Queensland Competition Authority

Guidelines for pricing proposals

Rural irrigation price review 2025–29

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SUMMARY

The Queensland Government has directed the Queensland Competition Authority (the QCA) to recommend prices for irrigation services[1] provided by Seqwater and Sunwater in specified water supply schemes and distribution systems for the period 1 July 2025 to 30 June 2029.

Our review is limited to pricing for irrigation customers in the specified water supply schemes and distribution systems (excluding water services provided by Burnett Water Pty Ltd in relation to Paradise Dam and Kirar Weir), as the government has only directed us to look at those prices. The structure and level of prices for non-irrigation customers are outside the scope of this review.

This paper provides guidance to the water businesses about our expectations for the pricing proposals that the businesses are required to submit, our overall approach to assessing proposals and the information we require to undertake our assessment. This early formal guidance will provide greater certainty for the businesses in the planning and development of their proposals. It will also give other stakeholders a better understanding of our approach. We will also provide informal support to the businesses, as required, during the development of proposals.

We expect the businesses to develop pricing proposals that are informed by meaningful engagement with their customers. In the 2020 review, we recommended that the businesses draw a clearer link for customers between service levels, proposed costs, and prices; and that they engage with customers to develop proposals that incorporate prices in future reviews. Better engagement should enhance the quality of proposals from the businesses by ensuring that the proposals consider the interests of customers and other affected stakeholders.

This paper also outlines the methods we have applied to determine allowable costs in recent reviews. This should help the businesses to anticipate our likely approach for this review. However, the businesses can propose alternative methods, which we will consider on their merits.

Pricing proposals should include the supporting information set out in this guidance so that we can undertake our assessment effectively. If we receive this supporting documentation in the proposal, it will limit the need for us to seek further information and help to streamline the review process.

[1] For the purposes of the review, irrigation services are defined as the supply of water or drainage services for irrigation of crops or pastures for commercial gain.

1 ABOUT THIS GUIDANCE

1.1 Our role

We have been directed by the Queensland Government to review the irrigation pricing practices of Seqwater and Sunwater. We are conducting the review under a referral issued by the Treasurer under sections 23 and 24 of the *Queensland Competition Authority Act 1997* (QCA Act).[2]

The purpose of the review is to recommend irrigation prices for the period from 1 July 2025 to 30 June 2029 (the price path period). The government will take our price recommendations into account before determining the prices that the businesses can charge.

1.2 Purpose of these guidelines

This paper provides guidance to the water businesses about our expectations for their pricing proposals, our overall approach to assessing proposals and the information we require to undertake our assessment. We expect the businesses to develop proposals that are informed by meaningful engagement with their customers. Proposals should include the supporting information set out in this guidance, so that we can undertake our assessment effectively.

We have separately published a guidance paper to provide information to stakeholders about how we intend to conduct the review, including our approach to stakeholder consultation and key review dates.

1.3 Pre-lodgement support

Our staff will be available to provide advice and support to the water businesses as they develop their pricing proposals and consult with customers. We may provide updated guidance throughout the review process.[3] In doing so, we will consult with stakeholders.

Pre-lodgement support by our staff will involve:

- periodically checking in with the businesses to confirm whether their engagement activities are on track
- flagging potential concerns with engagement processes as early as possible.

If requested, our staff may also:

- give informal feedback on the business's engagement strategy
- observe and provide feedback on engagement activities
- hold workshops with the businesses, as required, to clarify our expectations
- provide assistance on the methods to determine costs outlined in these guidelines
- provide feedback on whether methods to derive proposed costs or prices appear to be significantly inconsistent with the expectations in these guidelines.

[2] The referral is available on our website.

[3] In this respect, we are currently reviewing whether we need to refine our regulatory approaches given the climate change risks and opportunities now confronting regulated businesses.

Our staff may also meet with other stakeholders, including customer representative groups, to informally discuss aspects of our proposed review process (e.g. our proposed stakeholder engagement approach).

