator and service provider are responsible to the same Minister.

- Clause 2 of the CPA implicitly supports independent regulatory oversight of prices.
- Participation in benchmarking systems (eg by the Water Services Association of Australia (WSAA)) was considered to satisfy the CPA requirements on performance monitoring and best practice.

### 3.7 NCC assessments of South Australian urban water reform

#### 3.7.1 1999 NCP assessment

The 1999 assessment (second tranche) was the first major assessment of urban water reform. The NCC was satisfied that South Australia was operating on a full-cost recovery basis when CSOs were taken into account. The NCC was also satisfied that South Australia had:

- introduced a two-part tariff
- transparent separately funded CSOs
- adequate institutional separation
- engaged in public consultation and public education
- participated in benchmarking and performance monitoring and earned a positive rate of return.

Nevertheless, the NCC raised the issues of free allowances, property based charges and the scope for cross-subsidies.

#### 3.7.2 2001 NCP assessment

The June 2001 assessment (third tranche) focused on broader water reform and raised a number of key issues:

- high dividend payout ratios from SA Water to the Government might lead to insufficient funds to finance future capital investment (NCC, 2001, p 17-18)
- the lack of transparency in South Australia's price setting structure and the possibility of independent prices oversight (NCC, 2001, p 49–50).

#### 3.7.3 2002 NCP assessment

In the 2002 assessment, the NCC again raised the issue of dividends paid by SA Water to the South Australian Government and the lack of transparency in the price setting process, particularly for accounting and reporting on externalities and assessing the treatment of cross-subsidies between classes of customers (NCC, 2002, pp 6.4–6.5, 6.32).

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### *3.7.4 2003 NCP assessment framework and assessment*

In the 2003 assessment framework the NCC indicated that it remained concerned with the level of dividends paid by SA Water to the South Australian Government and indicated that:

a reasonable upper bound limit for dividend distribution by government water service businesses is the Corporations Law requirement that dividends may be paid only out of profits (profits include accumulated retained profits as well as current year's profit) (NCC, 2003a, p 13).

The NCC continued to express concern about the transparency of the price setting process and raised further issues about property based charges and the potential for cross-subsidisation (NCC, 2003a, p 19–23).

The NCC, in its 2003 assessment also drew South Australia's attention to:

the pricing principle requirements that (1) prices are determined on the basis of the revenue target for the business that is based on efficient resource and business costs ... (NCC, 2003b, p 6.4).

### *3.7.5 Summary of NCC's areas of concerns*

In its assessments of South Australia's compliance with its NCP obligations for urban water reform the NCC has identified three key areas of concern:

- lack of transparency in the price setting process (addressed by this Transparency Statement)
- dividend policy (addressed in Section 4.4)
- free allowances, property based charges and the scope for cross-subsidies (addressed in Section 5.6).

The South Australian Government has been implementing NCP reforms, such as the reform of water tariffs and the corporatisation of SA Water, over a period of time and addressing issues of concern raised by the NCC on an ongoing basis.

## **4 Water price setting methodology 2004-05 — Revenue outcomes**

### **4.1 Overview**

This chapter outlines the methodology adopted by the South Australian Government for setting urban water prices in South Australia for the year 2004-05 with respect to the CoAG principles and particularly the maximum and minimum revenue outcomes.

The revenue outcomes define a revenue band within which the real forecast revenue derived from the water pricing decision must lie.

### **4.2 CoAG principles: Revenue outcomes and revenue target**

The CoAG principles on urban water pricing are broad and generic in nature. The CoAG Strategic Framework states, “a prescriptive approach that can be universally applied is not practicable” (NCC, 1998, p 111).

The methodology for setting water prices in South Australia for 2004-05 is based on these general principles but, as the guidelines are not fully prescriptive, the Government has made some decisions on their detailed application in light of SA Water’s particular circumstances and more recent accounting standards and regulatory determinations.

Consistent with CoAG principles, the methodology is based on ensuring that the forecast target revenue lies within the revenue band between the upper bound of maximum revenue outcome (that SA Water would need to achieve full economic cost recovery while not earning monopoly profits) and the lower bound of minimum revenue outcome (that is sufficient to ensure SA Water’s ongoing commercial viability).

Some Australian independent regulators of water and wastewater service providers, such as the Independent Pricing and Regulatory Tribunal (IPART) of NSW and the Queensland Competition Authority (QCA), have adopted an alternative methodology, referred to as the ‘CPI+/-X’ methodology or building block approach. It involves determining a maximum revenue requirement, which is the sum of:

- operating expenditure
- return of capital (consumption of capital)
- a return on capital (usually calculated using a WACC).

The building block approach considers potential efficiency gains (‘X’ factor), significant changes in the operating environment and has been adapted to take into account water specific matters, such as externalities and augmentation of the network. In that approach, the maximum revenue requirement is intended to be a target. The analysis is generally accompanied by an assessment of the implications of pricing decisions for the business’s financial viability, rather than the calculation of a

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minimum revenue outcome. Those pricing determinations have also taken into consideration other NCP and CoAG obligations.

### Conclusion and Recommendation 4

The South Australian Government regards the maximum revenue outcome and the minimum revenue outcome as upper and lower revenue bounds, rather than specific revenue targets, consistent with CoAG principles.

### 4.3 Maximum revenue outcome, 2004-05 — Avoiding monopoly rents

The maximum revenue outcome — in the CoAG Strategic Framework, the revenue that a water business can recover while ensuring that it is unable to use its monopoly power to earn above normal profits — is consistent with CoAG's definition of full economic cost recovery and is conceptually the upper revenue bound for the business. It is calculated as the sum of:

- operating, maintenance and administrative expenses — efficient business costs (4.3.1)
- return on assets — a real risk-adjusted return on assets (4.3.2)
- depreciation — provision for asset consumption (4.3.3)
- externalities (4.3.4)
- taxes or TERs (4.3.5).

Each component of the maximum revenue outcome is discussed below. Estimated maximum revenue outcomes for 2002-03, 2003-04 and 2004-05 are included in Chapter 7.

#### 4.3.1 *Operating, maintenance and administrative expenses — Efficient business costs*

Estimates of efficient business costs are included in both maximum and minimum revenue outcomes. Efficient business costs include estimates of operational, maintenance and administrative costs.

SA Water participates in industry benchmarking analysis, most notably by WSAA. *WSAAfacts* compares the performance of the 23 major urban waterbodies in Australia and New Zealand using a range of measures.

At the time of writing, the most recent edition of *WSAAfacts* (based on 2000-01 outcomes) indicates that SA Water's water supply operating cost per property and total water supply cost per property is below the average, and below or comparable with the costs of the larger scale organisations servicing the other State capitals (Table 2).

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**Table 2: National benchmarking analysis from *WSAAfacts 2000-01***

Company	Operating cost per property service	Total cost per property serviced
Power and Water (Darwin)	\$368.67	\$948.30
Sydney Water	\$214.30	\$464.74
Actew Corporation (Canberra)	\$187.43	\$384.38
Brisbane Water	\$171.55	\$388.62
<b>Average all companies including regional utilities</b>	<b>\$163.98</b>	<b>\$398.66</b>
<b>SA Water</b>	<b>\$161.16</b>	<b>\$390.31</b>
Water Corporation (Perth)	\$158.20	\$443.59
Consolidated of Melbourne Co's	\$92.46	\$286.29

Source: Water Services Association of Australia, 2001, p 92 and p 107

SA Water compared favourably in the 2002 benchmarking study of customer service functions, in which the UMS Group compared the performance of 10 urban water utilities in Australia (UMS Group, 2002, pg 36).

SA Water also carries out annual market research of its customers. In the 2002 study SA Water rated very highly and second only to the gas provider. In other specific indicators addressed in the study, SA Water's customers rated its services in a range of performance indicators as very satisfactory at 8.2 out of a maximum possible rating of 10.0.

SA Water must also comply with its Customer Service Charter and minimum water quality standards that are monitored by the Department of Human Services.

SA Water has outsourced a number of functions, including the management of water and wastewater services for the Adelaide metropolitan area and the operation of regional water treatment plants. These services were opened to competition in order to promote their economically efficient delivery.

The NCC has noted that SA Water's per unit real operating costs have been steady from 1995-96 to 2000-01, while the indicator has fallen in other jurisdictions. Differing geographical and climate conditions would result in divergent costs across the States, and assets and business systems in place across jurisdictions may also differ. Further, the competitively tendered contracts for managing the water and wastewater services suggest SA Water's operating, maintenance and administrative costs are based on efficient operations.

## Conclusion and Recommendation 5

Given the recent competitive tender for a major outsourcing contract, the South Australian Government considers that efficient business costs have largely been achieved at this time.

However, the Government will analyse further the apparent differences in operating, maintenance and administrative expenses between South Australia and other jurisdictions following other major reviews.

### 4.3.2 *Return on assets*

The CoAG Strategic Framework requires that a water business earn a real risk adjusted return on the written down replacement cost of assets using a WACC. The issues that have arisen in the application of this CoAG principle are:

- valuation of assets
- the asset base–rolled forward estimate
- contributed assets
- the WACC.

Each is discussed below. The value of the asset base (which includes rolling forward) and the WACC are key parameters in determining the return on assets that, in turn, forms a significant proportion of the maximum revenue outcome.

#### *Valuation of assets*

The CoAG guidelines recommend that the deprival value method<sup>7</sup> be adopted for the valuation of relevant assets unless there is justification to use another method. In determining prices, the guidelines also require transparency in the treatment of contributed assets and the opening value of assets.

In its Review of the National Access Regime, the Productivity Commission noted that the Steering Committee on National Performance Monitoring of Government Trading Enterprises in the 1990s recommended the use of the deprival method of valuation of assets. This would prevent the writing down of asset values in order to improve a government business enterprise's return on assets (Productivity Commission, 2001, pp 361–362).

The South Australia Government Accounting Policy Statement, APS 3, now requires the fair value basis to be applied to the measurement of non-current assets as per Australian Accounting Standard AASB 1041 (July 2001) Revaluation of Non-Current Assets. Additionally, according to APS 3:

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<sup>7</sup> Deprival value is defined in Accounting Policy Statement No. 3 (APS3) as “the entire loss, both direct and indirect, that might be expected to be incurred by an entity if that entity were deprived of the asset at reporting date”.

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the valuation result derived under fair value will result in no material practical difference from the result obtained under deprival value (generally both will be valued on a written-down (depreciated) current cost basis) (APS 3, July 2001, Clause 6).

In accordance with the CoAG guidelines, SA Water assets were valued according to the optimised deprival value (ODV) method for the year ending June 2002.

Optimisation is a process of ensuring that only the most efficient capital costs are included in the asset base and thus consumers are not charged a rate of return on obsolete or redundant assets.

