ESSENTIAL SERVICES COMMISSION

PRICE REVIEW 2013: RURAL WATER BUSINESSES

DRAFT DECISION – VOLUME I

MARCH 2013

An appropriate citation for this paper is:

Essential Services Commission 2013, *Price Review 2013: Rural Water Businesses — draft decision,* Volume I, March

PRICE REVIEW 2013:RURAL WATER BUSINESSES

Draft Decision – Volume I

March 2013

PREFACE

In October 2012, three rural water businesses submitted their Final Water Plans to the Commission for assessment. These plans set out the prices that each of the businesses propose to charge for their water and other related services for their regulatory periods commencing 1 July 2013. The plans also include information about the proposed expenditure and the revenue needs of the businesses.

The Commission is required to assess the Water Plans and to decide whether to approve the prices proposed by the businesses. This draft decision outlines the Commission’s views on whether to approve or not approve the proposal of each of the rural water businesses, and any suggested amendments or actions required for the proposal to be approved. Volume II of this draft decision summarises the Commission's proposed outcomes business-by-business, including any actions that may be required prior to our final decision in June.

Each water business is required to respond to this draft decision by no later than 2 May 2013. Businesses are required to submit a revised schedule of tariffs giving effect to any required amendments set out in this draft decision. Businesses are also required to provide any further information required by the Commission.

Consultation with stakeholders is an important part of the Commission’s decision making process. Customers and other interested parties are invited to comment on the Commission's views as outlined in this draft decision. This can be done either through written submissions or by expressing your views at public meetings to be held around the state. Details of these meetings will be available on our website (www.esc.vic.gov.au). Written submissions are due by 2 May 2013 and will be made public on our website unless specifically requested otherwise. Submissions can be lodged by email (water@esc.vic.gov.au).

Copies of this draft decision, various supporting documents and the Water Plans submitted by each business are available on the Commission’s website www.esc.vic.gov.au.

Dr Ron Ben-David

Chairperson

RESPONDING TO THIS DRAFT DECISION

We are interested in thoughts and comments from the public about this draft Decision. The responses will assist the Commission in making its final decision.

Interested parties can provide feedback on this draft decision in one of two ways:

Come to a public meeting

We will hold information sessions in a number of regional centres during April — details of these meetings will be published on the Commission's website.

The sessions provide an opportunity for interested parties to understand the key features of the draft decision and to provide comment.

Provide written comments or submissions

You can send a written submission or comments in response to this draft decision. Written comments are due 2 May 2013.

We would prefer to receive them by email at water@esc.vic.gov.au.

You can also send comments by mail to

Essential Services Commission
Level 37, 2 Lonsdale Street
Melbourne VIC 3000

The Commission's normal practice is to make all submissions publicly available on its website. If you do not have access to the Internet, you can contact Commission staff to make alternative arrangements to view copies of the submissions.

If you do not wish some information to be disclosed publicly, because it is confidential or commercially sensitive, then please discuss the matter first with Commission staff.

GLOSSARY

2nd regulatory period	The period commencing 1 July 2008 and expiring 30 June 2013.
3rd regulatory period	The period commencing 1 July 2013 and expiring on a date specified by the Commission. For Goulburn-Murray Water's 3rd regulation period is set at three years.
4th regulatory period	For the metropolitan, regional urban and most rural water businesses, it is the period commencing 1 July 2018 and expiring on a date specified by the Commission. For Goulburn-Murray Water's, the 4th regulatory period commences 1 July 2016 and lasts for four years.
Annuity	A terminating "stream" of fixed payments.
Bulk Water	Water supplies between water businesses.
Business as usual operating expenditure (BAU)	The baseline level of operating expenditure is based on 2011-12 data. This expenditure excludes once-off or temporary costs associated with the drought and related major projects.
Capital expenditure (CAPEX)	Capital expenditure is incurred when a business spends money either to buy fixed assets or to add to the value of an existing fixed asset with a useful life extending beyond the taxable year.

Catchment	A structure, such as a basin or reservoir, used for collecting or draining water.
Channel	The bed of a stream or river.
Consumer price index (CPI)	The consumer price index published by the Australian Bureau of Statistics.
Customer Service Code	A code issues under section under section 4F of the *Water Industry Act* which set out the terms and conditions of service and supply.
Dethridge Wheel meters	Used to measure the flow of water delivered to farms for irrigation.
Enterprise bargaining agreement	A collective industrial agreement on wage and working conditions between either an employer and a trade union acting on behalf of employees or an employer and employees acting for themselves.
Environmental Contribution	The Minister of Water determines an Environmental Contribution which is levied on all Victorian water businesses, to meet costs associated with managing environmental water.
Headworks	Dams, weirs and associated works used for the harvest, storage and supply of water.
Locational pricing	Prices for the same service differentiated by location.
Long run marginal cost (LRMC)	The change in total cost resulting from a one unit change in output, over a long enough timeframe such that no inputs are 'fixed'. It is the sum of short run marginal operating and long run marginal capital costs.
Marginal cost	The change in total cost when one additional unit is produced.
Megalitre	1000 kilolitres = 1 million litres

Murray-Darling Basin	A large geographical area in the interior of southeastern Australia, whose name is derived from its two major rivers, the Murray River and the Darling River. It is one of the most significant agricultural areas in Australia.
Operating expenditure (OPEX)	Ongoing cost for running a product, business, or system.
Price determination	A determination in respect of a water business made by the Commission under section 33 of *the Essential Services Commission Act* (2001) and clause 8 of the *Water Industry Regulatory Order* (2003).
Price elasticity of demand	A measure of the affect that a change in price will have on the volume of water used.
Regulatory depreciation	An amount set to allow the regulated water businesses to recover the cost of capital investments over time. Also known as Return of Assets.
Revenue requirement	The revenue needed by each water business to cover operating costs and taxes, and provide a return on assets and a return of assets (depreciation).
Statement of Obligations	There is a Statement of Obligations (SoO) for each water business, specifying a number of requirements that the individual businesses must follow. They were made by the Minister for Water under section 4I of the *Water Industry Act* (1994), commencing from 16 September 2012.
Tariff schedules	A list of prices arranged or organised in a particular order.
Tariff structure	The way prices are organised, which can provide different incentives and signals to customers. For example, two part tariff (fixed service charge and IBT variable charge).

Variable charge	Charge for product/service based on the quantity used. Also known as a volumetric charge.
Water Charge (Infrastructure) Rules (WCIR)	The Rules which apply to the regulation of entities in the Murray-Darling Basin.
Water entitlement	A right to use water determined by the Minister for Water under the *Water Act* (1989) (Vic.). A water entitlement is the maximum amount of water authorised to be taken and used by a person or organisation under specified conditions.
Water Plan	A Water Plan is a document prepared and published by a water business, which sets out the services, key projects and prices it proposes to deliver over the next regulatory period. The primary purpose of the Water Plan is to inform and seek feedback from the public.
Water shares	A legally recognised, secure share of the water available to be taken from a defined water system; a water share is specified as a maximum volume of seasonal allocation that may be made against that share.
Weighted average cost of capital (WACC)	The rate that a company is expected to pay on average to all its security holders to finance its assets.

ACRONYMS

ACCC	Australian Competition & Consumer Commission
CAPEX	Capital expenditure
CAPM	Capital Asset pricing model
CGS	Commonwealth Government Securities
CPI	Consumer price index
DoH	Department of Health
DSE	Department of Sustainability and Environment
EPA Victoria	Environmental Protection Agency Victoria
ESC	Essential Services Commission
EWOV	Energy and Water Ombudsman Victoria
FAL	Financial accommodation levy
GIS	Geographic information systems
GSL	Guaranteed service levels
IBT	Inclining block tariff
LRMC	Long run marginal cost
LVLM	Living Victoria Living Melbourne
MRP	Market risk premium
NCC	New customer contributions

OPEX	Operating Expenditure
RAB	Regulatory asset base
SCADA	Supervisory control and data acquisition
SDC	Sewage disposal charge
SoOs	Statements of Obligations
VCOSS	Victorian Council of Social Services
WACC	Weighted average cost of capital
WCIR	Water Charge (Infrastructure) Rules
WIRO	Water Industry Regulatory Order

CONTENTS

SUMMARY

BACKGROUND — THE PRICE REVIEW PROCESS

In October 2012, the Essential Services Commission commenced its review of the rural water businesses' proposals for the regulatory period commencing on 1 July 2013.

Under the price review process, the rural water businesses submitted Water Plans setting out the expected costs of delivering rural services, their planned capital works programs, the forecast volumes of water that will be delivered and the levels of service promised to customers.

Consultation with stakeholders is an important part of the price review process. To inform water businesses and their customers of our expectation regarding the water planning process, we released a guidance paper in October 2011. In November 2012, we released a paper summarising the businesses' proposals and highlighting issues on which we were seeking stakeholder comments. The Commission received five written submissions. In addition during November and December 2012 we held public meetings around the state where the water businesses presented their proposals. Customers and community and business groups, then had the opportunity to respond.

The Commission has also formed a Customer Reference Panel. It includes consumer and business representative groups as well as individual customers. The panel provides the Commission with its views on the issues its members consider important for its price review.

This draft decision is the next stage in the Commission's consultation process. As well as undertaking its own analysis, the Commission also engaged expert consultants to assess and provide advice on the demand and expenditure proposals put forward by the businesses.

Interested parties can comment on the Commission's approach and proposed decisions before it makes its final decision in June 2013, by either making a written submission or attending public meetings in April 2013.

CONTEXT AND KEY ISSUES

Southern Rural Water's Water Plan will be assessed to the *Water Industry Regulatory Order* (WIRO), consistent with previous price decisions. However, Lower Murray Water (Rural) and Goulburn-Murray Water are also now covered under the Australian Competition and Consumer Commission (ACCC) framework and the Commission will regulate them under licence from the ACCC, and assess their proposed tariff structures against the ACCC's Water Charge (Infrastructure) Rules (WCIR).

The next regulatory period will see continuing uncertainty about rural modernisation for Lower Murray Water (Rural), Goulburn-Murray Water and Southern Rural Water. Ongoing consultation with the Murray-Darling Basin Plan will also cause uncertainty for Lower Murray Water (Rural) and Goulburn-Murray Water.

THE COMMISSION'S APPROACH

The Commission is required to assess the tariffs and revenues proposed in the businesses' Water Plans against the principles set out in the WIRO and the WCIR.

The WIRO principles require prices to be set to:

- generate the business's revenue requirement and allow it to meet the costs of delivering services to customers
- ensure the business's financial viability, including a reasonable return on capital
- reflect costs and provide incentives for sustainable water use
- take into account the interests of customers.

The ACCC requires the Commission to regulate according to the ACCC pricing principles which were made under the WCIR and require tariffs to be set to:

- promote the economically efficient use of water infrastructure assets

- ensure sufficient revenue for the efficient delivery of the required services
- give effect to the principles of user pays in respect of water storage and delivery in irrigation systems
- achieve pricing transparency
- facilitate efficient water use and trade in water entitlements.

In applying these principles, the Commission focused on ensuring prices are as low as possible but still sufficient to recover the businesses’ efficient costs of providing services.

KEY OUTCOMES AND SERVICE LEVELS

At the start of the second regulatory period, rural water businesses proposed targets for a core set of service standards provided by the Commission. However, the variability of the districts serviced by the rural businesses meant a single set of standards could not reflect the diverse needs of all rural customers. For this reason, the rural water businesses developed standards that reflect their unique operating environment and customers’ preferences, based on consumer consultation and experience.

Lower Murray Water (Rural) proposed to retain its standards and set them at a level consistent with historical performance, Southern Rural Water proposed to revise its standards to better describe service and cost outcomes expected by its customers, and Goulburn-Murray Water proposed a new set of standards to reflect its operations.

The Commission proposes to approve all rural businesses’ service standards.

REVENUE REQUIREMENTS

The Commission used independent expert consultants to review the operating and capital expenditure programs of rural water businesses. Generally, the consultants found the rural businesses were operating in an efficient manner and the proposed expenditure forecasts were reasonable.

The businesses' revenue requirements comprise their forecast operating expenditure, a return on assets (existing and new assets) and regulatory depreciation (return of assets).

Table 1 compares the businesses' proposed revenue requirements to the revenue from their proposed price increases. Each business proposed to recover less from prices than their calculated revenue requirement. Goulburn-Murray Water has a three year price period for the next regulatory period.

TABLE 1 REVENUE REQUIREMENT – PROPOSED COMPARED WITH DRAFT DECISION
($m 2012-13)

	2013-14	2014-15	2015-16	2016-17	2017-18	Total WP3
Goulburn-Murray Water						
Revenue from proposed prices	118.8	119.5	119.6	n/a	n/a	357.9
Proposed revenue	119.2	125.1	126.8	n/a	n/a	371.1
Draft Decision	115.6	121.5	122.3	n/a	n/a	359.4
Lower Murray Water Rural						
Revenue from proposed prices	26.1	26.7	27.4	28.0	28.6	137.0
Proposed revenue	26.4	27.4	27.8	27.9	27.9	137.4
Draft Decision	26.3	27.3	27.6	27.7	27.8	136.7
Southern Rural Water						
Revenue from proposed prices	28.2	28.4	28.7	28.9	28.6	142.8
Proposed revenue	28.2	28.5	28.9	28.9	28.7	143.2
Draft Decision	28.0	28.3	28.7	28.7	28.4	142.1

Note: Goulburn-Murray Water has a three year price period for the third regulatory period. Rounding means the numbers here may differ slightly from actual draft decision numbers.

Based on this draft decision reduction is in revenue requirements, there is some scope for small price reductions for Southern Rural Water and Lower Murray Water

(Rural) customers. The businesses will need to propose how they intend to pass on these reductions to prices for different services and districts in response to this draft decision. In the case of Goulburn-Murray Water, the prices proposed are below the draft decision revenue requirements even with the revenue reductions identified by the Commission. The Commission proposes to approve Goulburn-Murray Water's proposed prices.

FORM OF PRICE CONTROL

The Commission proposes to approve key elements of rural water businesses' proposals for price control, including Goulburn-Murray Water's and Lower Murray Water's proposals to maintain revenue caps, and Southern Rural Water's proposal to continue to apply a hybrid revenue cap.

The Commission proposes for all rural businesses to include rebalancing constraints within their price controls so customers do not face unreasonably high year-on-year price increases. This was a concern of customers in some districts during the second regulatory period.

The Commission has not approved Goulburn-Murray Water's proposed rebalancing constraint as it did not sufficiently protect customers against price volatility. The Commission requires the business to resubmit a proposal for a rebalancing constraint.

The Commission also requires all rural businesses seeking to make material price adjustments within the next regulatory period to consult with customer committees and customers before they apply to the Commission as part of their annual price approval process.

FINANCING CAPITAL INVESTMENTS

The Commission applied a real weighted average cost of capital (WACC) for the three rural businesses of 4.7 per cent. This is notably lower than the current WACC of 5.8 per cent. This reduction is the main reason for the Commission's proposed revenue reductions.

RURAL TARIFF STRUCTURES

Both Goulburn-Murray Water and Southern Rural Water proposed to maintain their existing tariff structures, although Goulburn-Murray Water committed to consulting with customers during the period with the aim of developing simplified tariffs.

The Commission approved Lower Murray Water's proposal to restructure its tariffs for the Mildura irrigation district to align them with its other districts. Generally the business proposed to maintain tariff structures for other rural services.

GROUNDWATER AND MISCELLANEOUS SERVICES

Groundwater and miscellaneous service charges make up a small proportion of rural businesses' revenue. The Commission proposes to approve the groundwater charges for the rural water businesses. It also proposes to approve the miscellaneous service charges proposed by Lower Murray Water (Rural). However, it requires additional information from Southern Rural Water and Goulburn-Murray Water before it will approve their miscellaneous service charges.

ADJUSTING PRICES DURING THE PERIOD

The Commission proposes to approve a price adjustment mechanism to account for events that are uncertain or unforeseen at the time of the final decision. In applying this mechanism, the Commission will take into account only factors that do not fall within the businesses' control. The Commission strongly encourages the water businesses to seek to manage such circumstances within their existing budgets, to ensure customers do not face unnecessary price changes and avoid price volatility.

The Commission notes that it will consider a reopening during the next regulatory period for Lower Murray Water (Rural), when the impact of the Sunraysia Modernisation Project is known.

1. INTRODUCTION

The Essential Services Commission is Victoria's independent economic regulator of essential services. Its role in the water industry includes regulating prices and monitoring the service standards and market conduct of the 19 Victorian Government owned water businesses. In carrying out its role, the Commission is guided by the regulatory framework in the *Essential Services Commission Act* (2001) and the *Water Industry Act (*1994).

There are four water businesses that are commonly referred to as partly or wholly rural businesses: Goulburn-Murray Water, GWMWater, Lower Murray Water and Southern Rural Water. This paper presents the Commission's draft decisions on Goulburn-Murray Water, Lower Murray Water's rural business and Southern Rural Water. It does not include the draft decisions for:

- GWMWater, which provides rural services and retail urban water and sewerage services from a single integrated business. GWMWater is included in the regional urban draft decision.
- Lower Murray Water's urban business, which is a separate business from Lower Murray Water (Rural), which is examined in this paper. Lower Murray Water (Urban) is included in the regional urban draft decision.

The three businesses covered by this paper are regulated under two different regulatory frameworks:

- the Commission assessed the proposals from Lower Murray Water (Rural) and Goulburn-Murray Water for irrigation and bulk water services against the Australian Competition and Consumer Commission's (ACCC) pricing principles (explained below)

- the Water Industry Regulatory Order (WIRO) applies to Southern Rural Water and all other regulated services provided by Lower Murray Water (Rural) and Goulburn-Murray Water, such as groundwater and miscellaneous services. The WIRO was updated by the Governor in Council under the Water Industry Act.[1]

The WIRO requires the Commission to approve or specify the price arrangements for the water businesses for each regulatory period. The Commission must approve the price arrangements if satisfied the prices, or the manner in which prices are to be calculated or otherwise determined, comply with procedural requirements and the regulatory principles in the WIRO. If not satisfied, the Commission may specify the prices that a business may charge, or the manner in which those prices are to be calculated or otherwise determined. Procedural requirements include the need for businesses to consult with customers and relevant regulatory agencies before submitting their Water Plans to the Commission for assessment.

In February 2011, the ACCC accredited the Commission to regulate the prices of irrigation and bulk water delivery services provided by Goulburn-Murray Water and Lower Murray Water in place of the ACCC under the Water Charge (Infrastructure) Rules (WCIR). The WCIR apply to water businesses in the Murray-Darling Basin. Specifically, the Commission must use the ACCC's pricing principles — which were attached to the ACCC's final decision on the Commission's application for accreditation[2] — to assess rural water businesses covered by the WCIR.

Regulation under the WCIR through the ACCC pricing principles will be similar to regulation under the WIRO. The process of the price review under both systems, including assessments by Commission staff and consultants, as well as consultation with customers, will be almost identical. The main differences between regulation under the WCIR and the WIRO are as follows:

- The WCIR sets the length of regulatory period for rural businesses: 3 years for the first regulatory period and 4 four years after that. Exemptions may be made for businesses with an urban and a rural business to enable alignment of

1 The WIRO is available on the Commission's website.

2 Australian Competition and Consumer Commission Application by Essential Services Commission of Victoria for accreditation Final Decision, 17 February 2012, Appendix B.

urban and rural regulatory period. The WIRO does not prescribe the length of the regulatory period.

- The ACCC's pricing principles set several WACC parameters which must be applied to businesses. The WIRO requires the Commission to determine WACC parameters.
- The WCIR requires an ex ante assessment of proposed expenditure, with actual expenditure automatically rolled into the asset base. The WIRO requires an ex post assessment of expenditure, with only an efficient amount to be rolled into the asset base.

1.2 2013 WATER PRICE REVIEW

The Commission assessed the prices that Victoria's 19 water businesses will be able to charge in the regulatory period commencing 1 July 2013. This draft decision covers three rural water businesses that submitted Water Plans to the Commission in late 2012: Goulburn-Murray Water, Lower Murray Water (Rural) and Southern Rural Water. The Water Plans include the businesses' proposed services and proposed costs of delivering these services. They also set out the prices that each business proposed to charge for its services for the next regulatory period.

In October 2011, the Commission released its guidance paper, to help the water businesses prepare their Water Plans.[3] The guidance paper outlined the Commission's expectations for the content of Water Plans. This includes a strong statement of expectations that businesses would consult with customers and other stakeholders to inform their final service and price proposals. It noted prices had increased rapidly in recent years due to substantial increases in expenditure, mainly reflecting the response to actual and anticipated water shortages. For this reason, the Commission noted Water Plans should reflect:

- prudent and efficient expenditure only
- ongoing productivity improvement
- initiatives that garner customer support and reflect their willingness to pay
- reflect clearly defined government obligations only.

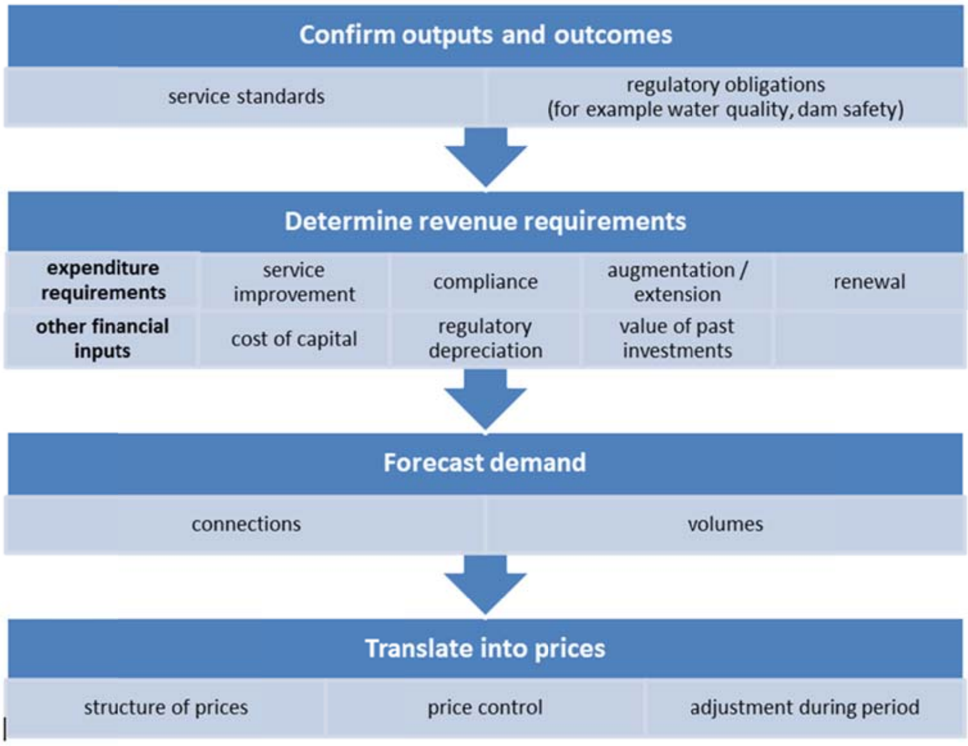
---

3 Essential Services Commission 2011, *2013 Water Price Review — guidance on Water Plans*, October.

1.3 COMMISSION'S APPROACH TO ASSESSING PROPOSED PRICES

The Commission follows a 'building block' approach to assess prices. The approach has four steps (figure 1.1). The first step involves establishing the service standards and other outcomes that a business proposes to deliver over the regulatory period. These standards and outcomes reflect obligations imposed by the Minister for Water through the Statement of Obligations, EPA Victoria, the Department of Health, the Department of Sustainability and Environment, and customer preferences.

FIGURE 1.1 STEPS IN ASSESSING AND APPROVING PRICES



In the second step, the Commission determines the revenue that the business requires to meet the service obligations and expected outcomes. It must assess whether the business's expenditure forecasts are prudent and efficient, whether its capital works program is deliverable within the timeframes proposed, and whether its business strategy reflects a long term planning horizon. The Commission must also ensure the businesses receive an efficient return on their capital investments.

The Commission makes assumptions about efficient expenditure to assess whether prices will result in the business earning sufficient revenue to deliver services. However, the assumed expenditure levels do not represent amounts that businesses are required to spend or direct to particular activities or projects. In consultation with customers, businesses are free to determine their expenditure priorities in light of changing circumstances, and to pursue innovation and efficiencies that enable them to outperform the cost assumptions.

Sometimes, given changing circumstances, a business might not proceed with a project or activity that it proposed in its Water Plan and that the Commission included when calculating assumed expenditure. It might do so when it identifies, in consultation with its customers, a higher priority project or activity that should be undertaken instead. Or, if costs increase by more than forecast at the time of the price review, the business might defer or cancel a lower priority project or activity to ensure projects and activities more highly valued by customers can go ahead without the business needing to recoup a revenue shortfall from customers.

The next step in the process involves assessing each business's forecast level of demand for rural services, including assumed growth for delivery shares, service points, connections and licences.

The final step is calculating the prices that will apply during the regulatory period. For each business, the Commission must ensure prices will generate the business's revenue requirement over the period,. It assesses whether the business's demand forecasts are reasonable and reflect the best available information. It also considers whether prices and proposed tariff structures provide appropriate signals about the costs of providing services, and provide incentives for sustainable water use.

1.4 THE COMMISSION'S CONSULTATION PROCESS

Before the Commission makes its final decision in mid-June on the prices to apply from 1 July 2013, interested parties have further opportunities to raise issues and express their views on the businesses' proposals.

This draft decision sets out the Commission's draft decisions on the prices that will apply from 1 July 2013. Businesses, customers and other interested parties are encouraged to comment on the draft decision. The process for making submissions is set out in the section ‘Responding to this draft decision’ at the front of this report.

Before making a final decision in June 2013, the Commission seeks additional feedback from interested parties by 2 May 2013. Submissions should be sent electronically to water@esc.vic.gov.au, or by mail to:

Water Team
Essential Services Commission
Level 37, 2 Lonsdale Street
Melbourne VIC 3000

Submissions will be available to the public on the Commission’s website (www.esc.vic.gov.au), except for any confidential information that parties identify clearly in their submissions. In these instances, the submitter should provide two copies of the submission — one excluding any confidential or sensitive information that the submitter does not wish to be made public. For details on the Commission’s submission policy, please see its website.

Public meetings will be held in April and May 2013, at which the Commission will explain its draft decision and seek to receive feedback and information from stakeholders. The Commission will advertise the meetings in regional newspapers and on its website.

1.5 THE STRUCTURE OF THIS DRAFT DECISION

This draft decision is structured in two volumes. Volume I is an overview of the Commission’s approach and assessment of the businesses’ proposals. It also summarises the suggested actions or amendments that businesses will need to take or make if the Commission proposes not to approve a business’s proposal.

Chapter 1 sets out the service standards and other related outcomes to be delivered, including expectations about the key water delivery and demand factors that are likely to underpin service delivery. Chapter 2 sets out the Commission’s assessment of the core service levels underpinning the businesses’ proposed price levels over the next regulatory period.

Chapter 3 set out the Commission’s views on the revenue required by each water business to deliver services and meet its obligations. The revenue requirement is used to set the prices that will apply over the next regulatory period. The Commission’s views on the businesses’ expenditure forecasts are set out in chapter 4 (operating expenditure) and chapter 5 (capital expenditure). Chapter 6 discusses issues related to financing capital investments, and chapter 7 contains the Commission’s assessment of the businesses’ proposed demand forecasts.

Chapters 8–11 discuss issues related to the businesses’ proposed tariff structures and how prices will be adjusted during the regulatory period. Rural tariffs and groundwater charges are discussed in chapters 9 and 10, and miscellaneous service charges in chapter 11. Chapter 12 outlines how prices will be adjusted during the period, including forms of price control and other mechanisms for dealing with uncertainty.

Volume II of this draft decision summarises the Commission’s draft decisions and specifies the actions required of each business.