1.4 Next steps

The water businesses are required to submit their pricing proposals by 30 November 2023. We will then begin our consultation process by holding stakeholder workshops in early 2024. Given our expectations that the businesses will take greater ownership of customer engagement to inform their proposals, we expect the businesses to present key points from their proposals at our initial stakeholder workshops and address any queries stakeholders may have. Further information about the workshops will be provided closer to the time.

Following the workshops, we invite stakeholders to make submissions on the businesses' proposals and any other issues considered relevant to our review by 29 February 2024. Our separate guidance paper for all stakeholders sets out the timeline for our review process.

2 OUR APPROACH TO THE REVIEW

In this chapter, we explain the framework for our review and describe our approach.

2.1 Principles guiding our review

Under section 24(1)(d) of the QCA Act, we are required to provide our price recommendations in accordance with requirements set out in the referral.[4] The main requirement is that prices for each tariff group are to transition towards a price target that would recover the irrigation share of a scheme's allowable costs, in accordance with the government's pricing principles.

In conducting our review, we must also consider the matters in the QCA Act and the stated matters in the referral.[5] The matters we are required to consider are extensive, diverse and potentially conflicting—for example, the need for efficient resource allocation, the protection of consumers from abuses of monopoly power, social welfare and equity considerations, balancing the interests of the water businesses and their customers, and economic and regional development issues (see Appendix A).

Regulatory tools are limited in their ability to achieve multiple and potentially conflicting goals or objectives. While we will use our judgement to weigh up and take the various matters into account, we will prioritise economic efficiency, because promoting efficient outcomes is consistent with the overall public interest and maximising benefits to society. Prices that reflect prudent and efficient costs signal the efficient cost of providing water services to customers, promote efficient consumption and investment decisions, and protect consumers from the use of monopoly power.

2.2 How we will assess pricing proposals

We expect the water businesses to develop pricing proposals that are informed by meaningful engagement with their customers. The businesses should focus particular attention on the economic efficiency matters in Appendix A, as in general, we consider that non-economic factors are best addressed through government policy.[6] In the latter respect, proposed prices should be in accordance with the government's pricing principles.

In developing their proposals, the businesses should consider irrigation prices that:

- promote efficient outcomes—for instance, by improving cost reflectivity to promote efficient usage and investment decisions by customers[7], and by reflecting the appropriate sharing of risk
- are informed by the preferences of customers
- promote the public interest—considering the impact on customers (including non-irrigation customers, where relevant) and the level of community service obligation payments

[4] Referral, para. B(1.1).
[5] In accordance with sections 24(1)(b) and 26 of the QCA Act.
[6] QCA, *Statement of regulatory pricing principles for the water sector*, final statement, April 2021, p. 2.
[7] Note that the application of the government's pricing principles with a transition path for reaching the price target can limit our ability to recommend prices that reflect prudent and efficient costs.

- are transparent, predictable and simple—prices should be cost-effective to implement and administer and easy to understand.

In the context of our review, the government's water pricing policy has implications that the businesses need to consider in developing their pricing proposals (see Box 1).

Box 1: Implications of the government's rural irrigation pricing policy

Irrigation prices are transitioning to levels required to recover the allowable costs under the referral. Any business decisions that impact on the expected revenue shortfall from irrigation prices should consider the implications for the rural irrigation water price subsidy.

In addition, while our review is confined to pricing for irrigation customers, many schemes have both irrigation and non-irrigation customers. Any business decisions that impact on service levels or costs across all customer groups (i.e. irrigation and non-irrigation customers) should consider the full implications for all these customer groups.