The Hunter Water Corporation Pty Ltd independently reviewed SA Water's asset valuation methodology, based on ODV, in May 2002, consistent with the triennial review process recommended by the Government Guidelines accompanying the South Australia Government Accounting Policy Statement, APS 3. The review concluded that:

there was, in general, a good correlation between the two organisations in terms of methodology used and the modern equivalent replacement asset types adopted (SA Water, 2002, p 46).

The total infrastructure assets, plant and equipment of SA Water (water and wastewater) were valued at approximately \$6 billion as at 20 June 2002 and \$6.4 billion as at 30 June 2003, based on optimised fair value and in compliance with APS 3 (Report of the Auditor-General, 2003, p 68–77).

### Conclusion and Recommendation 6

The South Australian Government considers that there is no practical difference between the 30 June 2003 asset valuations using the ODV approach or the fair value method.

The South Australian Government is satisfied with the application by SA Water of the fair value method of valuing assets.

#### *The asset base—rolled forward estimate*

The CoAG Guidelines do not include detailed specifications for rolling forward the valuation of assets. The method used for rolling forward the optimised asset base from June 2003 to June 2005 is broadly consistent with recent South Australian and national regulatory determinations, including the Electricity Pricing Order.

The June 2003 (audited) optimised asset base was rolled forward to June 2004, including adjustments for changes in capital, depreciation and inflation to derive a closing balance as at 30 June 2004. The estimated asset base for June 2005 was then determined by maintaining the June 2004 estimated asset base in constant dollars, adjusting only for depreciation and changes in capital (including contributed assets and capitalised interest).

The segmentation of the optimised asset base (eg into water and wastewater assets) is consistent with the method used in SA Water's audited accounts. The optimised asset

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value does not include the value of water licences, which have been classified as identifiable intangible assets.

The SA Water and subsequent Treasury and Finance estimates of the optimised asset base, for the 2003-04 and 2004-05 financial years, differed in the application of inflation adjustments. However, the resultant differences are not material. The adjusted Treasury and Finance estimates are included in Chapter 7 (Table 7).

The average real asset base over the 2003-04 and 2004-05 financial years was then estimated, by averaging the opening and closing balances for each year and converting to June 2004 dollars.

The pre-tax real rate of return, determined using the WACC methodology, was applied to the estimate of average real asset value for a particular year to estimate the real return on the investment included in the maximum revenue outcome.

### *Contributed assets*

Contributed assets, or private contributions of, or towards, non-current assets, are defined as non-reciprocal transfers by customers or developers, of non-current assets or to assist in the purchase of non-current assets (AASB Urgent Issues Group, 1996).

The CoAG Strategic Framework provides limited guidance on this issue, simply requiring transparency in the treatment of contributed assets in determining prices. The Expert Group recommended that returns should be calculated with, and without, contributed assets while a national approach was developed.

Since then, regulators have developed various treatments of contributed assets.

IPART considers that there is an element of double dipping in including contributed assets in the calculation of return on assets when the business has not paid for the assets, although it recognises that the business will have to maintain and eventually replace the asset (IPART, 1996, p 18). Similarly ESCOSA has recently indicated that customer contributions should not be included in the ETSA Utilities asset base for the purposes of calculating the return on investment and depreciation. However, the capital expenditure could be included in the asset base when the asset is replaced by the business (ESCOSA, 2003, p 13).

Given the complexity of the topic, QCA recently proposed two alternative treatments of contributed assets: first, that all contributed assets should be recognised where the contributor intended to receive a future price benefit, unless the contribution was a pre-payment for services, returned through special pricing arrangements or has since been returned or replaced; second, that the inclusion of all contributed assets in the asset base for the calculation of the return on investment should be accompanied by a deduction from the business's revenue requirement (QCA, 2002, p 59).

The Urgent Issues Group (UIG) recommends that such contributions be recognised "as an asset (at fair value) and revenue when the entity gains control of the contribution" (AASB Urgent Issues Group, 1996, p 5).



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Contributed assets have been included in SA Water's asset base in the 2004-05 water price setting process, and are recognised as revenue by SA Water when it gains control of the contribution, consistent with accounting standards. The estimates of incremental contributed assets included in the asset base in 2003-04 and 2004-05 are included in Chapter 7.

This treatment is consistent with accounting standards and does not contravene the CoAG guidelines; it is not, however, consistent with recent regulatory determinations interstate.

### Conclusion and Recommendation 7

To the extent that the treatment of contributed assets by SA Water has been transparently documented, the South Australian Government considers that consistency has been achieved with the CoAG guidelines.

It is considered, however, that the treatment of contributed assets in future price setting processes should be reviewed in the light of recent regulatory determinations.

### WACC

An appropriate return on assets is determined by applying the WACC to the estimated real asset base, as rolled forward.

The WACC is generally defined as the average cost of debt and equity, weighted according to the relevant proportion of the company's capital structure. The WACC also incorporates an allowance for market risk faced by the service provider.

The Expert Group recommended that a real rate of return on investment should be incorporated into the price setting process.

A recent IPART Discussion Paper on WACC also indicated that a pre-tax WACC is appropriate for government owned businesses where the taxes and dividends are paid to the government (IPART, 2002, p 5).

Recent determinations for regulated utilities are outlined in Table 3.

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**Table 3: Comparison of decisions on WACC**

<b>Business/ regulator</b>	<b>Industry/business</b>	<b>Approximate date</b>	<b>Pre-tax real WACC</b>	<b>Post tax nominal WACC</b>
Electricity Pricing Order	Electricity: ETSA Utilities	1999	7.79–8.74	
SAIPAR	Gas: Envestra	2001	7.6	
IPART	Water	2003	5.2–6.7	5.2–6.3
QCA	Water: Gladstone Area Water Board	2002		8.72
ACCC	Electricity: Murraylink conversion	2003	6.7	6.69

Source: SA Department of Treasury and Finance

The most recent South Australian regulatory decisions for electricity and gas utilities used a pre-tax real WACC ranging from 7.6% (gas distributor) up to 8.74% (electricity distributor). The risk structure for an electricity distribution monopoly and a gas distribution monopoly could be considered similar to a water distribution monopoly. This suggests the application of a similar WACC for SA Water.

On the other hand, in 2002 Leadenhall consultants, for SA Water, estimated a regulatory pre-tax real WACC for SA Water at 6%. Clearly, there is potentially a broad range of WACCs that could be applicable to SA Water.

To resolve an appropriate WACC would involve assessing the appropriateness of each element of the WACC and the issues concerning the choice of those elements, such as franking credits, credit rating, the risk-free rate, market premium and capital structure.

Given these uncertainties, a single WACC for SA Water has not been determined at this stage. In the meantime, it has been resolved to use two WACCs, one at an upper level (8%) and one at a lower level (6%). Accordingly, the South Australian Government considered two estimates of maximum revenue outcome: one using 8% pre-tax real and the other using 6% pre-tax real.

The South Australian Government is currently reviewing the ownership structure of all South Australian public non-financial corporations (PNFCs), including capital structures, dividends and CSO policies. The outcome of this major review may lead to adjustments to SA Water's capital structure and, at that time, a single WACC could be defined.

Estimates of the maximum revenue outcome based on pre-tax real WACCs of 8% and 6% are included in Chapter 7.

**Conclusion and Recommendation 8**

The South Australian Government considers that the application of a pre-tax real WACC to the real estimated asset base is consistent with the CoAG guidelines.

The use of an upper and lower pre-tax real WACC assisted the Government in its 2004-05 pricing decision.

The current review of the ownership structure for all PNFCs, including capital structures, dividends and CSO policies, may lead to adjustment of SA Water’s capital structure and, at that time, a single WACC could be defined.

**4.3.3 Depreciation — Provision for asset consumption**

The CoAG guidelines require that the maximum revenue outcome include the provision for asset consumption (or depreciation).

Recent pricing decisions by IPART and QCA on water utilities have adopted the straight-line depreciation method in estimating the maximum revenue requirement.

SA Water depreciates infrastructure assets, plant and equipment using the straight-line method over estimated useful lives, which range from 5 to 160 years. The useful lives of the assets are reviewed annually and the assessment for 2002 is included in Table 4.

**Table 4: Useful lives of SA Water’s infrastructure assets, plant and equipment**

<b>Asset</b>	<b>Useful lives</b>
Water and sewer assets	7–160 years
Water and sewer leased assets	40–50 years
Plant and equipment	5–10 years

Source: SA Water, 2002, p47

SA Water’s forward estimates maintain existing depreciation forecasts in real terms plus adjustments for changes to the real asset base. This approach appears to be consistent with the Expert Group’s statement that a business should recover the real value of assets in addition to earning a real return on those assets.

This treatment is consistent with APS No 7 which indicates that the method chosen to calculate depreciation on infrastructure assets should most accurately reflect “the pattern of consumption of the asset over its estimated useful life” and that the straight-line method should be used “provided that it will not result in any material

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misstatement of the timing of asset consumption” (South Australia Government. 2002(b)).

### Conclusion and Recommendation 9

The South Australian Government considers that the inclusion in the maximum revenue outcome of the provision for asset consumption based on the straight-line depreciation method is consistent with the South Australian Government’s Accounting Policy Statements and satisfies CoAG obligations.

#### 4.3.4 Externalities

The identification and measurement of externalities is a difficult issue and the subject of rigorous methodological and empirical debate in Australia.

The CoAG guidelines require that externalities be reflected in both the maximum revenue outcome and minimum revenue outcome, and be transparently reported as part of the price setting process. In particular, the guidelines specify that only the “environmental and natural resource management costs attributable to and incurred by the water business” should be reflected in the minimum revenue outcome. This restriction is not placed on the maximum revenue outcome.

However, IPART and QCA appear to only include environmental expenses actually incurred by a business in calculating the maximum revenue requirement.

SA Water included externalities that have been internalised through explicit charges to SA Water in the maximum revenue outcomes. An example is payments by SA Water to the catchment water management boards, including a one-cent per kilolitre (kL) levy paid to the River Murray Catchment Water Management Board.

Water resource management in South Australia is the responsibility of DWLBC, except to the extent that SA Water retains some responsibility for administering policy on water conservation by its customers. As DWLBC is funded from consolidated revenue, water resource management costs are currently borne by the South Australian community.

The South Australian Government has imposed ongoing physical water restrictions on consumers. It has also introduced a Save the River Murray Levy on SA Water customers which aims to contribute to restoring the health of the River Murray over time. This levy is not included within SA Water’s revenue.

The value of externalities and resource management costs attributable to SA Water as a result of providing services to urban water consumers is a complex matter that is being reviewed. These matters will also need to be considered within the context of a broader, Australian-wide resolution.

### Conclusion and Recommendation 10

Only actual environmental expenses have been included in the maximum revenue outcome.

The South Australian Government considers this approach is satisfactory, given the complexities involved in identifying and costing externalities and resource management costs, and the ongoing rigorous methodological and empirical debate over these matters.