2 SERVICE STANDARDS

2.1 INTRODUCTION

Various factors will affect water businesses' expenditure proposals — and, therefore, proposed prices — for the next regulatory period, including service standards. Under the *Water Industry Regulatory Order* (WIRO), the Commission regulates standards and conditions of supply for retail water, sewerage and other declared services. It can:

- approve standards set out in a water business's Water Plan, or
- specify those standards in a code, or
- do both.

The *Customer Service Code — Victorian Rural Water Businesses* specifies the standards and conditions with which rural water businesses must comply when supplying services and granting licences to customers.[4] The Commission can use these standards and conditions to assess water businesses' performance. Specifically, they can indicate whether additional expenditure is necessary to maintain or improve existing services, and whether a business can achieve seemingly efficient cost gains by lowering service levels for customers. Businesses are required to consider customers' views and preferences about the proposed service standard targets, and their willingness to pay for improved services.

Volume II of this draft decision details each business's proposed service standards and is available on the Commission's website. It outlines proposed changes to service standards, compared with those adopted in the second regulatory period, and specifies whether the Commission proposes to approve these proposed standards or requires businesses to revise them.

[4] Essential Services Commission 2012, *Rural Water Customer Service Code*, Issue No. 2, June

2.2 APPROACH TO ASSESSING SERVICE STANDARDS

Water businesses were required to propose a set of service standards for the next regulatory period. These standards are measurable aspects of a business's performance that reflect customers' key concerns and the business's key cost drivers.

Businesses were also required to set performance targets for each standard. The targets reflect the level of service that businesses are aiming to achieve over the next regulatory period, and the Commission will monitor actual performance over the period against these targets.

The Commission's approach to regulating standards and conditions of supply comprises two aspects:

- Businesses can propose their own service standards, accounting for their operating environment and customer needs and preferences.
- Each business is required to reflect service standards approved by the Commission in its customer charter.

In its 2011 guidance paper, the Commission stated that core service standard targets proposed by businesses should be set to the average performance of the business over the past five years.[5] The Commission also noted the five-year average may not be appropriate in some cases. Because rural water businesses provide such diverse services, they can propose their own standards that reflect their unique operating environments, service offerings and customer demands. In several cases, the standards proposed for the next regulatory period are entirely different from those against which targets were set at the start of the second regulatory period.

5 Essential Services Commission 2011*, 2013 Water Price Review—guidance on Water Plans*, December.

2.3 OVERVIEW OF PROPOSED SERVICE STANDARDS

At the start of the second regulatory period, rural water businesses proposed targets for a core set of service standards provided by the Commission. However, the variability of the districts serviced by the rural businesses meant a single set of standards could not reflect the diverse needs of all rural customers. For this reason, the rural water businesses developed standards that reflect their unique operating environment and customers' preferences, based on consumer consultation and experience.

Lower Murray Water revised its service standards during the second regulatory period, following a merger with the First Mildura Irrigation Trust and the transition of the Robinvale district to pumped irrigation. For the next regulatory period, Lower Murray Water proposed to retain these standards and set them at a level consistent with historical performance.

Following consultation with customers, Southern Rural Water proposed to revise its standards. The new standards will better describe service and cost outcomes expected by its customers.

Goulburn-Murray Water also proposed a new set of standards to reflect its operations. The new standards reflect changes in the business's service offering arising from the recent gravity irrigation modernisation project.

2.4 COMMISSION'S ASSESSMENT OF PROPOSED SERVICE STANDARDS

Southern Rural Water's and Goulburn-Murray Water's proposed new service standards better reflect each business's operating environment, compared with the core set of standards proposed by the Commission for the second regulatory period. Lower Murray Water proposed targets consistent with historical performance. The Commission is satisfied that the rural water businesses adequately consulted while developing their service standards. The Commission proposes to approve all of the rural businesses' proposals for service standards, and the targets set against them. Moreover, the Commission has found that proposed standards are consistent with the methodology proposed by the Commission in its 2011 guidance paper.

2.5 DRAFT DECISION

The Commission proposes to approve all service standards and targets proposed by Goulburn-Murray Water, Lower Murray Water (Rural) and Southern Rural Water..

3 REVENUE REQUIREMENT

3.1 INTRODUCTION

The Commission must be satisfied that prices are set at a level that generates sufficient revenue for a water business to recover the efficient cost of delivering services over the next regulatory period. It must also ensure prices do not allow a business to collect revenue that reflects monopoly rents or inefficient expenditure.[6]

The Commission used the 'building block' approach to derive an estimate of the revenues that Goulburn-Murray Water, Lower Murray Water and Southern Rural Water require to deliver proposed service standards and outcomes over the next regulatory period. Under this approach, the revenue requirement reflects operating expenditure and a return on the regulatory asset base (RAB) updated each year to reflect any additional capital expenditure (net of asset disposals) and regulatory depreciation.

[6] The requirements on the Commission with regard to revenue are set out in the WIRO for Southern Rural Water and in the ACCC's pricing principles for Goulburn-Murray Water and Lower Murray Water. GWMWater is assessed in the regional draft decision.

3.2 IMPACT OF THE COMMISSION’S DRAFT DECISION

The Commission has reviewed the businesses’ assumptions about expenditure, demand, and the return on and of assets for the next regulatory period, and adjusted each business’s revenue requirement to reflect the Commission’s current views of the efficient level of revenue that would enable the businesses to deliver on their service obligations over the next regulatory period.

Table 3.1 shows:

- The revenues raised by the prices proposed in businesses’ Water Plans are less than the businesses’ revenue proposals because businesses have indicated they intend to apply prices that will slightly under-recover their allowed maximum revenues.
- Revenues under the Commission’s draft decision are less than the businesses’ proposed revenues in all cases. They are less than the revenues raised by proposed prices for Lower Murray Water (Rural) and Southern Rural Water and these businesses are required to lower prices to match the revenue allowed by the draft decision. Goulburn-Murray Water’s proposed prices already raise revenue that is lower than the Commission’s draft decision revenue.

TABLE 3.1 REVENUE REQUIREMENT – PROPOSED COMPARED WITH DRAFT DECISION
($m 2012-13)

	2013-14	2014-15	2015-16	2016-17	2017-18	Total WP3
Goulburn-Murray Water						
Revenue from proposed prices	118.8	119.5	119.6			357.9
Proposed revenue	119.2	125.1	126.8			371.1
Draft decision	115.6	121.5	122.3			359.4
Lower Murray Water (Rural)						
Revenue from proposed prices	26.1	26.7	27.4	28.0	28.6	137.0
Proposed revenue	26.4	27.4	27.8	27.9	27.9	137.4
Draft decision	26.3	27.3	27.6	27.7	27.8	136.7
Southern Rural Water						
Revenue from proposed prices	28.2	28.4	28.7	28.9	28.6	142.8
Proposed revenue	28.2	28.5	28.9	28.9	28.7	143.2
Draft decision	28.0	28.3	28.7	28.7	28.4	142.1

Note: Goulburn-Murray Water has a three year price period for the third regulatory period. Rounding means the numbers in this table may differ slightly from actual draft decision numbers.

The revenue requirements proposed vary significantly among the rural water businesses. Over the next regulatory period, Southern Rural Water proposed a revenue requirement that is 1.8 per cent lower in real terms than that of the second regulatory period. By comparison, Goulburn-Murray Water's proposal is 3.6 per cent higher compared with the second regulatory period, and the proposal from Lower Murray Water (Rural) is 15.3 per cent higher.

Table 3.2 shows the breakdown of the Commission's draft decision on allowed revenues.

TABLE 3.2 BREAKDOWN OF REVENUE REQUIREMENT FOR THE THIRD REGULATORY PERIOD – DRAFT DECISION
($m 2012-13)

	Operating expenditure	Return on existing assets	Return on new assets	Return of assets [a]	Adjustment from last period	Renewals annuity	Total
Goulburn-Murray Water	297.5	28.2	5.2	28.5			359.4
Lower Murray Water (Rural)	103.1	16.0	5.4	12.2			136.7
Southern Rural Water	104.5	7.0	4.7	19.3	3.4	3.3	142.1
All businesses	**505.1**	**51.1**	**15.4**	**60.0**	**3.4**	**3.3**	**638.3**

Note: Numbers in this table may not add up because of rounding. [a] Regulatory depreciation.

3.3 COMMISSION’S ASSESSMENT OF SPECIFIC REVENUE ISSUES

The Commission reviewed businesses’ revenue proposals and adjusted the revenue requirement estimates to reflect its view of the efficient level of expenditure and the efficient costs of financing assets (tables 3.1 and 3.2).

The Commission’s draft decision results in a decrease in revenue requirements compared with those proposed by the businesses in their Water Plans. The decrease generally reflects downward adjustments to most businesses’ forecasts of capital expenditure and operating expenditure, including:

- downward adjustments to licence fees to be consistent with Commission estimates
- downward adjustments to environmental contributions to be consistent with Department of Sustainability and Environment (DSE) estimates
- the impact of changed assumptions about the weighted average cost of capital (WACC) and, therefore, the cost of financing the businesses’ proposed capital programs. The Commission updated the WACC to reflect current market conditions, therefore the WACC used to derive the draft decision is lower than that used by the businesses to develop their Water Plans.

3.3.1 FORGONE REVENUE — GOULBURN-MURRAY WATER

Goulburn-Murray Water sought an upward adjustment of $7.9 million in its Water Plan to reflect the under-recovery of revenue from the second regulatory period, due predominately to floods. The business submitted a proposal for forgone revenue because it seeks:

- the Commission and the public's recognition that flood related costs from the second regulatory (among other costs), were outside of the business's control and therefore should not be borne by the business, and
- a precedent, in case of a future incident of forgone revenue.

The Commission proposes not to approve Goulburn-Murray Water's proposal for forgone revenue because:

- The events listed by Goulburn-Murray Water had downward effects on its costs as well as its revenues. The Commission's review of the business's expenditure in the second regulatory period showed it had underspent its net capital forecast by $39.5 million and had achieved other cost savings.
- Events such as floods may be partly insurable.
- The business's proposed prices are set at less than its proposed revenue cap, which indicates it can fund part of any shortfall within its proposed revenue cap without an adjustment for forgone revenue.
- Its proposed forgone revenue would not comply with the ACCC's pricing principle of providing sufficient revenue to allow efficient delivery of the required services.

3.3.2 ANNUITIES — GOULBURN-MURRAY WATER

Goulburn-Murray Water proposed to incorporate two large negative annuities into its RAB in 2012-13, so as to simplify its regulatory accounting and align the treatment of capital investment across its business, and because the ACCC regulatory regime has no clear mechanism to recognise annuities. The business stated that it would have no effect on prices.

In previous regulatory periods rural businesses could choose to adopt a Regulatory Asset Base (RAB) approach or a renewals annuity approach (or a combination of the two) to recover their expenditure on asset renewals and rehabilitation:

- Under the RAB approach, capital expenditure is funded through prices charged over the life of the assets and recovered through a return of, and a return on, capital.
- Under an annuity approach (historically adopted in the rural sector), businesses forecast capital expenditure and convert this expenditure to an annual figure that they recover through prices each year.

In past decisions, the Commission supported rural businesses' proposals to move from an annuity to a RAB approach, because:

- it is difficult to make long term forecasts of investment needs, particularly given the changing nature of businesses' asset bases. For example, the move from channels to pipelines, and the reconfiguration of rural irrigation systems mean a replacement of existing assets may never occur.
- a single system of regulatory accounting is simple and easier for customers to understand.

In the 2005 price review, the Commission agreed to Goulburn-Murray Water's proposal to end its annuities approach. The decision included a transition proposal of capital offsets and price cuts so surpluses would be returned to customers within 10 years, and the deficits (which had largely accumulated in some recently built pipeline districts) were required to have a term of 75 years in line with the lives of relevant assets. The business has largely returned the surpluses, but the size of the remaining annuities is not clear to the Commission.

The Commission proposes to approve the incorporation of the annuities into the RAB, subject to Goulburn-Murray Water providing updated figures for the size of the annuities. The Commission's view is that the business's proposal complies with the ACCC pricing principles because bringing the annuities under the business's main regulatory approach improves transparency.

3.3.3 ANNUITIES — SOUTHERN RURAL WATER

Southern Rural Water proposed to phase out its three renewals annuities.

The Commission's view is that Southern Rural Water's proposal to phase out the annuities for its three irrigation districts would simplify its financial and tariff arrangements. At the end of the next regulatory period, Southern Rural Water will be the only remaining business with some annuities outstanding. All other businesses have moved away from the renewals annuities approach.

The Commission proposes to approve Southern Rural Water's proposal to incorporate its three irrigation annuities into its RAB.

3.4 DRAFT DECISION

The Commission proposes to approve the businesses' revenue proposals subject to the required amendments set out in the chapters on operating and capital expenditure, and financing capital investments.

The Commission proposes not to approve Goulburn-Murray Water's proposal for forgone revenue.

The Commission proposes to approve Goulburn-Murray Water's incorporation of its remaining deficit annuities into its RAB, subject to Goulburn-Murray Water providing updated values for the annuities.

The Commission proposes to approve Southern Rural Water's proposal to phase out its annuities.

4 OPERATING EXPENDITURE

4.1 INTRODUCTION

Operating expenditure comprises 73 to 80 per cent of the rural water businesses' annual revenue requirement for the next regulatory period (commencing 1 July 2013).[7] Clause 14 of the WIRO guided the Commission in assessing Southern Rural Water's operating expenditure, requiring the Commission to ensure:

- prices levied by the business provide it with a sustainable revenue stream that does not reflect monopoly rents or inefficient expenditure
- proposed expenditure forecasts are efficient and account for a long term planning horizon beyond the term of the Water Plan and
- the prices, or the manner in which they are determined, provide incentives for the business to pursue efficiency improvements over the regulatory period.

The Commission assessed Goulburn-Murray Water's and Lower Murray Water's (Rural) expenditure against the requirements of the Australian Competition and Consumer Commission's (ACCC) Water Charge Infrastructure Rules (WCIR), which are discussed in section 4.2.

Chapter 5 covers the Commission's draft decision on capital expenditure for the rural water businesses in the next regulatory period.

[7] Data for G-MW is for its three year pricing period only.

4.2 APPROACH TO ASSESSING OPERATING EXPENDITURE

The Commission outlined its approach to assessing operating expenditure in its 2011 guidance paper.[8] For businesses to recover proposed expenditure through regulated prices, their Water Plans must demonstrate the expenditure is required to meet proposed service outcomes. The Water Plans must also demonstrate the businesses will achieve their proposed service outcomes as cost efficiently as possible.

The Commission also considered businesses should be disciplined by the need to improve efficiency and manage controllable costs. It requires all businesses to achieve a minimum of 1 per cent per year productivity improvement on their baseline operating expenditure. The requirements under appendix B of the WCIR are broadly consistent with the Commission's requirements, and apply to the regulation of infrastructure assets. In light of this, the Commission has incorporated the similar WCIR requirements in its assessment. In addition, the WCIR require the Commission to compare and account for the operating expenditure of similar businesses, if applicable.

To facilitate the expenditure assessment, the Commission identified in its 2011 guidance paper that Water Plans should outline forecast operating expenditure for each year of the regulatory period, the key drivers of expenditure, justification of expenditure forecasts, and evidence of achieving the Commission's productivity improvement target. The Water Plans should also outline the relationship between expenditure and the delivery of obligations and service outcomes over the period.

As part of its information requirements, the Commission asked each business to consider:

- forecast changes in demand, including changes in customer numbers
- changes in input costs
- new or changed government obligations and
- new or changed customer service standards.

It also required the businesses to consider and address a number of issues in their Water Plans, such as cost items that increased significantly during the second

8 Essential Services Commission 2011, *2013 Water Price Review — guidance on Water Plans*, December, pp. 33–54.

regulatory period — for example, labour costs, electricity costs (including assumptions regarding the carbon price) and information technology (IT) costs.

Further, it required the businesses to:

- summarise briefly how they used shared services to deliver costs savings over the second regulatory period
- identify whether they adopted a strategic approach to procurement, including which elements are outsourced or provided inhouse
- to make available to the Commission any benchmarking studies in which the businesses participated.

The Commission generally expected the businesses to provide greater justification when proposing a significant departure from historical expenditure levels, or when forecasting expenditure for outcomes that are beyond what customers seek or regulators mandate.

The Commission engaged Cardno to review the efficiency of the rural water businesses' proposed controllable operating expenditure. Such expenditure excludes payment of bulk water charges, licence fees paid to regulators, and the environmental contribution levy paid to the government. The Commission verified these non-controllable costs for this price review.

Cardno was selected to undertake an expenditure review of the rural water businesses because of its strong experience in water price reviews, having undertaken expenditure assessments for both the Commission and IPART (the NSW regulator), and in other Australian capital cities as well as for OFWAT in the UK. Cardno completed the expenditure review for the Victorian rural water businesses in 2008 using many of the same key personnel, and has extensive involvement in the annual regulatory audits administered by the Commission.

The Commission instructed Cardno on the matters of significance that it must consider in the review, including the WIRO and WCIR requirements. It also drew the consultant's attention to any relatively large movements in expenditure trends during the second regulatory period. Cardno conducted its independent and professional assessment of the water businesses' expenditure forecasts in four months. It issued a draft report to each water business, after which it received further information and clarification from the businesses, and then provided a final report to the Commission.

Cardno undertook extensive information gathering and data analysis in preparing its final reports to the Commission. The Commission has confidence in Cardno's findings and recommendations, and used its final reports to decide on expenditure adjustments. Where the Commission decided not to accept the consultant's recommendation, it outlined its reason(s) in this draft decision.

In summary, Cardno:

- established a business-as-usual (BAU) operating expenditure baseline by reviewing the actual 2011-12 costs (the last full year of actual expenditure data) and adjusting to remove any one-off expenditure items such as drought management and other non-recurring costs
- assessed operating expenditure items identified by the businesses as new costs or those increasing in real terms above 2011-12 levels, and identified adjustments consistent with prudent and efficient expenditure. If the consultants were not satisfied that the proposed expenditure increases were efficient, they recommended these costs be removed from the forecast
- adjusted the businesses' total forecast operating expenditure to reflect the recommended adjustments to new expenditure and
- considered whether the businesses' adjusted total forecast operating expenditure for the third regulatory period achieves the 1 per cent productivity saving required by the Commission.

Sections 4.5.6 and 4.5.7 discuss the Commission's assessments for non-controllable costs. The Commission adjusted businesses' forecasts for licence fees and the environmental contribution to ensure they are consistent with advice from the relevant regulatory agencies. For the draft decision, the Commission assumed bulk water charges for Southern Rural Water and Lower Murray Water as per their Water Plans.

To calculate the total operating expenditure forecast for each business, the Commission added the controllable operating expenditure forecast (adjusted for growth and a 1 per cent productivity improvement) to the non-controllable operating expenditure forecast.

Cardno's final expenditure reports assessing each business are being released with this draft decision.

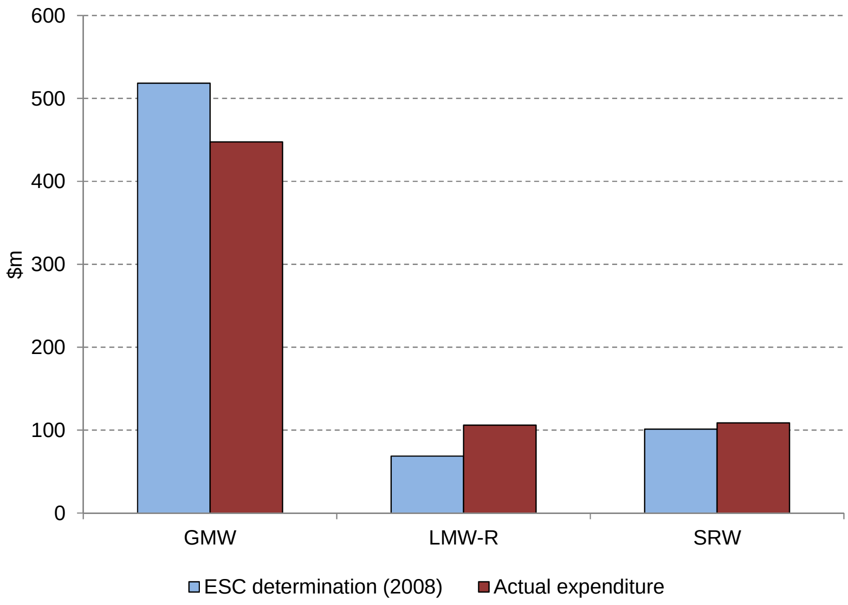
4.3 OVERVIEW OF BUSINESSES' PROPOSALS

For the second regulatory period, Goulburn-Murray Water's operating expenditure was $71 million (14 per cent) lower than the Commission approved total allowance. Lower Murray Water's (Rural) and Southern Rural Water's operating expenditures were higher by $37 million and $7 million than the Commission approved allowances, respectively, which they attributed the higher costs to responding to the drought during the early years of the second regulatory period, and to the flood in 2011.

Goulburn-Murray Water also experienced cost increases from responding to the drought and the flood, but operating expenditure reductions offset these increases. Examples of reductions included a $5.5 million reduction in the Murray Darling Basin Authority (MDBA) contribution, and a $33 million reduction in the asset management plan (particularly on the spur channel systems, which are subject to rationalisation under the Modernisation and Connection Program).

Figure 4.1 compares the actual and Commission approved operating expenditures.

FIGURE 4.1 OPERATING EXPENDITURE, 2008-09 TO 2012-13
Determination compared with actual[a] ($m 2012-13)



[a] Includes estimate for 2012-13.

For the next regulatory period, Lower Murray Water (Rural) and Southern Rural Water forecast operating expenditure which are $2.9 million (3 per cent) and $4.1 million (4 per cent) lower than that for the second regulatory period, respectively (table 4.1). Goulburn-Murray Water forecast operating expenditure of $298 during its three-year regulatory period, which on average is $99 million per year (Goulburn-Murray Water's average operating expenditure for the second regulatory period was $89 million).

Because operating expenditure is directly recovered through revenue and has a significant impact on water prices, the Commission required the businesses to provide both historical data and annual forecasts for the next 10 years. Table 4.1 showed the rural businesses' actual and forecast operating expenditure from 2008-09 to 2017-18. The businesses identified the following key drivers of proposed increases to operating expenditure:

- higher labour costs due to higher wage rates and an increase in employee numbers (for Goulburn-Murray Water, Lower Murray Water and Southern Rural Water)

- higher energy costs due to increasing energy use and the impact of the carbon price introduced on 1 July 2012 (for Goulburn-Murray Water and Lower Murray Water)
- the higher costs of operating and maintaining a hybrid gravity irrigation system during the transition from manual to automatic operation (for Goulburn-Murray Water)
- higher contribution to the MDBA (for Goulburn-Murray Water) and
- an increase from 2013-14 in the environmental contribution levy set by the Minister for Water to meet the costs of managing environmental water.

TABLE 4.1 ANNUAL OPERATING EXPENDITURE
Actual compared with proposed ($m 2012 13)

	2008 09	2009 10	2010 11	2011 12	2012 13	Total WP2	2013 14	2014 15	2015 16	2016 17	2017 18	Total WP3	Difference from WP2 to WP3	
	Actual				*Estimate*		*Forecast*						*$m*	*per cent*
Goulburn-Murray Water [a]	84.2	92.1	94.5	84.2	92.7	**447.57**	97.7	100.9	99.2	n/a	n/a	**297.72**	n/a	n/a
Lower Murray Water (Rural)	21.3	21.1	20.6	22.8	20.1	**106.02**	20.3	20.5	20.6	20.8	20.8	**103.06**	-2.96	-3
Southern Rural Water	23.5	23.1	20.6	20.7	20.7	**108.65**	21.4	21.1	20.9	20.7	20.6	**104.56**	-4.09	-4

[a] Goulburn-Murray Water's price period will run for three years from 1 July 2013. Goulburn-Murray Water's operating cost estimates for 2013-14 to 2015-16 include an adjustment for a 'productivity dividend'. See page 2 of Goulburn- Murray Water's Water Plan. n/a – not applicable.

.

4.4 OVERVIEW OF DRAFT DECISION

The Commission formed its draft decision on operating expenditure after considering the following:

- businesses' Water Plans
- additional information provided by the water businesses to support their forecasts
- consultation with the relevant regulatory agencies
- expenditure assessment reports prepared by Cardno
- water businesses' responses to the consultant's draft report and
- customer and stakeholder submissions.

Including the impact of bulk water charges, the environmental contribution and licence fees (which fall outside the control of the businesses), the Commission's preliminary approved operating expenditure for Goulburn-Murray Water over three years is $297.5 million, which is $0.20 million (0.07 per cent) lower than that proposed by Goulburn-Murray Water (table 4.2). The difference is mainly due to adjustments to the environmental contributions and the Commission's licence fee (section 4.5.6), and allowing the recovery of defined benefits superannuation costs Goulburn-Murray Water incurred in 2012 (section 4.5.2).

The Commission's preliminary approved operating expenditure for Southern Rural Water reflects adjustments to the environmental contributions and the Essential Services Commission's licence fee (section 4.5.6). The Commission proposed to accept Lower Murray Water's (Rural) forecast operating expenditure.

Cardno recommended no adjustments to the rural businesses' proposed controllable operating expenditure. It considered changes in operating expenditure forecasts are consistent with the timing of associated major capital projects and with fulfilling the businesses' obligations and customer service expectations as cost efficiently as possible. It also noted businesses' could explain any divergences from historical trends in forecast operating expenditure.

Based on Cardno's advice and our assessment of the businesses' operating expenditure the Commission proposes to adopt the businesses' proposed forecasts without amendment. We observe the rural businesses forecast flat or declining operating expenditure over the next regulatory period.

As with capital expenditure, the benchmarks that the Commission adopted for each business do not represent the amounts that businesses are required to spend or allocate to particular operational, maintenance and administrative activities. They represent assumptions about the overall level of expenditure (to be recovered through prices) that the Commission considers sufficient to operate the business and to maintain services over the regulatory period.

If the business is inefficient or incurs additional expenditure on other activities, and its actual operating expenditure during the regulatory period subsequently exceeds the benchmarks used to set prices, then lower profits (rather than higher prices) will result. The converse is true if the business makes an efficiency gain during the regulatory period.

The following key issues arose in the Commission's assessment of proposed operating expenditure, largely in line with the operating expenditure drivers that the businesses identified:

- labour
- defined benefits superannuation costs
- electricity
- the carbon price
- the environmental contribution.

The following sections discuss the Commission's adjustments and draft decision on these issues.

TABLE 4.2 DRAFT DECISION FORECAST OPERATING EXPENDITURE
($m 2012-13)

	2013-14	2014-15	2015-16	2016-17	2017-18	Total draft decision	Total proposed by water businesses	Difference	
								($m)	(per cent)
Goulburn-Murray Water [a]	97.6	100.9	99.0	n/a	n/a	**297.5**	297.7	-0.20	-0.07
Lower Murray Water (Rural)	20.3	20.5	20.6	20.8	20.8	**103.1**	103.1	0.00	0.00
Southern Rural Water	21.4	21.1	20.9	20.7	20.6	**104.5**	104.6	-0.04	0.00

[a] Goulburn-Murray Water's price period will run for three years from 1 July 2013.

4.5 ADJUSTMENTS TO KEY INPUTS

4.5.1 LABOUR COSTS

Labour cost is the largest contributor to rural water businesses' operating expenditure. In the second regulatory period, total labour costs comprised 57 per cent of the businesses' total operating expenditure. Of the three rural businesses, Goulburn-Murray Water had the most significant increase in labour costs, at 13 per cent per year on average over the second regulatory period. It gave the following explanation:

- It hired six additional staff for its expanded compliance regime. This regime aims to assure customers that scarce resources are being allocated fairly and according to licence conditions.
- Staff numbers in the customer service and billing divisions increased from 24 to a peak of 74, given the creation of the Water Registry and increased demand for water trading.
- Staff overtime and contractor hiring increased, to manage the short term response to maintain or restore supply due to the 2011 floods.