For example, any decisions to reduce service standards (with an associated reduction in costs) should involve consultation with all affected customers. In the case of proposals for improved service levels (with associated cost increases), the business should, in addition to consulting with all affected customers, consider the implications for the subsidy. We generally consider that irrigation customers' willingness to pay for the associated incremental costs would only be demonstrated where irrigation prices immediately transition to recover the full allowable costs associated with the improved service levels.[8]

Similarly, proposed changes to tariff structures (e.g. rebalancing of costs from the volumetric to fixed tariff components) could have the effect of increasing scheme-level revenue shortfalls or increasing the total costs allocated to high priority customers.

We will assess the following aspects of the business's proposal as part of our review process:

- the operating context within which the business operates (see Chapter 3)
- whether proposals are informed by meaningful engagement with customers (see Chapter 4)
- the business's justification for the prudency and efficiency of proposed costs with reference to the views of customers and our expectations (see Chapter 5)
- the business's explanation of price targets and associated prices with reference to our expectations and for consistency with the government's pricing principles (see Chapter 6).

If a proposal includes the supporting documentation discussed in these guidelines, it will limit the need for us to seek further information, thereby further streamlining the review process.

We intend to adopt a targeted approach to assessing proposals. For example, where a proposal shows that the business has understood customer concerns about costs and explains how the business has sought to address these, we may be able to streamline our assessment of the prudency and efficiency of proposed costs, to focus on any areas of contention.

In reaching our price recommendations, we would generally be receptive to recognising agreements between the businesses and their customers, if those agreements are consistent with the promotion of efficient outcomes and the requirements in the referral. However, we may not recognise agreements if they result in inefficient cost shifting to other customers (including to

[8] Unless the government has indicated that it is willing to pay any additional cost of the subsidy.

non-irrigation customers) or other stakeholders (e.g. taxpayers), or if the agreements are otherwise inconsistent with the requirements in the referral.

To reach our price recommendations for the core irrigation service, we need to follow three key steps, which will be informed by our assessment of the businesses' proposals and stakeholder submissions:

- Determine the prudency and efficiency of costs in each scheme—we need to ensure that prices reflect the efficient costs of service levels that are necessary to meet regulatory obligations[9] and service levels agreed with customers[10].
- Decide how the scheme costs are to be allocated to tariffs and smoothed over the price path period to reach the price target for each tariff group.
- Derive prices that will transition towards the price target—these are prices that are consistent with the government's pricing principles, which are the prices we will recommend.

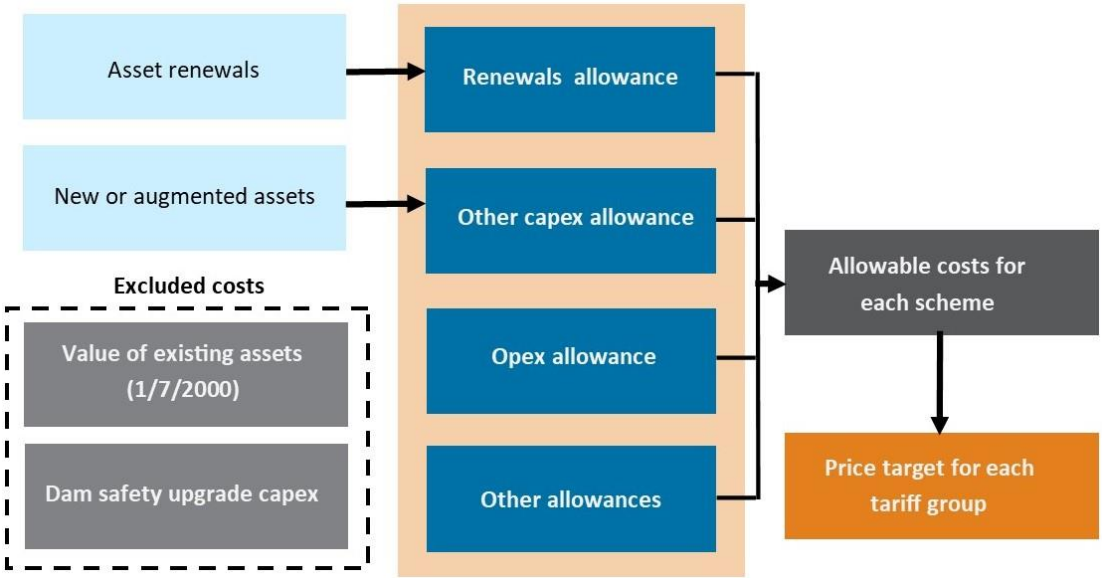
We also need to determine miscellaneous prices for the services provided by the businesses that are ancillary to the core irrigation service.