#### 4.3.5 *Tax equivalent regime*

The CoAG guidelines require that taxes or TERs should be included in the estimated maximum revenue outcome.

Competitive neutrality means that government businesses should not enjoy any net competitive advantages over private business as a result of public ownership. Competitive neutrality policy and principles were outlined in Clause 3 of the Competition Policy Agreement of 11 April 1995. The clause also stated that:

parties will impose on the Government business enterprise ... full Commonwealth, State and Territory taxes or tax equivalent systems.

Consequently the South Australian Government's Competitive Neutrality Policy Statement (July 2002) indicated that these principles would apply to significant government business activities where this is appropriate and in the public interest. SA Water is classified as a significant business activity and is therefore liable for the full range of rates and taxes or their equivalents as it would if it were not a State owned business.

SA Water is therefore liable for the appropriate corporate tax rate, which is currently 30% in 2003-04. In future years the tax rate is to be consistent with the corporate tax rate applied by the Australian Tax Office. SA Water is also liable for a range of land tax and council rates.

The pre-tax approach to estimating the required return on assets in setting the maximum revenue outcome removes the requirement to include a separate allowance for income TERs.

## Conclusion and Recommendation 11

The South Australian Government considers that the use of a pre-tax required rate of return on assets is consistent with the CoAG Strategic Framework and removes the need to include a separate allowance for income TER in the maximum revenue outcome.

### 4.4 Minimum revenue outcome, 2004-05 — Maintaining commercial viability

The minimum revenue outcome aims to estimate the necessary revenue requirement to meet the business's current and ongoing responsibilities and liabilities, and to ensure its ongoing commercial viability.

The CoAG guidelines are expressed in terms of costs and do not specify whether all cost items should be measured on an accrual or a cash basis, apart from adopting an annuity approach to estimating the cash requirements for asset refurbishment or replacement in the minimum revenue outcome.

Accrual basis is generally regarded as the most relevant method of analysing a corporation's financial performance and position. Other approaches might also be relevant to the assessment of SA Water's ongoing commercial viability, including accrual-based analysis of financial performance and stability, and cash flow analysis.

SA Water adopted the accrual basis for estimating the revenue required to achieve this outcome to ensure comparability with other financial inputs, in particular the estimated maximum revenue outcome and forecast target revenue.

The minimum revenue outcome is calculated as the sum of:

- operating, maintenance and administrative expenses — efficient business costs
- the provision for future asset refurbishment/replacement (estimated by the projected depreciation expense)
- dividends
- interest costs on debt
- externalities
- taxes and TERs.

Each component of the minimum revenue outcome is discussed below. The estimated minimum revenue outcomes for 2002-03, 2003-04 and 2004-05 are included in Chapter 7.

#### *Operating, maintenance and administrative expenses — Efficient business costs*

The estimates of efficient business costs in the minimum revenue outcome are the same as for the maximum revenue outcome (see Section 4.3 for a full discussion).

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### *4.4.1 Provision for future asset refurbishment/replacement*

The CoAG guidelines propose that the annuity approach, rather than a provision for the amount of capital consumed (depreciation), be adopted for estimating the long-term costs of maintaining the ongoing service delivery capacity of the asset base.

The renewals annuity approach involves estimating the annual cash requirement for known future asset replacement and refurbishment. The NCC has indicated a preference for this approach, although it has also stated that it would accept other approaches that were consistent with the objectives of the CoAG Strategic Framework (NCC, 2001, p 126).

The annuity approach has significant advantages: it establishes high quality information on the network and smooths out lumpy investments. The Productivity Commission recently noted that the renewals annuity approach usually produces “more favourable operating results compared to an assessment that includes depreciation charges” (Productivity Commission, 2003, p 162).

The NCC, QCA and IPART have all indicated a preference for adopting a renewals annuity approach, including the analysis of asset management plans, for assessing a service provider’s requirements for maintenance of the serviceability of the system. QCA and IPART are proposing to adopt this approach, where practicable, for determining maximum revenue targets.

Nevertheless, the QCA, in its recent Investigation of Pricing Practices of the Gladstone Area Water Board, recommended the adoption of straight-line depreciation subject to the board developing an appropriate asset management plan (QCA, 2002, p 101).

Further, IPART in its recent regulatory determinations on Sydney Water Corporation and Hunter Water Corporation, calculated their capital maintenance on the basis of straight-line depreciation over the average life of the assets (70 years) (IPART, 2003a, p 61, IPART, 2003b, pp 58).

Consistent with the decision of interstate regulators, SA Water has used the forecast depreciation expense, based on the straight-line depreciation method, as a broad estimate of the expenditure required to maintain the asset base in the minimum revenue outcome.

SA Water has indicated that it is continuing to enhance its asset replacement forecast, which would allow the annuity approach to be adopted in the future.

## Conclusion and Recommendation 12

While not entirely consistent with the CoAG guidelines, the South Australian Government considers that using straight-line depreciation to estimate the provision for future asset replacement/refurbishment, rather than the annuity approach, is the best estimate available for the 2004-05 water price setting process and is consistent with interstate regulators' decisions.

### 4.4.2 Dividends

The CoAG guidelines suggest that dividends, if any, should be included in the minimum revenue outcome and that “dividends should be set at a level that reflects commercial realities and stimulates a competitive market outcome”.

The guidelines do not prescribe how to set dividends at a level that reflects commercial realities. Nevertheless, the NCC has indicated that it considers a reasonable interpretation of the CoAG requirements for dividends to be based on the Corporations Law requirement:

that dividends may be paid only out of profits (profits include accumulated retained profits as well as the current year's profit). This approach would safeguard against water and wastewater service providers having insufficient financial resources to conduct their business. This approach would also be consistent with competitive neutrality objectives (NCC, 2003a, p 13).

In the 2003 NCP Assessment the NCC expressed concern that South Australia's:

current target dividend of 55 per cent of EBITDA means that dividends could exceed 100 per cent of after tax profit (which occurred in 2001-02) and potentially undermine the long term sustainability of SA Water (NCC, 2003b, p 6.6).

The NCC has also indicated that 'Cabinet' involvement in decisions on SA Water's capital expenditure, borrowings, pricing and dividends indicates considerable involvement in business issues and might reduce SA Water's business focus (NCC, 2003b, p 6.6).

As a point of clarification, the South Australian Government's current dividend policy is not based on dividends alone, but on a total contributions target (eg dividends and the income tax equivalent) of 55% of free cash from operations, (Earnings Before Interest, Tax, Depreciation and Amortisation) EBITDA less that level of capital expenditure agreed with the Treasurer as necessary to maintain the ongoing business operations of the Corporation.

The dividend payout ratio for private companies is largely determined in terms of the availability of cash and the business's future expenditure requirements. A company might adopt a low payout ratio as a result of financial difficulties or to fund future growth. Additionally, SA Water is subject to annual budgetary review processes and Cabinet deliberations and has a short term borrowing facility from the Department of



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Treasury and Finance. This minimises the risk of SA Water having inadequate financial resources to conduct its business in a manner consistent with its Charter.

The dividend payout ratio of SA Water has not breached the Corporations Law requirement, which specifically includes reference to accumulated retained profits.

Further, in terms of the South Australian Government Budget, where a distribution is contributed from equity it is classified as return of capital (rather than a dividend) and is not shown as general government income.

The dividend payout ratio might be considered high in comparison with some private sector companies (see Chapter 7, Tables 11 and 12). Nevertheless, when considering the level of dividends, the South Australian Government is cognisant of the fact that it bears significant financial risk (by way of liabilities, and implicit and explicit guarantees) on behalf of SA Water in providing for current and future services and assets. The South Australian Government also takes into consideration matters such as the relative price of different forms of capital raising.

Estimates of dividends included in the minimum revenue outcome are consistent with the agreed targets in the annual SA Water Performance Statements.

### Conclusion and Recommendation 13

The South Australian Government considers that the level of dividends anticipated in 2004-05 does not contravene the CoAG Strategic Framework or the Corporations Law requirement outlined by the NCC.

#### 4.4.3 *Interest cost on debt*

As required by the CoAG guidelines, interest expenses have been included in the minimum revenue outcome.

According to SA Water's 2002 Annual Report, borrowing costs are included as an expense unless they relate to the construction of a qualifying asset (assets which take longer than 12 months to complete), in which case they are capitalised to the cost of the assets. Pursuant to the *Public Finance and Audit Act 1987*, the South Australian Government provides a guarantee of SA Water's borrowings.

### Conclusion and Recommendation 14

The South Australian Government considers that the inclusion of interest expenses in the estimation of the minimum revenue outcome satisfies the CoAG guidelines.

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### 4.4.4 Externalities

The estimate of externalities in the minimum revenue outcome is the same as for the maximum revenue outcome (see Section 4.3).

#### Conclusion and Recommendation 15

Consistent with the CoAG guidelines “only the environmental and water resource management costs attributable to and incurred by the water business” have been included in the estimated minimum revenue outcome.

### 4.4.5 Tax equivalent regime

#### Conclusion and Recommendation 16

Consistent with the CoAG guidelines and the South Australian Government’s competitive neutrality policy on TERs, accrual tax expenses are included in the estimated minimum revenue outcome.

## 4.5 Conclusion

As the CoAG guidelines are not fully prescriptive, the South Australian Government has necessarily made some interpretive decisions on the detailed application of the principles for maximum and minimum revenue outcomes, taking into account SA Water’s particular circumstances, more recent accounting standards and interstate regulatory determinations.

The calculation of the minimum revenue outcome satisfies the principle of ensuring that forecast target revenue is consistent with ongoing financial viability.

The maximum and minimum revenue outcomes define a revenue band within which the forecast target revenue derived from the South Australian Government’s 2004-05 water pricing decision must lie.

#### Conclusion and Recommendation 17

Overall the South Australian Government considers that its methodology complies with CoAG principles for maximum and minimum revenue outcomes, although a number of technical issues need to be addressed.

Two substantive reviews of the ownership structure of all public non-financial corporations and of water pricing (which includes

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efficient resource pricing) are already taking place. Further consideration of efficient operating, maintenance and administrative expenses, contributed assets and the weighted average cost of capital, will be delayed until the completion of these reviews.

SA Water is enhancing its asset replacement forecast, which would allow an asset replacement annuity to be adopted in the future.

## **5 Water price setting methodology 2004-05 — Efficient resource pricing**

### **5.1 Overview**

This chapter outlines the methodology adopted by the South Australian Government for setting water prices in South Australia for the year 2004-05 by applying efficient resource pricing principles.

The aim of the water pricing structure is to promote efficient allocation of water resources by sending appropriate economic signals to customers and ensuring that the forecast target revenue lies within the outcome band described in Chapter 4.