In the 2011 guidance paper, the Commission expected improved inflows and higher storage levels across the state to result in lower labour costs linked to major capital works, drought management and restrictions enforcement. It also specified Water Plans should justify businesses' estimated staff numbers, and noted it will apply greater scrutiny to businesses forecasting increasing employment.[9]

Industry wide, businesses' forecast labour costs will increase by an average 0.9 per cent per year (in real terms) over the next regulatory period.[10] The Commission considered whether labour cost increases (either real increases in wages of existing staff or additional staff) are justifiable and represent a reasonable expenditure for an efficient business.

[9] Essential Services Commission 2011, *2013 Water Price Review — guidance on Water Plans*, December, p. 39.

[10] Labour costs for Lower Murray Water are the total for its rural and urban operations.

Wage rates

The Commission's approach to assessing wage rates is governed by the Victorian Government's wages policy. [11] The policy states annual wage increases should not exceed a nominal 2.5 per cent (equivalent to the Treasury inflation forecast of 2.5 per cent), and any real increases should be offset by real and bankable reductions in other wages costs. Currently, the businesses' wage increases for most staff are subject to enterprise bargaining agreements (EBAs) approved by the Minister for Finance (table 4.3).

TABLE 4.3 TERMS AND STATUS OF EBAS

Business	Status	Terms
Goulburn-Murray Water	Will expire in August 2015	4% nominal
Lower Murray Water	New EBA was signed in January 2013	2.5% nominal plus an additional 1.5% increase tied to efficiency gains
Southern Rural Water	Will expire in September 2014	4% nominal (a proposed 1% real increase after 2013-14)

Cardno took the following approach to assessing businesses' wage forecasts:

- Wage increases in existing EBAs will apply until the EBA expires.
- Once a new EBA applies, no real growth will occur in wages.

Cardno considered the businesses' proposals are consistent with the new wages policy and did not recommend any adjustments. The Commission agrees that Lower Murray Water's and Southern Rural Water's proposals are not inconsistent with the new wages policy. But, it reiterates that the policy requires any real wage increases to be offset by real and bankable reductions in other wages costs.

Goulburn-Murray Water's proposal will not be adjusted because its existing EBA will be effective during its proposed three year pricing period.

11 Department of Treasury and Finance 2012, *Public sector workplace relations policies*, December, pp. 7–8.

Staff levels

Southern Rural Water proposed no increases in its full time equivalent (FTE) staff, intending to maintain the 2011-12 staff level.

Lower Murray Water informed Cardno that FTEs fell by 23 in 2011-12, which resulted in ‘some reduction in services, increased workload pressure on some staff and the need to increase the use of external resources’.[12] As a result, Lower Murray Water increased its FTEs by three in 2012-13 and proposed another three staff for 2013-14.

Goulburn-Murray Water is continuing to modernise its irrigation delivery system from a manually operated system, which will change the nature of its labour force. It will rely less significantly on labour intensive irrigation operation and will need more staff who can manage, operate and maintain an automated system. For phase 1 of its organisational restructuring, Goulburn Murray Water forecast 140-150 positions out of 629 existing staff could be surplus, and proposed 106 new positions. These changes would be equivalent to a net loss of 34-49 staff. Phase 1 restructuring will affect mostly the retail and operations area, while phase 2 will affect mostly business support functions. Goulburn-Murray Water expects to achieve its target $6 million (1 per cent cumulative productivity savings over its three year price path) from this organisational restructuring.

Cardno assessed the businesses’ forecast FTEs on a case-by-case basis. It also compared the rural businesses’ number of FTEs and labour costs per FTE. Cardno concluded:

- Goulburn-Murray Water’s FTE over the second regulatory period increased significantly compared with that of the other businesses. The Commission understands the increase to be due to Goulburn-Murray Water absorbing the staff of the Northern Victoria Irrigation Renewal Project (NVIRP).
- Goulburn-Murray Water’s labour cost per FTE for the next regulatory period will be higher than that of the other rural businesses, as a result of the business’s changing labour force to manage the automated operations.

[12] Cardno 2013, *2012 Review of water prices*, February, page 20.

Cardno considered the businesses' proposed labour costs are reasonable. The Commission reiterates its expectations that the new wages policy will require any real increases in wage growth to be offset by real and bankable reductions in other wages costs. It requests Goulburn-Murray Water to provide any further updates on its organisational restructuring before the Commission releases its final decision.

See Cardno's report (chapter 4) for each rural business for more details.

4.5.2 DEFINED BENEFITS SUPERANNUATION COSTS

Each of the water businesses has some employees on defined benefits superannuation arrangements through the Local Authorities Superannuation Fund (managed by Vision Super), which closed to new members in 1993. Under the fund, businesses are not required to make contributions when the returns are high, as was the case for several years up to 2007-08. Vision Super determined in December 2011 that recent reductions in the share market resulted in a fund shortfall of $406 million and required additional contributions from the water businesses. Vision Super advised the businesses that they could pay the additional contributions as a lump sum, by equal instalments over 15 years (at an interest rate of 7.5 per cent), or as a combination of the two approaches.

For Cardno's expenditure review, Goulburn-Murray Water provided a receipt for its payment to Vision Super of $0.6 million in 2012. It also informed Cardno that a $0.6 million payment may be required during the third regulatory period. Cardno recommended against the proposed allowance for the third regulatory period, given the uncertainty of the payments.

Goulburn-Murray Water accepted Cardno's recommendation but requested that the revenue cap for the third regulatory period include the unforeseeable $0.6 million payment in 2012. Deloitte recommended the Commission adopt this approach for regional businesses. As a result, the Commission adjusted Goulburn-Murray Water's forecast operating expenditure to reflect the recovery of the superannuation payment in 2012. The yearly allowance was based on a 15 year repayment at a 5.75 per cent interest rate. Deloitte considered 'using a "benchmark" 15 year period for all businesses represents a balanced outcome which treats each business equally, allows recovery of the payment, and does not impose an undue burden on customers in the short term'.[13]

For the assumed borrowing rate to be used, Deloitte recommended 5.75 per cent, which is the rate at which Goulburn-Murray Water advised it can borrow (including the financial accommodation levy).

The Commission agreed with Cardno and Deloitte that the forecast should not allow for additional future payments, given the stock market is volatile and customers should not be made to pay costs that are uncertain. Nevertheless, the Commission will obtain updates from Vision Super before releasing its final decision.

See chapter 2 of Deloitte's overview report for details, and volume II of this draft decision for the adjustments to Goulburn-Murray Water's forecast.

Southern Rural Water did not indicate any defined benefits superannuation costs in its Water Plan, and Cardno confirmed these costs are not an issue for this business. Lower Murray Water did not indicate this cost item in its Water Plan for rural operations, but did so in its Water Plan for urban operations.

---

[13] Deloitte 2013, *Essential Services Commission, Expenditure review Water Plan 3: final overview document*, February, section 2.10.

4.5.3 ENERGY EXPENDITURE

Only Goulburn-Murray Water proposed increased energy expenditure. The increase will primarily reflect higher energy use, which will result from automation of its operations and projected greater groundwater pumping.[14] The business proposed no real increases in energy prices for the third regulatory period.

Lower Murray Water buys electricity through Procurement Australia (PA) and forecast no real increases in electricity prices, consistent with the new contract being negotiated with PA. For the third regulatory period, it forecast a fixed annual energy cost, at its 2011-12 level.

Because Southern Rural Water's water supply is gravity fed, its electricity cost is mostly for office use and is a minor cost in its BAU estimates. The business does not include energy as a separate cost in its forecast for the third regulatory period.

Cardno assessed the rural water businesses' forecast energy use on a case-by-case basis. It also compared the businesses' forecast energy cost per kilowatt hour: GWM Water will have the lowest energy cost per kilowatt hour, followed by Goulburn-Murray Water and then Lower Murray Water (Rural).

Cardno considered the businesses' proposed energy costs are conservative and recommended them as reasonable. The Commission accepts Cardno's recommendations.

See Cardno's report (chapter 4) for each rural business for more details.

[14] Goulburn-Murray Water noted its modelling suggested greater rainfall in the next regulatory period than in the second regulatory period's drought sequence, leading to raised water table levels. As a result, it will have 'to pump more groundwater, to manage the risks of water logging and salinity, increasing our energy usage compared with historic [sic] levels'.

4.5.4 CARBON PRICE (EXCLUDING ENERGY COSTS)

The Commonwealth Government introduced a carbon price on 1 July 2012, which will have indirect implications for all water businesses. Input costs may change as suppliers (including energy suppliers) pass on the carbon price. Indirect effects may include: reduced demand for water because energy costs are higher; reduced water catchment yields as people plant more trees in catchment areas; and the impacts of major customers increasing or decreasing demand for water as demand for their product changes.

In the 2011 guidance paper, the Commission specified Water Plans need to identify the costs affected by a carbon price and the extent of the assumed change. Water businesses must demonstrate their forecasts are reasonable, using the latest estimates of cost impacts. A price on carbon means businesses need to justify any proposed carbon mitigation programs via a cost–benefit analysis. [15]

In its response to Cardno's draft expenditure report, Goulburn-Murray Water noted it had not fully accounted for the impact of the carbon price in the operating expenditure submitted in its Water Plan. It submitted the results of its study on the impact of carbon price, noting the carbon price will increase its forecast operating expenditure by around 1 per cent per year and its capital expenditure by 0.6 per cent.

In its review of regional water businesses' expenditure, Deloitte stated the carbon price appears to be having a relatively small impact on non-energy cost inputs for water businesses. It also noted uncertainties about the future carbon price. As a result, Deloitte recommended:

- removing any broad based operating expenditure increases that the businesses proposed as a result of the carbon price
- including proposed increases if businesses can demonstrate material carbon price impacts on individual cost categories (for example, by providing documentation from suppliers outlining cost increases in 2012-13 as a result of the carbon price) and
- excluding proposed increases if documentation is not provided and/or costs are immaterial.

---

15 Essential Services Commission 2011, *2013 Water Price Review — guidance on Water Plans*, December, p. 41

- The Commission accepts Deloitte's recommendation as reasonable. Its draft decision, therefore, is to not allow for the impact of the carbon price beyond inflation. As a result, the Commission will not amend Goulburn-Murray Water's proposed operating expenditure to add the impact of carbon price. If Goulburn-Murray Water can provide more supporting information (such as documentation from suppliers) before the Commission makes its final decision, then the Commission would re-assess its draft decision.

The Australian Industry Group's (AiGroup) submission to the Commission noted trade exposed businesses are facing difficulties in passing on increased costs due to the carbon price, and the majority are not intending to pass on the increased costs.[16] The AiGroup noted its recent survey of a broad group of manufacturing, services and construction businesses on the initial impact of the carbon price showed:

- more than 60 per cent saw immediate input price rises, but less than 40 per cent intended to raise prices on any of their products and
- of those that did intend to increase prices, three quarters did so on less than half of their products, and only 7 per cent raised prices on all products.

On the basis of Deloitte's recommendations and the AiGroup submission, the Commission does not propose to make an allowance for non-energy costs related to the carbon tax, other than that covered by inflation.

4.5.5 PRODUCTIVITY AND EFFICIENCY

Goulburn-Murray Water forecast a cumulative $6 million productivity saving over the three year regulatory period. This exceeds our productivity hurdle rate of 1 per cent per annum. It will source these savings from its ongoing organisational restructuring.

[16] Australian Industry Group 2013, *Feedback — water price review 2013-14 to 2017-18*.

In their respective Water Plans, both Lower Murray Water and Southern Rural Water targeted a 1 per cent per year productivity saving over the third regulatory period but did not reduce their forecast operating expenditure by this amount. Lower Murray Water identified Supervisory Control and Data Acquisition (SCADA) upgrades, the installation of smart meters and greater irrigation pumping efficiency as potential sources of savings. Southern Rural Water noted it will generate efficiencies through targeted capital works and improved work processes resulting from implementing a new asset management system in 2013-14.

4.5.6 ENVIRONMENTAL CONTRIBUTION AND LICENCE FEES

The Commission adjusted the proposed operating expenditure forecasts to ensure forecast licence fees and environmental contributions are consistent with the advice provided by the relevant regulatory agencies.

Environmental contribution

The businesses' forecast operating expenditure includes costs associated with their environmental contribution to the Victorian Government under section 192 of the *Water Industry Act* (1994). The Department of Sustainability and Environment (DSE) advised the Commission of the environmental contribution amount for each business commencing on 1 July 2013. These amounts will be held constant in nominal terms during the next regulatory period. Table 4.4 shows the total contributions over the five year period.

TABLE 4.4 ENVIRONMENTAL CONTRIBUTION OVER THIRD REGULATORY PERIOD
($m 2012-13)

	Business proposed	Department Advised	Adjustment
Goulburn-Murray Water	5.1	4.8	-0.3
Lower Murray Water (Rural)	1.7	1.7	0.0
Southern Rural Water	2.0	1.9	-0.1

Licence fees

The water businesses are required to pay licence fees to agencies that regulate aspects of their activities. For rural businesses in particular, they are required to pay licence fees as set by the Minister for Finance, in consultation with the Minister for Water, under section 4H(2) of the *Water Industry Act*. The licence fee is for the costs that the Essential Services Commission incurs in administering the economic regulatory framework. Rural businesses are not required to pay licence fees to the Department of Health or to EPA Victoria.

The businesses' operating expenditure forecasts include estimates of the Commission licence fees over the regulatory period (table 4.5). The Commission assumed the total licence fees payable to it for the next regulatory period will be similar to the fees for the second regulatory period, so no real increase will occur across the periods. However, it adjusted the 2009-10 figure, which was an abnormally low licence fee. The fee profile across the next regulatory period is assumed to be flat for the first three years, stepping up over the final two years to reflect increased costs associated with the price review for the fourth regulatory period.

TABLE 4.5 COMMISSION LICENCE FEES OVER THIRD REGULATORY PERIOD
($m 2012-13)

	Business proposed	Commission revised	Adjustment
Goulburn-Murray Water	0.44	0.34	-0.10
Lower Murray Water (Rural)	0.10	0.10	0.00
Southern Rural Water	0.14	0.16	0.01

4.5.7 BULK CHARGES

Table 4.6 sets the businesses' proposed operating expenditure for external bulk water charges (excluding temporary markets). These forecasts are consistent with the businesses' actual bulk water charges for 2011-12 and 2012-13. For the draft decision, the Commission assumed bulk water charges for the relevant businesses as per Water Plans.

TABLE 4.6 FORECAST EXTERNAL BULK WATER CHARGES ($m 2012-13 per year)

Business	Total proposed	Bulk water suppliers
Lower Murray Water (Rural)	7.1	Goulburn-Murray Water
Southern Rural Water	0.5	Melbourne Water

4.5.8 FINDINGS ON SHARED SERVICES PROVISION AND COMPETITIVE PROCUREMENT

In the 2011 guidance paper, the Commission required the businesses:

- to summarise briefly in their Water Plans how they used shared services to deliver costs savings over the second regulatory period and
- to identify in their Water Plans whether they adopted a strategic approach to procurement, including which elements are outsourced or provided inhouse.

The guidance paper also indicated the Commission will look for evidence that all water businesses factored potential savings from shared services provision into their operating expenditure forecasts, and whether businesses looked for opportunities to implement shared services.

Goulburn-Murray Water noted in its Water Plan:[17]

> *… sharing of services, based on current conditions, could not be feasibly implemented give our location and specific requirements. Notwithstanding the lack of opportunities to share services between businesses, we have explored opportunities to coordinate service delivery between functional parts and separate locations across the business.*

[17] Goulburn-Murray Water 2012, *Water Plan 3 submission*, September, p. 39.

The business reported it has a policy of benchmarking all procured services and regularly procures external contractors to help deliver service outcomes. For the second regulatory period, the majority of procurement activities were undertaken by the FutureFlow alliance, which procured approximately $300 million worth of work through competitive bidding process. The majority of the contracts were awarded via a publicly advertised tender process.

The Commission encourages the businesses to continuously improve their initiatives in shared services and competitive procurement in the third regulatory period.

4.6 DRAFT DECISION

The Commission proposes to approve Lower Murray Water’s (Rural) forecast operating expenditure for the next regulatory period. The Commission proposes to approve operating expenditure for Goulburn-Murray Water and Southern Rural Water which are slightly lower that their proposal for the next regulatory period. See table 4.2 for details.

5 CAPITAL EXPENDITURE

5.1 INTRODUCTION

Capital expenditure is a key component of the rural water businesses' revenue requirement. The businesses recover net capital expenditure from customers over time by adding it to the regulatory asset base (RAB). Prices reflect capital expenditure through a return on the RAB (that is, the weighted average cost of capital [WACC] multiplied by the RAB) and a return of the RAB (through regulatory depreciation).

The Commission analysed the rural water businesses' forecast capital expenditure for the next regulatory period against the requirements of the *Water Industry Regulatory Order* (WIRO) and the Australian Competition and Consumer Commission's (ACCC) Water Charge (Infrastructure) Rules 2010 (WCIR). The WIRO applies to Southern Rural Water. The WCIR applies to Goulburn-Murray Water and Lower Murray Water (Rural).

5.2 APPROACH TO ASSESSING CAPITAL EXPENDITURE

As discussed in chapter 4, the WIRO requires the Commission to ensure prices levied by the businesses provide them with a sustainable revenue stream that does not reflect monopoly rents or inefficient expenditure, and that allows the business to recover expenditure on renewing and rehabilitating existing assets. The Commission must also be satisfied that the proposed expenditure forecasts are efficient and account for a planning horizon beyond the five year regulatory period. Further, the WIRO requires approved prices, or the manner in which they are determined, to provide incentives for the businesses to pursue efficiency improvements over the regulatory period.

The Commission sought to identify and assess the key projects that represent a large proportion of the total capital expenditure forecast, rather than assess each business's entire forecast capital expenditure. As specified in the 2011 guidance paper, the Commission assessed whether each business's forecast capital expenditure would efficiently meet obligations imposed by government (including technical regulators) and customers' service expectations. It also assessed whether:

- the businesses compared proposed trends in capital expenditure with historical trends, to identify the reasons for divergences from historical trends, together with any other relevant factors
- the proposed new key capital works are consistent with efficient long term expenditure on infrastructure services (based on a best practice asset management framework that considers risk and systemwide needs)
- changes in operating costs are consistent with the timing of key capital projects
- the timeframe for delivering the proposed new capital expenditure is reasonable, given the business's delivery of key projects in the past and
- the risk sharing and incentive/penalty arrangements with contractors are based on a symmetrical sharing of risk for delivery or non-delivery of projects.

The approach required for assessing capital expenditure under appendix B of the WCIR is broadly similar to the Commission's above approach. In addition, the WCIR require:

- the Commission to assess whether the businesses' asset management and planning frameworks reflect best practice and
- forecasts to be based on reasonable assumptions of the efficient costs to be incurred in the regulatory period.

The Commission was more cautious of forecasts if the proposed expenditure was discretionary or broadly linked to government or policy objectives but businesses did not specify projects or programs. Additionally, if proposed increases in capital expenditure were driven by customer preferences rather than regulatory obligations, then the Commission expected businesses to demonstrate appropriate consultation to establish that customers need/prefer the proposed programs and are willing to pay for them.

Businesses were asked to identify in their Water Plans those projects that are uncertain in scope or timing, or that require further studies, or for which government funding is uncertain. They were also asked to suggest potential mechanisms for dealing with that uncertainty. In the 2011 guidance paper, the Commission recognised the merit of introducing pass-through mechanisms to deal with uncertainty around capital projects. Chapter 12 discusses the Commission's approach to adjusting prices, including how to account for capital projects with uncertain timing and costs.

The Commission engaged Cardno to review the prudency and efficiency of proposed capital expenditure. It instructed Cardno on the matters that it must consider in the review, including the WIRO and WCIR requirements. The Commission also drew the consultant's attention to any relatively large movements in the expenditure trends during the second regulatory period. Cardno conducted its independent and professional assessment of the respective water businesses' expenditure forecasts in four months. It issued a draft report to each water business, after which it received further information and clarification from the businesses, and then provided a final report to the Commission.

Cardno undertook extensive information gathering and data analysis in preparing its final reports to the Commission. The Commission has confidence in Cardno's findings and recommendations, and used its final reports to decide on expenditure adjustments. Where the Commission decided not to accept the consultant's recommendation, it has outlined the reason(s) in this draft decision.

For Cardno's approach to assessing capital expenditure, see Cardno's expenditure reports, which are being released with this draft decision.

5.3 OVERVIEW OF BUSINESSES' PROPOSALS

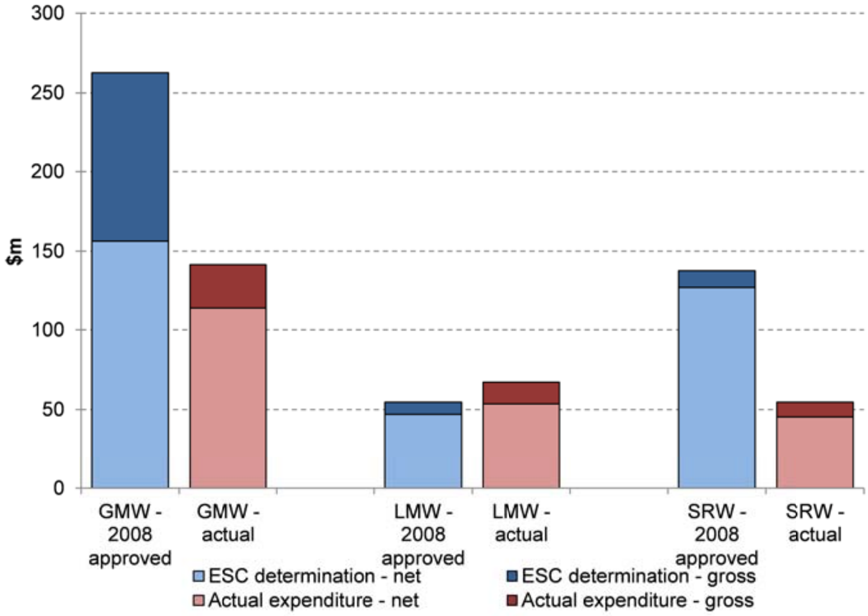
Capital expenditure increased significantly in the second regulatory period reflecting the impact of large one-off projects aimed at augmenting water supply. Figure 5.1 compares the actual and Commission approved capital expenditure for the second regulatory period for each business.

Net capital expenditure excludes projects that will receive funding from government or through customer contributions.

Goulburn-Murray Water's significant underspend was due largely to the transfer of major capital works on irrigation system modernisation to the Northern Victoria Irrigation Renewal Project (NVIRP), which the Victorian and Commonwealth governments funded. Southern Rural Water's lower capital expenditure was a result of delays in planned works for the Macalister Irrigation District (MID) 2030, and underspending on some minor projects and the MID channel automation project.[18]

FIGURE 5.1 GROSS AND NET CAPITAL EXPENDITURE, 2008-09 TO 2012-13

Determination compared with actual[a] ($m 2012-13)



[a]includes estimate for 2012-13.

[18] Cardno noted capital expenditure forecast for the second regulatory period included MID 2030 planned works of $97 million. Final arrangements for the full program are ongoing, but leading works have begun

For the next regulatory period, Goulburn-Murray Water forecast net capital expenditure of $82.6 million, which on average is a $27.5 million capital spend per year (Goulburn-Murray Water's average net capital spending for the second regulatory period was $22.7 million). Southern Rural Water forecast a net capital expenditure of $45.6 million, higher by $0.2 million than its total net capital expenditure for the second regulatory period. Lower Murray's proposal is $34.1 million, which is $19.4 million lower than its actual net capital spend for the second regulatory period.

Table 5.1 sets out the actual and forecast gross and net capital expenditure.

TABLE 5.1 ANNUAL GROSS AND NET CAPITAL EXPENDITURE
Actual compared with proposed ($m 2012-13)

	2008-09	2009-10	2010-11	2011-12	2012-13	Total WP2	2013-14	2014-15	2015-16	2016-17	2017-18	Total WP3	Difference from WP2 to WP3	
	Actual				*Estimate*		*Proposed*						*$m*	*per cent*
Goulburn-Murray Water (net) [a]	17.8	22.1	28.4	19.1	26.4	**113.7**	22.1	33.8	26.7	n/a	n/a	**82.6**	n/a	n/a
Goulburn-Murray Water (gross) a	27.9	28.3	34.9	22.0	28.4	**141.6**	22.4	34.3	27.4	n/a	n/a	**84.2**	n/a	n/a
Lower Murray Water Rural (net)	15.1	18.6	5.6	7.3	7.0	**53.5**	17.8	9.1	2.5	2.3	2.4	**34.1**	-19.4	-0.4
Lower Murray Water Rural (gross)	26.3	20.5	5.9	7.6	7.1	**67.4**	17.8	9.1	2.5	2.3	2.4	**34.1**	-33.3	-0.5
Southern Rural Water (net)	15.8	8.3	7.5	7.2	6.6	**45.3**	10.2	8.6	8.9	8.5	9.4	**45.6**	0.2	0.0
Southern Rural Water (gross)	16.5	8.4	7.5	8.2	14.0	**54.7**	15.0	15.2	12.1	11.0	10.0	**63.3**	8.6	0.2

Note: Net capital expenditure excludes projects that will receive funding from government or through customer contributions. [a] Goulburn-Murray Water's regulatory period will run for three years from 1 July 2013. . n/a – not applicable.

The key drivers of proposed capital expenditure for the third regulatory period are:

- renewals and upgrades of existing infrastructure to maintain services and
- compliance with the requirements of technical regulators such as DSE (for example, dam safety) and the Department of Health (for example, water quality).

Key projects proposed by the rural water businesses include:

- Goulburn-Murray Water's improvements to dam safety at the Tullaroop Reservoir, by constructing a filter buttress across the main embankment section and upgrading existing instrumentation
- Southern Rural Water's construction of the Southern Cowwarr balancing storage to reduce order lead time for customers and improve the consistency of flow rates and
- Southern Rural Water's outlet rationalisation and increased automation of outlets for the MID, leading to improved service levels and compliance with measurement standards.

Table 5.2 (and volume II) details the key capital expenditure projects and programs for each water business as detailed in their Water Plans. For most businesses, a small group of projects account for a significant proportion of their total capital expenditure.

TABLE 5.2 PROPOSED KEY CAPITAL PROJECTS ($m 2012-13)

Proposed project/program	Reason	Proposed expenditure
Goulburn-Murray Water		
Tullaroop reservoir dam safety upgrade	Compliance	8.2
Mildura/Merbein salinity interception scheme	Renewal/ compliance	4.9
Access tracks and fencing	Improved service	13.0
Road culvert and crossing replacement	Renewal	5.8
Lower Murray Water (Rural)		
Mildura irrigation system essential replacements and overhauls	Renewals	6.8
Merbein switchboard replacement and pump overhauls	Renewals	4.6
Automatic channel control at Red Cliffs and Merbein	Improved service	3.0
Red Cliffs switchboard replacement and pump overhauls	Renewal	2.5
Irrigation meter replacement program	Renewal	1.8
Irrigation pipeline and minor replacement	Renewal	1.4
Southern Rural Water		
MID— Southern Cowwarr balancing storage	Improved service	6.5
MID—Nambrok Denison regulator retrofit	Renewal	4.8
Werribee irrigation—piping or lining 4/1 channel	Renewal	4.1
MID—outlet rationalisation	Improved service/renewal	3.8

5.4 OVERVIEW OF DRAFT DECISION

The Commission formed its draft decision on capital expenditure after considering the following:

- businesses' Water Plans
- additional information provided by the water businesses to support their forecasts

- consultation with the relevant regulatory agencies
- expenditure assessment reports prepared by Cardno
- water businesses' responses to the consultant's draft report and
- customer and stakeholder submissions.

