

Lower Murray Water final decision - rural services

2018 Water Price Review

19 June 2018

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Summary

In September 2017, Lower Murray Water provided a submission to us proposing rural prices for a five year period starting 1 July 2018

This final decision paper covers Lower Murray Water's rural services. A separate paper provides our final decision on Lower Murray Water's urban infrastructure services.¹

On 28 March 2018, we released our draft decision on Lower Murray Water's price submission for rural services. The draft decision set out our initial views on Lower Murray Water's proposals, and invited interested parties to make further submissions. We also held a public meeting in April 2018. In addition to a response from Lower Murray Water, we received three written submissions on our draft decision, which are available on our website. A list of these submissions is included in Appendix A to this final decision.

After considering feedback from Lower Murray Water, we have now made a price determination.² The price determination sets out the prices Lower Murray Water may charge (or the manner in which its prices are to be calculated, determined, or otherwise regulated) for the five year period from 1 July 2018 (2018–23). This final decision paper sets out our supporting reasons and analysis.

Where our final decision on a particular aspect is unchanged from our draft decision, we have not detailed the supporting reasons in our final decision. Rather, we have noted that our final decision confirms the reasons and position we reached in the draft decision.

Where we have reached a different decision to that proposed in our draft decision, or where new information required our consideration, we have set out our reasons in full in this final decision. This final decision should be read in conjunction with our draft decision.

¹ Our final decision for Lower Murray Water's urban infrastructure services is available on our website.

² Before the commencement of a regulatory period, clause 29 of the Water Charge (Infrastructure) Rules 2010 requires us to make a price determination which determines the maximum prices a water corporation may charge, or the manner in which its prices are to be calculated, determined or otherwise regulated during the regulatory period. See Essential Services Commission 2018, *Lower Murray Water Determination: 1 July 2018 – 30 June 2023*, June.

Our final decision has updated the revenue to be collected by Lower Murray Water

Our final decision approves a revenue requirement of \$128.3 million over the five year period starting 1 July 2018.³ This is \$0.2 million or 0.1 per cent higher than our draft decision, and mainly reflects our updates to labour and energy costs, as anticipated in our draft decision.

Lower Murray Water will improve rural services

Our final decision approves prices that will allow Lower Murray Water to deliver on its customer service commitments, government policy and other obligations.

Some of the ways Lower Murray Water plans to improve outcomes for customers are by:

- investment in irrigation and drainage systems renewals in response to feedback that customers value the reliable supply of irrigation water
- improving access to account information and staff in response to feedback that customers value real time information and personal contact.

Rural tariff structures will remain the same

Our final decision approves Lower Murray Water's proposed tariff structures, which reflect a continuation of its current approach. Lower Murray Water's tariffs are location specific and cover an array of services for irrigation, drainage, waterworks, stock and domestic and private diversions.

We also approve Lower Murray Water's proposed 'revenue cap' form of price control. This means the revenue Lower Murray Water can earn is fixed at the start of its regulatory period, but customer prices may vary annually – within pre-defined limits – so the corporation can meet its revenue requirement.

For more detail on tariffs and the form of price control, see from pages 31 and 27, respectively.

³ The revenue requirement is the forecast amount a water corporation needs to deliver on customer outcomes, government policy, and other obligations. Along with forecast demand, it is an input to calculating the prices to be charged by a water corporation.

1. Our role and approach to water pricing

We are Victoria's independent economic regulator

Our role in the water industry includes regulating prices and monitoring the service standards of the 19 water corporations operating in Victoria.

Lower Murray Water's rural infrastructure-related services and prices are regulated under the Commonwealth's Water Charge (Infrastructure) Rules 2010 (WCIR). In February 2011, the Australian Competition and Consumer Commission (ACCC) accredited the commission to regulate Lower Murray Water's rural infrastructure related services. This accreditation required the commission to follow the ACCC's pricing principles (made under the WCIR) when conducting its price review. The accreditation decision and the attached pricing principles are available on our website.

Some of Lower Murray Water's miscellaneous services are not infrastructure related, and are regulated under the Water Industry Regulatory Order 2014 (WIRO).

We are reviewing the prices 17 water corporations propose to charge customers from 1 July 2018

In September 2017, Lower Murray Water provided a submission to us proposing rural prices for a five year period starting 1 July 2018. Our task is to assess the price submission against the legal framework that governs our role, and make a price determination that takes effect from 1 July 2018. The price determination will specify the maximum prices Lower Murray Water may charge for its rural prescribed services, or the manner in which prices are to be calculated, determined or otherwise regulated. We also issue a final decision that explains the reasons for our price determination.

We assess prices against the WICR and other legal requirements

The WCIR requires the commission to adopt a building block approach to review Lower Murray Water's proposed prices. This approach has four steps.

The first step is to establish service obligations and other outcomes that Lower Murray Water proposes to deliver over the regulatory period. These obligations and outcomes reflect obligations imposed by the Minister for Water through the Statement of Obligations and government regulatory agencies, and customer preferences.

Next, the commission determines the revenue that Lower Murray Water needs to meet these service obligations and outcomes. To do so, it reviews Lower Murray Water's expenditure proposals and calculates an appropriate return on Lower Murray Water's assets. The revenue

approved by the commission does not represent amounts that Lower Murray Water is required to spend or direct to particular activities or projects. In consultation with customers, Lower Murray Water is free to determine its expenditure priorities and to pursue innovation and efficiencies that enable it to outperform cost assumptions.

At the third step, the commission reviews Lower Murray Water's service demand forecasts that are used to forecast prices.

Finally, the commission reviews Lower Murray Water's proposed tariff structures and calculates prices to apply in the first year of the regulatory period. These prices will form part of the commission's final decision.