2.2.1 Determine prudency and efficiency of costs in each scheme

We will determine the prudency and efficiency of the costs of supplying customers (irrigation, urban and industrial) in each of the specified schemes. We intend to obtain external technical advice to inform our assessment.

The relevant costs for assessment are those allowable under the referral (see Figure 1).

Figure 1 Allowable costs under the referral



Allowable costs comprise an appropriate allowance for expenditure on renewing existing assets[11], a return on and of capital expenditure (capex) associated with augmentation of existing assets or

[9] Including regulatory and legislative obligations, such as those relating to water planning and dam safety, imposed by government and other regulatory bodies.
[10] Including customer service standards.
[11] As well as, where applicable, improved service levels agreed with customers.

new assets[12], operating expenditure (opex), allowances for working capital and tax, and costs arising from review events. Excluded from allowable costs are allowances for two types of capex— that is, capex incurred before 1 July 2000 to build the existing assets and capex on dam safety upgrades.

After deciding on the prudent and efficient level of costs for each scheme, we may need to make other scheme-level adjustments, including those for revenue offsets and distribution loss transfers.

2.2.2 Converting scheme-level costs into a price target for each tariff group

We will assess how the scheme-level costs are converted into a price target for each tariff group. To do this, we will assess how the water businesses propose to:

- allocate costs between fixed and volumetric tariff components, customer priority groups (for example, high priority and medium priority customers) and tariff groups (where applicable)
- convert costs into a unit cost for each tariff component (for example, a cost per megalitre of water usage).

In accordance with the referral, we will then determine the price target for each tariff group by smoothing the unit costs over the price path period so that the price target increases annually by our measure of inflation.[13]

2.2.3 Transitioning irrigation prices to the price target

The last step is to apply the government's pricing principles to determine irrigation prices in accordance with the transitional path to the price target. If customers reach the price target during the price path period, their prices will then reflect the price target for the rest of the period.

[12] Expenditure on augmentation of existing assets and new assets relates to expenditure that provides for an increase in the volume of WAEs that can be supplied by the infrastructure.
[13] Referral, Sch. 2, para. A.

3 SERVICE LEVELS

The pricing proposal should set out the service levels necessary to meet regulatory and legislative obligations and customer service standards.

3.1 Regulatory and legislative obligations

This section should specify key regulatory and legislative obligations including:

- water planning obligations under the *Water Act 2000* administered by the Department of Regional Development, Manufacturing and Water
- dam safety obligations under the *Water Supply (Safety and Reliability) Act 2008*
- monitoring and reporting requirements administered by the Department of Regional Development, Manufacturing and Water
- environmental obligations.

3.2 Customer service standards

The proposal should specify the service standards that the water business proposes to deliver over the price path period.

Service standards generally cover obligations relating to an attribute of service quality, such as customer responsiveness and service. These service standards are referred to in the businesses' standard supply contracts and developed in consultation with customer representatives.

For example, for Sunwater, these standards are set out in each scheme's water supply arrangements and service targets (also referred to as 'Sunwater Rules') and describe the process for ordering water and delivery times, circumstances that require suspension or restriction of supply, and the duration and frequency of shutdowns.

3.3 Supporting information

The pricing proposal should set out:

- key regulatory and legislative obligations, including an explanation of:
  - any changes since the last review
  - possible further changes that may impact on future costs
- service standards to be delivered over the price path period, including an explanation of:
  - any changes since the previous review
  - how service standards, including any changes from the previous review, have been informed by the business's customer engagement program.