Cardno recommended no adjustment to the businesses' forecast capital expenditure (table 5.3). It concluded the forecasts are appropriate in relation to each business's key drivers and obligations, and noted all businesses provided robust justifications and reasonable cost estimates for the key projects reviewed.

As part of its assessment, the Commission observed:

- Goulburn-Murray Water spent significantly less (42 per cent) than the capital expenditure allowance that the Commission approved for the second regulatory period (because the business transferred a significant portion of its capital works program to NVIRP as part of its wider modernisation program).
- Lower Murray Water spent $13 million (or 23 per cent) more than its capital expenditure allowance for the second regulatory period (primarily as a result of the rescoping and higher tendered costs for works on the Robinvale high pressure system). But it significantly reduced its forecast capital expenditure for the next regulatory period. Lower Murray Water limited its forecast to renewal projects that are high priority in relation to risk, and delayed projects that depend on government funding.
- Southern Rural Water spent $43 million (31 per cent) less than its capital expenditure allowance for the second regulatory period (as a result of underspends in minor projects and the MID channel automation project). For the next regulatory period, the business proposed a further reduction of $31 million (33 per cent) in its capital expenditure. It intends to focus on irrigation services and bulk water, which have been its main areas of capital investment in the past.

Given the above observations and Cardno's recommendations, the Commission proposes to accept the rural water businesses' forecast capital expenditure without adjustments (table 5.3).

TABLE 5.3 DRAFT DECISION FORECAST CAPITAL EXPENDITURE 2013-14 TO 2017-18
($m 2012-13)

	2013-14	2014-15	2015-16	2016-17	2017-18	Total draft decision	Total proposed by water businesses	Difference	
								$m	*per cent*
Goulburn-Murray Water (net)	22.1	33.8	26.7	0.0	0.0	82.6	82.6	0.0	0.0
Goulburn-Murray Water (gross)	22.4	34.3	27.4	0.0	0.0	84.2	84.2	0.0	0.0
Lower Murray Water Rural (net)	17.8	9.1	2.5	2.3	2.4	34.1	34.1	0.0	0.0
Lower Murray Water Rural (gross)	17.8	9.1	2.5	2.3	2.4	34.1	34.1	0.0	0.0
Southern Rural Water (net)	10.2	8.6	8.9	8.5	9.4	45.6	45.6	0.0	0.0
Southern Rural Water (gross)	15.0	15.2	12.1	11.0	10.0	63.3	63.3	0.0	0.0

5.5 ADJUSTMENTS TO CAPITAL EXPENDITURE FORECASTS

5.5.1 ADJUSTMENTS FOR TIMING OF KEY PROJECTS

A large proportion of proposed capital expenditure for each business is linked to five key projects. Cardno noted most of the projects are works programs rather than individual projects. A key issue is whether each business can deliver these key programs within the proposed timeframe, given they often require detailed planning and approvals before they can proceed. For this reason, Cardno was asked to assess whether each business could deliver its proposed capital expenditure program over the regulatory period, accounting for:

- the business's performance against previous capital expenditure programs and its demonstrated capacity to deliver against capital budgets of the size of those proposed
- the current approval status of proposed projects
- the internal and external resources available to the business to deliver these projects
- the business's obligation to deliver projects in the third regulatory period abd
- the business's project management capability.

Overall, given the smaller capital works program for the third regulatory period, Cardno concluded all businesses are likely to be able to deliver their proposed capital works as forecast.

5.5.2 ADJUSTMENTS FOR LACK OF JUSTIFICATION OR INSUFFICIENT SUPPORTING DOCUMENTATION

Cardno concluded the capital expenditure forecasts are appropriate in relation to each business's key drivers and obligations, and noted all businesses provided robust justifications and reasonable cost estimates of works required.

5.5.3 ADJUSTMENTS FOR UNCERTAINTY

For the second regulatory period, the Commission approved a mechanism for managing uncertain or unforeseen events. Under the mechanism, the businesses can apply for a price adjustment to account for significant events that were uncertain or unforeseen at the time of the original determinations. The Commission intends to adopt this mechanism (chapter 12) in the next regulatory period.

Lower Murray Water excluded the Sunraysia Modernisation Project from its Water Plan for the next regulatory period, but the Commonwealth Government recently announced the $103 million funding available for this project. Lower Murray Water advised Cardno that the project is likely to change its operating circumstances, and that its Water Plan and price determination will likely need revisiting. An adjustment will not be needed for at least one year and until further details are known. Lower Murray Water thus advised Cardno that it wishes, at this stage, to proceed with this price determination.

The Commission will continue to monitor Lower Murray Water’s plans for the Sunraysia Modernisation project before making its final decision.

5.6 OTHER CAPITAL EXPENDITURE ISSUES

5.6.1 ASSET MANAGEMENT

In the 2011 guidance paper, the Commission noted it expects businesses to plan for and manage effectively the renewal and maintenance of existing infrastructure assets. It also expects the augmentation of infrastructure to meet the future requirements of new and existing customers for water and sewage services. Both the WIRO and the WCIR require the capital expenditure forecasts in the Water Plans to account for a planning horizon beyond the regulatory period.

The WCIR also requires the Commission to assess whether the businesses’ asset management and planning frameworks reflect best practice. Best practice asset management requires: the establishment of asset databases, the use of geographic information systems (GIS) and SCADA systems, the establishment of condition assessment and internal performance monitoring, and the development of tools to evaluate whether to renew or rehabilitate assets. An audit of each business’ asset management plans and systems was conducted in 2011.

In its expenditure reports, Cardno made the following observations about the businesses' asset management:

- Cardno agreed with the 2011 audit report[19] that Goulburn-Murray Water has a strong management focus and is adapting its asset management strategies to having a more technically complex asset portfolio out of the Modernisation and Connections Program. It considered Goulburn Murray Water should develop a 30 year renewals forecast based on a rationalised channel network and Modernisation and Connections Program assets.
- The 2011 audit report found no significant level of risk that Lower Murray Water's asset management processes and practices could reduce the quality, reliability and safety of the services provided, but it made recommendations. Cardno noted Lower Murray Water has begun to implement a number of the audit report's recommendations.
- Southern Rural Water is implementing a new asset management system in 2013-14, to improve the information available to the business and allow it to optimise its asset management processes. Cardno noted the new system will address most of the recommendations in the 2011 audit report.

The Commission understands all the businesses are improving their asset management systems in response to the recommendations in the 2011 audit reports. On behalf of DSE, the Commission will continue to audit the asset management capability of all water businesses.

5.6.2 PERFORMANCE AND IMPLEMENTATION OF KEY CAPITAL PROJECTS

The Commission will monitor the implementation of key capital projects against the schedule in the final determination, and will publish details in its annual performance reports of the businesses.

[19] The annual asset management audit of the water businesses was a requirement under their respective Statement of Obligations. It is being administered by the Commission on behalf of the Department of Sustainability and Environment. The last audit was conducted in 2011.

Also, given the major impact of a small number of projects on the total capital expenditure program of each business, the Commission will identify businesses that fail to deliver key capital projects against the timelines proposed in their Water Plans. Where necessary, it will seek an explanation. While the Commission acknowledges that priorities may change over five years it is important that water businesses inform their customers of any material changes.

5.6.3 GOVERNMENT CONTRIBUTIONS

The Victorian Government is expected to contribute to a number of capital projects in the water sector (such as new town water and sewerage schemes and recycled water projects). The value of any contributions received from the government should be netted off the regulatory asset base (RAB), to ensure the business does not also recover the costs from customers through prices.

Between the draft and the final decisions, the Commission will clarify with DSE whether there is any better information on known government contributions that the businesses will receive in the next regulatory period. At the beginning of the next regulatory period, the Commission will adjust the businesses' RAB to account for all government contributions received during the second regulatory period.

5.7 DRAFT DECISION

The Commission proposes to approve Goulburn-Murray Water's, Lower Murray Water's (Rural) and Southern Rural Water's forecast capital expenditure for the next regulatory period without any adjustments. See table 5.3 for details.

6 FINANCING CAPITAL INVESTMENTS

6.1 INTRODUCTION

Under the Water Industry Regulatory Order (WIRO) and the Australian Competition and Consumer Commission's (ACCC's) Water Charge (Infrastructure) Rules (WCIR), the Commission must approve a rate of return that will apply to each business's regulatory asset base (RAB). The requirements of the WIRO apply to Southern Rural Water. The WCIR requirements apply to Goulburn-Murray Water's and Lower Murray Water's rural operations.

This chapter sets out the Commission's draft decision on the assumptions rural water businesses used in their Water Plans for financing capital investments, namely the initial regulatory asset values, the rate of return on investments and methods for calculating regulatory depreciation.

6.2 ROLLING FORWARD THE REGULATORY ASSET BASE

Each water business's RAB represents the value, as assessed by the Commission, of its capital investments. This is the value on which businesses can expect to earn a return (return on capital), and the value that is returned to the business over the economic life of the assets (as regulatory depreciation).

The opening RAB for each business at 1 July 2013 is calculated as follows:

Opening RAB 1 July 2013 =	Opening RAB at 1 July 2007
plus	Capital expenditure (net)2007-08 to 2011-12[20]
(minus)	Regulatory depreciation 2007-08 to 2011-12
(minus)	Proceeds from disposal of assets $_{\text{2007-08 to 2011-12}}$
plus	Assumed capital expenditure (net) $_{\text{2012-13}}$
(minus)	Regulatory depreciation $_{\text{2012-13}}$
(minus)	Assumed proceeds from disposal of assets $_{\text{2012-13}}$

For subsequent years in the third regulatory period, the opening asset base for each year is calculated using annual forecasts for net capital expenditure, customer contributions, regulatory deprecation and disposals.

An adjustment will be made for any difference between assumed and actual net capital expenditure for 2012-13 when the opening RAB is calculated for the fourth regulatory period.

Below, the Commission have separated its analysis of actual net capital expenditure for 2007-08 to 2011-12 and forecast net capital expenditure for 2012-13 consistent with the calculation for the opening RAB above.

20 Capital expenditure (net) is equal to gross capital expenditure minus any customer or government contributions.

6.2.1 ACTUAL NET CAPITAL EXPENDITURE, 2007-08 TO 2011-12

Capital costs can be lumpy by nature (reflecting factors such as weather conditions), so businesses can go above or below the capital allowance approved for the second regulatory period, depending on their circumstances. The Commission focused its analysis on businesses that substantially exceeded the capital expenditure forecasts for the second regulatory period.

Table 6.1 compares net capital expenditure approved for the second regulatory period and proposed actuals from water businesses.

TABLE 6.1 NET CAPITAL EXPENDITURE
Approved for the second regulatory period compared to business actuals, 2007-08 to 2011-12, ($m 2012-13)

Water Business	Approved	Business proposed	Difference	Per cent
Goulburn-Murray Water	142.6	103.1	-39.5	-27.7
Lower Murray Water (Rural)	54.0	59.9	5.9	11.0
Southern Rural Water	95.8	46.9	-49.0	-51.1
Total	**292.4**	**209.9**	**-82.6**	**-28.2**

Lower Murray Water

Lower Murray Water's net capital expenditure exceeded the forecast because the costs of the Robinvale High Pressure System were 8 per cent higher than originally budgeted. Cardno's expenditure review highlighted the variance was because:[21]

- the pipeline contractor went into liquidation costing Lower Murray Water an additional $700 000
- the project was completed over four years, and expenditure was not adjusted for escalating prices and
- the original estimate did not include connecting domestic and stock customers, which cost an additional $1.7 million.

[21] Cardno 2013, *2012 review of water prices*, 'Assessment of expenditure forecasts for Lower Murray Water', p. 22.

The Commission proposes to roll the full actual amount ($59.9 million) into Lower Murray Water's RAB because changing the scope (to include domestic and stock factors) appeared appropriate, and the contractor's going into liquidation was largely out of Lower Murray Water's control.

6.2.2 FORECAST NET CAPITAL EXPENDITURE, 2012-13

In its guidance paper, the Commission stated it would use the forecasts for 2012-13 net capital expenditure approved for the second regulatory period to roll into the RAB. The Commission considered adjustments to 2012-13 net capital expenditure where the business justified deferrals in capital works or special circumstances. Otherwise, 2012-13 net capital expenditure was fixed at the 2008 determination forecast.

2012-13 net capital expenditure is fixed at the forecasts approved for the second regulatory period to remove incentives for businesses to delay capital works until the last year of a regulatory period. Even if unintentional, delayed projects in the regulatory period provide an undue benefit to businesses, and customer prices for the period assumed a service will be provided when scheduled.

Table 6.2 compares net capital expenditure forecasts for 2012-13 approved for the second regulatory period and proposals from water businesses.

TABLE 6.2 NET CAPITAL EXPENDITURE
Forecasts approved for the second regulatory period compared to business proposed actuals 2012-13, ($m 2012-13)

Water Business	2008 Determination	Business proposed	Difference	Per cent
Goulburn-Murray Water	29.9	26.4	-3.5	-11.7
Lower Murray Water	7.1	7.0	-0.1	-1.3
Southern Rural Water	53.3	6.6	-46.8	-87.7
Total	**90.3**	**39.9**	**-50.4**	**-55.8**

Southern Rural Water proposed a significantly lower forecast for 2012-13 net capital expenditure than its approved forecast for the second regulatory period. This reflected delays to the Macalister irrigation district 2013 and power station projects.

The Commission proposes to accept: Southern Rural Water's revised forecast ($6.6 million) for 2012-13 to reflect these delays in capital works; Goulburn-Murray Water's revised forecast ($26.4 million) for 2012-13 to reflect the 11.7 per cent decrease in forecast net capital expenditure; and Lower Murray Water's proposed $7.0 million to include in its RAB for the third regulatory period.

6.3 OTHER RAB ISSUES

6.3.1 LOWER MURRAY WATER AND FIRST MILDURA IRRIGATION TRUST MERGER

On 19 August 2008 the then Minister for Water issued a determination for Lower Murray Water to take over the whole of the functions, powers and duties of the First Mildura Irrigation Trust (FMIT).[22] The Commission proposes to revise upwards Lower Murray Water's RAB (by $9.6 million) to include the 2007-08 merger with FMIT.

6.4 DRAFT DECISION

The Commission proposes to approve the amounts proposed by Goulburn-Murray Water and Southern Rural Water for inclusion in their RAB from 1 July 2013.

The Commission proposes to approve the amounts proposed by Lower Murray Water for inclusion in their RAB from 1 July 2013, adjusting for the inclusion of the FMIT's closing RAB into its asset base.

22 Lower Murray Water 2009, *Lower Murray Water Annual Report 2008-09*, p. 2.

TABLE 6.3 DRAFT DECISION, PROPOSED REGULATORY ASSET BASE ROLL FORWARD
($m 2012-13)

Water business	GMW	LMW	SRW	Total
Closing RAB as at 1 July 2007	**113.0**	**9.2**	**5.5**	**127.7**
Plus net capital expenditure 2007-08 to 2011-12	103.1	59.9	46.9	209.9
Less regulatory depreciation 2007-08 to 2011-12	26.1	7.6	12.3	46.0
Less proceeds from disposal of assets 2007-08 to 2011-12	0.0	2.2	4.3	6.5
Adjustments		9.6		9.6
RAB as at 1 July 2012	**190.0**	**68.9**	**35.8**	**294.7**
Plus net capital expenditure (forecasts approved for the second regulatory period) 2012-13	26.4	7.0	6.6	39.9
Less regulatory depreciation 2012-13	6.2	2.5	4.0	12.6
Less assumed proceeds from disposal of assets 2012-13	0.0	0.0	0.7	0.7
RAB as at 1 July 2013	**210.2**	**73.4**	**37.7**	**321.2**

6.5 RATE OF RETURN

The Commission's approach to assessing the rate of return differs depending on the rural business. This reflects changes to the regulatory framework for Victorian water businesses operating in the Murray-Darling Basin; that is, Goulburn-Murray Water's and Lower Murray Water's rural operations. The Commission will assess the prices of these businesses against the WCIR requirements (see chapter 1).

The Commission will determine a rate of return for Southern Rural Water consistent with the requirements of the WIRO. That is, the rate of return for Southern Rural Water will be calculated in a way that is consistent with regional urban and metropolitan water businesses.

6.5.1 RATE OF RETURN FOR SOUTHERN RURAL WATER

The WIRO requires the Commission to allow a water business to recover a rate of return on its assets and investments. In its guidance paper, the Commission noted it would use the same approach to calculate the rate of return it used in the 2008 and 2009 water price reviews.

Specifically, the Commission used a weighted average cost of capital (WACC) approach to estimate an efficient rate of return for Southern Rural Water. The WACC for a regulated business is the estimated cost of its various classes of capital (debt and equity) weighted to account for capital structure.

The Commission applied a WACC expressed in real post-tax terms because forecast tax payments are used to calculate each business's revenue requirement.[23] The WACC is applied (at a common rate) to each business's forecast RAB for each year of the regulatory period to calculate an allowance for return on assets.

The Commission aimed to set a value for the WACC that reflects the efficient cost of capital for a 'benchmark utility'. It is impossible to estimate the cost of capital for government owned firms, so the Commission estimated the WACC for the water businesses by referencing the cost of capital for sufficiently comparable market listed businesses (for example, businesses in a similar industry or businesses facing similar risks).

The formula for the WACC is:

$$WACC = R_e\,(E/V) + R_d\,(D/V)$$

where:

R_e is the required post-tax return

E/V and D/V are the shares of equity and debt to the value of the regulatory asset

[23] The Commission notes the Independent Pricing and Regulatory Tribunal recently shifted from a pre-tax to post-tax calculation for the (real) WACC, noting its view the post-tax real WACC provides a superior estimate of the tax liability of a similar well-managed, privately owned business. See: Independent Pricing and Regulatory Tribunal of New South Wales 2012, *Review of Prices for Sydney Water Corporation's water, sewerage, stormwater and other drainage services*, p 86.

on equity

base respectively.[24]

R_d is the real cost of debt

The required return on equity and the cost of debt is calculated with reference to the underlying real risk-free rate of return. The cost of debt (Rd) is the sum of the real risk-free rate and the debt margin. The required return on equity (Re) is calculated using the capital asset pricing model (CAPM). The CAPM provides a direct estimate of the required return for a project or asset as the sum of the return earned by risk-free assets and a premium for risk. That is:

$$R_e = R_f + \beta_e\,(R_m - R_f)$$

where:

R_e is the real required after-tax return on equity

R_f is the real risk-free rate

β_e is the equity beta

(R_m) is the market risk premium, and is the return in excess of the risk-free rate that investors would need to invest in a well-diversified portfolio of assets.

6.5.2 RATE OF RETURN FOR GOULBURN-MURRAY WATER AND LOWER MURRAY WATER

The WCIR approach to the WACC is similar to the WIRO's:

- The cost of equity is estimated using the domestic capital asset pricing model, based on the Officer model.
- The cost of equity is calculated using a market risk premium (MPR) of 6 per cent.
- The risk free rate is based on the yield of 10 year Commonwealth Government Securities (CGS), using an averaging period of 10-40 business days commencing as close as practically possible to the start of the regulatory period.
- The cost of equity is calculated using an equity beta of 0.7.

[24] V is the value of regulatory assets, E is the value of regulatory assets financed through equity, D is the value of regulatory assets financed through debt and E + D = V.

- The benchmark debt risk premium estimate is based on a benchmark gearing level of 60:40 debt to equity on the yields of BBB+ rated corporate bonds with 10 year maturity.

The Commission applied these rules to estimate a rate of return for Goulburn-Murray Water's and Lower Murray Water's rural operations for the third regulatory period. The only differences between the two approaches are:

- the WCIR specify using yields of BBB+ rated corporate bonds with 10 year maturity to estimate a debt margin (whereas the WIRO grants the Commission some discretion over the bonds used to benchmark risk premiums) and
- the WCIR specify the equity beta must have a value of 0.7 (just above the Commission's assumed rate of 0.65, see below).

6.6 DRAFT DECISION

In determining an appropriate rate of return, the Commission has regard to current financial conditions. Financial conditions differ markedly from those prevailing at the time of the 2008 water price review.Since 2008, the structure of lending rates has shifted significantly:

- **Risk free borrowing** rates are lower and remain very low by historic standards, supported by several cuts to the Reserve Bank of Australia's official cash rate over the past year (as indicated by relatively low yields on long term government securities).
- **Debt premiums** are higher and remain high, largely reflecting repriced corporate debt following the global financial crisis, and ongoing uncertainty in the global economy.

The Commission recognises the risks water businesses face if borrowing rates increase (from historic lows) to long term average levels over the course of the third regulatory period. Therefore, the Commission derived a feasible range for the WACC by considering probable ranges for market based estimates for the risk free rate of return and the debt premium (the latter reflecting relatively thin bond markets, making it difficult to derive reliable estimates for bond yields).

6.6.1 DRAFT DECISION ON THE RATE OF RETURN FOR SOUTHERN RURAL WATER

The Commission's analysis and assumptions for the real risk free rate, equity beta, market risk premium, debt margin, financing structure and franking credits are set out below.

REAL RISK FREE RATE

The Commission indicated in its guidance paper it would estimate a risk free rate of return based on average nominal yield on nominal Commonwealth Government Securities (CGS) over a 40 day trading period (using a 40 day trading period to 28 February 2013). The guidance paper did not specify the term of the security, but the Commission estimated a risk free rate based on 10 year CGS. This is the approach used for the 2008 and 2009 water price reviews. The nominal rate using this approach is 3.448 per cent.

The Commission considers the nominal yield on 10 year CGS remains the most appropriate measure of the nominal risk free rate of return for the water businesses. Other Australian regulators also use the 10 year CGS.

The main alternative is CGS with a duration that matches the length of the regulatory period. This approach seeks to align the net present value of cash flows over a regulatory period, which would be five years for the Victorian water businesses. The Commission's preference for a longer dated CGS (10 years) is largely based on a duration matching strategy — that is, it is more consistent with the long term nature of the assets.

The Commission adjusted the estimated nominal risk free rate for forecast inflation. Specifically, the Commission used a forecast band to reflect uncertainty about inflation forecasts.

Deloitte Access Economics provided the Commission with inflation forecasts (based on the ABS all groups consumer price index, Australia) for the term of the third regulatory period. Deloitte Access Economics forecast 2.7 per cent average annual inflation (current at 5 March 2013) over the third regulatory period, which is close to the 2.75 per cent businesses used to develop Water Plans. To estimate a range for the real risk free rate of return, the Commission adopted 2.75 per cent as the upper range for forecast annual inflation.

However, some other market practitioners forecast lower inflation, particularly in the near term, with some forecasts below the mid-point of the Reserve Bank of Australia's target band (of 2-3 per cent each year).[25] The Department of Treasury and Finance forecasts inflation to be 2.5 per cent for 2012-13.[26] To estimate a real risk free rate of return, the Commission adopted 2.4 per cent as the lower bound for forecast annual inflation.

The assumptions about the nominal risk free rate and inflation give an estimated real risk free rate range of 0.679 per cent to 1.023 per cent. The Commission used this range for its draft decision on the WACC for the third regulatory period. The estimates will be updated before the final decision on water prices.

EQUITY BETA

As noted in the guidance paper, the Commission used an equity beta of 0.65 to estimate the WACC for the third regulatory period. The Commission notes:

- It is generally accepted water businesses experience a materially lower level of non diversifiable risk than the market portfolio.
- The proposed equity beta is consistent with other recent regulatory decisions, including those of the Commission in its 2008 and 2009 water price reviews.
- The proposed equity beta is the same as that applying in the current regulatory period, and the Commission does not consider there has been any underlying change to the non-diversifiable risk facing the water industry.

Determining the equity beta is perhaps the largest issue in decisions on the WACC in Australian jurisdictions, because estimates are subject to a significant degree of judgement. Estimating an equity beta requires analysing returns for share market listed utilities in Australia, which typically have small sample sizes. The beta is also particularly significant for calculating the revenue allowance for return on assets (although perhaps less so for water than other sectors such as energy, where the return on assets typically comprises a larger proportion of the overall revenue allowance).

[25] See forecasts by Westpac at www.westpac.com.au/docs/pdf/aw/economics-research/Offshore_Weekly.pdf

[26] See www.budget.vic.gov.au/CA2579B200132B63/WebObj/2012-13BudgetUpdate/$File/2012-13BudgetUpdate.pdf

Further, there is ongoing work to test how a change to elements of the pricing framework (such as changes to the form of price control) affects systematic risk (the beta), including research conducted by the Queensland Competition Authority. The Commission considers this research has merit.

MARKET RISK PREMIUM

As stated in the guidance paper, the Commission used a MRP of 6 per cent to estimate the WACC for the third regulatory period. The Commission notes:

- Surveys of market practitioners found most financial analysts adopt a MRP of 6 per cent[27]
- Australian regulators generally adopt a MRP of 6 per cent, or a band around 6 per cent
- The WCIR require a MRP of 6 per cent be applied for Victorian businesses operating in the Murray-Darling Basin.

DEBT MARGIN

The Commission's guidance paper noted it would use the latest market evidence on the borrowing costs of an efficiently financed business to calculate a WACC for the third regulatory period — based on estimating a range for a debt margin for a 40 day measurement period. This approach is consistent with the principles generally adopted in Australia. The cost of capital should be based on an industry benchmark rather than the utility specific costs. Further, the cost of capital for a government owned utility is typically set on the same basis as a privately owned utility to ensure competitive neutrality and to recognise the underlying opportunity costs to society.

Given the continued difficulty in estimating debt margins from market data (reflecting relatively thin trading on bond markets), the Commission proposes to apply a range for the debt margin for the draft decision on the WACC. The range is based on the estimated cost of debt for a company with a BBB- to BBB+ rating

27 Officer, R. and Bishop, S. 2008, *Market risk premium: a review paper*, August, p 17; ACIL Tasman 2009, ARTC access undertaking Hunter Valley Rail Network: Response to ACCC's issues paper and ARTC and Synergies' submissions on WACC, Prepared for the NDW Minerals Council, August, p. 22.

over the risk free rate. This band is wider than that used in the 2008 and 2009 water price reviews, reflecting the uncertainty about the reliability of debt margin estimates.

PricewaterhouseCoopers (PwC) provided estimates of average nominal debt margins on these ratings over the 40 day trading period to 28 February 2013. Within this trading period, the average annual margin implied by this range of bonds was between 3.03 per cent (the low recorded over the 40 day trading period for BBB+ rated bonds) to 4.53 per cent (the high recorded over the trading period for BBB- rated bonds). The Commission adopted this range for the draft decision on the WACC. These estimates will be updated for the final decision.

The Department of Treasury and Finance is currently considering the Financial Accommodation Levy (FAL) it will apply to government owned entities from 1 July 2013. Before the final decision on water prices, the Commission will cross check market based estimates with the actual lending rates faced by the water businesses (which are influenced by the FAL).

FINANCING STRUCTURE

The Commission's guidance paper assumed a benchmark financing structure of 60 per cent debt to regulatory assets to calculate the WACC for the third regulatory period. This is commonly known as the gearing ratio. The Commission uses a benchmark (rather than the actual financial structure of each water business) to ensure customers will not bear the costs associated with potentially inefficient financial structures. The Commission notes:

- This approach is consistent with the observed gearing of comparable listed utility businesses, which suggests 60 per cent debt to regulatory assets is the appropriate benchmark for an efficient private sector business.
- Other regulators assume the 60 per cent debt to regulatory assets for the financing structure.

FRANKING CREDITS

As stated in the guidance paper, the Commission assumed a franking credit rate of 0.50. Under the Australian dividend imputation system, investors receive a franking credit for the company tax paid before the dividend. This recognises companies already paid tax on profits from which the dividends are paid. This approach is consistent with other regulatory decisions.