2. Our assessment of Lower Murray Water's price submission

We have made our price determination for Lower Murray Water after considering: Lower Murray Water's price submission, its responses to our queries and our draft decision, and written submissions from interested parties. A list of submissions responding to our draft decision is provided in Appendix A. We also held a public meeting in April on our draft decision to receive feedback.

Any reports, submissions, or correspondence provided to us which are material to our consideration of Lower Murray Water's price submission are available on our website (to the extent the content is not confidential).

Lower Murray Water's price submission and financial model presented clear and comprehensive information to support its proposals. Lower Murray Water also provided evidence that its engagement sought to capture the main priorities and concerns of customers, and that it has taken this feedback into account (see customer engagement on page 5).

Our guidance paper for rural infrastructure services included a number of matters Lower Murray Water must address in its price submissions. Lower Murray Water's price submission addressed each of these matters, with our preliminary assessment set out in our draft decision. Our final decision is set out below.

Our final decision is generally consistent with our draft decision. Where our final decision on any particular aspect is unchanged from our draft decision, we have not detailed the supporting reasons for our decision. The analysis in this paper focuses on areas where we have reached a different decision to that proposed in our draft decision, or where new information required our consideration. Accordingly, this report should be read in conjunction with our draft decision.

3. Customer engagement

Our guidance required Lower Murray Water to engage with customers to inform its price submission.⁴ Lower Murray Water adopted an extensive engagement approach for its rural services that aligned with the commission's requirements for its urban services. The commission notes that this approach to rural engagement is greater than what is required under the WCIR.

The engagement by Lower Murray Water:

- took place between September 2016 and September 2017
- used a range of methods including focus groups, rural customer research, pop-up kiosks at farmers' markets and social media to inform and update its customers on the pricing submission process
- sought views from agricultural industry representatives such as Murray Valley Wine Grape Growers, Dried Fruit Australia and Citrus Australia, and was informed by its rural customer service advisory committees and the strategic advisory committee
- covered topics such as irrigation operation, enforcement of delivery shares, removal of channels near local schools, capital works programs, affordable and financially sustainable services, climate change and maximising the benefit of irrigation networks.

More detail on Lower Murray Water's engagement is available at pages 3 to 7 of its price submission.⁵

Evidence that Lower Murray Water's engagement influenced its proposals includes:

- investment in irrigation and drainage systems renewals in response to feedback that customers value the reliable supply of irrigation water
- improving access to account information and staff in response to feedback that customers value real time information and personal contact.

The Consumer Action Law Centre (CALC) suggested we could play a greater role to promote best practice customer engagement and identify areas for improvement.⁶ We note that following our price review, we will continue to work with water corporations to promote best practice customer engagement.

⁴ Essential Services Commission 2017, *2018 Lower Murray Water Rural Price Review, Guidance paper*, February, pp. 11-13.

⁵ Lower Murray Water's price submission is available on our website at www.esc.vic.gov.au.

⁶ Consumer Action Law Centre 2018, *Submission on standard draft decisions: 2018 Water Price Review*, 8 May, p. 4.

4. Service outcomes

Introduction

This chapter reviews Lower Murray Water proposed service outcomes.⁷ The WCIR do not cover Lower Murray Water's services standards, which are regulated under Victoria's legal framework. Consistent with its price submission covering Lower Murray Water's urban water and related services, Lower Murray Water has proposed a set of outcomes for its rural customers, as well as the outputs and activities that will provide a basis to measure Lower Murray Water's progress against each outcome.

Lower Murray Water's proposed service outcomes

The service outcomes Lower Murray Water proposes to deliver over the five year period starting 1 July 2018 are:

- supply customers with water when they need it
- keep customer costs to a minimum
- be easy to contact and quick to respond
- comply with other government obligations.

Each customer outcome has performance measures and targets for Lower Murray Water to achieve. Proposed changes include improved targets and some new performance measures. Improved targets include:

- More than 98 per cent of water orders delivered on time (up from 95 per cent).
- Less than 60 channel / pipe bursts and leaks per 100 km by 2023 (currently 70 per 100 km).
- Less than 7 complaints to EWOV per year (currently 1.3 per 1000 customers).

Lower Murray Water has proposed a new measure of customer satisfaction. It proposes to survey customers who interact with it and aims for 80 per cent satisfaction. Lower Murray Water's proposed service standards are set out on pages 9 to 12 of its price submission.

To facilitate improved transparency around Lower Murray Water's performance, Lower Murray Water has proposed to report annually in summary on its website, along with a downloadable

⁷ Under the WCIR, operators are required to provide details of the 'infrastructure service standards' that they will deliver. Consistent with the terminology in our rural guidance to Lower Murray Water, we refer to those 'infrastructure service standards' as 'service outcomes'.

report and also include any interim reporting. It will also discuss results with the Strategic Advisory Committee and Customer Service Advisory Committee.

Draft decision on service outcomes

Our draft decision proposed to approve Lower Murray Water's proposed service outcomes because they are consistent with the requirements in our guidance. Lower Murray Water:

- provided evidence that the new service outcomes were informed by the business's customer engagement program
- provided evidence to demonstrate the connection between the performance measures, key actions, activities and programs proposed to achieve the specified service outcomes
- is improving service outcomes as a result of the Sunraysia Modernisation Project Stage 1 which delivered 365-day irrigation access
- is proposing measures aimed at improving customers' satisfaction with its service.

Final decision on service outcomes

In a submission in response to our draft decision, Consumer Action Law Centre has noted a range of ambitions by water corporations when it comes to proposed service standards and that water corporations should be encouraged to 'improve service standards over time'.⁸

We note that Lower Murray Water proposed targets for standards improve on past targets, and were developed in consultation with its rural customers to reflect the aspects of service delivery most important to customers. No other new considerations were raised in submissions on our draft decision that affected our assessment of service outcomes. Our final decision accepts Lower Murray Water's proposed service outcomes for the same reasons.