### **5.2 CoAG principles and efficient resource pricing**

The CoAG guidelines require that water charging arrangements comprise an access component and a usage component and be based on efficient resource pricing. They specify that efficient resource pricing includes basing the usage charge ideally on long run marginal cost (LRMC). LRMC is the cost of providing an extra unit of service when all production costs (including capital) are allowed to vary (ie including smoothing of the incremental cost of lumpy capital investments).

LRMC usually differs from short run marginal cost in the water industry by including an estimate of the cost of expanding the system in response to growing consumer demand. As consumers are being given an economic signal of the cost of impending augmentation, this approach might avoid, or delay, these costs through higher prices and reduced demand.

However, in an industry, such as the water industry, with high fixed costs (represented as a lump sum or an annuity) and long life assets, marginal costs generally lie below average costs. While the usage charge in a two-part tariff is designed to send an efficient resource pricing signal to consumers, the Expert Group suggested that the supply charge should recover the remaining fixed costs of the water supply system and ensure the ongoing viability of the business (Expert Group, 1995, p 45).

In setting an appropriate supply and usage charge for natural monopoly infrastructure services, the Expert Group and regulators consider that an appropriate balance is required in order to avoid customers 'bypassing' the network and to encourage the efficient use of resources, for instance where available water resources are constrained.

### **5.3 Consumption based pricing**

One of the elements of the CoAG Strategic Framework is that governments should adopt pricing based on consumption of water resources.

SA Water introduced consumption based charges for all but commercial customers in July 1995. Consumption based pricing for commercial customers is being phased in on a revenue-neutral basis over a five-year period. Full consumption based charges will apply for those customers from 2006-07.

## Conclusion and Recommendation 18

The NCC is satisfied that South Australia is meeting its CoAG and NCP obligations on consumption based pricing of water services (NCC, 2003b, p 6.9).

### 5.4 Current pricing structure for water services

SA Water's current water pricing structure is based on a two-part tariff of an access (supply) charge and a two-tier water usage charge.

Water customers are classified into two broad groups:

- non-commercial customers, including residential customers
- commercial customers, including retail, wholesale, finance, real estate, professional, construction and recreational services.

#### 5.4.1 Non-commercial

The following water tariffs applied in 2003-04 for non-commercial customers.

- Annual supply charge
  - Residential \$135
  - Non-residential \$149
- Water usage charge
  - 0–125 kL 42c/kL
  - Greater than 125 kL \$1.00/kL

#### 5.4.2 Commercial

The pricing regime for commercial customers that applied before 2002-03 had a supply charge based on the property's value (and a property rate), a free water allowance based on the supply charge and a water usage charge for amounts consumed in excess of the free allowance.

The *Waterworks Act 1932* specifies the transitional arrangements to remove the free water allowances for commercial customers by 2006-07. Under the transitional arrangements a discount will be applied to water usage previously provided as part of the free allowance. Table 5 outlines the discount and shows that it will be steadily reduced. In 2001-02 the discount was effectively 100% (ie water usage within the allowance was 'free'). Since 2002-03 all water usage has incurred a charge. The discount will reduce progressively to zero in 2006-07 (ie full water usage charges apply).

To ensure the transitional arrangements are revenue neutral the supply charge will be reduced via a reduction in the commercial property rate. The reduced supply charge will, on average, compensate commercial customers for the increase in water usage expenditure arising from the removal of the free water allowance.

**Table 5: Discounts to water consumption tariffs for commercial customers**

Year	Discount
2002-03	80%
2003-04	60%
2004-05	40%
2005-06	20%
2006-07	Nil

Commercial water prices in 2003-04 are:

- Annual supply charge
  - 0.162% (property rate) multiplied by the property value subject to a minimum of \$149
- Water usage charge
  - 0–125 kL 16.8c/kL (60% discount on 42c/kL)
  - >125 kL up to allowance\* 40c/kL (60% discount on \$1.00/kL)
  - above allowance\* \$1.00/kL

\*Where the water allowance is similar to the free water allowance previously provided.

## 5.5 Efficient resource pricing signals

The application of efficient resource pricing is considered important by the Government and included in the current review of water pricing. The issues that need to be considered in the application of efficient resource pricing to water pricing include SA Water’s average incremental operating costs, such as chemicals and electricity, the opportunity cost of drawing water from the Murray, projected augmentation costs and an estimate of externalities.

The complex issues involved (eg defining and pricing externalities) and the ongoing rigorous debate, will necessitate a considerable period before these matters are satisfactorily settled.

SA Water also has a lower usage charge for the first 125 kilolitres of water consumed by residential customers to ensure that all customers are able to afford a basic level of service. This component of usage charge is determined on the basis of general affordability of an essential service and the Government’s social policy rather on the basis of economic efficiency.

### Conclusion and Recommendation 19

The South Australian Government’s view is that the current water pricing structure, with an access and a usage component, is consistent with CoAG principles.

The South Australian Government considers that the lower first tier

usage charge is justified on the basis of general affordability of an essential service, rather than economic efficiency.

Efficient resource pricing is being considered as part of the current review of water pricing.

## 5.6 Cross-subsidies

The CoAG Strategic Framework requires that cross-subsidies ideally be removed in order to promote efficient pricing. However, where cross-subsidies are retained they should be made transparent.

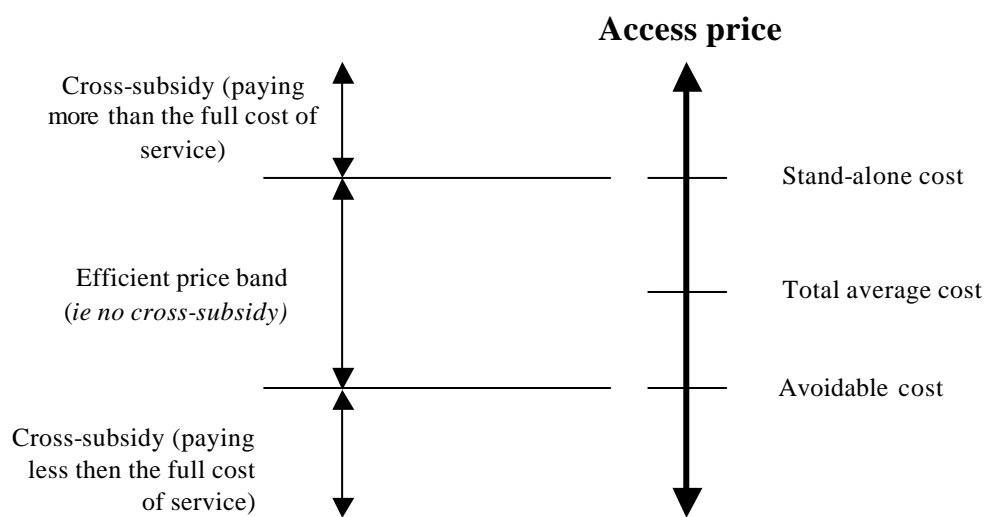
### 5.6.1 Defining cross-subsidies

South Australia has adopted the Baumol Band (Figure 1), as suggested by the NCC, as the theoretical definition of cross-subsidies (NCC, 2001, p 127).

A cross-subsidy might occur between the services provided by a business (eg water and wastewater) or between a consumer or groups of consumers (eg metropolitan and non-metropolitan consumers) through sharing common costs. The definition of a cross-subsidy adopted by SA Water is a situation where:

- some users are paying less than the LRMC (or avoidable cost) of service provision while others are paying more, and/or
- some users are paying more than the full cost of service provision on a stand-alone basis — stand-alone cost (ie with a dedicated system).

**Figure 1 The Baumol Band**



Source: SA Water

*Avoidable cost* measures longer run incremental costs that would be avoided if the service provider did not have to provide the additional service being considered. It

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should not include allowances for existing joint or common costs (eg water treatment or pipes) of the service provision. In theory, pricing below avoidable cost will encourage the quantity demanded to be greater than the economically efficient level.

*Stand-alone cost* includes provision for the incremental costs of the additional service provided and the existing joint or common costs. In theory pricing above stand-alone cost will discourage demand for services and might promote disconnection of some consumers from the system. However, the lack of substitutes makes the latter result unlikely for most residential consumers.

### **5.6.2 Identification of cross-subsidies**

The debate on cross-subsidies has focused on whether there are any water customers who are paying less than avoidable costs, that is at less than the cost to SA Water of providing water. This is a particular issue for the South Australian Government's Statewide pricing policy.

The NCC has also suggested the possibility of cross-subsidies arising as a result of transition over time to consumption-based pricing for commercial customers. These two matters are discussed below.

### **5.6.3 Statewide pricing**

SA Water provides water services to its customers in regional areas of South Australia at a single uniform price under the South Australian Government's Statewide pricing policy. Thus, water customers in the metropolitan area and in regional urban areas are charged the same price for reticulated water. This is an important element of the Government's equity and social justice policy and regional policy.

In regional areas there may be a minority of customers who pay less than avoidable cost. SA Water receives a substantial CSO payment to fund any potential cross-subsidies and to ensure that SA Water can achieve an adequate commercial return from its country water business.

## **Conclusion and Recommendation 20**

The South Australian Government considers that consistency has been achieved with CoAG guidelines as any potential cross-subsidies arising from its policy of Statewide pricing are addressed through CSOs (discussed in Chapter 6).

### **5.6.4 Consumption based pricing for commercial customers**

In its 2003 assessment, the NCC noted and endorsed the South Australian Parliament's legislative transitional arrangements, which are moving commercial customers towards fully volumetric pricing by 2006-07.

Notwithstanding this reform, the NCC still expressed concern that:



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... — about half of all commercial customers could expect to face a reduction in their water bill when fully volumetric water charges are applied in 2006-07— suggest that there may also be cross-subsidisation among commercial customers of water services (NCC, 2003b, p 6.10–6.11).

It appears that the NCC is concerned that there may currently be a cross-subsidy between commercial consumers, on the basis that the transitional arrangements will result in some commercial customers paying less for water.

There will be some relative price movements between commercial customers but this by itself does not signify that there is currently a cross-subsidy. A cross-subsidy would arise where a customer is charged a price that sits outside the Baumol Band (ie below avoidable cost or above the stand-alone cost). The Baumol Band acknowledges that a range of prices can be charged to a different set of customers, yet still remain within the band and, hence, without a cross-subsidy.

### **Conclusion and Recommendation 21**

The South Australian Government considers that the transitional pricing arrangements shifting commercial customers onto consumption based pricing over time meets the requirements of the CoAG principles and amendment of the transitional arrangements is not required.

## **6 Water pricing decision**

### **6.1 Overview**

The South Australian Government made its decision on 2004-05 water prices by selecting the preferred pricing option, after giving due consideration to the trade-offs between economic efficiency, the NCP/CoAG framework and the other policy considerations of equity and social justice policy, environmental policy and regional policy.

As discussed in this chapter, these other policy considerations had a significant influence on the South Australian Government's ultimate choice of where, within the maximum and minimum revenue outcomes, the 2004-05 potential revenue target would lie.