4 CUSTOMER ENGAGEMENT

Structured and purposeful customer engagement by the water businesses can assist our assessment of pricing proposals, by:

- verifying that any changes to customer service standards have been agreed with customers[14]
- identifying the most cost-effective response to meeting a particular service standard
- identifying customers' willingness to pay for different levels of service
- enabling performance monitoring of the business
- facilitating scrutiny of the rationale for changes in costs and prices, and improving the incentives for the businesses to become more efficient
- ensuring customer views are considered in developing new tariffs or tariff structures.

Effective customer engagement can:

- help the business understand issues of importance to customers, which it can then take into account when proposing outcomes to deliver over the price path period
- provide improved transparency to customers on how outcomes to be delivered have been informed by their views and improve their understanding of the prudency and efficiency of proposed costs.

4.1 Our expectations of the water businesses

Consistent with our general approach in previous irrigation pricing reviews, we will continue to engage with stakeholders (including irrigation customers) through consultation processes in the form of workshops and opportunities to provide written submissions.

However, we expect the water businesses to take greater ownership of customer engagement to inform their proposals. To this end, we expect the businesses to present key points from their proposals at our initial stakeholder workshops in early 2024, including how they have addressed customers' concerns. The businesses should also be able to address any queries that stakeholders have on the proposals. This will help ensure that the businesses effectively engage with customers prior to submitting the proposals.

We want to encourage well-designed engagement as this can facilitate high-quality proposals, by:

- ensuring the businesses take customers' views (including on proposed changes in service standards) into account when developing service and expenditure plans
- giving the businesses an incentive to demonstrate that customers are receiving value for money
- fostering cost-effective solutions over time.

Proposals should demonstrate how customer feedback has informed the outcomes that the businesses propose to deliver over the price path period. The businesses should also outline how

[14] The referral directs us to recommend prices that are necessary to meet regulatory obligations and deliver agreed service levels. As part of this assessment, we will verify whether any changes to customer service standards (i.e. service targets referred to in supply contracts) have been agreed with customers.

engagement has informed proposed deliverables and service levels (e.g. service standards) and proposed inputs (e.g. proposed prices and associated costs) to deliver these outcomes.

4.1.1 Engagement on deliverables and service levels

We would expect the water businesses to periodically review the service standards in their supply contracts, in consultation with (irrigation and non-irrigation) customers, to ensure that service standards remain consistent with the views of customers.[15] For example, over time, customers may have concerns with the salinity of water supplied, which could be reflected in an associated service standard.

When engaging with customers on these service standards, the businesses should ensure that customers understand the cost and price implications of any proposed changes.

Mandated compliance standards are set by technical regulators or government agencies external to the business and us. Although we expect the businesses to comply with their legal and regulatory obligations, we do not expect the businesses to engage with customers on mandatory compliance issues. However, the businesses should inform customers on how these standards are met and the costs involved in complying with them, to allow scrutiny of costs by customers.

4.1.2 Engagement on cost inputs

Engaging with customers on actual and proposed costs is important, as it allows for scrutiny of costs by customers, to help ensure that expenditure proposals are prudent and efficient.

To facilitate this process, cost forecasts should be derived using a simple and transparent methodology. Irrigation customers are familiar with service options and the plausibility of proposed costs and can work together to raise concerns.

4.1.3 Engagement on prices

In developing their proposal, we expect the businesses to engage with irrigation customers on the level of prices required to recover proposed allowable costs (price targets) and proposed prices to be faced by irrigation customers under the government's pricing principles for all tariff groups (see Chapter 6).

When price targets and prices are transparent to irrigation customers, these customers are likely to be better equipped to advocate for potential options (e.g. service delivery approaches) that reduce allowable costs and therefore reduce price targets or the length of the price transition period.