Service outcomes and targets are set out in Appendix B and form part of the manner in which Lower Murray Water's services are regulated.

⁸ Consumer Action Law Centre, op. cit., p. 4.

5. Operating expenditure

Introduction

This chapter reviews Lower Murray Water's forecast operating expenditure. Operating expenditure is a key input into customer prices. The completion of the Sunraysia Modernisation Project (Stage 1) and the associated modernisation of infrastructure means that Lower Murray Water's future operating expenditure requirements will differ from past requirements (in terms of the nature and magnitude of expenditure).

We regulate Lower Murray Water's forecast operating expenditure according to the ACCC's pricing principles (Box 5.1) made under the WCIR.

Box 5.1 ACCC's principles for assessing operating expenditure

In making an assessment of the prudent and efficient operating expenditure for the next regulatory period, the regulator must assess:

- the prudence and efficiency of operating expenditure in the previous regulatory period
- the reasons and evidence supporting changes to service standards in the next regulatory period
- the reasons and evidence supporting changes to operating expenditure in the next regulatory period
- reasonable productivity improvements in providing services over the next regulatory period.

Where relevant, a regulator must compare and take into account operating expenditure of similar businesses.

Forecasts must be based on reasonable assumptions of the efficient costs likely to be incurred in this period.

Source: Australian Competition and Consumer Commission 2012, *Application by Essential Services Commission of Victoria for accreditation Final decision*, 17 February.

Draft decision on operating expenditure

In our draft decision (pages 9 to 15), we outlined our assessment approach and proposed to accept Lower Murray Water's operating expenditure forecast of \$98.32 million for the 2018–23 period. In summary, we found:

- Evidence indicating its baseline controllable operating expenditure reflects an efficient benchmark.⁹
- Lower Murray Water justified the additional operating costs for energy and savings for labour and various other items above its annual baseline cost. Lower Murray Water was the only water corporation to have no recommended adjustments to controllable operating expenditure by Deloitte.
- Lower Murray Water proposed to provide an updated electricity forecast once it had its new contracts in place ahead of our final decision.
- We accept Lower Murray Water's explanation of the Sunraysia Modernisation Project stage 1 operating costs impacts and consider these productivity improvements are reasonable.

We noted in our draft decision that we would update the forecast non-controllable operating expenditure for our final decision based on the latest inflation and external bulk charges-data.¹⁰

Final decision on operating expenditure

Lower Murray Water's response to our draft decision accepted the commission's adjustments, but provided updated forecasts for controllable operating expenditure based on the latest information for labour and energy.

- The 2018-19 Victorian budget cut the payroll tax from 3.65 per cent to 2.425 per cent for regional corporations from 1 July 2018. As a result, Lower Murray Water has proposed savings of \$0.52 million across the 2018–23 period. This is consistent with our draft decision requirement to be provided with updated forecasts if there is a change in legislation or government policy.
- In its price submission, Lower Murray Water proposed additional electricity costs of \$5.90 million above the baseline for the 2018–23 period. In its response to our draft decision, Lower Murray Water has increased this to \$7.30 million above the baseline based on its latest energy contract until 30 June 2020 and then expected prices until 30 June 2023 using advice from Ernst & Young and SavvyPlus Consulting. It highlighted 30 per cent of its controllable costs are for electricity, and that it has adopted a progressive procurement strategy so prices are not fixed for the term of the contract. We have verified the forecast electricity prices and costs for 2018–23.¹¹ However, the forecasts from SavvyPlus were expressed in nominal terms, so we have adjusted these for inflation to produce a revised forecast of \$6.68 million. We consider the revised

⁹ Controllable costs are those that can be directly or indirectly influenced by a water corporation's decisions.

¹⁰ Non-controllable costs are those that cannot be directly or indirectly influenced by a water corporation's decisions.

¹¹ We requested our expenditure consultant, Deloitte Access Economics, to review the updated electricity price forecasts and compare against the information received for our draft decision. Deloitte recommended a \$0.34 million increase for our final decision.

electricity forecast better reflects efficient operating expenditure and for our final decision we accept a \$0.78 million increase from our draft decision.

- Lower Murray Water also updated its balancing adjustment in its financial model, which reduced its controllable operating expenditure forecast by \$0.01 million across the 2018–23 period. This item was added to its proposed cost variation above the baseline to absorb model corrections (refer to page 11 of our draft decision for more details).

No other new considerations were presented in submissions received following the draft decision which caused us to change our views on operating expenditure. Accordingly, our final decision for controllable operating expenditure accepts a \$0.26 million increase from our draft decision for 2018–23.

For non-controllable operating expenditure, we have revised our draft decision forecasts where required based on the latest March 2018 inflation and external bulk charges information. We have revised our forecast environmental contribution from our draft decision, and made no changes to forecast licence fees or external bulk charges.¹²

Based on the latest inflation data, we have revised the forecast 2018-19 environmental contribution from \$0.52 million to \$0.50 million, which results in a total reduction of \$0.08 million across the 2018–23 period.

Accordingly, we have decreased our draft decision forecast for Lower Murray Water's non-controllable operating expenditure by \$0.08 million to \$18.45 million across the 2018–23 period.

Table 5.1 sets out our adjustments from our draft decision for controllable and non-controllable operating expenditure. Table 5.2 sets out the benchmark operating expenditure we have adopted for our final decision.

¹² For the environmental contribution, we have used the 2018-19 value provided by the Department of Environment, Land, Water and Planning and assumed that this will remain flat in nominal terms (decline in real terms) across the 2018–23 regulatory period.