6.6.2 DRAFT DECISION ON WACC FOR SOUTHERN RURAL WATER

Based on this analysis, the Commission's feasible range for the WACC for Southern Rural Water was 4.1 to 5.3 per cent (table 6.4). The Commission proposes to adopt a WACC in the middle of the range (4.7 per cent) to account for current borrowing costs which are near historic lows. Proposing a WACC at the lower end of the range may result in an undue risk that businesses will not be able to cover their borrowing costs in the third regulatory period.

TABLE 6.4 DRAFT DECISION — REAL POST TAX WEIGHTED AVERAGE COST OF CAPITAL

WACC parameter	Value
Risk free rate of return	0.679–1.023
Equity beta	0.65
Equity (market risk) premium	6.0
Debt margin	3.03–4.53
Financing structure (debt/assets)	60
Franking credits	0.5
Forecast inflation	2.40-2.75
Vanilla post tax WACC (real) range	4.1–5.3
Vanilla post tax WACC (real) point	4.7

The proposed WACC is lower than the rates adopted in the Commission's previous water price reviews, but it is within the range of recent decisions of other regulators. In its February 2013 draft decision, for example, the Essential Services Commission of South Australia proposed a WACC of 4.87 per cent for SA Water over the period from 2013-14 to 2015-16. Similarly, the Independent Pricing and Regulatory Tribunal adopted a WACC of 4.2 per cent for its March 2013 Draft Determination for Hunter Water.

DRAFT DECISION

The Commission proposes to adopt a real post-tax weighted average cost of capital of 4.7 per cent for Southern Rural Water.

6.6.3 DRAFT DECISION ON THE RATE OF RETURN FOR GOULBURN-MURRAY WATER AND LOWER MURRAY WATER

The Commission derived a feasible range for the WACC for Goulburn-Murray Water's and Lower Murray Water's rural operations that is consistent with the WCIR requirements for businesses operating in the Murray-Darling Basin. The Commission considered forecast ranges for the risk free rate of return and the debt margin. The WCIR requires the debt margin estimate to be based on a BBB+ rated corporate bond.

Apart from the range assumed for the debt margin and the value adopted for the equity beta, the Commission used the same parameters to estimate the WACC for Goulburn-Murray Water and Lower Murray Water as for Southern Rural Water (table 6.5). The Commission's feasible range for the WACC for Goulburn-Murray Water and Lower Murray Water was 4.2 to 4.7 per cent.

For this draft decision, the Commission proposed to adopt a real post-tax WACC of 4.7 per cent (the upper end of this range) for regulatory consistency. This rate is consistent with rates used for the other water businesses in Victoria. It also means Lower Murray Water will have a consistent WACC across its rural and urban operations.

TABLE 6.5 DRAFT DECISION – REAL POST TAX WACC

WACC parameter	Value
Risk free rate of return	0.679 – 1.023
Equity beta	0.7
Equity (market risk) premium	6.0
Debt margin	3.03 – 3.25
Financing structure (debt/assets)	60
Franking credits	0.5
Forecast inflation	2.4 – 2.75
Vanilla post tax WACC (real) range	4.2 – 4.7
Vanilla post tax WACC (real) point	4.7

DRAFT DECISION

The Commission proposes to adopt a real post-tax weighted average cost of capital of 4.7 per cent for Goulburn-Murray Water and Lower Murray Water.

6.7 REGULATORY DEPRECIATION

Regulatory depreciation or the 'return of' capital expenditure returns the value of capital invested to investors over the life of the relevant asset.

In their Water Plans, rural water businesses generally forecast regulatory depreciation for the third regulatory period based on a straight line approach. That is, an equal amount of the asset is depreciated each year based on the expected useful life of the asset. The Commission therefore proposes to approve the depreciation forecasts provided by the businesses.

In the past, the Commission's approach was to recognise regulatory depreciation from the first year expenditure is incurred. For projects that take several years to complete, this approach results in businesses receiving regulatory depreciation on projects before assets come into service. For small projects and projects spread across one or two years, this approach has little impact on a business's revenue requirement. The approach can have a more substantial impact for projects with capital costs greater than $10 million each year and spread across more than two years.

Given that many major projects in the rural sector are government funded, they do not incur regulatory depreciation. Therefore, while the Commission assesses the depreciation proposed by the rural businesses, it is not a major factor that influences prices.

DRAFT DECISION

The Commission proposes to approve the depreciation forecasts submitted by Goulburn-Murray Water, Lower Murray Water and Southern Rural Water.

6.8 REVIEW OF THE RATE OF RETURN METHODOLOGY

In the draft decision for the regional urban water businesses, the Commission noted our intention to apply the WACC for the third regulatory period, consistent with our guidance paper (and as in past water price reviews). Following our final determination the Commission will review the rate of return methodology used for our last three price decisions. This review will include an assessment of alternative approaches. The Commission will involve all interested parties in the deliberations through broad public consultation.

This review will inform the Commission’s approach to estimating the rate of return for water businesses for the fourth regulatory period.

7 DEMAND

7.1 INTRODUCTION

The water businesses' demand forecasts directly affect the prices customers will pay during the period. Changes in customer numbers and consumption are important determinants of the capability of the water infrastructure to provide services and of the need for expenditure on renewal and augmentation.

Key demand forecasts that influence prices charged by the rural water businesses include:

- irrigation (including volumes, service points and delivery shares)
- bulk water services
- domestic and stock connections and deliveries
- drainage (including volumes and connections) and
- groundwater (including volumes and licences).

Volume II of this draft decision contains forecasts the rural water businesses provided for each demand variable.

7.2 APPROACH TO ASSESSING DEMAND

The Commission considered the following information when assessing businesses' proposed demand forecasts:

- businesses' Water Plans
- additional information provided by businesses to support forecasts
- the review conducted by Frontier Economics and
- information from stakeholders, including customers.

The Commission's guidance paper identified the key factors for assessing demand forecasts for the third regulatory period (1 July 2013 to 30 June 2018).[28] This included consistency between demand forecasts and the businesses' proposals about operating and capital expenditure and revenue forecasts.

The Commission engaged Frontier Economics to independently review water businesses demand forecasts. It followed a rigorous selection process from a panel of specialist consultants who understand the businesses and had previously undertaken major demand reviews in the water sector. Frontier Economics was chosen because it has extensive experience in reviewing the veracity of demand forecasts for water services in Victoria and other Australian states.

The Commission instructed Frontier Economics on the significant matters the consultant must consider in its review. Frontier Economics had taken a risk based approach to assessing the businesses' forecasts. The assessment (conducted over four months) comprised an initial information request, a draft report issued to each water business, further information and clarification received from the businesses and a final report issued to the Commission for its deliberations for the draft decision. Frontier Economics undertook extensive information gathering and data analysis in preparing its final report to the Commission.

Specifically, the review assessed whether demand forecasts:

- were based on appropriate forecasting methodologies or approaches, given the materiality of the forecasts for revenue and resulting prices
- reflected reasonable assumptions about the influences on demand, including:
  - supply (including environmental conditions, inflows, restrictions, and the effects of recent and upcoming supply augmentations)
  - population and demographic changes
  - general and local conditions and future prospects for economic development
- used the best available information, demand trends and relevant water supply and demand strategies
- accounted for current demand and economic conditions
- were statistically unbiased and

28 Essential Services Commission 2011, *2013 water price review — guidance on Water Plans*, October.

- accounted for changed tariff structures and elasticities.[29]

Frontier Economics considered businesses' Water Plans, additional information provided by the businesses, relevant Victorian Government policy and forecasts, and its own experience. The Commission is confident in Frontier Economics' findings and recommendations and used the consultant's final report to adjust demand forecasts that underpin the draft decision. Where the Commission did not accept the consultant's recommendation, it outlined the reasons for the decision.

Frontier Economics' final report is available from the Commission's website.[30]

7.3 OVERVIEW OF BUSINESSES' PROPOSALS

The rural water businesses' Water Plans included forecasts of volumes for irrigation, stock and domestic, and surface and groundwater diversions (see volume II). Some businesses included drainage volumes where customers received this service.

The key points for each business are outlined below.

Goulburn-Murray Water forecast:

- a reduction in delivery shares in all regions but Shepparton, reflecting rural modernisation and
- a reduction in service points, again reflecting rural modernisation.

Southern Rural Water forecast:

- increases in irrigation water shares in the Macalister/Thomson system, driven by new water share sales
- customer and connections to remain at 2012-13 levels, except for the Macalister/Thomson system and

[29] Essential Services Commission 2011, *2013 Water Price Review — guidance on Water Plans*, October.

[30] Frontier Economics 2013, *Water price review 2013: rural demand forecasts*, February, www.esc.vic.gov.au.

- groundwater customer numbers, surface water diversion customer numbers and bulk entitlement customers to remain at 2012-13 levels.

Lower Murray Water forecast:

- no increase in irrigation customer numbers
- an increase in irrigation volumes in Mildura and Merbein, reflecting customer consultation and signs of replanting and
- little change in domestic and stock connection numbers or volumes.

Lower Murray Water also proposed aligning drainage licences in the Mildura (former First Mildura Irrigation Trust) region with those used for all other drainage customers.

7.4 COMMISSION'S ASSESSMENT

Frontier Economics noted that in most cases the rural water businesses based their forecasts on observations over recent years. The Commission considers it reasonable that customer behaviour will remain broadly consistent with historical observations unless there is likely to be changes affecting key drivers. The Commission approve all forecasts proposed by Goulburn-Murray Water, Southern Rural Water and Lower Murray Water in their Water Plans, except the following:

- Goulburn-Murray Water indicated it submitted incorrect forecasts of delivered volumes for 2014-15 and 2015-16. In its final Water Plan, it forecast delivery volumes at 110 per cent of irrigator high reliability water shares (HRWS) for 2013-14 to 2015-16. Goulburn-Murray Water's identified that this assumption was correct for 2013-14, and revised this assumption to delivery volumes at 100 per cent of irrigator HRWS for 2014-15 and 2015-16. On this basis, the Commission proposes to adopt the **revised** delivery volumes.
- Southern Rural Water assumed that increased HRWS in the Macalister/Thomson system would not increase delivery volumes. Frontier Economics recommended increasing the delivery volume forecast to account for the forecast increase in HRWS. Southern Rural Water conceded that the new HRWS will result in higher usage and proposed that usage will average at 70 per cent of the new water shares. On that basis, the Commission agrees with Frontier Economics' recommendations and proposes to adopt the **revised** volumes for the purposes of this Draft Decision.

7.4.1 FORM OF PRICE CONTROL

Accurate demand forecasts are not as important for rural water businesses as they are for urban water businesses. The low percentage of tariff revenue from variable charges and the form of price control reduce rural water businesses' sensitivity to demand volumes.

The form of price control affects the level of risk businesses bear from their demand forecasts. The rural businesses all proposed revenue caps. This makes the first year of forecast connections and demand the most important because revenue caps can correct for any over-recovery or under-recovery of revenue caused by inaccurate demand forecasts.

7.5 DRAFT DECISION

The Commission proposes to approve the demand forecasts proposed by Lower Murray Water.

The Commission proposes to revise the demand forecasts proposed by Southern Rural Water and Goulburn-Murray Water as shown in tables 7.1 and 7.2.

Tables 7.1 and 7.2 contain the revised forecasts for Southern Rural Water and Goulburn-Murray Water respectively.

TABLE 7.1 DRAFT DECISION — REVISED FORECASTS FOR SOUTHERN RURAL WATER (ML)

	2013-14	2014-15	2015-16	2016-17	2017-18	Average annual growth over period *per cent*
Macalister irrigation district — water usage fee —standard	142 412	142 824	143 236	144 986	144 986	0.45

TABLE 7.2 DRAFT DECISION — REVISED FORECASTS GOULBURN-MURRAY WATER (ML)

	2013-14	2014-15	2015-16	Average annual growth over period a
Shepparton – infrastructure fee	143 026	124 054	121 536	-7.8
Central Goulburn – infrastructure fee	292 832	252 223	245 303	-8.5
Rochester – infrastructure fee	138 668	120 925	119 135	-7.3
Loddon Valley – infrastructure	149 645	129 452	126 475	-8.1
Murray Valley – infrastructure fee	217 929	188 090	183 323	-8.3
Torrumbarry – infrastructure fee	263 129	227 067	221 276	-8.3
Shepparton – water use fee	47 951	41 590	40 746	-7.8
Central Goulburn – water use fee	180 309	155 304	151 043	-8.5
Rochester-Campaspe – water use fee	74 020	72 822	71 624	-1.6
Loddon Valley – water use fee	7 268	6 287	6 143	-8.1
Murray Valley – water use fee	99 465	85 846	83 670	-8.3
Torrumbarry – water use fee	133 096	114 855	111 926	-8.3

[a] Goulburn-Murray Water’s third regulatory period is for the three years from 1 July 2013.

8 FORM OF PRICE CONTROL

8.1 INTRODUCTION

Victorian water businesses can propose the form of price control they wish to use. Several forms of price control are used in Victoria, but revenue caps are the most common in rural areas. The various forms of price control have advantages and disadvantages in terms of risk sharing between businesses and their customers, price certainty for customers, and businesses' flexibility in adjusting prices to reflect changing circumstances. When considering an appropriate form of price control, the businesses and the Commission weigh up the nature and magnitude of any uncertainties, the potential impacts of unforeseen events on business costs and financial viability, customer preferences and potential customer impacts, among other factors.

In its 2008 final decision, the Commission approved revenue caps for First Mildura Irrigation Trust (FMIT) (now incorporated into Lower Murray Water), Goulburn-Murray Water, Lower Murray Water's rural services and Southern Rural Water (which excluded some services from its revenue cap including recycled water and fee based applications). Given uncertainty about major projects proposed by Goulburn-Murray Water and Southern Rural Water, the Commission proposed not to approve prices for all services provided by these businesses for the full regulatory period until they clarify the projects' scope and funding.

8.2 DIFFERENT FORMS OF PRICE CONTROL

In the past, most rural water businesses proposed revenue caps as their form of price control, with pricing principles used for specific services. Some businesses also used price caps for some services.

8.2.1 REVENUE CAP

Under a revenue cap, the maximum revenue a business can earn is set at the start of a regulatory period. A business thus has guaranteed revenue regardless of sales volume. But a revenue cap can result in price volatility for water customers, because water businesses may change prices to maintain their approved revenue. Businesses may raise prices to offset lower than forecast sales of water services, for example. Conversely, when sales of water services are higher than expected, businesses may reduce prices to ensure revenues stay within the revenue cap.

A revenue cap is often an effective mechanism to help businesses deal with significant demand or supply uncertainty. It is more appropriate when most of a business's costs are fixed and do not vary significantly with the level of demand or supply. For this reason, revenue caps were considered appropriate for rural businesses because these businesses often face highly variable demand and have largely fixed costs.

8.2.2 PRICE CAPS

Under price caps, the Commission approves maximum prices at the start of the regulatory period to recover businesses' allowed revenues. They are fixed for the regulatory period (except for inflation and productivity adjustments), which provides certainty and stability for customers.

Individual price caps may be appropriate when a business's fixed costs are relatively low and its operating costs vary significantly with the quantity of water and other services provided. Under a price cap, revenues would increase when water sales increased, enabling the business to recover higher operating costs. When sales of water or other services are less than forecast, revenues would be lower than forecast.

When fixed costs comprise a significant part of a business's total costs, individual price caps may still be appropriate if customers place a high value on price certainty over the regulatory period. In such a situation, businesses would bear the risk of revenue volatility (and potential impacts on financial viability) when actual demand or supply vary significantly from forecast levels.

8.2.3 A COMBINED APPROACH

Businesses can use a hybrid approach, using different forms of price control for different services. A business may, for example, choose to implement a revenue cap on the majority of its services (particularly those with high fixed costs), price caps on services for which costs rise and fall according to demand (that is those with low fixed costs) and pricing principles for other services (such as miscellaneous services).

8.2.4 REBALANCING CONSTRAINTS

A rebalancing constraint is a limit on price rises or falls that can occur over a certain period. They are designed to reduce possible price volatility that water customers may face. A rebalancing constraint can be applied to a revenue cap and a tariff basket. A business with a revenue cap may have a rebalancing constraint under which individual tariffs must not rise or fall by more than 10 per cent, for example, in any year of a regulatory period. The appropriate price range and time period of rebalancing constraints depend on the water business's circumstances.

8.3 APPROACH TO REGULATING FORMS OF PRICE CONTROL

In February 2011 the Australian Competition and Consumer Commission (ACCC) accredited the Commission to regulate the prices of irrigation and bulk water delivery services provided by Goulburn-Murray Water and Lower Murray Water. The accreditation was carried out under the Water Charge (Infrastructure) Rules (WCIR), which govern the price regulation of irrigation and bulk water suppliers operating in the Murray-Darling Basin. A condition of accreditation was the Commission would apply the WCIR pricing principles when regulating the two water businesses.

The Commission used the WCIR to assess Goulburn-Murray Water's and Lower Murray Water's proposed forms of price control.

The Commission assessed Southern Rural Water's proposed form of price control using the *Water Industry Regulatory Order* (WIRO). The WIRO gives the Commission the flexibility to approve prices, or the manner in which prices are calculated or otherwise determined. The Commission can thus approve pricing formulas, price caps and/or pricing principles.

The ACCC's pricing principles state the following about forms of control to be used under the WCIR:

> A regulator may apply any form of price control — subject to meeting the requirements of the Water Charge (Infrastructure) Rules 2010.

In discussing this principle, the ACCC said:

> Therefore, the decision in applying a form of price control will largely reflect a decision about achieving revenue stability for the operator and price stability for customers. The ACCC considers that the regulator will be in the best position to decide on how to make this trade-off between different objectives. In making this decision the regulator may choose to seek input from the regulated business.[31]

To guide its considerations on the form of price control appropriate for Goulburn-Murray Water, the Commission used the criteria in its guidance paper to assess proposed forms of price control for all rural water businesses, given the ACCC's pricing principles and the WCIR do not specifically guide the form of price control to be applied. These criteria note price controls should: [32]

- provide incentives to align price structures with underlying costs. That is, high cost services should have higher prices, while low cost services should have lower prices. Aligning costs and prices is important for efficient investment and water service use.

---

31 Australian Competition and Consumer Commission 2011, *Pricing principles for price approvals and determinations under the Water Charge (Infrastructure) Rules 2010*, July, p. 51.

32 Essential Services Commission 2011, *2013 water price review — guidance on Water Plans*, October.

- manage and allocate demand and supply risks efficiently. That is, the chosen form of price control should reflect demand and supply risks and how they affect revenue. Water businesses should consider aligning risky activities with the forms of price control that can allocate risk to the party best able to manage it.
- minimise administrative complexity and cost. That is, administratively simple forms of price control are easy for customers to understand and result in lower costs for the water industry to administer.

The Commission also identified the following issues for water businesses to consider when proposing their forms of price control for the third regulatory:

- **Risk management** — water businesses were required to decide whether uncertainty about supply and demand forecasts increased and how it affects future demand. Options for dealing with increased uncertainty include price control mechanisms or tariff designs that target risk. The Commission expects businesses to consider how climate change affects forecasting uncertainty.
- **Price path stability** — price stability (that is, avoiding price shocks) is important within and between control periods. To promote price stability, businesses should formulate expenditure plans that extend beyond single regulatory periods. This broader planning should improve investment decisions, given the large and 'lumpy' nature and long life of many water industry assets. The Commission expects businesses to explore options for managing the impact on customers of changes in costs, which could involve smoothing price changes over a reasonable period or developing transition plans.
- **Transition arrangements** — the Commission will consider the businesses' arrangements for transferring from one form of price control to another, if applicable. It will focus on how water businesses intend to protect those disadvantaged by a change in the form of price control, and how the change affects price stability.

- **Rebalancing constraints** — Businesses were required to consider how significant tariff changes will affect customers and how they will manage any impacts. Adopting rebalancing constraints is a common approach of other regulated infrastructure industries. Typically, rebalancing constraints set a maximum annual rate of change for an individual tariff. They thus help clarify how to manage equity concerns arising from tariff changes and how to minimise regulatory costs. The Commission recognised the merits of this approach and indicated it would favourably consider proposals to use it.

8.3.1 LENGTH OF REGULATORY PERIOD

Under the WCIR, rural water businesses' default regulatory period is firstly three years and then four years for subsequent regulatory periods. An exception applies for water businesses that operate both rural and urban businesses, in which case the water business can apply to align the regulatory periods of its rural and urban businesses. In Victoria, this situation is relevant to Lower Murray Water, which has rural and urban businesses.

Under the WIRO, water businesses may apply for any length of regulatory period.

8.4 OVERVIEW OF BUSINESSES' PROPOSALS

The rural water businesses largely proposed to maintain their existing forms of price control. Table 8.1 sets out their past and proposed forms of price control. The following are key features of the proposals:

- Lower Murray Water applied for a revenue cap, and a five year regulatory period to align its rural and urban regulatory periods
- Southern Rural Water applied for a five year revenue cap and also for other forms of price control for specific services, such as application fees, recycled water charges, recoverable capital expenditure and termination fees
- Goulburn-Murray Water applied for a revenue cap for three years.

TABLE 8.1 BUSINESSES' PAST AND PROPOSED FORMS OF PRICE CONTROL

Rural water business	2008 form of price control	Proposed form of price control	Proposed length of regulatory period
Lower Murray Water Rural	Revenue cap	Revenue cap	Five years (to align with urban business)
Goulburn-Murray Water	Revenue cap	Revenue cap	Three years
Southern Rural Water	Hybrid revenue cap	Hybrid revenue cap	Five years

8.4.1 LOWER MURRAY WATER RURAL

Lower Murray Water proposed to maintain its revenue cap for the third regulatory period.

Lower Murray Water rural did not propose a rebalancing constraint.

The business applied to the Commission for an exemption from the WCIR requirement of an initial three year regulatory period. It proposed a five year regulatory period, to align its rural and urban businesses' regulatory periods.

8.4.2 GOULBURN-MURRAY WATER

Goulburn-Murray Water proposed to continue to apply a revenue cap. It also proposed a rebalancing constraint, to limit the extent of price changes allowed in each year of the regulatory period. It argued combining these two forms of price control is most appropriate because it:

- allocates risks to the party best placed to manage them
- ensures revenue adequacy to match its high fixed costs (given the business recovers more than 90 per cent of its total revenue from fixed charges)
- is simple and transparent in its operation, so involves low transaction costs to implement.

Goulburn-Murray Water further argued in its Water Plan that a revenue cap would allow it to adjust its tariff structure within the regulatory period to account for its current major tariff strategy review.

Goulburn-Murray Water was the only rural business to propose a rebalancing constraint. It proposed rebalancing constraints of:

- 15 per cent to apply to average customer bills,[33] and
- ±10 per cent to apply to average bills in small wholesale basins

In its Water Plan, Goulburn-Murray Water noted no opposition during its consultation with water customers. The business further argued its proposal would limit price changes between years but still allow it to recover its required revenue over time.

Under the WCIR, Goulburn-Murray Water's regulatory period will be set at three years, and subsequent regulatory periods will be set at four years.

8.4.3 SOUTHERN RURAL WATER

Although Southern Rural Water proposes to continue to cover most of its services with a revenue cap, it proposed different forms of price control for selected services such as:

- moving application fees to a tariff basket (currently specified charges) given the costs of different applications have changed, requiring greater pricing flexibility
- continuing recycled water charges under individual price caps
- removing from its revenue cap the lumpy and unpredictable capital expenditure from its operation of Lake Narracan and Yallourn Weir on behalf of Gippsland power companies. Instead, the business proposed passing through the cost of this service to the customers, using the Commission's pricing principles. It proposed to pass through the costs only after seeking the Commission's approval
- continuing to exclude termination fees from the revenue cap and setting them at 15 times the annual delivery share fee.

[33] The 15 per cent would apply on average bills of three customer types within each customer group (based on service received, for example stock and domestic, irrigation)..

Southern Rural Water also proposed to carry forward some unused revenue from the second regulatory period's revenue allowance for irrigation and groundwater and rivers customers, to build a 'resilience' fund for absorbing unforeseen cost or revenue changes without amending its indicative price path.

Southern Rural Water did not propose a rebalancing constraint.

Southern Rural Water argued in its Water Plan that its revenue cap operated successfully without a rebalancing constraint. It also suggested its current tariff setting practices avoided price shocks in the second regulatory period. The business noted:

- it works with customers annually to set tariffs within the revenue cap. Customers provide input on, for example, whether tariff changes should be smoothed, adjusted in a single year, or deferred to later years
- it usually priced below its revenue cap and below the indicative tariffs in its Water Plan during the second regulatory period
- the effectiveness of its customer engagement is demonstrated by its tariffs for 2012-13 being between 9 and 18 per cent below the approved levels for the second regulatory period.

Southern Rural Water proposed to maintain a five year regulatory period and a hybrid revenue cap.

8.5 COMMISSION'S ASSESSMENT

8.5.1 CONSULTATION

During the second regulatory period, the Commission was involved in disputes between rural water customers and Goulburn-Murray Water over large rises in tariffs. It considered these problems were largely caused by the business' inadequate consultation with rural customers over the impact of annual tariff changes, and by the business increasing prices rapidly rather than transitioning to the higher price over a period of time.

The Commission thus amended Goulburn-Murray Water's pricing determination to require it to consult with customers when preparing its final annual tariff application.

In keeping with this approach, the Commission proposes that all rural water businesses' determinations for the third regulatory period require businesses to consult with customers before proposing a material tariff change. Determinations will require water businesses, at their annual approvals, to provide evidence of customer consultation (including customer consultative committees) and a statement on customer impacts and how the business will address those impacts.

The Commission's view is this approach complies with the ACCC's pricing principles because consultation with customers on proposed tariff changes will better achieve pricing transparency.

8.5.2 LOWER MURRAY WATER

The Commission proposes to approve Lower Murray Water maintaining a revenue cap because a revenue cap continues to suit the structure of Lower Murray Water's costs and uncertain demand and supply environment.

The Commission proposes to require all businesses seeking a revenue cap or tariff basket to propose a rebalancing constraint. Therefore, Lower Murray Water is required to respond to this draft decision with a proposed rebalancing constraint. The Commission's view is this requirement supports the ACCC's pricing principles because it improves price stability by reducing the extent of price volatility. [34]

The Commission proposes to approve the five year regulatory period proposed by Lower Murray Water. The Commission considers this complies with the ACCC's pricing principles because under the WCIR Lower Murray Water can apply for a five year regulatory period to align the regulatory periods of its rural and urban businesses.

8.5.3 GOULBURN-MURRAY WATER

The Commission proposes to approve Goulburn-Murray Water's proposal to maintain a revenue cap because it is an appropriate form of price control given the business's costs structure and its uncertain demand and supply environment.

[34] Australian Competition and Consumer Commission 2011, *Pricing principles for price approvals and determinations under the Water Charge (Infrastructure) Rules 2010*, July, p. 66.

The Commission's view is this proposal complies with the ACCC's pricing principles because the revenue cap appropriately balances the requirements of revenue and price stability (subject to including an appropriate rebalancing constraint).

Goulburn-Murray Water was the only rural business to propose a rebalancing constraint. It nominated a constraint that would allow it to adjust the bill for three typical customer types by a maximum of ±15 per cent each year. The business further proposed a 10 per cent constraint on small wholesale basins.

The Commission proposes not to approve Goulburn-Murray Water's proposed rebalancing constraint. The Commission's view is this approach does not comply with the ACCC's pricing principles because it does not result in an adequate level of price stability.

Rebalancing constraints are usually applied to all tariffs, rather than average bills, to protect all customers from price shocks. Basing the rebalancing constraint on average bills could mean the bills for some customers rise substantially from year to year. In addition, a rebalancing constraint of 15 per cent appears too high to avoid the types of large prices rises that led to customer disputes in Goulburn-Murray Water's Pyramid Boort and Woorinen regions during the second regulatory period, regardless of whether it applies to individual tariffs or average bills.