Thus, in accordance with Step 5 of the 2004-05 Water Price Setting Methodology, the South Australian Government considered a number of potential revenue outcomes for the metropolitan and country water businesses. These revenue estimates were then compared with the estimated maximum revenue outcomes (at 6% and 8% pre-tax real WACCs) and the minimum revenue outcome to ascertain whether or not they were within the revenue outcome band.

The South Australian Government also considered the pricing options associated with each potential revenue outcome in accordance with Step 6 of the methodology.

### **6.2 Environmental policy**

Efficient resource pricing would suggest that water customers should receive a pricing signal about the environmental costs of drawing further water resources from the River Murray. However, identifying and measuring all environmental externalities is difficult and is the subject of rigorous methodological and empirical debate in Australia.

In the meantime, the South Australian Government has imposed ongoing physical water restrictions on consumers. Its Save the River Murray Levy on SA Water customers aims to contribute to restoring the health of the River Murray over time.

Given these physical constraints on water supply, the Save the River Murray Levy and the uncertainties of taking into account environmental costs, the South Australian Government has resolved that it would not take further account of environmental matters in setting 2004-05 water prices.

### **6.3 Equity and social justice policy**

One of the most important considerations of the South Australian Government in setting 2004-05 water prices is the extent to which all water customers are capable of paying increased prices for the essential service of water. These equity and social justice issues are vital and were at the forefront of the Government's 2004-05 water pricing considerations.

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The costs of other essential services have increased substantially and the Government does not want to unduly burden water customers with non-essential price increases. Further, the Government was mindful to ensure that the forecast revenue target chosen from the set of potential revenue outcomes was not close to the maximum revenue outcome so that there was no possibility of approaching the point where monopoly rents could be achieved.

The Government therefore clearly resolved that it would not seek to set 2004-05 water prices at a level that would result in a forecast target revenue close to the maximum revenue outcome, particularly the outcome using 8% pre-tax real WACC.

### **6.4 Community service obligations**

According to the CoAG Strategic Framework, CSOs are to be paid to the service provider where they are required to provide services to customers at less than full cost. The treatment of CSOs is also required to be transparently reported.

The South Australian Government considers that a CSO arises when a government specifically requires a public enterprise to carry out activities relating to outputs or inputs which the public enterprise would not elect to do on a commercial basis, and which a government does not require other businesses in the public or private sectors to generally undertake or which a business would only do commercially at higher prices.

The categories of CSOs funded by the South Australian Government for water activities, are:

- service charge exemptions
- administration of the pensioner concession scheme
- water restrictions
- country grants — pre-1999 assets (Statewide pricing)
- post-1999 assets (new country investments).

Each category of CSO is addressed separately below. Given its particular importance, Statewide pricing, and the associated CSO, is discussed in Section 6.5. Some subsidies are also paid to SA Water. The CSO and subsidy payments for water activities are reported in Chapter 7, Table 10.

#### **6.4.1 Service charge exemptions**

SA Water receives a CSO payment for providing service charge exemptions to certain customers, such as places of worship, charitable organisations and sporting clubs. The figure is an estimate of forgone payments, carried forward over time. Service charge exemptions total \$8.5 million per annum for water and wastewater.

#### **6.4.2 Administration of the pensioner concession scheme**

SA Water administers pensioner entitlement applications and the distribution of concessions to local government. The CSO payment covers staffing and associated administration costs. The actual pensioner concession payments are funded through a

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subsidy from the Department of Human Services based on the amount of the concessions paid and total \$500,000 per annum.

### **6.4.3 Water restrictions**

Level 2 water restrictions were imposed in July 2003 following advice from the Murray Darling Basin Commission that South Australia faced a real risk of not receiving its normal entitlement flow over the following year. Following good rains the measures were lifted in October 2003 but replaced with permanent water conservation measures involving a baseline set of restrictions to support Government policy on water conservation. The measures have been supported by a \$1.2 million CSO to SA Water to fund a public education campaign to promote water conservation and a further \$1 million for SA Water to administer a rebate to water consumers for the installation of household water saving devices

### **6.4.4 Subsidies**

SA Water also receives a number of subsidies and payments from various state agencies. These payments are for services provided for emergency services, free water to Adelaide City Council and the Port Adelaide and Enfield Council, involvement in a whole of government contract with EDS, and pricing issues with water filtration plants.

## **6.5 Regional policy — Statewide pricing and associated CSOs**

The South Australian Government's Statewide water pricing policy means that water services are provided to some country locations at less than full cost.

It is the Government's view that Statewide pricing delivers significant economic benefit to regional locations. It is an important element of the Government's regional policy, with further implications for equity and social justice policy.

Country grants are effectively a subsidy paid to SA Water for its non-metropolitan infrastructure assets. The CSOs are intended to equalise the rate of return on non-metropolitan assets to that of metropolitan assets and are funded where regional customers are paying less than the full cost of services.

The CSO for Statewide pricing is provided in two ways.

Firstly, the Statewide pricing CSO payments are based on a 1999 review in which all SA Water's existing non-metropolitan pre-1999 assets were valued according to 1997-98 values and a return on assets approach was used to calculate the CSO payments.

Secondly, the new investments CSO relates to non-commercial country infrastructure investments by SA Water after 1999.

**Conclusion and Recommendation 22**

The South Australian Government considers that it has complied with CoAG guidelines on CSOs that are transparently reported and funded from consolidated revenue.

In its consideration of 2004-05 water prices, the South Australian Government resolved to maintain its existing regional policy. Accordingly, the CSO amounts for Statewide pricing will continue to be administered and reported in the current manner, pending the outcome of the review of CSO policy.

**6.6 Total CSO payments to SA Water**

SA Water's CSO obligations are funded separately and directly from the South Australian Government Budget. They are reported transparently in SA Water's Charter and the CSO payment to SA Water is disclosed in SA Water's Annual Report. Parliament is therefore advised of SA Water's CSO funding.

The relevant assets are incorporated into SA Water's asset base, which is adjusted as appropriate. Accordingly, CSO payments are included in the forecast target revenue for the 2004-05 water pricing decision.

The CSO payments to SA Water for 2002-03, 2003-04 and 2004-05 are provided in Chapter 7.

**6.7 Review of CSO policy**

The South Australian Government, as part of its review of ownership structure for PNFCs, is currently reviewing its CSO policy. The review aims to adopt explicit guidelines for identifying, costing and funding CSOs in the future. The objective of the CSO policy review is to create a whole of government policy, with guidelines on how CSOs should be determined, priced and administered.

**6.8 The South Australian Government's 2004-05 water pricing decision**

On 1 December 2003, the South Australian Government considered a number of options outlined in a Cabinet Submission presented by the Minister for Administrative Services, as the Minister responsible for SA Water.

The submission was consistent with the methodology approved by the South Australian Government on 20 October 2003 and based on CoAG principles.

As part of the Government's deliberations, relevant departments and agencies were consulted: DWLBC, Department of Human Services including the SA Housing Trust, Department of Treasury and Finance, Department of the Premier and Cabinet,

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Department for Business, Manufacturing and Trade, Department for Environment and Heritage, Environment Protection Authority and Office for Regional Development.

The South Australian Government approved a 3.5% average increase in the tariffs charged to SA Water customers. This increase was consistent with the Adelaide CPI less the electricity component of the CPI for 2002-03. The actual CPI increase was 4%.

The resultant forecast target revenue is considered to be consistent with the CoAG principles of avoiding monopoly profits and ensuring the ongoing financial viability of SA Water. It is consistent with the South Australian Government's budgetary forward estimates and, in real terms, it was considered to be within the band of the maximum revenue outcomes (using both 6% and 8% pre-tax real WACC) and the minimum revenue outcome.

Revenue estimates for SA Water and a graph comparing estimated revenue outcomes are included in Chapter 7.

The impact of the increase on water tariffs is outlined in Table 6 below, which also indicates that the property rate for commercial customers in 2004-05 is yet to be determined. It will be determined after property values have been updated.

SA Water has indicated that in a medium year an average customer consumes approximately 250 kilolitres per annum. The water bill for this 'average' customer increases by \$12.25 per annum.

The overall price increase resulted in a reduction in real terms against the headline Adelaide CPI. Thus the water price increase would appear to have a marginal impact on families and businesses. To reduce the impact of this increase on low income earners, the Government also increased by \$5.00 the maximum remission for pensioners, raising the maximum pensioner rebate on water rate charges under the *Rates and Land Tax Remission Act 1986* to \$95.00 per year. Thus, a pensioner consuming 250 kilolitres per annum would incur an increase of only \$7.25 per annum as a result of the increased remission.

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**Table 6: Comparison of the pricing structure**

Description	2003-04	2004-05
<b>Non-commercial</b>		
<b>Supply charge</b>		
Residential	\$135	\$141
Business	\$149	\$155
<b>Water usage charge</b>		
First 125 kL	42c/kL	44c/kL
Above 125 kL	\$1.00/kL	\$1.03/kL
<b>Commercial</b>		
<b>Supply charge</b>		
Property rate %	0.162	To be determined
Minimum	\$149	\$155
Allowance (kL) — discounted water	<u>Supply charge x 1.14.</u> \$1.00/kL	<u>Supply charge x 1.21</u> \$1.03/kL
<b>Water usage charge</b>		
First 125 kL	16.8 cents (42 cents discounted by 60%)	26.4 cents (44 cents discounted by 40%)
Above 125 kL and less than the allowance	40 cents (\$1.00 discounted by 60%)	61.8 cents (\$1.03 cents discounted by 40%)
Consumption above the allowance	\$1.00/kL	\$1.03/kL

### Conclusion and Recommendation 23

The South Australian Government considers that the forecast target revenue is consistent with the CoAG principles of avoiding monopoly profits and ensuring the ongoing financial viability of SA Water, being within the band of the maximum and minimum revenue outcomes.

The South Australian Government's approach to 2004-05 water price was heavily influenced by equity and social justice policy and regional policy.

## **7 Financial analysis relevant to the 2004-05 water pricing decision**

### **7.1 Introduction**

This chapter outlines some of the financial analyses that the South Australian Government reviewed in making its 2004-05 water pricing decision and includes some up to date financial information. The chapter includes:

- Tables 7 and 8: Adjusted infrastructure asset base
- Table 9 and Figure 2: Comparison of revenue outcomes for SA Water - 2002-03 to 2004-05 (in real terms)
- Table 10: Estimated CSO payments and subsidies to SA Water for water services
- Table 11: Profits and distributions to the South Australian Government for SA Water Corporation and water business as at Mid-Year Budget Review (in nominal terms)
- Table 12: Summary of financial ratios for SA Water — 2003-04 and 2004-05.