Table 5.1 Adjustments to draft decision operating expenditure

\$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Draft decision – operating expenditure	20.5	19.7	19.4	19.4	19.3	98.3
Updated balancing adjustment	0.00	-0.00	0.00	-0.00	-0.013	-0.013
Electricity	0.13	0.26	0.26	0.13	0.00	0.78
Payroll tax	-0.11	-0.10	-0.10	-0.10	-0.10	-0.52
Total adjustments to controllable costs	0.02	0.16	0.16	0.03	-0.11	0.26
Environmental contribution	-0.02	-0.02	-0.02	-0.02	-0.02	-0.08
Total adjustments to non-controllable costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.08
Final decision - total operating expenditure	20.5	19.8	19.6	19.4	19.2	98.5

Note: Numbers have been rounded

We have adopted the benchmark for operating expenditure set out in Table 5.2 for the purpose of making our final decision on Lower Murray Water's revenue requirement (Table 7.4). We consider our final decision for Lower Murray Water's forecast operating expenditure is consistent with the requirements of our guidance and the ACCC's pricing principles, and we are satisfied that Lower Murray Water is recovering no more than its efficient operating expenditure.

We note that Lower Murray Water is proposing to maintain service levels, but has proposed improvements in some areas and a lower annual controllable operating expenditure.

Table 5.2 Final decision – operating expenditure

\$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Controllable costs	16.8	16.1	15.9	15.7	15.5	80.0
Non-controllable costs	3.7	3.7	3.7	3.7	3.7	18.5
- Bulk services ^a	3.2	3.2	3.2	3.2	3.2	15.9
- Environmental contribution ^b	0.5	0.5	0.5	0.5	0.5	2.4
- Licence fees - ESC ^c	0.017	0.017	0.017	0.017	0.029	0.096
Draft decision - operating expenditure	20.5	19.8	19.6	19.4	19.2	98.5

^a Bulk services covers the supply of bulk water from Goulburn-Murray Water to Lower Murray Water

^b The Environmental Contribution collects funds from water corporations under the Water Industry Act 1994 (Vic)

^c Licence fees are paid to cover costs incurred by the Essential Services Commission in their regulatory activities related to the water corporation

Note: Numbers have been rounded

The benchmark operating expenditure that we have adopted for Lower Murray Water does not represent the amount that Lower Murray Water is required to spend or allocate to particular operational, maintenance and administrative activities. Rather, it represents assumptions about the overall level of operating expenditure (to be recovered through prices) that we consider sufficient to operate the business and to provide services over the regulatory period.

6. Capital expenditure

Introduction

This chapter reviews Lower Murray Water's proposed capital expenditure. Capital expenditure forecasting involves anticipating the scope, timing and costs for a large number of various sized projects, ranging from the replacement of existing assets at the end of their lives to the construction of major new assets and facilities.

We regulate Lower Murray Water's infrastructure related capital expenditure according to the ACCC's pricing principles. These principles focus on the efficiency and prudence of capital expenditure (Box 6.1) made under the WCIR.

Box 6.1 ACCC's principles for assessing capital expenditure

In making an assessment of the prudent and efficient capital expenditure for the next regulatory period, the regulator must assess:

- the prudence and efficiency of capital expenditure in the previous regulatory period (where relevant to proposed capital expenditure in the next regulatory period)
- the reasons and evidence supporting the commencement of new major capital expenditure projects in the next regulatory period, including whether such projects are consistent with efficient long term expenditure on infrastructure services
- the reasons and evidence supporting levels of capital expenditure in the next regulatory period
- whether the timeframe for delivering the proposed capital expenditure program is reasonable, having regard to the operator's delivery of major projects in the past
- whether the asset management and planning framework of the operator reflects best practice.

Forecasts must be based on reasonable assumptions of the efficient costs likely to be incurred in this period. Subject to confidentiality, external review of an operator's proposed capital expenditure must be made public on the regulator's website.

Source: Australian Competition and Consumer Commission, op. cit.

Draft decision on capital expenditure

Capital expenditure is an input to estimating the regulatory asset base. In our draft decision (pages 17 to 21), we proposed to accept Lower Murray Water's capital expenditure forecast of \$34.34 million for the 2018–23 period. The reasons for this were:

- Lower Murray Water's price submission and business cases provided evidence that its forecasts for capital expenditure are efficient.
- Lower Murray Water's forecast capital expenditure is consistent with the ACCC principles requiring reasons and evidence for the forecast levels of capital expenditure.
- We considered the timeframe for delivering the planned capital expenditure program is reasonable, given Lower Murray Water's past track record for delivering its capital expenditure program.
- Lower Murray Water has an appropriate approach for managing expenditure associated with uncertain projects.
- Lower Murray Water has demonstrated that it is working towards best practice in terms of its asset management and planning framework.
- We considered Lower Murray Water's approach to forecasting its capital expenditure is consistent with the requirements of our guidance and the ACCC's pricing principles.¹³

Final decision on capital expenditure

Lower Murray Water's response to our draft decision proposed no adjustments to the draft decision.

No other new considerations were presented in submissions received following the draft decision which caused us to change our views on capital expenditure.

Accordingly, we have adopted the gross capital expenditure benchmark proposed in our draft decision for the purpose of making our final decision on Lower Murray Water's forecast regulatory asset base (Table 7.2) and its revenue requirement (Table 7.4). We consider this benchmark is consistent with our guidance and the ACCC's pricing principles.¹⁴

The benchmark that we adopt for Lower Murray Water does not represent the amount that the water corporation is required to spend or allocate to particular projects. Rather, it represents assumptions about the overall level of expenditure (to be recovered through prices) that we consider sufficient to operate the business and to maintain or improve services over the regulatory

¹³ Essential Services Commission 2017, op. cit., pp. 23-29.