4.2 Engagement principles

We consider that, to be effective, engagement should:

- *promote an understanding of customer needs by ensuring a broad representation of customer views*—the businesses should give customers and other affected stakeholders an appropriate opportunity to participate, the information required to make a meaningful contribution and a clear understanding of the role of customers in the process
- *be cost-effective and targeted to what customers value and can influence*—the businesses should prioritise issues that have a significant influence on service provision, costs and prices, and consider the costs of engagement programs against their perceived benefits

[15] We note that this is consistent with the businesses' obligations under their standard supply contracts.

- *be ongoing and occur within timeframes necessary to inform decision-making*—the businesses should ensure engagement is an ongoing process that is embedded in business-as-usual arrangements so that they can maintain a focus on the issues that are most important to customers, and takes place as early as is required to inform long-term decision-making
- *clearly inform the planning and decision-making of the business*—engagement should clearly influence the planning and decision-making of the business and lead to clear and measurable outputs to be delivered by the business.

4.2.1 Engagement should promote an understanding of customer needs

The businesses should seek to understand the engagement preferences of customers and other relevant stakeholders and tailor their engagement plans and programs to ensure that customers and other affected stakeholders have a reasonable opportunity to participate in the process.

We would also expect the businesses to ensure that stakeholders are equipped to constructively participate by:

- providing all parties with the information required to make a meaningful contribution
- explaining the role of stakeholders in the process, including the way in which their input will be used.

Engagement should be targeted to the relevant audience and seek to obtain information that reflects the views of the relevant stakeholder base. For example, where the business is considering a change in service standards, we would expect it to employ a complementary mix of engagement methods and channels that enable a comprehensive understanding of the views of customers (including non-irrigation customers) likely to be affected by the proposed change.

4.2.2 Engagement should be cost-effective and targeted to what customers value and can influence

In planning topics to engage on, the businesses should prioritise issues with the potential to significantly influence service provision, costs and prices. Customers should have a clear understanding of what drives the costs that the businesses incur in providing the required level of service and how this influences the price customers pay for the service.

Importantly, the businesses should prioritise issues on which customers can reasonably be expected to influence the businesses' decision-making. For example, while it is appropriate to inform customers of expenditure required to meet regulatory obligations, the businesses should put greater emphasis on seeking customer input on expenditures over which the business has some discretion, such as expenditure associated with changes in customer service standards.

4.2.3 Engagement should be ongoing and within timeframes necessary to inform decision-making

Engagement should be embedded in the business-as-usual operations of the businesses, with the objective of informing long-term strategy and decision-making. Ongoing engagement can also inform the businesses in planning their engagement on their proposals, by helping them to understand outcomes that matter to customers.

When engaging on its proposal, the business should start early and maintain the engagement through the development of the proposals, responding to customer feedback as required, and refining and further testing proposals with customers in response to any feedback.

Engagement on some issues may require the businesses to take a long-term view, as some outcomes may not fully materialise within a given price path period (e.g. outcomes that depend on new investment).

4.2.4 Engagement should inform planning and decision-making

A key aim of engaging should be to inform the planning and decision-making of the businesses in respect of service delivery and pricing. The proposals should indicate how engagement has influenced proposed outcomes, including how customer priorities have been reflected in service and expenditure plans.

4.3 Assessment approach

Our assessment will be based on the engagement principles explained in these guidelines.

The water business should demonstrate that it has effective customer engagement practices that can translate into a proposal that provides an appropriate balance between the interests of the business and its customers.

We will also seek submissions from stakeholders on how effectively the businesses have engaged.

4.4 Incentives for good engagement

While pricing issues were a major concern for customers in the 2020 review, they were given limited opportunity to provide input on pricing-related issues in the development of the proposals. In addition, there were broad concerns with increases in costs and the lack of clarity in how some costs had been developed. Better customer engagement could reduce the number of contentious issues that we need to address.