Goulburn-Murray Water is required to propose a rebalancing constraint that applies to tariffs and charges rather than average bills. The Commission also requires Goulburn-Murray Water to submit a lower figure for its rebalancing constraint or to justify its proposal of 15 per cent if it intends to apply it to tariffs rather than bills.

Under the WCIR, Goulburn-Murray Water's first regulatory period must be three years in duration.

8.5.4 SOUTHERN RURAL WATER

The Commission proposes to approve Southern Rural Water continuing to apply a hybrid revenue cap. Southern Rural Water's arrangements for recoverable capital expenditure (one part of the proposed hybrid form of price control), which involves the Gippsland power companies, appear appropriate. These customers are large and well informed, and therefore a negotiated approach under pricing principles appears to be the most desirable outcome.

The Commission proposes to require all businesses seeking a revenue cap or tariff basket to propose a rebalancing constraint. Therefore, Southern Rural Water is required to respond to this draft decision with a proposed rebalancing constraint.

The Commission proposes to approve a five year regulatory period for Southern Rural Water.

The Commission considers this proposal complies with the WIRO because:

- a revenue cap continues to suit the structure of Southern Rural Water’s costs and uncertain demand and supply environment and
- the different forms of price control for other assets better reflect the nature of the regulated services, such as pricing principles for larger customers which provides for more efficient pricing.

8.6 DRAFT DECISION

The Commission proposes to approve Goulburn-Murray Water's and Lower Murray Water's proposals to maintain revenue caps, and Southern Rural Water's proposal to continue to apply a hybrid revenue cap.

The Commission proposes to require all rural water businesses to consult with customers before proposing a material tariff change to the Commission at the annual tariff approval process. The determinations will require water businesses to provide evidence of customer consultation (including customer consultative committees) and a statement about customer impacts and how the business will address those impacts.

The Commission proposes to approve the five year regulatory period proposed by Lower Murray Water.

The Commission requires Lower Murray Water rural and Southern Rural Water to propose rebalancing constraints on their tariffs.

The Commission proposes not to approve Goulburn-Murray Water's proposed rebalancing constraint. It requires the business to propose a rebalancing constraint that applies to tariffs rather than average bills. The Commission also requires Goulburn-Murray Water to submit a lower figure for its rebalancing constraint, or justify its proposal of 15 per cent if it intends to apply it to tariffs rather than bills.

9 RURAL TARIFFS

9.1 INTRODUCTION

Rural water businesses provide a range of services including bulk water, irrigation, drainage, domestic and stock and diversion services. These are monopoly services and are subject to price regulation.

The Commission regulates prices for Southern Rural Water under the *Water Industry Regulatory Order* (WIRO).

In 2010 the Water Charge (Infrastructure) Rules (WCIR) were made under the *Water Act* (2007) (Cth) and responsibility for regulating most of Goulburn-Murray Water's services, and Lower Murray Water's rural services was transferred to the Australian Competition and Consumer Commission (ACCC). The WCIR governs the price regulation of larger irrigation and bulk water suppliers operating in the Murray-Darling Basin. The ACCC accredited the Commission to regulate these businesses.

The Commission recognises rural water businesses face specific issues for tariff structures and pricing. They arise from differences in demand and supply balances in rural areas, the more specialised and commercial nature of rural water customers, and geographic and temporal differences in water usage patterns. Therefore, services, tariff structures and prices may differ significantly among water businesses and even among customers of the same water business.

Customer consultation is an important part of setting prices. The Commission emphasised this in its guidance paper and has assessed water businesses' customer consultation processes and customer impact assessments when considering rural tariff proposals for the third regulatory period (commencing 1 July 2013).

9.2 APPROACH TO ASSESSING TARIFF STRUCTURES

In February 2011, the ACCC accredited the Commission to regulate the prices of irrigation and bulk water delivery services provided by Goulburn-Murray Water and Lower Murray Water in place of the ACCC under the federal regulatory scheme that applies to the Murray-Darling Basin. The Commission must use the ACCC's pricing principles to assess the proposals of rural water businesses covered by the WCIR.

Therefore rural tariffs have been assessed using two sets of assessment criteria:

- The ACCC's pricing principles which apply to irrigation and bulk water supplies of Lower Murray Water (rural) and Goulburn-Murray Water.
- The WIRO which applies to Southern Rural Water and all other regulated services provided by Lower Murray Water (rural) and Goulburn-Murray Water which are not covered by the WCIR such as groundwater and miscellaneous services charges.[35]

The ACCC's pricing principles for tariffs say that tariff structures should:

- promote the economically efficient use of water infrastructure assets
- ensure sufficient revenue streams to allow efficient delivery of the required services
- give effect to the principles of user pays in respect of water storage and delivery in irrigation systems
- achieve pricing transparency
- facilitate efficient water use and trade in water entitlements.

On customer consultation the ACCC's pricing principles say that the regulator must have regard to consultation undertaken by an operator in approving or determining regulated charges.

35 To the extent that the WCIR do not apply to a prescribed service, the WIRO does. Each instrument gives the Commission power to regulate relevant prices.

The WIRO requires prices approved by the Commission must (among other things):

- provide for a sustainable revenue stream that nonetheless does not reflect monopoly rents or inefficient expenditure by the regulated entity
- provide appropriate incentives and signals to customers or potential customers about:
  - using Victoria's water resources sustainably by referencing the costs of providing prescribed services to customers (either collectively or to an individual customer or class of customers), including costs associated with balancing supply and demand and
  - the costs associated with servicing a new development in a particular location
- provide incentives to pursue efficiency improvements and to promote the sustainable use of Victoria's water resources
- enable customers or potential customers to readily understand the prices charged for prescribed services, or the manner for calculating or otherwise determining prices
- account for the interests of customers, including low income and vulnerable customers.

For services regulated under the WIRO, the Commission must also be satisfied water businesses observed procedural requirements set out in the Statement of Obligations. Specifically, water businesses were required to demonstrate they consulted customers when preparing their Water Plans.

9.3 OVERVIEW OF BUSINESSES' PROPOSALS

9.3.1 GOULBURN-MURRAY WATER

Goulburn-Murray Water proposed relatively minor tariff changes for the third regulatory period. It is reviewing its tariff strategy across the entire business to better match tariffs with a changed external environment (including the Northern Victoria Irrigation Renewal Project and the Murray-Darling Basin Plan). It expects to have a simplified tariff structure proposal prepared by the end of the third regulatory period.

Goulburn-Murray Water's proposed changes for the third regulatory period were:

- price increases for some tariffs, to make charges more uniform across its irrigation districts and
- higher service point fees, to better reflect costs.

Goulburn-Murray Water provides services as standalone activities and recovers the costs of each from the customers of those services, meaning many tariffs are different in each district. The business' regulated services include:

- harvesting, storing and delivering bulk water by its headworks business
- irrigation services including managing infrastructure to deliver water to irrigators in six gravity irrigation districts and three pumped districts, and operating and maintaining a surface and subsurface drainage network
- supplying water to domestic and stock customers in five water districts
- licensing diverters, including licensing and managing shared access to groundwater and surface water resources.

Goulburn-Murray Water's existing rural tariffs

Within the pricing regions, Goulburn-Murray Water has unbundled charges to match the separate water rights held by water users. Irrigators' charges, for example, are levied on the following:

- Water shares (which represent a share of the water resource) are tradeable assets independent of ownership of land.
- Delivery shares give irrigators in a district a share of the delivery capacity of infrastructure.
- Use rights give irrigators the right to use water at a specific location.

Some irrigation charges are common to all pricing districts, while others differ:

- The service fee is charged per property and is the same price across all areas.
- Service point fees are fixed fees in the gravity irrigation districts (Shepparton, Central Goulburn, Rochester-Campaspe, Loddon Valley, Murray Valley and Torrumbarry-Gravity).
- The infrastructure access fee is a variable charge that differs by water district.
- The infrastructure use fee is a variable charge that differs by water district.
- The overuse fee is a variable charge that is the same in all districts.

- Miscellaneous service charges are for other services, often connected to primary rural water services (see chapter 11).

Proposed price changes

In its Water Plan, Goulburn-Murray Water proposed initial tariff changes, before it finalises its long term tariff strategy during the third regulatory period:

- Service point fees are proposed to increase from $250 to $300 for all irrigation outlets from the beginning of the third regulatory period, to better reflect costs and to signal to customers the long term direction of service point fees.
- Revenue from infrastructure access fees is proposed to rise on average each year by a maximum of 1.5 per cent plus inflation. This will not apply to the Shepparton irrigation district because it has reached a stable operating position.
- Infrastructure use fees in some areas are proposed to rise as they move towards a more uniform fee reflecting the standard annual operating costs across districts.
- Diverters' charges are proposed to rise by 1.5 per cent plus inflation.
- Bulk water charges in smaller catchments are proposed to continue to move towards full cost recovery, with annual increases limited to a maximum of 10 per cent.
- Price changes in a typical bill are proposed to be limited to a maximum annual increase of 15 per cent.

Irrigation districts — service point fees

Service point fees recover costs associated with providing metered outlets to properties. Goulburn-Murray Water proposed to increase irrigation service point fees from $250 to $300 per outlet in 2013-14 but reduce infrastructure access fees to offset any additional revenue.

According to Goulburn-Murray Water, the current service point fee was designed to match the cost of reading and maintaining Dethridge Wheel meters but did not cover the costs of newer meters already in place. The business argued the increase would ensure the fee more accurately matched the cost of operating and maintaining existing irrigation meters.

Goulburn-Murray Water expects the number of water meters to fall as modernisation continues, but the cost per meter to increase, reflecting the higher costs of the new meters and fewer customers from whom to recover costs.

Feedback from irrigation customers suggested:

- generally, customers supported a more cost reflective approach but wanted greater clarity on the costs associated with the new electronic meters
- a large proportion of small user customers felt the longer term direction for service point fees would make their service too expensive and their small operations would become unviable
- a small minority of customers suggested Goulburn-Murray Water impose even higher service point fees than those proposed in the Water Plan to encourage system users to rationalise outlets as part of the modernisation program
- some customers were concerned their farm layouts prevented them from further rationalising outlets.

9.3.2 LOWER MURRAY WATER

Lower Murray Water proposed to maintain its current tariff structure except in its Mildura district.

Lower Murray Water has four irrigation districts: Mildura, Merbein, Red Cliffs and Robinvale (which comprises the waterworks districts, and Millewa urban area and the Millewa rural area). Prices are calculated for each district based on planned operating and capital expenditure. Direct costs are attributed to each service area and overheads are allocated in proportion to the number of assessments (bills).

Lower Murray Water's existing rural tariffs

Lower Murray Water's existing tariff structure reflects the provision of several different services across separate pricing districts.

It charges tariffs for irrigation and drainage services for the Merbein, Red Cliffs and Robinvale regions. Irrigation tariffs comprise the following:

- The service charge is a fixed charge levied on each account and is the same in each region.
- The delivery share charge is a fixed charge levied based on a customer's delivery share and differs across the three regions.

- The usage charge is a variable charge based on water use and differs across the three regions.
- The garden charge is a fixed charge per customer.

Drainage service tariffs comprise the following:

- The region charge is a fixed charge based on a customer's water share and is the same in each region.
- The district charge is a fixed charge based on a customer's water share and differs across the three regions.
- The drainage charge for the business' four divisions is a fixed charge based on a customer's delivery share, and differs across the three regions.

Robinvale has specific charges for stock and domestic and diverter services, including service charges, delivery charges and connection charges for urban and rural regions:

- The waterworks districts have charges for service (fixed per account), connection (fixed per connection) and delivery (variable charge), as well as a charge (fixed per hectare) that varies with a customer's division.
- The Millewa districts have three categories of charges for rural access (house, scrub or stocked) and two categories for urban access (offtake and no offtake). There are also urban and rural variable delivery charges, and rural and urban service charges (fixed per account).
- Diverters are charged a variable operation fee.

The Mildura district's charges for irrigation and stock and domestic services are structured differently to those in Lower Murray Water's other districts (table 9.1).

TABLE 9.1 CURRENT CHARGES FOR MILDURA DISTRICT ($)

Mildura irrigation	Fixed or variable	2012-13
Customer charge	Fixed charge per account	167.00
Service point charge	Fixed charge per connected assessment	146.00
Auxiliary supply	Fixed charge per auxiliary connection	-
Water share fee	Fixed per ML water share	12.05
Delivery capacity share Mildura South	Fixed per max ML/14 days period	547.30
Delivery capacity share other areas	Fixed per max ML/14 days period	483.33
Metered use charge	Variable charge per ML supplied	46.00
High pressure levy Mildura South	Variable charge per ML supplied	37.74
Drainage fee	Variable charge per ML of drainage	6.40
Mildura — domestic and stock		
Customer charge	Fixed charge per account	167.00
Service point charge — Benetook and mid area and Mildura South	Fixed charge per connected service	217.00
Service point charge — other areas	Fixed charge per connected service	146.00
Water share fee	Fixed charge per ML water share	12.05
Delivery capacity charge Mildura South	Fixed charge per assessment	133.03
Delivery capacity charge Other Areas	Fixed charge per assessment	110.66
Metered use charge	Variable charge per ML supplied	90.58
High pressure levy	Variable charge per ML supplied	37.74

Lower Murray Water's proposed tariffs

Lower Murray Water proposed several changes to its tariff structures in the third regulatory period:

- The Mildura district's charges will be restructured to align them with those in other districts to simplify and reduce the number of charges.
- Prices in the Mildura district will rise, as will prices in other districts.
- The region and district charges for Merbein, Red Cliffs, Robinvale, and the regional drainage charge for diverters will be discontinued.

Mildura district tariff restructuring

Lower Murray Water proposed to simply tariffs in the Mildura irrigation district, by applying the tariffs used in other districts (table 9.2). Lower Murray Water said the Mildura district had retained tariff structures from the former First Mildura Irrigation Trust.

TABLE 9.2 PROPOSED CHARGES FOR MILDURA DISTRICT 2013-14 ($)

	Fixed or variable	2013-14
Mildura — irrigation and stock and domestic		
Service charge	Fixed charge per account	97.32
Delivery share	Fixed charge per delivery share	510.97
Delivery	Variable charge per ML use	47.46
Drainage division 1	Fixed per delivery share	50.12
Mildura high pressure system — irrigation and stock and domestic		
Service charge	Fixed charge per account	97.32
Delivery share	Fixed charge per delivery share	593.76
Delivery	Variable charge per ML use	87.66
Drainage division 1	Fixed per delivery share	50.12

Price changes in Mildura district

According to Lower Murray Water, price increases in the Mildura district largely reflected:

- proposed increases in operating costs
- an increase in the business' regulatory asset base (which leads to a higher revenue requirement for the business)
- a forecast decrease in demand for 2014 (which requires higher prices to recover revenue).

Further, Lower Murray Water argued these factors also apply to its other districts. It proposed the following annual real price changes in average bills:

- Mildura — 3.3 per cent
- Mildura high pressure system — 4.5 per cent

- Merbein — 1.7 per cent
- Red Cliffs — -0.4 per cent
- Robinvale — 3.0 per cent.

Cancellation of regional and district charges

Lower Murray Water proposed to cancel its existing regional and district charges. These charges represent contributions to government projects (such as the Murray-Darling Freshwater Research Centre) from Lower Murray Water and (the former) Sunraysia Rural Water. Former Sunraysia Rural Water customers had wanted this type of expenditure separated out on their bills.

According to Lower Murray Water, feedback from its customer service committees suggested the majority of customers wanted simple bills. It proposed including regional and district charges in the delivery share charge.

9.3.3 SOUTHERN RURAL WATER

Southern Rural Water proposed to maintain its existing tariff structures.

Southern Rural Water charges for irrigation services (in the Macalister, Werribee, and Bacchus Marsh irrigation districts) and bulk water services (provided to urban water businesses and power companies).

The irrigation tariffs comprise the following elements:

- The water shares charge is a fixed annual fee based on a customer's megalitre volume of the share.
- The delivery shares charge is an annual fee based on a customer's megalitre volume of the share plus a service point tariff applied to each service point associated with the share.
- The usage charge is a volumetric charge billed at end of irrigation season (August).

Southern Rural Water is a storage manager on the Latrobe, Macalister, Werribee and Maribyrnong water systems. It levies storage operator charges to cover the cost of harvesting, storing and releasing water on behalf of entitlement holders. Its customers and their entitlements are as follows:

- Gippsland Water holds an entitlement on the Latrobe system.

- Western Water holds entitlements in the Maribyrnong and Werribee systems.
- Melbourne Water holds an entitlement on the Maribyrnong system to inflows and capacity of Rosslynne Reservoir.
- The Gippsland power generating companies hold entitlements on the Latrobe system to inflows and capacity of Blue Rock dam and Lake Narracan, and to unregulated flows through Lake Narracan.

The charges for these are determined as follows:

- The Bulk Entitlement Conversion Orders specify the share of costs for each customer (typically based on a share of storage costs).
- The entitlements of the former State Electricity Commission of Victoria are charged to the Department of Treasury and Finance. The Department of Sustainability and Environment is charged for the unallocated share in Merrimu, while the Victorian Environmental Water Holder will be billed for the new Latrobe environmental entitlement.
- The costs of capital projects are passed through as direct costs for the Yallourn system (Lake Narracan and Yallourn Weir).

Southern Rural Water levies a recreational facilities charge and shares the costs of recreation facilities between irrigators and urban water businesses (based on customer numbers in an area of operation). These facilities range from simple picnic facilities and playgrounds to multiple recreation areas, car parks, boat ramps and waterway (powered craft) management.

Southern Rural Water proposed to set fees for terminating delivery shares based on a 15 times multiple of the annual fee for the delivery share. This fee complies with a Ministerial Direction on delivery entitlements, and protects other entitlement holders from the price impact of spreading fixed costs over a smaller entitlement base. To date, Southern Rural Water has not had a delivery share terminated.

Proposed changes to bulk water holders

Southern Rural Water proposed to increase storage operator charges for Gippsland Water by an average of 10.97 per cent each year. The business argued the proposed increase reflects two main factors:

- Changes in cost shares will result from proposed amendments to bulk entitlements. Gippsland Water currently holds an entitlement in the Latrobe system to 12.4 per cent of inflows and capacity of Blue Rock dam. An amendment to the bulk entitlement will grant Gippsland Water a further 3.7 per cent. Gippsland Water will also be charged proportionally for the new drought reserve (bringing its cost share to 21.1 per cent).

- Charges will better reflect costs.

Southern Rural Water revised its weightings for the Latrobe system, following feedback from Gippsland Water about how it takes bulk water from Blue Rock dam.

9.3.4 CONSULTATION BY RURAL WATER BUSINESSES

Generally, it appears the rural water businesses consulted customers when developing their Water Plans. Consultation is important to avoid price shocks and to ensure customers understand tariffs. The Commission focused on rural water businesses' efforts and success in engaging customers and in implementing transition plans when appropriate to lessen the impact of tariff changes on customers.

The Commission sought additional information from businesses where customers raised concerns about the level of consultation. Customers of Lower Murray Water and Goulburn-Murray Water complained they were not aware of proposals made by the businesses. In some cases, businesses' customer committees were not aware of businesses' proposals until they were released in Water Plans. Table 9.3 summarises how rural water businesses consulted with customers.

TABLE 9.3 CONSULTATION UNDERTAKEN BY RURAL BUSINESSES

	Bulk Customers	Retail Customers	Water Services Committee	Online	Other
Goulburn-Murray Water	Standalone brochures Consultation sessions	Newsletters Information sessions Meetings Surveys Draft Water Plan brochures	Regular meetings Presentations Discussion paper on future tariff strategy aided by advisory group	Webpage launch Website articles Feedback forms Surveys	Articles in regional newspapers Presentations at local events
Lower Murray Water		Newsletters Satisfaction survey Complaint tracking Direct emailing	Consultation with customer service advisory committees	Website Twitter	Media releases Public notices Public meetings Briefings with local and State government, industry and community
Southern Rural Water	Meetings with bulk entitlement holders	Customer focus groups Feedback forms Summary sent to all licence holders	Meetings with customer consultative committees	Online video presentations on specific issues	Workshop with groundwater and rivers forum Discussions with the Victorian Farmers' Federation and its water council Meetings with stakeholders

9.4 COMMISSION'S ASSESSMENT

This section sets out the Commission's assessment on rural tariffs in cases where:

- businesses proposed a change in tariff structure
- tariffs were a source of concern for customers or were difficult for customers to understand
- businesses did not adequately justify tariff increases significantly higher than the business average
- the Commission is concerned tariffs are not consistent with the WIRO.

The Commission engaged with each business to satisfy itself that the procedural requirements of the WIRO (for Southern Rural Water) and the WCIR (for Goulburn-Murray Water and Lower Murray Water rural) were complied with and that the necessary consultation with customers and other stakeholders was effective. Specifically, the Commission tested customer support for proposed tariff structures at public forums the Commission held in October and November 2012.

Customers can raise a concern or issue via a written submission to the Commission about the draft decision or through oral commentary at a public forum on the draft decision. Information on both options is set out in the section "How to respond to this draft decision".

9.4.1 GOULBURN-MURRAY WATER AND LOWER MURRAY WATER

The Commission's key interests about Goulburn-Murray Water's and Lower Murray Water's Water Plans were:

- whether their proposed tariff structures and prices complied with the ACCC's pricing principles
- whether Goulburn-Murray Water's bulk water charges complied with the ACCC's pricing principles
- whether Lower Murray Water's proposed prices for the Mildura irrigation district complied with the ACCC's pricing principles
- whether consultation with customers was adequate.

This review is the first for these two businesses under the ACCC's pricing principles. Given similar issues, these two businesses' proposals are assessed together.

Goulburn-Murray Water's and Lower Murray Water's proposed tariff structures and prices

The Commission proposes to approve Goulburn-Murray Water's and Lower Murray Water's tariff structures, and to approve Goulburn-Murray Water's prices (which are within the approved maximum allowed revenue in this draft decision). The Commission requires Lower Murray Water to adjust its prices to reflect its approved maximum allowed revenue.

The Commission assessed the businesses' proposals against each of the ACCC's pricing principles. First, the Commission's view is Goulburn-Murray Water's and Lower Murray Water's proposed tariffs promote the economically efficient use of water infrastructure assets. Each business's tariffs include a fixed and variable component to reflect each business's fixed and variable costs. This particularly applies to services that use infrastructure (which often incurs a fixed cost) and also incur variable costs (such as providing water). Both businesses impose fixed charges for service costs not driven by water use (such as licence fees).

Second, the Commission's view is Goulburn-Murray Water's and Lower Murray Water's proposed tariffs comprehensively cover the range of services each business provides and therefore sufficient revenue will be recovered to efficiently deliver all services. The Commission reviewed proposed tariffs against the functions carried out by each business and is satisfied the costs generated can be recovered by the tariff structures proposed by Goulburn-Murray Water and Lower Murray Water. Including fixed and variable components in tariffs will also allow each business to recover revenue that reflects the underlying cost structures of providing different services.

Third, the Commission's view is Goulburn-Murray Water's and Lower Murray Water's tariff structures for water storage and delivery in irrigation systems reflect user pays principles. The Commission reviewed the revenues and costs of several services provided by Goulburn-Murray Water and Lower Murray Water to assess their cost reflectivity. The Commission found revenue raised for services broadly matched the costs incurred providing the services. Further, both businesses progressed with unbundling tariffs, to more accurately reflect different costs for different services.

Fourth, the Commission’s view is Goulburn-Murray Water’s and Lower Murray Water’s proposed tariffs facilitate efficient water use and trade in water entitlements. Both businesses unbundled tariffs, improving clarity about service costs, which in turn encourages efficient water use and trade in entitlements.

Consultation with customers

The ACCC's pricing principles require the Commission to consider consultation an business undertakes before approving or determining regulated charges. The Commission’s view is Goulburn-Murray Water adequately consulted on its proposed tariffs and prices. The Commission reviewed the information Goulburn-Murray Water submitted about its consultation with customers. It also considered written customer submissions and matters raised by consumers at the public forum on Goulburn-Murray Water’s Water Plan.

The Commission is aware some customers were dissatisfied with Goulburn-Murray Water’s tariffs, and with the changing nature of Goulburn-Murray Water’s infrastructure networks. These factors require broader consideration beyond this price determination process. Goulburn-Murray Water proposes a major review of its tariffs during the third regulatory period. The Commission expects the business to consult closely with customers about tariffs and to consider appropriate transition strategies to mitigate any resulting customer impacts. The Commission also expects any tariff proposals arising from the tariff review will comply with the ACCC’s pricing principles.

The Commission considers Lower Murray Water consulted with customers, although its consultation processes were not adequate in all cases. The Commission reviewed the information Lower Murray Water submitted about its consultation with customers. It also considered written customer submissions and matters raised by consumers at public forum on Lower Murray Water's Water Plan.

The Commission sought additional information about Lower Murray Water's consultation processes following complaints at the public forum. Lower Murray Water provided additional information, arguing it:

- met with its customer committees (rural and urban)
- used local media to announce it had started consulting on its draft Water Plan
- sent emails to rural customers advising it was starting to develop its draft Water Plan

- met with industry groups and associations such as the Victorian Farmers Federation
- updated its website with details as they were released
- held public meetings after releasing the draft Water Plan: a meeting in each irrigation district, and public meetings in Mildura, Swan Hill and Kerang.

In a public submission to the Commission, the Victorian Farmers Federation noted Lower Murray Water altered its proposed tariffs following customer consultation. [36]

Mildura irrigation district

Stakeholders indicated they were concerned Lower Murray Water did not adequately consult before structuring tariffs for the Mildura irrigation district. Some irrigators were also concerned about the level of price rises.

The Commission considers the proposed structure does not by itself cause price rises but rather rises reflected increases in prices sought by Lower Murray Water. Further, the price rises in the Mildura irrigation district were comparable with rises in other districts. The Commission's view is the simplified structure is consistent with the ACCC's pricing principles because aligning tariff structures enables comparisons among the costs of services in Lower Murray Water's pricing districts.

Following a request from the Commission, Lower Murray Water provided additional data comparing bills from the existing and proposed tariff structures for the Mildura irrigation district.[37] It argued the proposed restructured tariffs raised comparable revenue to the existing tariff structure. Table 9.4 shows bills for a hypothetical Mildura customer for pressurised and nonpressurised districts, using the current and the proposed tariffs

---

36 Victorian Farmers Federation 2013, *Submission to price review 2013-18*, 25 January.

37 Lower Murray Water 2013, *Submission to price review 2013-18*, 14 January.

TABLE 9.4 COMPARISON OF CURRENT AND PROPOSED CHARGES FOR THE MILDURA IRRIGATION DISTRICT ($)[a]

Bill comparison (nonpressurised) [b]	2013	2014
Existing Mildura tariffs		
Customer charge	167.00	
Service point charge	146.00	
Delivery capacity share Mildura South	5 799.96	
Metered use charge	4 600.00	
Drainage fee	640.00	
Total	**11 352.96**	
Proposed Mildura tariffs		
Service charge		100.00
Delivery share		6 131.64
Delivery charge		4 746.00
Drainage division 1		601.44
Total		**11 579.08**
Bill comparison (pressurised) [b]		
Existing Mildura tariffs		
Customer charge	167.00	
Service point charge	146.00	
Delivery capacity share Mildura South	6 567.60	
Metered use charge	8 374.00	
Drainage fee	640.00	
Total	**15 894.60**	
Proposed Mildura tariffs		
Service charge		100.00
Delivery share		7 125.12
Delivery charge		8 766.00
Drainage division 1		601.44
Total		**16 592.56**

[a] This table excludes existing tariffs with no corresponding proposed tariff. All existing tariffs are in table 9.1. [b] As at 1 January 2013.

Source: Lower Murray Water 2013, *Submission to price review 2013-18*, 14 January.