¹⁴ *ibid.*, p.7.

period. Lower Murray Water determines how to best manage the allocation of its revenue and priority of its expenditure within a regulatory period.

Our final decision accepts Lower Murray Water's approach for addressing uncertain capital expenditure. We reiterate that Lower Murray Water will need to demonstrate the prudence and efficiency of additional costs incurred during the 2018–23 period if seeking to include them in the regulatory asset base.

7. Revenue requirement

Introduction

This chapter presents Lower Murray Water's revenue requirement. The commission must be satisfied that Lower Murray Water's prices are set at a level that generates sufficient revenue for the water business to recover the efficient cost of delivering services over the regulatory period. This revenue does not represent the approval of any particular projects or items of expenditure. Rather, Lower Murray Water should allocate its revenue depending on the most efficient spending options available during the regulatory period, which may change over time.

Approach to reviewing the revenue requirement

The ACCC's pricing principles require us to use the 'building block' approach to estimate the revenue that Lower Murray Water requires to deliver proposed service outcomes. Under this approach, the revenue reflects operating expenditure and a return on the regulatory asset base (RAB) updated annually to reflect additional capital expenditure and regulatory depreciation.

We set out our approach to rolling forward and calculating the RAB in our guidance, which aligns with the requirements of the ACCC's pricing principles.¹⁵

Regulatory asset base

The regulatory asset base is used to estimate the return on assets and regulatory depreciation in the revenue requirement. Our guidance required Lower Murray Water to propose its:

- closing regulatory asset base at 30 June 2017
- forecast regulatory asset base for each year of the regulatory period from 1 July 2018.

Closing regulatory asset base

We update the regulatory asset base to reflect actual capital expenditure, government and customer contributions, and asset disposals for the period to 30 June 2017. This helps to ensure prices reflect the actual expenditure of a water corporation.

Our draft decision proposed to accept a closing regulatory asset base for 30 June 2017 of \$84.6 million. We proposed to accept this amount as Lower Murray Water's actual net capital expenditure was 24.3 per cent lower than the forecast used to approve maximum prices for the period from 1

¹⁵ Australian Competition and Consumer Commission, op. cit.

July 2013.^{16 17} Lower Murray Water also calculated its closing regulatory asset base in accordance with the requirements of our guidance.

No other new considerations were raised in submissions on our draft decision that affected our assessment of the closing regulatory asset base. Our final decision accepts a closing regulatory asset base at 30 June 2017 of \$84.6 million, as set out in Table 7.1.

Table 7.1 Final decision - Closing regulatory asset base
\$ million 2017-18

	2012-13	2013-14	2014-15	2015-16	2016-17
Opening RAB 1 July	68.3	78.2	54.6	45.0	74.1
Plus gross capital expenditure	13.5	12.4	45.8	53.3	13.4
Less government contributions	0.0	32.3	51.9	19.2	0.0
Less customer contributions	1.5	0.5	0.3	0.2	0.1
Less proceeds from disposals	0.3	0.6	0.6	2.0	0.1
Less regulatory depreciation	1.9	2.5	2.7	2.8	2.8
Closing RAB 30 June	78.2	54.6	45.0	74.1	84.6

Note: Numbers have been rounded

Forecast regulatory asset base

The forecast regulatory asset base is calculated having regard to the closing asset base, and forecasts for capital expenditure, government and customer contributions, and asset disposals.

Table 7.2 sets out our final decision on Lower Murray Water's proposed forecast regulatory asset base from 1 July 2018.¹⁸

¹⁶ Net capital expenditure is calculated by deducting government and customer contributions from gross capital expenditure.

¹⁷ We take a risk-based approach to including past capital expenditure in the regulatory asset base. We undertake a prudence and efficiency review where a water corporation has exceeded its net capital expenditure forecasts by more than 10 per cent. We believe this approach is reasonable given capital expenditure can be relatively 'lumpy' in nature.

Table 7.2 Final decision - Forecast regulatory asset base
\$ million 2017-18

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening RAB 1 July	84.6	74.0	83.9	86.8	88.7	89.8
Plus gross capital expenditure	2.6	13.9	6.0	5.2	4.4	4.9
Less government contributions	6.2	1.1	0.0	0.0	0.0	0.0
Less customer contributions	0.3	0.3	0.3	0.3	0.3	0.3
Less proceeds from disposals	3.9	0.4	0.4	0.4	0.4	0.4
Less regulatory depreciation	2.8	2.2	2.4	2.5	2.6	2.7
Closing RAB 30 June	74.0	83.9	86.8	88.7	89.8	91.4

Note: Numbers have been rounded

Approach to reviewing the rate of return

We set out our approach to reviewing the rate of return in our guidance, which aligns with the requirements of the ACCC's pricing principles.¹⁹ This approach includes the weighted average cost of capital (WACC) parameters required by the pricing principles.

Draft decision on rate of return

In our draft decision we proposed a WACC of 4.0 per cent and stated we would update this figure in our final decision.

¹⁸ Our rural guidance required Lower Murray Water to use forecast figures of the components of its regulatory asset base from the 2013 price determination for incomplete years where actual figures are not available. This is so we can assess the opening asset base for 1 July 2018. An adjustment will be made for any difference between the forecast figures and actual figures at the price review following the 2018 water price review.

¹⁹ Australian Competition and Consumer Commission, op. cit.

We estimated the real risk free rate and a debt margin according to the methodology in the ACCC's pricing principles to calculate a rate for return for Lower Murray Water:

- We calculated the real risk free rate from the 40 day trading period to 16 March 2018.
- We developed the range for the debt margin. This range is consistent with recent guidance and decisions of other Australian regulators.²⁰ We included an assumed 0.15 per cent debt raising cost in our range for the debt margin based on information from the Treasury Corporation of Victoria.