Tables 7, 8, and 9, and Figure 2 include adjustments to the optimised asset base from that presented to the South Australian Government when it was considering the 2004-05 water prices. The adjustments relate to revisions to a closing asset balance and inflation adjustments. The revised figures were not available for Cabinet's consideration due to time restrictions but the adjustments were not material.

Tables 10, 11, 12 and 13 were not used in the 2004-05 water pricing decision process. The latest information provided here is based on the Mid Year Budget Review, which takes into account Government decisions up to December 2003.

### **7.2 Maximum and minimum revenue outcomes**

The Government's methodology for setting prices for SA Water's, urban water users requires the development of a forecast target revenue, which is required to lie within a band with an upper bound of the estimated maximum revenue outcomes (both 6% and 8% pre-tax real WACC) and a lower bound of the estimated minimum revenue outcome (see Sections 4.3 and 4.4).

#### **7.2.1 Asset base**

Table 7 illustrates the approach adopted to calculate the estimated optimised asset base for total assets and water assets. The opening balance for 1 July 2003 is based on the actual 30 June 2003 closing balance (as published in the 2002-03 Auditor-General's Report p 65).



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**Table 7: Adjusted Infrastructure Asset Base**

Year	Opening balance (\$'000)	Additions# (\$'000)	Balance (\$'000)	Inflation* adjustment (\$'000)	Depreciation (\$'000)	Closing balance (\$'000)
<b>Total assets</b>						
2003-04	6,400,760	205,300	6,606,060	77,888	112,000	6,571,948
2004-05	6,571,948	138,379	6,710,326	-	115,901	6,594,426
<b>Water assets</b>						
2003-04	4,049,925	88,913	4,138,838	49,117	74,774	4,113,180
2004-05	4,113,180	75,221	4,188,401	—	77,378	4,111,023

\* Only 50% of additions to capital expenditure and contributed assets have been increased by the inflation adjustment to reflect timing of additions throughout the year. The inflation rate used was 1.2%, based on SA Water's general cost index.

# These figures include contributed assets (by developers) of \$17.335 million per annum in both 2003-04 and 2004-05.

Table 8 presents SA Water's opening and closing balances, and the average asset base in real terms. The average real asset base was used to calculate the maximum revenue outcomes.

**Table 8: Adjusted Infrastructure Asset Base (Real)**

Year	Opening balance (\$'000)	Closing balance (\$'000)	Average WDV assets (\$'000)
<b>Total assets</b>			
2003-04	6,477,569	6,571,948	6,524,758
2004-05	6,571,948	6,594,426	6,583,187
<b>Water assets</b>			
2003-04	4,098,524	4,113,180	4,105,852
2004-05	4,113,180	4,111,023	4,112,101

### 7.2.2 Revenue outcomes

Table 9 provides a comparison of the estimated maximum revenue outcomes, the minimum revenue outcome, both derived from the water asset base, and the forecast target revenue. The forecast target revenue reflects the Government's 2004-05 water pricing decision.

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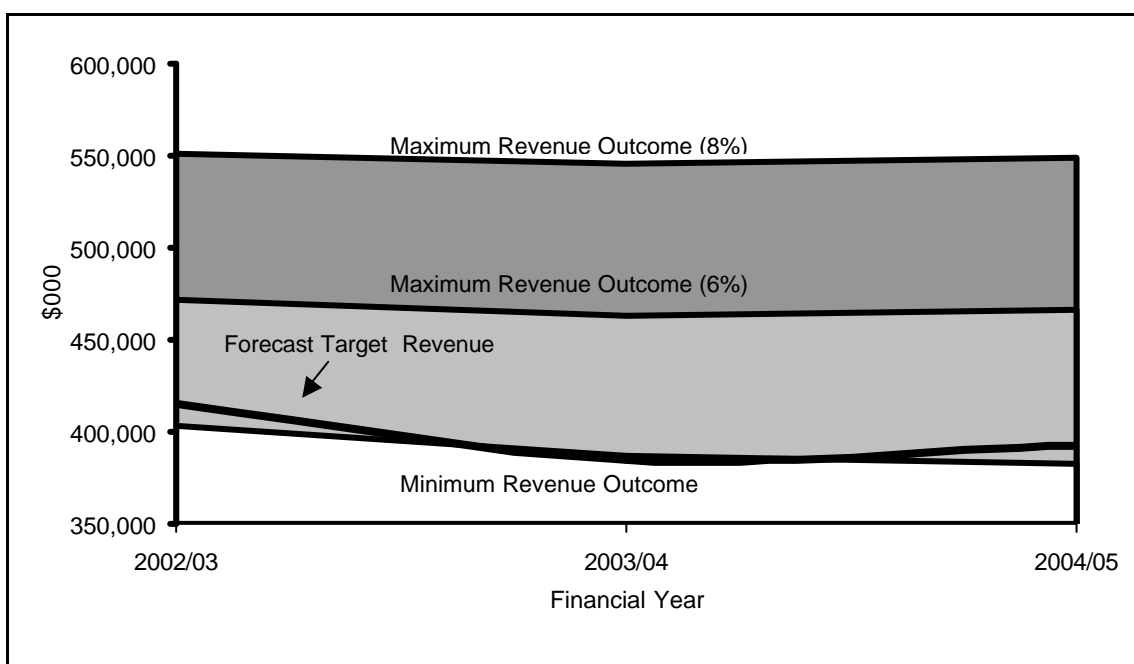
**Table 9: Comparison of revenue outcomes for SA Water — 2002-03 to 2004-05 (in real terms)**

Outcome	2002-03 (\$'000)	2003-04 (\$'000)	2004-05 (\$'000)
Maximum revenue (6% WACC)	471,486	463,683	466,471
Maximum revenue (8% WACC)	551,604	545,801	548,713
Minimum revenue (commercial viability) outcome	404,009	387,593	383,442
Forecast target revenue	415,000	384,917	392,962

For 2003-04, the forecast target revenue derived from water assets is marginally below the minimum revenue outcome, because of a one-off special dividend of \$10 million accrued in 2003-04 but paid in 2004-05. It arises from the pass-through of certain benefits provided by Riverland Water to SA Water in lieu of economic development obligations contained in its contract with SA Water for the construction and operation of water treatment plants. This situation is reversed in 2004-05. The forecast target revenue derived from water assets is well below the maximum revenue outcomes.

Figure 2 depicts the comparison of the revenue outcomes and the forecast target revenue derived from water assets for 2002-03 to 2004-05 in real terms.

**Figure 2: Comparison of revenue outcomes for SA Water — 2002-03 to 2004-05 (in real terms)**



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### 7.3 Community service obligations

The estimated CSOs and subsidies to SA Water in 2002-03, 2003-04 and 2004-05 for water are provided in Table 10 (see Chapter 6).

**Table 10: Estimated CSO payments and subsidies to SA Water for water services**

<b>CSO payments (in nominal terms)</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>
	<b>(\$ million)</b>	<b>(\$ million)</b>	<b>(\$ million)</b>
Statewide pricing/country operations	64.9	64.9	64.9
New country investments	6.3	7.9	9.5
Service charge exemptions	2.8	2.8	2.8
Water restrictions support/ communication		2.2	
Pensioner concession scheme*	0.4	0.4	0.4
<b>Subsidies</b>			
Free water (Councils)	1.2	1.2	1.3
Emergency services	0.1	0.1	0.1
Water filtration	2.5	-	-
EDS*	0.9	0.9	0.2
<b>Total CSO (water) payments</b>	<b>79.1</b>	<b>80.4</b>	<b>79.2</b>

\* Apportioned between water and wastewater

### 7.4 Profit and its distribution

The estimated profits and their distribution for SA Water as a whole for the years 2003-04 and 2004-05 are provided in Table 11.

## TRANSPARENCY STATEMENT – URBAN WATER 2004-05

**Table 11: Profits and distributions to the South Australian Government for SA Water Corporation and water business as at Mid-Year Budget Review (in nominal terms)**

Item	Corporation		Water business <sup>(a)</sup>	
	2003-04	2004-05	2003-04	2004-05
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
<b>EBITDA (b)</b>	443,832	470,853	243,402	259,596
<b>Profit after tax</b>	172,204	190,056	77,827	89,019
<b>Retained earnings</b>	107,048	129,675	46,211	56,906
<b>Contribution to Government</b>	255,796	246,797	110,424	108,302
<b>Dividend</b>	183,873	167,429	79,376	73,473
<b>Income tax expense</b>	71,923	79,368	31,048	34,829

(a) Based on SA Water allocation of revenue and expenditure by business segments

(b) Earnings before interest, tax, depreciation and amortisation

SA Water's contribution to the South Australian Government in 2003-04, which includes dividends and income tax expense, is slightly higher than the contribution in 2004-05 due to a one-off accrued special dividend (see Section 7.2.2).

The total dividend to the South Australian Government anticipated in 2003-04 is higher than profit after tax, although not greater than accumulated profits as indicated by the retained earnings. This is consistent with the NCC's interpretation of the CoAG principles on dividends, which is based on the requirements of Corporations Law (see Section 4.4).

The estimated income tax expense is consistent with the South Australian Government's Policy on Competitive Neutrality.

### 7.5 Ongoing financial viability

Financial indicators of SA Water's ongoing financial viability, such as indicators of profitability and financial management are provided in Table 12. They are consistent with the Productivity Commission's definitions of financial performance indicators.

## TRANSPARENCY STATEMENT – URBAN WATER 2004-05

**Table 12: Summary of financial ratios for SA Water — 2003-04 and 2004-05**

<b>Financial ratios</b>	<b>2003-04</b>	<b>2004-05</b>
<b>Profitability</b>		
Return on assets (EBIT/avg total asset)	5.0%	5.3%
Return on equity (ops profit after tax/avg total equity)	3.3%	3.6%
<b>Financial management</b>		
Interest cover times (EBIT/gross interest expense)	3.8	4.1
Debt to equity (total borrowings/total equity)	25%	25%
Dividend payout ratio (dividend/ ops profit after tax)	107%	88%

The improvements in these financial indicators are consistent with SA Water's Performance Statement. SA Water has a strong interest cover ratio, its dividend payout ratio is declining and it has a low debt to equity ratio.