Lower Murray Water also acknowledged price rises could affect customers. It proposed phasing the price increases over the third regulatory period and argued it smoothed the effect as much as possible.

9.4.2 GOULBURN-MURRAY WATER'S BULK WATER CHARGES

The Commission supported Goulburn-Murray Water's proposal at the 2008 water price review to move to basin pricing at a retail level, to better reflect costs. During the second regulatory period, price differences between the business's basins increased as prices better reflected costs.

Goulburn-Murray Water proposed to continue moving bulk water charges towards full cost recovery for the third regulatory period. Increases would be limited to a rise of 10 per cent in each year. This limit of 10 per cent each year for smaller basins forms part of the business' rebalancing constraint.

The Commission's view is the proposed changes to bulk water charges would improve the cost reflectivity of tariffs and charges. As such, they better meet the ACCC pricing principles' requirements that tariffs promote the economically efficient use of water infrastructure assets and give effect to the principle of user pays for storing and delivering water in irrigation systems.

The Commission expects Goulburn-Murray Water's tariff review to deal with the cost reflectivity of entitlement storage fees and their impact on customers.

9.4.3 SOUTHERN RURAL WATER

Southern Rural Water proposed to maintain its existing tariff structure, and to increase prices. The Commission proposes to approve Southern Rural Water's proposed tariffs and charges because they are consistent with the WIRO. Southern Rural Water's revenues for licences reflect costs.

The Victorian Farmers Federation noted: [38]

- the proposed prices were modest and appeared to reflect the business' management and maintenance program
- there was a substantial reduction in the proposed Thorpdale fee (falling from $9.10 to $3.65 over the third regulatory period).

The Commission noted Southern Rural Water used a different multiple to calculate termination fees than other rural businesses. Southern Rural Water's termination

[38] Victorian Farmers Federation 2013, *Submission to price review 2013-18*, 25 January.

fee is based on a 15 times multiple of the annual fee for the delivery share in accordance with a Ministerial Direction on delivery entitlements.[39]

The Commission considers Southern Rural Water's proposed increase in Gippsland Water's bulk water charge is consistent with the WIRO because it reflects changes in Gippsland Water's bulk entitlement shares, which increased Gippsland Water's costs.

The Commission did not receive any submissions on this matter.

9.4.4 CONSULTATION

The Commission emphasised customer consultation is important to avoid price shocks, which could adversely affect customers. To ensure rural water businesses adequately consult with customers on tariffs for the third regulatory period, the Commission proposes to include in determinations a requirement that businesses consult with customers before proposing a tariff change at annual tariff reviews.

The Commission also proposes to require businesses that propose revenue cap and tariff basket forms of control to propose a rebalancing constraint to further reduce the possibility of price shocks.

39 The 'Directions on Delivery Entitlements' was made on 26 June 2007 by the then Minister for Water, as Minister administering the *Water Act* (1989).

9.5 DRAFT DECISION

The Commission proposes to approve Southern Rural Water's proposed rural tariff structures.

The Commission proposes to approve Goulburn-Murray Water's proposed rural tariff structures and prices.

The Commission proposes to approve Lower Murray Water's proposed tariff structures.

10 GROUNDWATER TARIFFS

10.1 INTRODUCTION

Groundwater is water sourced from underground usually through water bores. The rural water businesses provide groundwater services to customers such as licensing. Groundwater services are prescribed services under the Water Industry Regulatory Order (WIRO), which means the Commission can regulate groundwater prices.

10.2 APPROACH TO ASSESSING GROUNDWATER TARIFF STRUCTURES

The Commission must assess the rural water businesses' Water Plans based on the WIRO's procedural requirements and regulatory principles. The Commission must be satisfied the rural water businesses observed the procedural requirements set out in the Statement of Obligations, including consultation with customers.[40]

Specifically, the Commission must be satisfied the proposed prices (among other things):

- provide for a sustainable revenue stream to the rural water business that does not reflect monopoly rents or inefficient expenditure by the rural water business
- provide appropriate incentives and signals to customers or potential customers about:
  - using Victoria's water resources sustainably, by referencing the costs of providing prescribed services to customers including costs of balancing supply and demand

[40] The Statement of Obligations sets out the Victorian Government's requirements for water businesses.

- the costs associated with servicing a new development in a particular location

- provide the rural water business with incentives to pursue efficiency improvements and to promote the sustainable use of Victoria’s water resources
- enable the rural water business’ customers or potential customers to readily understand the prices it charges for prescribed services, or the manner for calculating or otherwise determining such prices
- account for the interests of customers, including low income and vulnerable customers.

10.3 OVERVIEW OF BUSINESSES’ PROPOSALS

The water businesses that provide groundwater services do not propose major changes to their groundwater charges. Southern Rural Water and Lower Murray Water do not propose any tariff restructuring, and Goulburn-Murray Water proposes some rebalancing of tariffs to improve cost reflectivity.

10.3.1 GOULBURN-MURRAY WATER

Goulburn-Murray Water proposed some changes to individual groundwater charges. It applies the following fees to its three geographic areas:

- a fixed licence fee
- a fixed service point fee for each bore
- a variable groundwater entitlement fee
- a variable overuse fee
- a variable intensive management fee, which differs in the two geographic regions where it applies (table 10.1).

Table 10.1 Proposed intensive management fees 1 July 2013 Goulburn-Murray Water

Groundwater diversion areas	Intensive management fee	Increase over the previous year
	$	*per cent*
Shepparton Irrigation Region Water Supply Protection Area	1.74	2.35
Spring Hill, Campaspe, Katunga, Mid-Loddon, Upper Loddon, Kinglake, Mid Goulburn, Upper Ovens, Lower Ovens	4.70	2.17
Other areas	–	–

Table 10.2 shows Goulburn-Murray Water's proposed charges for groundwater for 2013-14. For the remainder of the regulatory period, the business proposed increasing prices by 1.5 per cent plus inflation (that is, at the same rate as its proposed maximum annual increase in total revenue).

TABLE 10.2 PROPOSED GROUNDWATER TARIFFS, 1 JULY 2013 GOULBURN-MURRAY WATER
($m 2012-13)

Groundwater diversion areas	Service fee	Service point fee	Groundwater entitlement fee	Overuse fee
	per licence	*per bore*	*ML per entitlement*	*per ML*
All customers ($)	185.00	105.00	3.81	2 000.00
Increase over previous year (per cent)	2.78	5.00	3.53	0.00

10.3.2 LOWER MURRAY WATER

Lower Murray Water proposed to maintain its current tariff structure and only to increase its groundwater tariffs in line with the consumer price index over the next regulatory period.

Table 10.3 presents the main features of its groundwater charges:

- fixed charges for licence fees
- a variable charge depending on the volume of water per licence and
- a minimum charge for groundwater use.

TABLE 10.3 LOWER MURRAY WATER'S PROPOSED GROUNDWATER TARIFFS
($m 2012-13)

Tariff and price component	2013-14	2014-15	2015-16	2016-17	2017-18
Application for groundwater licence	330.50	330.50	330.50	330.50	330.50
Application for renewal of groundwater licence	79.50	79.50	79.50	79.50	79.50
Application for transfer of groundwater licence	79.50	79.50	79.50	79.50	79.50
Groundwater licence — volume	1.70	1.70	1.70	1.70	1.70
Minimum charge	81.25	81.25	81.25	81.25	81.25

10.3.3 SOUTHERN RURAL WATER

Southern Rural Water's groundwater and rivers business manages taking and using water from groundwater aquifers in southern Victoria. It also licences bore construction. Southern Rural Water administers around 3400 licences to use nearly 330 000 megalitres of groundwater.

The business also processes a range of applications. These may be for new licences — most commonly to construct groundwater bores — or may be to vary or transfer existing licences. Each year around 1200 bore construction licences are issued (mostly for stock and domestic use). There have been much higher numbers of applications in recent years caused by the drought.

The key features of Southern Rural Water's licensing services for groundwater and rivers charges are summarised below:

- Take and use licences specify the maximum volume of water that may be taken in a year and any conditions that apply to the licence. Southern Rural Water levies a fixed charge per licence plus a variable charge.
- Construction licences incur a fee when an application is lodged and an application fee for extending or transferring the licence every 12 months.
- Operating licences are required to operate works associated with a take and use licence. An annual fee recovers the surveillance costs and costs of monitoring compliance with licence conditions.
- Transactional applications cover applications to obtain new licences and to undertake transactions against existing licences. Charges are based on the average costs of processing each class of application.
- Intensive management fees apply in areas where monitoring and compliance costs are higher.

Southern Rural Water proposed to maintain its current tariff structure and to increase prices for groundwater licence services in line with the consumer price index. The business argued minimal capital expenditure planned for the third regulatory period meant surface and groundwater prices reflected its stable operating environment. Table 10.4 presents the proposed groundwater charges.

TABLE 10.4 SOUTHERN RURAL WATER'S PROPOSED GROUNDWATER CHARGES
($m 2012-13)

	2013-14	2014-15	2015-16	2016-17	2017-18
Groundwater licence fees					
Fixed licence charge	345.00	345.00	345.00	345.00	345.00
Volumetric charge	3.90	3.90	3.90	3.90	3.90
Intensive management fee — Deutgam	26.00	20.00	20.00	20.00	20.00
Intensive management fee — Koo Wee Rup	3.95	2.15	2.15	2.15	2.15

10.4 COMMISSION'S ASSESSMENT

10.4.1 GOULBURN-MURRAY WATER

The Commission notes Goulburn-Murray Water reviewed its tariffs, including groundwater charges. The proposed price increases for groundwater aim to improve cost reflectivity.

The Commission proposes to approve Goulburn-Murray Water's groundwater tariffs because they improve the alignment of revenues and costs and are consistent with the requirements of the WIRO.

10.4.2 LOWER MURRAY WATER

Lower Murray Water did not propose any real price changes in its groundwater charges or any tariff restructuring.

The Commission proposes to approve Lower Murray Water's groundwater tariffs, because they provide signals to customers about the costs of providing groundwater services.

10.4.3 SOUTHERN RURAL WATER

Southern Rural Water proposed no real increase in the prices of its groundwater licence services.

The Commission proposes to approve Southern Rural Water's groundwater tariffs, because they provide signals to customers about the costs of providing groundwater services.

The Commission received submissions from groundwater users about the high cost of Southern Rural Water's licence charges for groundwater and specifically the cost reflectivity of the charge.[41] The Commission reviewed Southern Rural Water's costs and revenues from groundwater and found them comparable. Therefore, the Commission is satisfied groundwater licence charges reflect costs.

The Victorian Farmers Federation commended Southern Rural Water for:

- seeking to decrease the waiting/processing period for groundwater and rivers licences and construction applications
- keeping the tariffs for access to groundwater and unregulated rivers stable in the third regulatory period, and decreasing them slightly from the second regulatory period. [42]

The Commission proposes to approve Southern Rural Water's groundwater tariffs because they provide signals to customers about the costs of providing groundwater services.

10.5 DRAFT DECISION

The Commission proposes to approve the groundwater tariffs proposed by Goulburn-Murray Water, Lower Murray Water, and Southern Rural Water.

41 Ward, D. 2012, *Submission to price review*, 27 November.

42 Victorian Farmers Federation 2013, *Submission to price review 2013-18*, 25 January.

11 MISCELLANEOUS CHARGES

11.1 INTRODUCTION

As well as providing major rural water services (such as irrigation and groundwater services), rural water businesses provide miscellaneous services. Licence application and licence transfer fees are examples of rural miscellaneous services. Miscellaneous services are part of a range of prescribed services under the *Water Industry Regulatory Order* (WIRO) and subject to price regulation by the Commission.

11.2 APPROACH TO REGULATING MISCELLANEOUS SERVICES

Under the Commission's approach, each business was required to identify a core set of miscellaneous services. The core set should include businesses' most important miscellaneous services, including those expected to generate a significant proportion of total miscellaneous revenue. Table 11.1 explains the difference between core and noncore miscellaneous services.

TABLE 11.1 CORE AND NONCORE MISCELLANEOUS SERVICES

Service	Outline	Requirements to the Commission
Core miscellaneous service	Make up a majority of revenue from miscellaneous services, 'top 10'[a] miscellaneous services, most common miscellaneous services.	• definitions • scheduled prices • confirmation prices are set using pricing principles.
Noncore miscellaneous service	All other miscellaneous services.	• confirmation that prices are based on pricing principles • can have scheduled prices or be priced 'at cost' • no definitions required.

[a] There can be less than 10 services if they make up a majority of revenue.

Businesses' approved price schedules should include core miscellaneous services, to help customers understand the nature of miscellaneous services and when a charge applies. These price schedules form part of businesses' pricing determinations.

In its guidance paper,[43] the Commission reaffirmed the principles set out in the 2008 water price review. That is, prices for miscellaneous services should be set according to actual costs, based on the aggregate of:

- direct third party or contractor invoice cost
- direct marginal internal costs (including labour, materials and transport costs) and
- a fair contribution to overheads.

43 Essential Services Commission 2011, *2013 Water Price Review—Guidance on Water Plans*, October.

The Commission asked all water businesses to confirm they used these pricing principles when setting their miscellaneous service charges. Rural businesses may consider greater use of miscellaneous service charges if individual tariffs relate to a very small proportion of revenue or apply to very few customers.

Water businesses can either set a standard price for a service based on the pricing principles and listed on its pricing schedule, or apply actual cost on a case-by-case basis when charging for noncore miscellaneous services. For many services (for example, a meter accuracy test), businesses could set a standard price and review it annually to ensure it still represents actual cost. In other cases, especially for services provided infrequently (such as larger meter installations), businesses could apply actual cost on a case-by-case basis. The Commission considers businesses are best placed to make this decision.

The Commission sees merit in businesses using consistent approaches to provide and charge for miscellaneous services. However, the time and resources required to achieve such consistency may be substantial. Therefore, the Commission does not propose businesses adopt a common core set of miscellaneous services with standard pricing in the third regulatory period.

11.3 OVERVIEW OF BUSINESSES' PROPOSALS

Rural water businesses did not clearly identify their proposals for miscellaneous service charges in their Water Plans. Southern Rural Water did not discuss miscellaneous service charges at all in its Water Plan.

Goulburn-Murray Water initially proposed around 150 miscellaneous service charges. It proposed to review and consolidate its miscellaneous service charges to reduce complexity over the next regulatory period.

Lower Murray Water proposed maintaining its existing miscellaneous service charges and increasing them only by the consumer price index over the next regulatory period. It also proposed miscellaneous service charges for photocopying, other charges, and meter and connection charges not present in its last pricing determination.

None of the rural businesses stated in their Water Plans that they used pricing principles to determine their miscellaneous service charges, or that their noncore miscellaneous service charges would be based on actual costs.

11.4 COMMISSION'S ASSESSMENT

The Commission sought more information from the water businesses, given the lack of information they provided on miscellaneous service charges. Specifically, it requested businesses identify a core set of miscellaneous services, define each core service and confirm they used the Commission's pricing principles.

Lower Murray Water complied with this request and provided and defined its core miscellaneous service charges, and outlined the pricing principles it used when setting the charges. The Commission notes its charges are consistent with its pricing principles and the WIRO. For these reasons, the Commission proposes to approve Lower Murray Water's miscellaneous service charges.

Southern Rural Water provided its core miscellaneous service charges and confirmed it used the Commission's pricing principles. However, it did not define its core set of charges. The Commission proposes to approve Southern Rural Water's miscellaneous service charges subject to the business defining its core miscellaneous services.

Goulburn-Murray Water proposed around 150 miscellaneous service charges in its Water Plan. The Commission requested that it provide its core set of miscellaneous charges that comprise the majority of its miscellaneous services revenue. Goulburn-Murray Water did not provide its core miscellaneous service charges, clearly define the services provided for the charges, or identify the pricing principles it used to determine the charges. The Commission cannot approve the business's proposal without this information.

Wherever possible, appendix A lists all the businesses' proposed core miscellaneous services, a definition of the service and proposed charges.

11.5 DRAFT DECISION

The Commission proposes to approve Lower Murray Water's miscellaneous service charges.

The Commission proposes to approve Southern Rural Water's miscellaneous service charges subject to the business defining its core miscellaneous services.

Goulburn-Murray Water is required to provide the Commission with a core set of miscellaneous service charges, clearly define the services provided for the charges, and identify the pricing principles it used to determine the charges.

12 ADJUSTING PRICES

12.1 INTRODUCTION

In the water industry, the source of uncertainty often relates to the unknown accuracy of water businesses' forecasts pertaining to such matters as demand for their services (for example, water sales) and the cost of delivering those services. Despite this uncertainty, these forecasts are essential elements in determining each business's revenue requirements and price paths. The regulatory framework that governs these determinations, as demonstrated by the analysis described in the preceding chapters of this draft decision, is predicated on the proposition that, in most instances, the water businesses are better placed to manage this uncertainty than their customers.

Indeed, one of the major roles of the businesses is to manage this uncertainty on behalf of their customers in the event that an adverse demand or expenditure (or other) outcomes materialise during the regulatory period. Of course, water businesses can also potentially benefit from assuming this role when circumstances are more favourable than forecast (for example, where input costs are lower than expected).

Typically, regulators do not allow price adjustments within a regulatory period to reflect differences between the actual and forecast costs of service provision, demand or revenue. This is true irrespective of whether these differences are to the detriment or the benefit of the water business. This approach ensures that customers can have confidence in the predictability of the prices to be charged throughout the regulatory period.

The Commission’s regulatory framework provides flexibility for businesses to plan for and manage their exposure to the uncertainty associated with forecasts. This includes through:

- approving an overall revenue allowance for a regulatory period for each business, with the expectation that businesses will re-prioritise their expenditure as circumstances change (in consultation with customers)
- allowing for different forms of price control that allows a water business to mitigate the impacts of risks associated with forecasts, particularly in relation to demand
- allowing for changes to tariff structures such as through changing the mix of fixed and variable charges

Customers do not have similar opportunities to manage or mitigate changing circumstances. The regulatory framework administered by the Commission therefore seeks to provide the water businesses appropriate incentives to operate efficiently in managing uncertainty. Moreover, this flexibility ensures that the regulator need not intervene in operational decisions that best lie with the water businesses and that the cost of regulation is not increased necessarily.

There are circumstances, however, that lie beyond the scope of the water business to manage within the prices approved at the start of a regulatory period. There are mechanisms for a rural water business to seek Commission approval to re-open that decision.

12.2 REOPENING PRICE DETERMINATIONS IN RESPONSE TO UNCERTAIN AND UNFORSEEN EVENTS IN THE THIRD REGULATORY PERIOD

The approach to adjusting prices within a regulatory period will vary depending on the business. Southern Rural Water will continue to operate under the Commissions’ uncertain and unforeseen events mechanism.

Lower Murray Water and Goulburn-Murray Water are Part 6 operators, governed by the Water Charge (Infrastructure) Rules 2010 (WCIR). Under rule 40, the operator can apply for a variation of the approval or determination of its regulated charges for a regulatory period if an event (which the operator could not have reasonably foreseen) occurs during the regulatory period that:

- materially and adversely affects the operator's water service infrastructure, or
- otherwise materially and adversely affects the operator's business.

Since Lower Murray Water submitted its Water Plan, the Commonwealth Government announced a grant of $103 million to Lower Murray Water for an infrastructure modernisation program, which could significantly alter its expenditure and tariff projections. Lower Murray Water explained the potential impact of the grant as follows:

> "The recent announcement of the $103 million Commonwealth funding for the Sunraysia Modernisation Project will obviously affect our WP3, the extent of this is not known at this early state as a revised Business Case is yet to be developed. It is expected that major capital works will occur in the Merbein, Mildura and Red Cliffs irrigation districts. The Commission intends to continue a close dialogue with the ESC as this major project develops.[44]

The Commission notes that it is reasonably likely that Lower Murray Water will seek to apply for a reopening during the regulatory period. The need for a reopening will be influenced by the scope and scale of the Sunraysia Modernisation Project.

The remainder of this chapter focuses on the adjustment process for Southern Rural Water.

12.2.1 MID PERIOD PRICE ADJUSTMENT PROCESS FOR SOUTHERN RURAL WATER

In the final decision on the 2008 water price review, the Commission approved an uncertain and unforeseen events mechanism (at clause 4 of each of the businesses' Determinations) that set out a process for a business or the Commission to initiate a reopening of price determinations.

The reason for introducing the mechanism was to provide for increased flexibility for the Commission to consider whether to allow a mid-period adjustment to prices in response to events that could not have been foreseen at the time that prices were originally approved. This general re-opening provision was subject to a range of criteria being met (see below).

---

[44] Lower Murray Water 2013, personal communication to the Commission, 18 January.

As stated in the 2011 guidance paper, the Commission will adopt the uncertain and unforseen events mechanism in its current form for the third regulatory period.

However, the Commission will also enhance the mechanism to increase its flexibility to consider reopening a determination in response to specific events that are material, and for which the impacts can be isolated from other factors impacting on business costs and revenues.

Therefore, in certain cases—only for those where the impact of an uncertain and unforseen event is material, and the effects of which on a business's costs and revenues can be isolated from broader operational considerations — the Commission proposes to adopt a discretion to limit the scope of any reopening to a single event, rather than the full suite of factors influencing business costs and revenues. That is, any adjustment to prices will only reflect the reason for the reopening of prices. This differs from the general re-opening provision which takes into account all relevant up-to-date information regarding the affected water businesses' operations. Examples of more targeted re-opening might include price adjustments for unexpected and new statutory obligations, or delayed or cancelled projects.

This enhancement will help to ensure that the Commission can reopen determinations and, if justified, adjust prices in a more timely way. The Commission believes this flexibility will result in outcomes that are in the best interests of businesses and customers, and is consistent with the principle that customers should only pay for the services they receive.

During the second regulatory period, price changes arising from a re-opener have been limited to taking effect from 1 July of the relevant year. This has proven too limiting. Therefore, the Commission proposes to allow for price changes arising from the reopening of a price determination to take at any time within the regulatory period. This allowance will apply for any application under the uncertain and unforseen events mechanism. (It should be noted that a change in prices may be affected by the timing of its implementation. For example, if an increase in prices is found to be warranted, its later implementation is likely to result in a higher increase in order to recover the required revenue.)

These changes will not limit the consultation obligations the Commission has under the *Water Industry Regulatory Order* (WIRO) and the *Essential Services Commission Act 2001*, but will provide more flexibility for the Commission to adjust prices within a regulatory period, subject to certain criteria being met.

The Commission would require any application by a water business to re-open its prices to be informed by broad consultation with its customers.

Main features of the uncertain and unforseen events mechanism

For Southern Rural Water, the uncertain and unforseen events mechanism will continue to account for events that were uncertain or unforeseen at the time of the price review, such as:

- unsustainable or unwarranted differences between actual and forecast demand levels
- changes in legislative and other government imposed obligations
- catastrophic events (such as fire, earthquake or act of terrorism).

As with the final decision on the 2008 water price review, the Commission proposes to only consider applications for events listed above that the businesses cannot control or efficiently manage without undermining its delivery of services to customers. Other key features are:

- a water business (by application to the Commission) or the Commission may initiate a reopening.
- prices can either be raised or reduced as a result of an uncertain or unforeseen event.
- an adjustment to prices may be implemented by the Commission at any time within a regulatory period (and not only on 1 July in any year), or at the end of the regulatory period.
- there will be no nominal thresholds for applications (based on differences between forecast and actual outcomes for expenditure, revenue and demand). However in applying to reopen a decision, the water business will need to demonstrate it does not have the financial resources or operational capacity to manage its exposure.
- in certain cases—only for those where the impact of an uncertain and unforseen event on business costs or revenues is material, and the effects of which can be isolated with certainty — the Commission proposes to have discretion to limit the reopening of a determination to a single event, rather than the full suite of factors influencing business costs and revenues.

Main factors determining whether to approve a mid-period price adjustment

The Commission will agree to reopen its final price determination for review only when it is fully satisfied:

- the event is clearly outside the business's control and not predictable with any confidence.
- the business has exhausted all opportunities within its control to mitigate against the circumstances in which it finds itself, including demonstrable reprioritisation of its operating and capital expenditure programs.
- customers are not unduly exposed to risk or price fluctuations.
- the impact of the event is material, clearly observable and verifiable.
- the net impact on costs or revenue of all changes that occurred during the period being considered is significant (except in cases where the Commission identifies a material event for which the effects can be isolated).

A key threshold in deciding whether to approve a mid-period adjustment to prices is whether the business has the ability to absorb the impacts of any event that impacts on costs or revenues. The Commission places particular emphasis on financial viability ratios in assessing the appropriateness of a mid-period price adjustment. The Commission also expects the businesses to demonstrate they have exercised appropriate risk management processes to mitigate and plan for such events, wherever possible.

12.3 DRAFT DECISION

For Southern Rural Water, The Commission proposes to approve an uncertain and unforeseen events mechanism that sets out a process for businesses or the Commission to reopen price determinations to account for events that were uncertain or unforeseen at the time of the price review.

The mechanism will include new provisions that in certain cases—only for those where an uncertain and unforeseen event is material, and the effects of which on a business's costs and revenues can be isolated from broader operational considerations — the Commission propose to adopt the discretion to limit a reopening of determinations to the single event, rather than the full suite of factors influencing business costs and revenues (as applies under the general re-opener provision).

The Commission proposes to allow for price changes arising from the reopening of a price determination to take effect at any time within the regulatory period..