Final decision on rate of return

No other new considerations were raised in submissions on our draft decision that affected our assessment of the rate of return. There has also been no material change to any of the WACC parameters since the draft decision. The real risk free rate from the 40 day trading period to 4 June 2018 remains at 0.82 per cent. Our final decision adopts a WACC of 4.0 per cent consistent with our draft decision. The parameters for the final decision are in Table 7.3.

Table 7.3 Final decision - Real post tax WACC

WACC parameter	Source of parameter	Value
Risk free rate of return	Commission estimate	0.82%
Equity beta	ACCC pricing principles	0.70
Equity (market risk) premium	ACCC pricing principles	6.00%
Debt margin (includes debt raising cost)	Commission estimate	2.00–2.50%
Financing structure (debt assets)	ACCC pricing principles	60%
Franking credits	ACCC pricing principles	0.50
Forecast inflation	Commission estimate	2.30%
Vanilla post tax (real) WACC range		3.7–4.0%
Proposed Vanilla post tax (real) WACC		4.0%

Approach to calculating depreciation

Regulatory depreciation is an input to calculating the regulatory asset base. In our guidance, we stated Lower Murray Water should estimate regulatory depreciation using reasonable assumptions

²⁰ Independent Pricing and Regulatory Tribunal 2017, *WACC biannual update*, February.

about asset life and utilisation. We also noted in our guidance that we prefer a straight line depreciation profile.²¹

Final decision on regulatory depreciation

Our draft decision proposed to accept Lower Murray Water’s forecast regulatory depreciation, as it was calculated in a manner consistent with the requirements of our guidance.²² No new considerations for depreciation were raised in submissions following the draft decision which caused us to change our views on depreciation.

For the reasons set out above, our final decision adopts Lower Murray Water’s forecast for regulatory depreciation, as set out in Table 7.4.

Final decision on the revenue requirement

Table 7.4 Final decision - Revenue requirement
\$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Operating expenditure	20.5	19.8	19.6	19.4	19.2	98.5
Return on assets	3.2	3.4	3.5	3.6	3.6	17.3
Regulatory depreciation	2.2	2.4	2.5	2.6	2.7	12.5
Revenue requirement	25.9	25.6	25.6	25.6	25.6	128.3

Note: Numbers have been rounded

²¹ Essential Services Commission 2017, op. cit., p. 36.

²² For the period from 2018-19 to 2022-23, Lower Murray Water proposed a regulatory depreciation of \$12.5 million.

8. Demand

Introduction

This chapter reviews Lower Murray Water's proposed demand forecasts. Demand forecasts are a key input into the determination of prices and are relevant to the assessment of past and forecast capital expenditure and operating expenditure.

Approach to reviewing demand

The commission must ensure that Lower Murray Water's proposed demand forecasts meet the requirements of the WCIR and the ACCC's pricing principles for rural infrastructure related services.²³ Rule 11 of Schedule 1 of the WCIR outlines the requirements of demand forecasts (Box 8.1).

Box 8.1 Water charge infrastructure rules requirements of demand forecasts

The Commission will assess whether Lower Murray Water's proposed forecasts:

- are based on an appropriate and unbiased forecasting methodology
- are based on reasonable assumptions about the key drivers of demand, including:
 - supply restrictions
 - environmental conditions, including water inflows and the availability of water
 - commodities, including the treatment of water as a derived demand
 - any elasticity assumptions
 - demographic impacts, where appropriate
- utilise the best available information, including historical data that can identify trends in demand
- take account of current demand and economic conditions.

Source: WCIR 2010.

²³ Essential Services Commission 2017, op. cit., p. 41.

Lower Murray Water's proposal for demand forecasts

Lower Murray Water's demand forecasts are set out at pages 31 to 33 of its price submission, and are also included in its financial model. Lower Murray Water forecast:

- irrigation customer numbers consistent with historical trends
- an increase in irrigation volumes in Mildura, Merbein and Red Cliffs due to more favourable business conditions and development occurring within the districts
- an increase in private diverter volumes consistent with historical trends
- domestic and stock connection numbers and volumes consistent with historical trends.

Draft decision on demand forecasts

Lower Murray Water proposed a revenue cap form of price control. Therefore, demand forecasts have minimal impact on revenue recovered by the business. The commission considered that Lower Murray Water's proposed demand forecasts meet the requirements of the WCIR and the ACCC's pricing principles for rural infrastructure related services. For this reason we proposed to accept Lower Murray Water's demand forecasts.

Final decision on demand forecasts

No other new considerations were presented in submissions received following the draft decision which caused us to change our views on Lower Murray Water's demand forecasts.

Our final decision accepts Lower Murray Water's demand forecasts.

9. Form of price control

Introduction

This chapter reviews Lower Murray Water's proposed form of price control. The form of control can be an important means of managing risk for water businesses and also has implications for how price changes will affect water customers.

For the current regulatory period, Lower Murray Water has a revenue cap form of price control with a rebalancing constraint of plus or minus 10 per cent. This means that Lower Murray Water may alter its prices to raise the revenue allowed by the commission at the last price review, but must limit individual price changes to plus or minus 10 per cent in any single year.

Approach to reviewing forms of price control

The ACCC's pricing principles allow the commission to apply any form of price control. In our guidance we supported Lower Murray Water maintaining its revenue cap.

Lower Murray Water proposed to continue to apply a revenue cap to its regulated tariffs. A revenue cap allows prices to be adjusted to reflect under or over-recovery of revenue in prior years, usually due to deviations in demand from forecast. Lower Murray Water proposed to limit any annual price increase to 10 per cent (not including inflation). Its proposal is similar to its current approach, which we approved in 2013.