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## **TRANSPARENCY STATEMENT – URBAN WATER 2004-05**

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## **Appendices**



**TRANSPARENCY STATEMENT – URBAN WATER 2004-05**

## **Appendix 1: Processes to set 2004-05 water prices and prepare the Transparency Statement**

<b>Week commencing</b>	<b>Milestone (key milestones bolded)</b>	<b>Date completed</b>
As soon as possible within the 10 day rule	Cabinet endorses the methodology for setting water prices (Minister for Administrative Services)	20 Oct 03
	<b>Cabinet endorses the processes for preparing a Transparency Statement</b>	
13 Oct 03	Water pricing consultation draft to agencies for comment	
	Drafting of Part A of Transparency Statement commences	
27 Oct 03	Cabinet submission seeking price decision to Minister (30 Oct 03)	
3 Nov 03	<b>Minister forwards submission to Cabinet (6 Nov 03)</b>	
17 Nov 03	Cabinet considers Water Pricing submission	
1 Dec 03	Last opportunity for Cabinet to finalise pricing decision (1 Dec 03)	Decision
	<b>Water prices gazetted (5 Dec 03)</b>	1 Dec 03
	Drafting of Part A of Transparency Statement is finalised	Gazetted
		4 Dec 03
15 Dec 03	<b>Cabinet endorses Part A of Transparency Statement</b>	due
	<b>Treasurer refers review of water pricing processes to ESCOSA together with Part A of Transparency Statement</b>	09 Feb 04
	<b>Xmas/New Year Break</b>	
	ESCOSA review over two months	
	During this period Treasury and Finance discusses issues with ESCOSA, including the draft of its Part B	
23 Feb 04	Final Part B of Transparency Statement due from ESCOSA to the Treasurer (27 Feb 04)	due 7 April 04
1 Mar 04	Treasury & Finance settles adjustments or addendum to Part A	
15 Mar 04	Cabinet Submission incorporating Parts A and B of Transparency Statement forwarded by Treasurer to Cabinet Office (17 Mar 04)	
22 Mar 04		
29 Mar 04	<b>Cabinet endorses Transparency Statement (Part A and Part B)</b>	due April 04
	Statement published on net/forwarded to NCC (29 Mar 04)	

## Appendix 2: Comparison of current water price setting practice with CoAG principles and NCC assessments

The CoAG Strategic Framework relating to urban water pricing, as detailed in the Compendium of National Competition Policy Agreements, is outlined in Box 1 and the Table below. – particularly General Clause 3 (a) and the first column.

The NCC’s interpretation of the 1994 CoAG Strategic Framework for water reform as detailed in its 2001 NCP Assessment of South Australian Water Reform are summarised in the second column of the Table. Relevant comments from the NCC’s 2003 assessment are included in Column four. The key outstanding issues appear to be: transparency of SA pricing processes; details of the pricing of externalities; and SA’s dividend policy.

### General Clause 3 (a)

“... adoption of pricing regimes based on the principles of **consumption based pricing, full cost recovery** and desirably the removal of **cross-subsidies** which are not consistent with efficient and effective service, use and provision. Where cross-subsidies continue to exist, they be made transparent...”

“that where service deliveries are required to provide water services to classes of customer at less than full cost, the cost of this be fully disclosed and ideally be paid to the service deliverer as a **community service obligation (CSO)** ;”

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
Urban Water Pricing (Clause 3 (b)) “...adoption by no later than 1998 of charging arrangements for water services comprising an access or connection component together with an additional component or components to	Pricing consumption based pricing –two part tariffs (comprising a fixed access component and a volumetric cost component) where cost-effective.	Pricing Cabinet approves SA Water prices on the recommendation of the responsible Minister. Prices are gazetted in December each year.	Pricing Suggested independent price regulation of water and wastewater services and/or a public pricing process. SA has not demonstrated

TRANSPARENCY STATEMENT – URBAN WATER 2004-05

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
<p>reflect usage where this is cost-effective;”                      Expert group to report on asset valuation methods and cost-recovery definitions                      “That supplying organisations, where they are publicly owned, aiming to earn a real rate of return on the written down replacement cost of their assets, commensurate with the equity arrangements of their public ownership;”</p> <p>Guidelines for the Application of Clause 3 and Expert Group Recommendations (2)                      Prices will be set by a nominated jurisdictional regulator (or equivalent) who, in examining full cost recovery as an input to price determination, should have regard to the principles set out below.                      Deprival value methodology for asset</p>	<p>free water allowances should be removed as these can lead to cross-subsidisation and undermine consumption based pricing.                      charges based on property values do not necessarily reflect cost of services.</p> <p>Cost Recovery                      full cost recovery.                      jurisdictions will need to demonstrate that... providers are recovering costs consistent with the agreed guidelines and CoAG commitments.                      vertically integrated operators should ensure processes are in place to establish the contribution</p>	<p>Two-part tariff for residential customers comprising an access charge and an inclining block usage charge.                      Uniform statewide pricing (supported by CSOs)                      Free water allowance for commercial customers to be phased out over a five-year period (beg 2002/03).                      Property based charge still applies for commercial customers. Quantum of property charge is being reduced to offset the increase in usage charges.                      (NCC, 2002)                      Cost Recovery                      Optimised Deprival Value (ODV) method of valuing assets subject to independent triennial review.                      A review of the weighted average cost of capital (WACC) was undertaken in 2001-02 by Leadenhall Australia.                      Performance Statement agreed by the Minister and Treasurer requires a target return on</p>	<p>compliance with CoAG pricing principles.                      Transparency Statement indicating basis of pricing would demonstrate compliance with CoAG principles.</p> <p>Cost Recovery                      An important element of CoAG principles is requirement that prices be set to achieve a revenue target based on efficient resource and business costs. Elements that determine the revenue target and the target’s connection with prices should be made clear.</p>

TRANSPARENCY STATEMENT – URBAN WATER 2004-05

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
<p>valuation unless specific circumstances justify another method                      An annuity approach to determine cash requirements for asset replacement/refurbishment where it is desired that the service delivery capacity be maintained                      To avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or TERs (tax equivalent regime), provision for the cost of asset consumption and cost of capital, the latter being calculated using a WACC.                      “To be viable, a water business should recover, at least the operational, maintenance and administrative costs, externalities, taxes or TERs (not including income tax), the interest cost on debt, dividends (if any) and make provision for future asset refurbishment/replacement (as noted in (3) above). Dividends should be set at a level that reflects commercial realities and stimulates a competitive market outcome.”                      In applying (4) and (5) above, economic regulators (or equivalent)</p>	<p>to total cost of major functional areas such as headworks, bulk water, reticulation and retail services.                      information on methodologies for asset valuation and provision for asset consumption as well as information on the treatment of taxes and tax-equivalent regimes (TERs), externalities, dividends and return on capital.                      Externalities                      Council will consider a proxy for environmental externalities as the costs of mitigating environmental problems.                      Externalities                      Cross-subsidies</p>	<p>investment of 6 %.                      Externalities                      SA Water applies a 1 cent water catchment levy which is passed on to water management catchment boards.                      No other explicit charge for externalities although the present top tier per kl charge exceeds LPMC plus proxy for environmental externalities.                      CSIRO Land and Water has completed a report that considers the valuation of externalities.                      Cross-subsidies/CSOs                      Significant subsidies in the</p>	<p>Externalities                      SA has no mechanism for transparently reporting how externalities are factored in to prices.                      SA should provide information on how it transparently accounts for and reports on externalities in the price setting process.</p>

**TRANSPARENCY STATEMENT – URBAN WATER 2004-05**

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
<p>should determine the level of revenue for a water business based on efficient resource pricing and business costs. In determining prices, transparency is required in the treatment of community service obligations, contributed assets, the opening value of assets, externalities including resource management costs, and tax equivalent regimes.</p>	<p>The objectives and size of all cross subsidies should be identified and transparently reported. CSOs Cross-subsidies should ideally be removed or replaced with a transparent CSO. CSOs should be clearly defined, have an explicit public benefit objective, and be transparently reported and consistent with CoAG pricing reforms.</p> <p>Dividends As per Corporations Law, dividends should only be paid out of profits (accumulated retained profits plus current year's profits).</p>	<p>country are made transparent through CSOs.</p> <p>Dividends SA Water to report dividend paid to government as a proportion of after tax profit in annual reports. Noted that Cabinet processes of determining the dividend consider the long-term focus of SA Water.</p>	<p>Cross-subsidies Potential cross-subsidy while free allowance is being phased out should be reported transparently.</p> <p>Dividends SA dividend policy of 55 % of EBITDA may consistently result in dividends in excess of 100 % of after tax profits. Policy could also have unintended impacts on capital structure and financial resources. Exacerbated by lack of</p>

TRANSPARENCY STATEMENT – URBAN WATER 2004-05

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
<p>Institutional role separation                      6 (c) "...as far as possible, the roles of water resource management, standard setting and regulatory enforcement and service provision be separated institutionally;"                      6 (d) "that this occur, where appropriate, as soon as practicable, but certainly no later than 1998;"</p>	<p>January 1999 Tripartite Meeting – separate Ministers would be an acceptable form of separation. If regulator and service provider are responsible to same Minister, Council requires information on how potential conflict of interest has been effectively addressed. Clause 2 of CPA gives implicit support to desirability of independent regulators for independent prices oversight.</p>		<p>independent regulation of prices and service quality. SA should publish the rationale for level of dividend paid.                      Cabinet involvement might reduce commercial focus and compromise separation of water regulation from service provision.</p>
		<p>The water resource manager (DWLBC) is separate from the service provider.                      DHS monitors water quality service standards.                      EPA monitors environmental standards.                      Performance Statement agreed by Minister and Treasurer includes customer service standards.                      Cabinet approves prices.                      DTF has oversight of SA Water's commercial performance.</p>	<p>SA has not imposed independent oversight of pricing and service standards. Lack of transparency makes it difficult to be confident SA Water's actions are consistent with CoAG's principles. Preparation of statement needs to be independent of SA Water and involve relevant expertise in water and wastewater pricing.                      Preparation by ESCOSA or clearance by ESCOSA with its comments made public.</p>

TRANSPARENCY STATEMENT – URBAN WATER 2004-05

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
<p>Performance Monitoring and Best Practice</p> <p>6 (e) “The need for water services to be delivered efficiently as possible... with service providers seeking to achieve international best practice;”</p>	<p>Active participation in benchmarking systems such as WSAA.</p>	<p>SA Water participates actively in national urban water industry performance monitoring and its rolling benchmarking program. Also participates in other ad hoc benchmarking projects to inform specific performance improvement initiatives.</p>	<p>SA Water is participating in WSAA performance monitoring processes.</p>
<p>Commercial Focus</p> <p>6 (f) “that the arrangements in respect of service delivery organisations in metropolitan areas in particular should have a commercial focus, and whether achieved by contracting out, corporatised entities or privatised bodies this be a matter for each jurisdiction to determine in the light of its own circumstances;”</p>	<p>Appropriate structural and administrative responses to CPA obligations regarding legislation review, competitive neutrality and structural reform.</p>	<p>SA Water is a statutory corporation under the Public Corporations Act 1993. SA Water complies with SA Competitive Neutrality Policy Statement. SA has completed a number of legislation reviews.</p>	<p>SA has completed a number of legislative reviews and is still considering the recommendations.</p>
<p>Consultation prior to change</p> <p>7(a) “. . . public consultation by government agencies and service deliverers where and/or new initiatives are contemplated involving water resources;”</p> <p>“that where public consultation</p>	<p>Council will examine extent and methods of public consultation, with particular regard to pricing, allocations and water trading.</p>	<p>Consultation was undertaken in major reviews. (eg Competition Commissioner - 1996 and Minister’s Green Paper – 1999/2000)</p>	<p>Transparency Statement could demonstrate compliance with public consultation obligations.</p>

TRANSPARENCY STATEMENT – URBAN WATER 2004-05

CoAG (1)	NCC Interpretation (1)	SA Pricing Practices - Water	NCC Assessment (2003)
<p>processes are not already in train in relation to recommendations 3(b), 3 (d), (4) and (5) in particular, such processes will be embarked upon;”</p>			
<p>Public Education Programs                      7 (c) “that jurisdictions individually and jointly develop public education programs in relation to water use and the need for, and benefits from, reform.”                      7(d) “that responsible water agencies work with education authorities to develop a more extensive range of resources materials on water resources for use in schools;”                      7(e) “that water agencies should develop individually and jointly public education programs illustrating the cause and effect relationship between infrastructure performance, standards of service and related costs, with a view to promoting levels of service that represent the best value for money to the community.”</p>	<p>Evidence that agencies are working with education authorities.                      Council notes potential conflict of interest in service provider determining level of public education on water conservation.                      Council will examine measures used by jurisdictions to address the issue and programs offered by service provider as a good corporate citizen.</p>	<p>SA Water participates in various education programs with the community and education authorities.</p>	<p>Transparency Statement could demonstrate compliance with public education obligations.</p>

1. 2001 NCP Assessment The 1994 CoAG Strategic Framework
2. Additional comments on terms used in these Guidelines are included in Appendix 1.