APPENDIX A – MISCELLANEOUS CHARGES

TABLE A.1 GOULBURN-MURRAY WATER

Miscellaneous service charge	Definition	Charge ($)
Private works	Not provided	
Security deposit		25% Job
Supervision fee		5% Job
Issue fee/job		77.00
Water district		
Reclassification fee	Not provided	141.00
Subdivision fees	Not provided	
Subdivision category A		589.00
Subdivision category AI		848.00
Diversion works on crown land	Not provided	
Small pipe outlet	Not provided	
Issue fee		128.00
Supply agreement	Not provided	
Issue fee		77.00
Investigation fee		141.00
High flow annual fee (drainage only)		66.00
New/amendment to supply by agreement		565.00
Purchase of additional water entitlement	Not provided	
Administration fee		79.00
Purchase of high reliability water share		2 142.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
Amend District Boundaries	Not provided	
Extension to G-MW Districts		508.00
Excision from G-MW Districts		508.00
By Laws Tariff Criteria		
$ per copy		6.00
Special Meter Reading	Not provided	
Meter Reading Fee/Meter		55.00
Bore Monitoring	Not provided	
Monitoring Fee/Bore		82.00
Delivery Share / Reservation Fee	Not provided	
Application Fee		178.00
Normanville Pipeline Scheme	Not provided	
Capacity Adjustment Request	Not provided	
Application Fee		178.00
Connection Fee	Not provided	
Administration Fee		81.00
Tapping/Meter Installation		685.00
Entitlement Acquisition		2 072.00
Update Models/Plans		187.00

Continued next page

TABLEA .1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
Delivery share / reservation Fee		
Application Fee	Not provided	
Annual Fee		
Shepparton		4 690.00
Central Goulburn		3 110.00
Rochester		2 684.00
Campapse		2 487.00
Loddon Valley		3 154.00
Murray Valley		2 834.00
Torrumbarry		2 906.00
Woorinen		4 650.00
Nyah		3 496.00
Tresco		4 388.00
Emergency Domestic & Stock Supply	Not provided	
Emergency Domestic & Stock Supply per kilolitre		0.40
Emergency Domestic & Stock Supply per megalitre		387.00
Information Statement		
Application for information statement under section 158 of the Act		
Land Information Statement	Not provided	107.00
Water Information Statement		
One Water Share Identification Number (WEE no.)	Not provided	33.00
Each additional Water Share Identification Number	Not provided	11.00
Rates and Charges Update - One per statement	Not provided	33.00
Express service	Not provided	49.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
Dams on Waterway		
Dams or other works less than 5ML capacity not requiring qualified engineering input or design and specifications by G-MW	Not provided	569.00
Dams less than 5ML capacity IR, CO and D&S with engineering design review, consultancy and assessments by G-MW	Not provided	2 229.00
Dams less than 5ML capacity IR, CO and D&S without engineering design review, consultancy and assessments by G-MW	Not provided	920.00
Dams greater than 5ML capacity or 7m embankment height with engineering design review, consultancy and assessments by G-MW	Not provided	2 787.00
Resubmission of revised proposals with G-MW assessment	Not provided	1 866.00
Dams greater than 5ML capacity or 7m embankment height without engineering consultancy and assessments by other than G-MW	Not provided	921.00
Private Dams not on a Waterway		
Dams requiring a licence to construct with engineering consultancy and assessment by other than G-MW	Not provided	921.00
Dams requiring a licence to construct with engineering, design review, consultancy and assessments by G-MW	Not provided	2 787.00
Resubmission of revised proposals with G-MW assessment	Not provided	1 866.00
Waterway Determination		
Water determination inspection and report/inspection	Not provided	741.00
Each additional assessment required/inspection	Not provided	320.00
SURFACE WATER LICENCE FEES		
Bundled Surface Water		
1. Applications for a Works Licence D&S and zero Vol*	Not provided	1 255.00
2. Application for renewal, amalgamation, subdivision	Not provided	763.00
2.1 For each additional licence renewed (same land)	Not provided	363.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge		Definition	Charge ($)
2.2	For each additional assignment of Licence issued from subdivision (third and subsequent licences)	Not provided	363.00
3.	**Application for replacement licence upon alteration**		
3.1	Category 1	Not provided	No charge
3.2	Category 2	Not provided	397.00
3.2	Category 3	Not provided	545.00
3.2	Category 4	Not provided	1 023.00
4.	Application for Temporary Transfer of licence volume	Not provided	71.00
5.	Application for Permanent Transfer of licence volume (to other land)	Not provided	990.00
6.	Application for Permanent Transfer of ownership (sale of land)	Not provided	616.00
7.	Assessment of Private Rights to Water Fee	Not provided	753.00
	Purchase of Water from G-MW Water Bank for S&D only	Not provided	2 353.00
	Technical assessment fee for sensitive/high risk applications (in additional to application fee)	Not provided	1 288.00
8.	**Irrigation Development Guidelines**		
	Tier 1	Not provided	236.00
	Tier 2	Not provided	Tier 1 + 1050.00
	Tier 3 Agreed Price (Quote)	Not provided	Tier 2 + 115.00/hour
9.	Convert Farm Dam Registration Licence to Standard Licence	Not provided	No charge
	Title Search Fee standard electronic search	Not provided	53.00
	Title Search Fee non standard	Not provided	106.00
10.	Repring of Bundled Surface Water Licence unsigned	Not provided	71.00
11.	Licence assessment with no field inspection component	Not provided	182.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
GROUNDWATER LICENCE FEES		
Bundled Groundwater		
12. Application for a Works Licence to construct, alter or replace for Domestic & Stock	Not provided	930.00
Each additional bore at the site	Not provided	349.00
12.1 Renewals of a Works Licence (Bore Construction) for Domestic & Stock	Not provided	631.00
12.2 Transfer of a Works Licence (Bore Construction) for Domestic & Stock	Not provided	397.00
13. Application for a Works Licence to construct, alter or replace for licensable purposes	Not provided	1 341.00
13.1 Application for a Works Licence to construct, alter or replace for licensable purposes each additional bore at the site	Not provided	349.00
13.2 Renewal of a Works Licence (Bore Construction) Licensable Use	Not provided	675.00
14. Application for a Works Licence to construct, alter or replace for investigation or monitoring	Not provided	500.00
14.1 Each additional bore at the site	Not provided	349.00
15. Application for a Groundwater Licence 0 ML – 20 ML	Not provided	1 399.00
15.1 Technical assessment fee for sensitive/high risk applications (in addition to application fee)	Not provided	1 288.00
16. Application for a Groundwater Licence more than 20 ML and up to 200 ML (inc.) plus	Not provided	2 900.00
Additional charge per ML greater than 20 ML	Not provided	6.70
17. Application for a Groundwater Licence more than 200 ML and up to 400 ML (inc.) plus	Not provided	4 240.00
Additional charge per ML greater than 200 ML	Not provided	13.20
18. Application for a Groundwater Licence more than 400 ML, plus	Not provided	6 526.00
Additional charge per ML greater than 400 ML	Not provided	26.50

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
19. Application for Temporary Transfer of Groundwater licence volume	Not provided	
19.1 Low Risk	Not provided	271.00
19.2 Medium Risk	Not provided	707.00
19.3 High Risk	Not provided	707.00
Additional charge per megalitre	Not provided	
0 ML – 20 ML	Not provided	No charge
20 ML – 200 ML	Not provided	6.60
200 ML – 400 ML	Not provided	13.00
400 ML plus	Not provided	26.00
20. Application for Permanent Transfer of Groundwater licence volume** (to other land)	Not provided	990.00
Additional charge per megalitre applied to zero volume groundwater licences	Not provided	
20 ML – 200 ML	Not provided	6.60
200 ML – 400 ML	Not provided	13.00
400 ML plus	Not provided	26.00
21. Application for Permanent Transfer of ownership (sale of land)	Not provided	990.00
22. Application for part assignment (subdivision) of Licence other than for Domestic and/or Stock and commercial use	Not provided	904.00
22.1 For each additional assignment of Licence issued (third and subsequent licences)	Not provided	623.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
23. Application for renewal of an irrigation licence	Not provided	795.00
23.1 For each additional irrigation Licence renewal (same land)	Not provided	623.00
24. Registration of Domestic & Stock Bore Fee		94.00
25. Application for replacement licence upon alteration	Not provided	
25.1 Category 1	Not provided	No charge
25.2 Category 2	Not provided	397.00
25.3 Category 3	Not provided	545.00
25.4 Category 4	Not provided	1 023.00
25.5 Category 4 (decrease licence volume)	Not provided	250.00
26. Irrigation Development Guidelines	Not provided	
Tier 1	Not provided	236.00
Tier 2	Not provided	Tier 1 + 1050.00
Tier 3 Agreed price (quote)	Not provided	Tier 2 + 115.00/hour
Capital charge for New Groundwater Entitlement (per licence ML)	Not provided	149.00
27. Partial Refund of BCL Licence Application Fee (nonconstruction only)	Not provided	242.00
28. Reprint of Bundled Groundwater Licence unsigned	Not provided	71.00
29. Licence assessment with no field inspection component	Not provided	182.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
Water Share & Allocation		
Application for assignment of allocation	Not provided	75.70
Application to transfer a Water Share	Not provided	170.00
Application to vary or associate a Water Share	Not provided	143.20
Application to consolidate a Water Share	Not provided	143.20
Application to divide a Water Share	Not provided	143.20
Application to divide and transfer a Water Share	Not provided	170.00
Application to investigate ownership of Water Share	Not provided	164.00
Copy of Record of Water Share	Not provided	23.90
Purchase of Water from G-MW Water Bank		
Land Transactions		
Change of Ownership	Not provided	67.00
Application to Issue or Vary a Delivery Share	Not provided	169.00
Application to Transfer a Delivery Share	Not provided	169.00
Application for delivery capacity assessent	Not provided	85.00
Application to Amalgamate/Subdivide Delivery Share	Not provided	282.00
Application to Cease to be a serviced property	Not provided	169.00
Application to issue or vary a Water User Licence - Tier 1	Not provided	395.00
Application to issue or vary a Water User Licence - Tier 2	Not provided	Tier 1 + 1050.00
Application to issue or vary a Water User Licence - Tier 3 Agreed price (quote)	Not provided	Tier 2 + 115.00/hour
Application to cancel a Water Use Entity	Not provided	No charge
Application to Issue/amend/renew a Works Licence	Not provided	675.00
Application to Transfer a Works Licence	Not provided	1 341.00

Continued next page

TABLE A.1 (CONTINUED)

Miscellaneous Charge	Definition	Charge ($)
Infrastructure operator establishment fee (syndicate)	Not provided	1 554.00
Licence assessment with no field inspection component (syndicate)	Not provided	182.00
Property Services	Not provided	
Grazing and general occupation licence application fee	Not provided	251.00
Jetties and slip ways licence application fee	Not provided	251.00
Regatta fees - first day	Not provided	184.00
Regatta fees - each consecutive day	Not provided	101.00

TABLE A.2 GWMWATER

Miscellaneous Charge	Definition	Charge ($)
Groundwater and Surface Water	Application for a Take and Use Licence (s51) other than Domestic and Stock	935.00
Groundwater and Surface Water	Permanent Transfer to New Licence / per Transaction (s62)	935.00
Surface Water	Construct Dam or Other Works on a Waterway	512.00
Groundwater	Application for a Licence to Construct or Alter a Bore (s67)	395.00
Groundwater	Application for Approval to Dispose of Matter Underground by Means of a Bore (s76)	395.00
Trade Waste	Application to discharge Trade Waste - Categoey 1 and 2	345.00
Groundwater and Surface Water	Application for a Renewal of Take and Use Licence (s53) other than Annual Licence	312.00
Wastewater	Waste Connection Charges - Large Industrial	303.00
Urban Water and Rural Pipeline	Water - Tapping/Connection Charge (tapping size 20mm) [a]	293.00
Groundwater	Application for a Licence to Construct or Alter a Bore - Data Collection Only	234.00

[a] Higher charge for larger size tappings. Based on actual costs.

TABLE A.3 LOWER MURRAY WATER

Miscellaneous Charge	Definition	Charge ($)
Water Share Issue Fee[a]	This is an application fee for the processing and recommendation to approve an issue of water share.	
Water Share Transfer (within Authority) Fee*	This is an application fee for the processing and recommendation to approve a water share transfer within Authority.	
Sub Division Processing Fee	This is an administration fee for investigation, correspondence and administration associated with the compliance of processing a subdivision, including setting requirements and conditions for the subdivision to occur	
Water Share Vary/Associate Fee*	This is an application fee for the processing and recommendation to approve a water share variation.	
Information Statement Fee	S 159(i) of the Water Act 1989 states that any person may apply to LMW for an information statement in relation to any land that is within a district of the LMW or its area of interest.	
These are requested as part of the sale of properties for information LMW has relating to a particular property. The fee includes one meter reading.		
Water Share Transfer (between Authority) Fee*	This is an application fee for the processing and recommendation to approve a water share transfer between Authorities.	
Trade of Water Allocation (between) Fee*	This is an application fee for the processing and recommendation to approve a trade of water allocation between Authorities.	
Water Share Division Fee*	This is an application fee for the processing and recommendation to approve a divide of water share.	
Water Share Cancel/Surrender Fee*	This is an application fee for the processing and recommendation to approve a cancellation or surrender of water share.	
Tapping Fee		
Tapping 20mm	This fee covers the installation of a tapping band and ferrule to LMW system. The plumber is required to excavate around LMW's main with adequate clearance to enable LMW to install a tapping band and ferrule. The plumber is responsible for backfilling, road opening fees and permits and safety of the site.	214.00

[a] Fees set by the Victorian Water Registrar

TABLE A.4 SOUTHERN RURAL WATER

Miscellaneous Charge	Definition	Charge ($)
BCL Applications Category A or B	Not provided	735
Information Statement, Special Meter Read	Not provided	90
Gw Licence Transfer (Sale Of Property) A	Not provided	580
Sw Licence Transfer (Sale Of Property) A	Not provided	580
Groundwater Licence Application - Under 20ml not significant	Not provided	1 365.00
Bore Construction Licence – Investigation	Not provided	90
Bore Construction Licence Renewal	Not provided	300
Gw Part Transfers (Licence Splits)	Not provided	1 365.00
Surfacewater Part Transfers (Licence Splits)	Not provided	1 365.00
Surfacewater Application Under 10 Ml not significant	Not provided	1 365.00

[a] Fees set by the Victorian Water Registrar

APPENDIX B – ENERGY COSTS AND CARBON PRICE

Appendix B refers to the final report from Deloitte in relation to the expenditure review. The following is an excerpt from the final report. This report is available on the Commission's website.

2.5 Electricity costs

2.5.1 Background

Electricity is a major cost item for many water businesses with pumping and treatment processes often requiring large energy inputs.

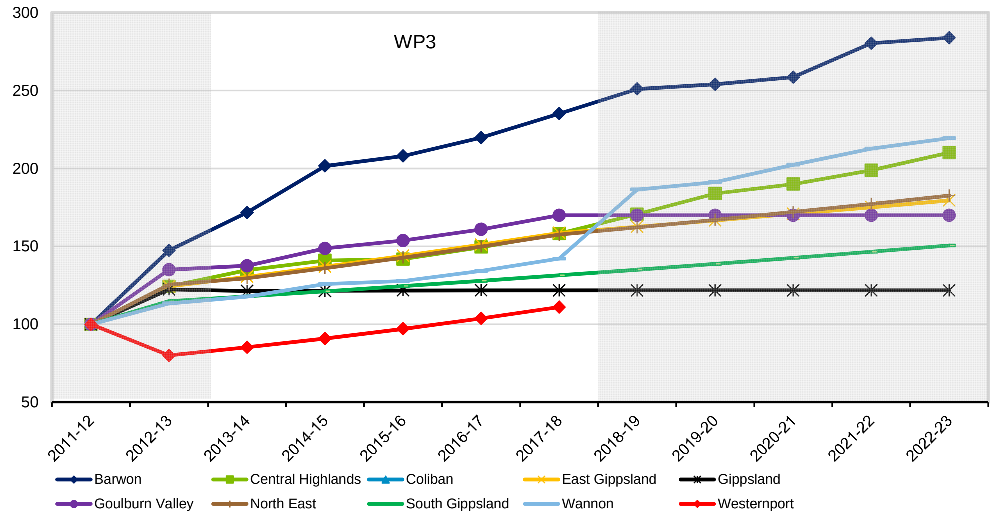
Each business has forecast increases in electricity costs over 2011-12 levels, citing factors including:

- The impact of the carbon price introduced on 1 July 2012
- Increasing network charges
- Increased volumes of electricity being used.

2.5.2 Business Proposals

In submitting their Water Plans to the ESC each business was asked to set out their forecast of electricity costs and justify any cost increases. The figure below summarises increases in electricity costs, using 2011-12 as a base year. Barwon Water has forecast the largest increase by far, with costs driven by both increased energy usage and an assumption about large price increases, particularly in 2012-13.

Figure 2-6 Total energy costs 2011-12 to WP4 (Index 2011-12 = 100)



Note: Coliban Water did not provide electricity costs for 2011-12 in its Water Plan.

While several businesses based their forecasts on a report prepared for the Water Services Association of Australia (WSAA), a wide range of different assumptions about usage and prices were made, as shown in the table below.

Table 2-3 Electricity cost increases

	Large site price increase (per kWh)	Small site price increase (per kWh)	Volume change 2011-12 to 2017-18
BW	46.4% in 2012-13, between -0.2% and 7.6% thereafter	31% in 2012-13, between 0.2% and 10.8% thereafter	35%
CHW	8.9% in 2012-13, between -1% and 7% thereafter	11.4% in 2012-13, between -0.1% and 5.3% thereafter	24%
CW	Not available	Not available	Not available
EGW	23% in 2012-13 4% pa thereafter	11% in 2012-13 4% pa thereafter	15%
GW	26% in 2012-13 0% pa thereafter	14% in 2012-13 0% pa thereafter	0.2%
GVW	43.3% in 2012-13, between 0.9% and 6.8% thereafter	13.3% in 2012-13, between 0.3% and 6.8% thereafter	11.1%
NEW	30% in 2012-13 and 5% pa thereafter	20% in 2012-13 and 5% pa thereafter	0%
SGW	18% in 2012-13 2% pa thereafter	9% in 2012-13 2% pa thereafter	6%
WNW	30% in 2012-13 18.2% in 2013-14 10.3% in 2014-15 4% in 2015-16 6.9% in 2016-17 8.1% in 2017-18	28.5% in 2012-13 0.7% in 2013-14 8.3% in 2014-15 3.3% in 2015-16 4.7% in 2016-17 5.5% in 2017-18	9%
WPW	2% pa	10% pa	-17%

Note: Coliban Water has not provided electricity price or volume increase assumptions for WP3 in its Water Plan. Wannon Water's forecasts are expressed in nominal terms – all other businesses are real.

The table below compares the average price (cents per kWh) forecast by the businesses for large sites, both historically and over WP3.

Table 2-4 Electricity costs per kWh, large sites 2011-12 to 2017-18

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BW	13.18	19.30	19.25	20.72	21.33	22.48	24.02
CHW	18.69	20.35	21.76	22.40	22.17	23.02	23.98
CW	Not provided						
EGW	11.97	14.69	15.27	15.88	16.51	17.16	17.84
GW	10.27	12.92	12.74	12.73	12.73	12.73	12.73
GVW	13.90	19.94	20.12	21.49	21.56	22.28	22.81
NEW	12.55	16.29	16.83	17.67	18.55	19.48	20.46
SGW	15.85	18.74	19.07	19.40	19.73	20.08	20.42
WNW	11.15	14.49	17.13	18.88	19.64	21.00	22.71
WPW	12.45	12.70	12.95	13.21	13.48	13.75	14.02

Source: ESC templates. Excludes new projects.

The average price per kWh will vary between businesses according to a range of factors including:

- Total use
- Peak versus off-peak consumption
- The relevant tariff
- Where the tariff includes a demand component, the peak demand
- The relevant distributor – some businesses are served by Powercor and the others by SP AusNet
- Contractual arrangements, including rebates.

Most regional water businesses buy electricity through bulk purchasing arrangements, with the majority using Procurement Australia to do so. The current bulk purchase agreement through Procurement Australia expires in June 2013.

2.5.3 Approach to assessment

Prior to setting out our approach to assessing the businesses' forecasts, it is useful to explain the various components of an electricity bill.

Components of the bill

A customer's electricity bill comprises three different cost elements, being:

- Wholesale ('energy') prices, which are determined in a competitive market both by bilateral contracts between generators and retailers and in the 'spot market'. Since 1 July 2012 wholesale electricity prices include the impact of Australia's carbon price.
- Network costs – including both distribution and transmission charges. These are set by the AER. The distribution costs are subject to two separate decisions – one related to general network costs and the other to metering costs.
- Other costs – which includes a range of items including:
  - Ancillary costs, including pool fees
  - Costs associated with various energy efficiency schemes

- o Retailer's margin

The relative contribution of the three different cost elements for an individual customer will differ according to the customer's usage and their location. In general, the higher the usage at a particular site the higher the proportion of energy costs relative to network costs.

Distribution network costs

Distribution network tariffs are re-set annually on 1 January based on a determination made by the AER in 2010. Each of the five distributors in Victoria has a different price path. The current AER determination lasts until 31 December 2015.

Prices generally change by the CPI plus the X factor determined by the AER in its 2010 decision, although smaller adjustments are made to reflect performance (the S factor) and licence fees (L factor). The table below sets out the applicable increases for the X factor until the end of the next regulatory period.

Table 2-5 Movements in distribution pricing

Date of increase	SP AusNet	Powercor
1 Jan 2012	7.64% nominal	6.60% nominal
1 Jan 2013	CPI + 5.22%	CPI + 6.3%
1 Jan 2014	CPI + 6.1%	CPI + 6.9%
1 Jan 2015	CPI + 6.1%	CPI + 7.4%
1 Jan 2016	To be determined	To be determined
1 Jan 2017	To be determined	To be determined
1 Jan 2018	To be determined	To be determined

Note: Westernport, South Gippsland, Gippsland, East Gippsland and North East Water are in SP AusNet's distribution area; the remainder of the businesses are in Powercor's area.

Individual tariffs may increase by up to 2% more than the average increase.

In Victoria, metering prices are subject to a separate regulatory regime associated with the smart meter roll out.

Transmission network costs

Electricity transmission network tariffs are reset annually on 1 April by SP AusNet based on a determination made by the AER in 2008. The AER determination applies until 30 March 2014.

Prices generally change by the CPI plus the X factor determined by the AER in its 2010 decision, although as with distribution pricing variations can apply. The X factor is currently 1% in each year.

Table 2-6 Movements in transmission pricing

Date of increase	SP AusNet
1 Jan 2012	CPI + 1%
1 Jan 2013	CPI + 1%
1 Jan 2014	To be determined
1 Jan 2015	To be determined
1 Jan 2016	To be determined
1 Jan 2017	To be determined
1 Jan 2018	To be determined

Energy costs

Energy prices are determined in a competitive market through a range of pool prices, bilateral contracts and self-generation. Energy prices are directly impacted by the carbon price, particularly in Victoria where most energy is from high-emissions brown coal, although other factors also affect the bill.

The carbon price will impact electricity costs primarily through the energy component of the bill. Following the implementation of the carbon price spot prices in Victoria increased from around $35 to $55-65 for off-peak use, and from $50 to $75 for peak use.

2.5.4 The Procurement Australia quote

As noted above, almost all the businesses purchase electricity through Procurement Australia. The current Procurement Australia bulk purchase is through AGL and expires on 30 June 2013.

Subsequent to the preparation and submission of water plans, tenders for the subsequent three year period have been received and Procurement Australia has recommended that a new three year contact be signed.

In summary the Procurement Australia offer provides, for large sites:

- A 12% reduction from the current price of 8.076 c/kWh in 2012-13 to 7.1116 c/kWh in 2013-14 (in nominal terms) for the energy component for peak use (including the carbon price)
- A 4% increase from the current price of 4.860 c/kWh in 2012-13 to 5.0313 c/kWh in 2013-14 (in nominal terms) for the energy component for off-peak use (including the carbon price)

For small sites the 2013-14 energy charge is similar to the current charge.

In the draft Overview paper we indicated that under the Procurement Australia offer the energy component of prices remains unchanged in **real** terms for three years. We have since held discussions with Procurement Australia which has confirmed that the energy component of prices will actually remain unchanged in **nominal** terms for three years.

The Procurement Australia generally provides for lower energy prices than assumed in the WSAA report and by businesses. Hence it appears that most forecasts included in Water Plans are overstated.

2.5.5 Our approach

It is not possible to undertake independent detailed modelling of all electricity sites operated by businesses. We have used the Procurement Australia tender outcomes, as advised to individual businesses, as the basis for our electricity forecasts. We have combined these tender outcomes with known changes in network costs and applied them to data provided by each business.

We have made a number of simplifying assumptions in undertaking our calculations. For example, we have applied the AER-determined distribution network price outcomes on a financial year basis, rather than calendar year basis. This increases our forecasts compared to the likely actual outcomes. At the same time we have not included any S-factor or L-factor outcomes, including in respect of 2013 prices which (for Powercor customers) reduces our forecasts compared to the likely actual outcomes and roughly offsets the impact of the financial year assumption.

Where possible we have worked with the businesses to apply our assumptions into the businesses' own electricity models. Where this was not possible, we have made a number of broad assumptions. In the case of small sites we have assumed that:

- 40% of costs are related to energy (including carbon costs)

- 45% are related to network costs
- 10% are related to MRET costs
- 5% are related to ancillary charges.

With a small number of exceptions we have accepted forecasts of electricity volumes proposed by each business.

Forecasting both energy costs (beyond the end of the Procurement Australia tender period on 30 June 2015) and network costs (beyond the end of the current regulatory period) is extremely difficult. A number of factors suggest that there could be real decreases in these costs such as:

- Demand for electricity is decreasing and hence future capital requirements are likely to be comparatively low
- With the linking of carbon prices to the European market there could be reductions in the carbon price element electricity prices
- In the latter years of the current regulatory period the ‘saw tooth’ effect of regulatory pricing is such that prices are above their cost-reflective levels, and need to reduce to achieve cost reflectivity
- There have been changes to the National Energy Rules which provide the AER with a stronger ability to scrutinise and review prices.

In the draft Overview document we outlined our view for forecasting purposes it was reasonable to assume that both the energy and network components of electricity prices would remain unchanged following the expiry of the Procurement Australia and current regulatory periods respectively. In their responses a number of businesses indicated they did not agree with this approach; however none provided persuasive information to support an alternative position. We have therefore maintained our approach.

2.7 Carbon price

2.7.1 Background

As noted above, the Australian Government introduced a carbon price on 1 July 2012. While none of the businesses that are the subject of our review are liable to pay the carbon price, some businesses may still face indirect price impacts through such things as:

- Disposal of waste to landfill – many landfill operators will be liable entities under the scheme.
- Price impacts as a result of their upstream suppliers being liable for the carbon price.

This has the potential to impact both capital and operating expenditure.

It is important to understand the impact of the carbon price as it was not present in the base year (2011-12) and hence needs to be explicitly taken into account in forward forecasts.

The impact of the carbon price will vary across input categories. Cost items likely to be most affected include Australian-manufactured products which have large energy inputs and where suppliers do not qualify for government assistance.[1]

The carbon price will change over time, with a 5% nominal increase applying on 1 July 2013 and 1 July 2014. Beyond this date, and for the remainder of the WP3 period, the carbon price is very uncertain. The Government's original intention was that a floating price, with a ceiling and a floor, would apply, but in late August 2012 it was announced that from 1 July 2015 Australia and Europe will be linking their emissions trading systems and that the price floor would not be implemented. If current prices are any indication, this could cause a sharp fall in the carbon price in 2015 – at present European carbon prices are approximately $10 per tonne of CO2. Prices are at historically low levels both due to weak European demand as a result of the ongoing financial crisis, as well as the strong Australian dollar. In announcing the linkage between the carbon schemes the Government maintained its confidence in Treasury modelling which predicts a $29 (nominal) carbon price in 2015-16. However many independent commentators are suggesting a much lower European price – around $10-$15 – is a more likely outcome. This is an estimate only – there are many highly uncertain factors including whether the European economy recovers and to what extent, whether the European Union delays the release of permits, and the strength of the Australian dollar.

It is also important to note that the effect of movements in the carbon price will be captured in the CPI and businesses will be able to adjust their prices accordingly.

[1] Due to the high carbon cost some organisations may face, and potential difficulties in passing this cost on to consumers, the government has implemented a wide reaching support package to be implemented during the three year fixed price period. The package will cover 94.5% of carbon costs for high intensity emission producers – such as steel manufacturing.

Various work has been undertaken to estimate the effect of the carbon price on water businesses. In its 2011 submission to its regulator, Sydney Water indicated that it expected its operating expenditure would be higher by about 1.2% as a result of the carbon price. In 2012 Deloitte estimated the impact on operating costs for a rural water business at around 0.7%, with the majority of this impact coming through electricity costs. Our 2012 work took into account, in part, actual input cost changes advised by individual suppliers. As a general rule we have found that actual price increases have been less than prior modelling would suggest, with many suppliers absorbing carbon price impacts.

2.7.2 Business proposals

All businesses have forecast that the carbon price will have an impact on electricity costs, with many also suggesting that it will also affect chemical costs.

The only business to suggest that a more widespread impact is likely is East Gippsland Water, which has forecast increases of around 2.5% across a wide range of inputs. These increases have been attributed to the carbon tax as well as a number of other reasons.

2.7.3 Approach to assessment

Given the relatively small impact that the carbon price appears to be having on non-energy cost inputs for water businesses, and the uncertainties regarding the future carbon price, our approach to the impact of the carbon price on operating expenditure has been as follows:

- Any broad-based expenditure increases to operating expenditure proposed by businesses as a result of the carbon price have been removed
- Where businesses are able to demonstrate material carbon price impacts on individual cost categories (for example, by providing documentation from suppliers outlining cost increases in 2012-13 as a result of the carbon price) we have included these increases in the forecasts. Where documentation has not been provided and/or costs are immaterial we have excluded any carbon impacts from the forecast
- We have assumed that the increase in input prices will be once-off. The relatively small increase in the carbon price in 2013-14 and 2014-15 is likely to be more than offset by a reduction in the price in 2015.