Final decision on form of price control

Our guidance noted that if Lower Murray Water proposed to continue with its existing price control, it would only need to state this in its submission.

Our draft decision proposed to approve Lower Murray Water's proposed continuation of its existing form of price control as it allows the recovery of sufficient revenue to cover the forecast efficient costs of providing services. Also, by limiting price increases arising from variations in demand from forecast, its proposal helps to minimise the impact of price changes on customers that can arise under a revenue cap.

No other new considerations were presented in submissions received following the draft decision which caused us to change our views on the form of price control.

For the reasons set out above, we consider it appropriate to maintain the views we expressed in our draft decision. Our final decision accepts the position in our draft decision for the same reasons, and accepts Lower Murray Water's proposed form of price control.

Lower Murray Water's proposal to adjusting prices

Lower Murray Water proposed pass through mechanisms are set out at page 37 and pages 56 to 58 of its price submission. It proposed:

- to continue with its existing uncertain and unforeseen events mechanism
- to continue a direct pass through of Goulburn-Murray Water entitlement storage fees
- a pass through mechanism for electricity costs.

Draft decision on adjusting prices

In our draft decision we:

- Accepted Lower Murray Water's proposal to continue the existing uncertain and unforeseen events mechanism. Under this mechanism, Lower Murray Water may apply for a variation of our determination subject to the requirements specified in rule 40 of the WCIR.
- Accepted Lower Murray Water's proposal to continue a pass through of Goulburn-Murray Water's entitlement storage fees. However, we requested Lower Murray Water to detail how it would interact with its form of price control.
- Did not accept Lower Murray Water's proposed electricity cost pass through mechanism. We noted that Lower Murray Water proposed to share the risk of electricity cost increases with its customers in an effort to reduce the impact of forecast increases on prices. It was unclear at the time of our draft decision if Lower Murray Water required an electricity pass-through mechanism for costs above its proposed forecast increase to energy costs, given the change to market conditions since its submission. We also considered that the proposed pass through formula was not easy to understand.

Final decision on adjusting prices

Our final decision has accepted the uncertain and unforeseen mechanism proposed by Lower Murray Water (noting submissions responding to our draft decision presented no new information to change the views we expressed in our draft decision).

In response to our draft decision, Lower Murray Water proposed to exclude revenue arising from the pass through of Goulburn-Murray Water entitlement storage charges from its revenue cap. Lower Murray Water levies entitlement storage charges on behalf of Goulburn-Murray Water and remits the revenue to Goulburn-Murray Water. Our final decision accepts the continuation of this arrangement.

In response to our draft decision, Lower Murray Water requested that the commission reconsider its draft decision, and approve the proposed pass through mechanism for electricity costs. In support of this, it noted:

- Its business is particularly exposed to electricity prices. Electricity prices account for over 30 per cent of the corporation's controllable costs for the rural business, and around 10 per cent of costs for the urban business.
- Electricity price uncertainty continues to exist.
- Since the draft decision, it sought customer committee member views on the proposed mechanism. The feedback was that committee members thought the adjustment mechanism was an appropriate option for addressing the energy requirements of the business.

Given the above, our final decision accepts Lower Murray Water's proposed electricity cost pass through mechanism as it:

- is supported by its customer committees
- is symmetrical – if it is triggered then customers would benefit from lower electricity prices (and would pay more if electricity prices rise)
- is consistent with providing for the financial viability of Lower Murray Water (given the cost exposure of the business to electricity prices)
- will continue to provide incentives for Lower Murray Water to manage electricity costs, given the mechanism will only be triggered if electricity costs were to increase substantially above forecast.

The approved mechanism is set out in Lower Murray Water's price determination.²⁴

²⁴ The approved mechanism has been altered from Lower Murray Water's original submission to ensure the mechanism trigger is dependent on total actual electricity costs incurred breaching the upper or lower bound collar.

10. Tariffs

Introduction

This chapter reviews Lower Murray Water's proposed tariff structures. Lower Murray Water did not propose any changes to its existing tariff structures for pumped irrigation, waterworks, stock and domestic and private diversions.

Approach to reviewing tariffs

The commission regulates Lower Murray Water's tariffs according to the ACCC's pricing principles (Box 10.1).

Box 10.1 ACCC's principles for assessing tariffs

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.

Source: Australian Competition and Consumer Commission 2012, op. cit.

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

Draft decision on tariffs

Our draft decision proposed to approve Lower Murray Water's proposed continuation of its existing tariff structures for irrigation, drainage, waterworks, stock and domestic and private diversions. Lower Murray Water proposed to continue recovering the costs incurred by individual districts through the use of location based pricing.

Lower Murray Water proposed a rebalancing of its prices within each district to cover the forecast increase to electricity costs and changes to other forecast costs during the proposed regulatory period.²⁵

Our draft decision also proposed to accept Lower Murray Water's proposed approach to calculating its miscellaneous charges as it is consistent with our principles.²⁶

Our draft decision noted that we provide water corporations with a large degree of discretion to decide on individual tariff structures.²⁷ This recognises that Lower Murray Water, in consultation with its customer consultative committees and customers, is best placed to consider the interests of customers in designing tariffs, and that existing tariff structures have been developed over time to deal with a variety of local circumstances.

Our draft decision considered Lower Murray Water's approach to charging the Victorian Environmental Water Holder for actual costs incurred to deliver environmental water was acceptable, as it reflects the costs incurred by Lower Murray Water to deliver the environmental water through its regulated infrastructure.