**Comment on terms used in the Expert Group’s recommendations.**

The reference to or equivalent in principles 1 and 6 is included to take account of those jurisdictions where there is no nominated jurisdictional regulator for water pricing.

The phrase not including income tax in principle 5 only applies to those organisations which do not pay income tax. Externalities in principles 5 and 7 means environmental and natural resource management costs attributable to and incurred by the water business.

Efficient resource pricing in principle 6 includes the need to use pricing to send the correct economic signals to consumers on the high cost of augmenting water supply systems. Water is often charged for through a two-part tariff arrangement in which there are separate components for access to the infrastructure and for usage. As an augmentation approaches, the usage component will ideally be based on the long-run marginal costs so that the correct pricing signals are sent.

Efficient business costs in principle 6 are the minimum costs that would be incurred by an organisation in providing a specific service to a specific customer or group of customers. Efficient business costs will be less than actual costs if the organisation is not operating as efficiently as possible.

## **Appendix 3: Water price setting methodology for 2004-05**

### **1. Valuation of assets**

For SA Water's metropolitan and country water supply businesses, determine the value of water supply assets using fair value<sup>1</sup> methodology.

### **2. Avoiding monopoly rents**

Establish SA Water forward estimates for 2004-05 of operational, maintenance and administrative costs, externalities, taxes or TERs, provisions for asset consumption<sup>2</sup> and for cost of capital based on the weighted average cost of capital.

### **3. Ensuring commercial viability**

Establish SA Water forward estimates for 2004-05 of operational, maintenance and administrative costs, externalities, taxes or TERs, dividends, interest payments on debt and provision for asset consumption<sup>2</sup>.

### **4. Efficient resource pricing and business costs**

Consider the extent to which costs under 2 and 3 represent efficient resource pricing and business costs having regard to appropriate benchmarks and other factors. Adjust both estimates as necessary to determine measures of the maximum allowable revenue and minimum revenue for viability.

### **5. Potential revenue outcomes**

Determine the level of revenue in 2004-05 for the metropolitan and country businesses based on existing pricing parameters and policy settings including provision for agreed community service obligation revenues.

Confirm that the revenue levels are within the band of minimum and maximum revenue indicated under 4 and consider potential revenue targets for 2004-05 and out years.

### **6. Pricing options that promote efficient resource allocation**

Consider the extent to which the economic signals provided by water use prices promote efficient resource allocation. This should have regard to the marginal costs of service provision and externalities, particularly environmental externalities.

Determine specific pricing options for 2004-05, to be applied on a Statewide basis, that provide for an improvement in return on asset toward WACC while minimising the scope for cross-subsidy and managing the impact of price change for customers. All specific pricing options to involve separate components to reflect access to water supply and water use. The usage component to ideally be based on long-run marginal costs including provision for environmental externalities.

### **7. Pricing decision**

## TRANSPARENCY STATEMENT – URBAN WATER 2004-05

Determine a preferred pricing option taking into account the trade-offs between economic efficiency, social equity and environmental outcomes within the context of the NCP/CoAG framework.

### Notes

1. The Expert Group recommended asset valuation based on deprival value unless a specific circumstance justifies another method.

Accounting Policy Statement No. 3 now requires measurement of non-current assets on the fair value basis as per Accounting Standard AASB 1041 (July 2001) Revaluation of Non-Current Assets.

Government entities are moving toward a fair value basis for measuring non-current assets. According to the Accounting Policy Statement 3 (July 2001), the move to fair value methodology should not result in any material practical difference from deprival methodology — “generally both will be valued on a written down current cost basis”. Nevertheless, the valuation should ensure that assets are optimised to ensure that consumer charges do not include a rate of return on redundant assets.

2. Asset consumption to be based on a straight-line basis of depreciation over the relevant useful life of the asset. Whilst the Expert Group recommends an annuity approach, Accounting Policy Statement 7 (July 2003) indicates that “the method chosen should be that which most accurately reflects the pattern of consumption of the asset over the estimated useful life.” The Independent Pricing and Regulatory Tribunal (IPART) of NSW and the Queensland Competition Authority have used straight-line depreciation in recent determinations on water pricing.

**Appendix 4: Terms of reference for ESCOSA**

**NOTICE OF REFERRAL FOR AN INQUIRY INTO URBAN  
WATER PRICING PURSUANT TO PART 7 OF THE ESSENTIAL  
SERVICES COMMISSION ACT 2002**

**FROM:       The Hon Kevin Foley, Treasurer**

**TO:           The Essential Services Commission of South Australia**

**RE:           Urban Water Prices from 1 July 2004**

**BACKGROUND:**

1. Pursuant to section 35(1) of the *Essential Services Commission Act, 2002* (**the Act**), the Commission must conduct an inquiry into any matter that the Minister, by written notice, refers to the Commission.
2. The Act is committed to the Treasurer by way of *Gazettal* notice dated 12 September 2002 (p. 3393).
3. The South Australian Government proposes to publish a Transparency Statement each year on SA Water water and sewerage prices. The Government has prepared its first Transparency Statement on 2004/05 urban water prices.
4. The Transparency Statement will link Cabinet's decision on urban water prices to CoAG pricing principles, provide information on SA Water's financial performance in the context of pricing decisions and past and future expenditures, and address details of estimates of revenues, community service obligations, capital expenditure program, profit and its distribution.
5. SA Water is to meet the reasonable costs of the Commission in undertaking the inquiry.

## **REFERRAL:**

I, KEVIN FOLEY, Treasurer, refer to the Commission the matter described in paragraph (a) of the Terms of Reference for inquiry, in accordance with those matters in paragraph (b) of the Terms of Reference and subject to the Directions set out in this Notice.

## **TERMS OF REFERENCE:**

The following are the Terms of Reference for the inquiry referred pursuant to section 35(1) of the Act:

- (a) The Commission is to inquire into the processes undertaken in the preparation of advice to Cabinet, resulting in Cabinet making its decision on the level and structure of SA Water's urban water prices for 2004-05, with respect to the adequacy of the application of CoAG pricing principles;
- (b) In undertaking this inquiry, the Commission is to consider the "Transparency Statement - (Part A) Urban Water Prices in South Australia 2004-05" dated January 2004;
- (c) In considering the processes undertaken for the preparation of advice to Cabinet, the Commission is to advise on the extent to which information relevant to the CoAG principles was made available to Cabinet.

## **REQUIREMENTS FOR INQUIRY:**

The following requirements are made pursuant to section 35(5) of the Act:

- (a) I require that the Commission undertake its inquiry and submit a Draft Report to both myself and the Minister for Administrative Services by no later than 24 March 2004;
- (b) I require that the Commission submit a Final Report on the inquiry to both myself and the Minister for Administrative Services by no later than 7 April 2004;
- (c) In conducting the inquiry, the Commission is not required to hold public hearings, public seminars or workshops but may receive and consider any written submissions as it thinks appropriate and it must advertise to call for written submissions to be lodged no later than 14 days from the date of publication of the Notice of Inquiry as required pursuant to section 36 of the Act;

- (d) If the Commission wishes to seek further information or guidance in relation to the conduct of this inquiry, it may contact the Director, Infrastructure, Microeconomic Reform and Infrastructure Branch, Department of Treasury and Finance.

**DIRECTIONS:**

The following direction is made pursuant to section 35(5)(f) of the Act:

I direct that in undertaking its enquiry the Commission must preserve the confidentiality of any information, material or documentation provided by Government to enable the Commission to undertake its enquiry and stamped “Strictly Confidential”.



Kevin Foley MP  
**TREASURER**

TRANSPARENCY STATEMENT ON URBAN WATER PRICING IN SOUTH  
AUSTRALIA – PART A

SCHEDULE OF AMENDMENTS

Page 20

- Line 31 - delete “excluded from the regulatory asset base” and insert “recognised”.
- Line 36 – delete “(QCA, 2002, p 38)” and insert “(QCA, 2002, p 59)”.

Page 29

- line 9 – delete “(see Chapter 7, Tables 12 and 13)” and insert “(see Chapter 7, Tables 11 and 12)”

Page 45

- Chapter 7 – delete

Year	Opening balance (\$'000)	Additions# (\$'000)	Balance (\$'000)	Inflation* adjustment (\$'000)	Depreciation (\$'000)	Closing balance (\$'000)
<b>Total assets</b>						
2003-04	6,400,760	185,300	6,586,060	77,888	112,000	6,551,948
2004-05	6,551,948	138,379	6,690,326	-	115,901	6,574,426
<b>Water assets</b>						
2003-04	4,049,925	88,913	4,138,838	49,117	74,774	4,113,180
2004-05	4,113,180	75,221	4,188,401	—	77,378	4,111,023

and insert –

Year	Opening balance (\$'000)	Additions# (\$'000)	Balance (\$'000)	Inflation* adjustment (\$'000)	Depreciation (\$'000)	Closing balance (\$'000)
<b>Total assets</b>						
2003-04	6,400,760	205,300	6,606,060	77,888	112,000	6,571,948
2004-05	6,571,948	138,379	6,710,326	-	115,901	6,594,426
<b>Water assets</b>						
2003-04	4,049,925	88,913	4,138,838	49,117	74,774	4,113,180
2004-05	4,113,180	75,221	4,188,401	—	77,378	4,111,023

Note – changes to Table 7 do not affect Table 8 or the outcome of analysis.