We considered Lower Murray Water's proposed price movements reflect costs incurred within its districts, and accord with the ACCC's principle of giving effect to 'user pays' principles. We also considered Lower Murray Water's proposed tariff structures satisfied the requirements of our guidance.²⁸ For these reasons we proposed to accept Lower Murray Water's proposed tariff structures.

Final decision on tariffs

No new considerations were presented in submissions received following the draft decision which caused us to change our views on Lower Murray Water's proposed tariff structures.

In its response to our draft decision, Lower Murray Water proposed tariffs reflecting our draft decision on its revenue requirement. The proposed tariffs satisfy the ACCC principles as described in Box 10.1.

For the reasons set out above, our final decision accepts Lower Murray Water's proposed tariffs.

²⁵ In response to our enquiry, Lower Murray Water confirmed that proposed price changes had been consulted on with its Customer Committees.

²⁶ Lower Murray Water's prescribed miscellaneous charges are calculated in a way that meets the requirements of the WCIR and the WIRO.

²⁷ Essential Services Commission 2017, op. cit., p. 46.

²⁸ *ibid.*, pp. 45-48.

Our price determination for Lower Murray Water sets out the prices it may charge for the five year period from 1 July 2018 (or the manner in which its prices are to be calculated, determined, or otherwise regulated for each tariff).

Lower Murray Water's irrigation bills in Merbein and Mildura will generally remain steady from 1 July 2018, increasing by around 0.2 and 0.4 per cent respectively. Red Cliffs will increase by around 1 per cent in 2018-19, while Mildura HPS will receive and increase of just over 2 per cent and customers in Robinvale will receive a bill decrease of around 1 per cent. Private diverter bills will increase by around 1.3 per cent in 2018-19.²⁹

²⁹ Indicated bill movements are in real \$2018-19. Irrigation bills are based on 100ML of annual usage and private diverters on 1000ML. Bills also include pass through of Goulburn-Murray Water entitlement charges.

Appendix A – submissions received on draft decision

Name or organisation	Date received
Kingspan Environmental and Urban Water Cycle Solutions	23 May 2018
Water Services Association of Australia	15 May 2018
Consumer Action Law Centre	8 May 2018

Appendix B – approved service standards

We have approved the following standards and conditions of service and supply and associated targets for Lower Murray Water’s rural services.

Lower Murray Water’s approved rural service standards

Proposed performance assessment criteria	Unit of measurement	2018-19	2019-20	2020-21	2021-22	2022-23
Outcome 1 – Supply me with water when I need it						
Water orders delivered on time (whole of rural business)	Percentage	> 98	> 98	> 98	> 98	> 98
Channel / pipe bursts and leaks (whole of rural business)	Per 100 km	< 64	< 63	< 62	< 61	< 60
Deliver capital plan on cost and on time (Projects >\$1 M)	Percentage	95	95	95	95	95
Outcome 2 – Keep my costs to a minimum						
Billing payment issues complaints	Number	< 4	< 4	< 4	< 4	< 4
Deliver price path commitment for rural customers as approved by the commission	Pass/Fail	Pass	Pass	Pass	Pass	Pass
Deliver 1% per annum efficiency improvement	Pass/Fail	Pass	Pass	Pass	Pass	Pass
Statutory compliance reports generated automatically	Percentage	90	92	94	96	100
Outcome 3 – Be easy to contact and quick to respond						
Post interaction satisfaction survey: Number of completed surveys	Number	150	150	150	150	150
Post interaction satisfaction survey: Level of customer satisfaction	Percentage	> 80	> 80	> 80	> 80	> 80
Community satisfaction survey	Percentage	> 78	> 79	> 80	> 81	> 82
Customer complaints to EWOV	Number	< 7	< 7	< 7	< 7	< 7
Calls answered within 60 seconds (operations room)	Percentage	> 85	> 85	> 85	> 85	> 85
Report our performance against all rural customer outcomes to customers annually	Pass/Fail	Pass	Pass	Pass	Pass	Pass
Outcome 4 – Comply with other government obligations						
Compliance with government reporting policy requirements	Percentage	100	100	100	100	100
Implement strategies to deliver Letter of Expectations and associated policies (Water for Victoria)	Pass/Fail	Pass	Pass	Pass	Pass	Pass

Note: Numbers have been rounded

Lower Murray Water's approved rural service standards (continued)

Proposed performance assessment criteria	Unit of measurement	2018-19	2019-20	2020-21	2021-22	2022-23
Customer Service Code – Irrigation						
Number channel bursts and leaks - Merbein	per 100 km	155	154	153	152	151
Number channel bursts and leaks - Red Cliffs	per 100 km	65	64	63	62	61
Number channel bursts and leaks - Robinvale	per 100 km	10	10	10	10	10
Number channel bursts and leaks - Millewa	per 100 km	7	7	7	7	7
Number channel bursts and leaks - Mildura	per 100 km	150	148	146	144	142
Unaccounted for water - Merbein	Percentage	12	12	12	12	12
Unaccounted for water - Red Cliffs	Percentage	12	12	12	12	12
Unaccounted for water - Robinvale	Percentage	2	2	2	2	2
Unaccounted for water - Millewa	Percentage	20	20	20	20	20
Unaccounted for water - Mildura	Percentage	15	15	15	15	15
Customer Service Code – Licensing/Administration						
Use licences determined within 30 days	Percentage	90	90	90	90	90
Processing transfer of water use licences between Lower Murray Water customers within 10 days	Percentage	90	90	90	90	90
Processing permanent transfer of water shares between Lower Murray Water customers within 10 days	Percentage	85	85	85	85	85
Number of works licences metered or assessed for metering at 30 June	Percentage	95	95	95	95	95
Volume of total annual use limit metered at 30 June	Percentage	95	95	95	95	95