Accordingly, we will provide the businesses with incentives for more effective engagement for the upcoming review.

4.4.1 Targeted assessment

For the upcoming review, we intend to adopt a targeted approach to assessing proposals. For example, where a proposal shows that the business has understood customer concerns about costs and explains how the business has sought to address these, including instances where it has been unable to do so, we will be able to streamline our assessment of the prudency and efficiency of proposed costs, to focus on any areas of contention.

We will provide, in our draft and final reports, an assessment of the quality of customer engagement underpinning a proposal. For example, where a proposal shows that the business has listened to customers and has adequately addressed their concerns in developing proposed outcomes, we will note and commend the business for this in our report.

4.4.2 Future reviews

We will continue to explore incentives for high-quality customer engagement. For example, in future pricing reviews, we may grade the quality of the businesses' engagement activities and reward high-quality engagement with favourable grades. We will also explore the possibility of more flexible arrangements for assessing high-quality pricing proposals, including the possibility of further streamlining our assessment of high-quality proposals demonstrated to have broad-based customer support.

4.5 Achieving proposed outcomes

While engaging with customers to establish desired goals is important, what matters more is that agreed outcomes are delivered in practice.

The businesses are required, under the terms of their supply contracts, to report on their performance toward the achievement of their service standards.

The businesses should explain in their proposals how they propose to measure performance against agreed outcomes and to inform customers of performance against these outcomes, including the expenditure incurred to achieve the outcomes.

4.6 Supporting information

The pricing proposal should:

- summarise the business's customer engagement strategy, including describing and justifying methods and explaining frequency, timeframes and attendance rates
- explain why the business considers that its understanding of customers' needs is representative of the actual views of customers
- justify the relevance of the matters covered in the business's engagement process
- outline the issues raised by customers and the business's response to these issues
- explain the insights gained from engagement and how these have informed decision-making and have been reflected in the proposal
- outline the outcomes that the business intends to deliver, and explain how these outcomes have been informed by the business's customer engagement program.

The business must make available, on request, the information made available to customers during engagement.

5 PROPOSED COSTS

Pricing proposals should develop forecasts that reflect prudent and efficient costs of the following cost components ('allowable costs'):

- an operating expenditure (opex) allowance—the ongoing costs of running the business and maintaining assets, including operations, maintenance and administration costs (section 5.1)
- a renewals and other capital expenditure (capex) allowance—an appropriate allowance for the costs of maintaining or improving the service capacity of existing assets or building new assets (section 5.3), reflecting our assessment of renewals and other capex (section 5.2), forecast inflation (section 5.4) and an appropriate rate of return (section 5.5)
- return on working capital—the cost of holding capital to manage the timing difference between cash outflows and inflows associated with current liabilities and assets (section 5.6)
- review events—prudent and efficient costs arising from review events (section 5.7)
- a tax allowance—consistent with our nominal post-tax approach to the weighted average cost of capital (WACC), we include an allowance for tax as part of total costs (section 5.8).

When allocating costs to the scheme-level, adjustments may be required for revenue offsets and other adjustments such as allocating costs of distribution losses (section 5.9).

This chapter outlines our recently applied methods to calculating the cost components above. However, businesses can propose alternative methods, which we will consider on their merits.

Cost forecasts should be derived using simple and transparent methodologies. This supports increased scrutiny by customers and a less intrusive and burdensome review process.

5.1 Forecast operating expenditure

We need to assess prudency and efficiency of opex (see Box 2).

Box 2: Prudency and efficiency assessment of opex

We generally consider opex is prudent if it is necessary to:

- operate or maintain the relevant service
- meet legal or regulatory obligations[16]
- achieve an outcome that is explicitly endorsed or desired by customers (for example, agreed service levels)
- achieve broadly accepted changes in community expectations in relation to corporate responsibility (such as commitments to climate change mitigation).

We consider that opex is efficient if it represents the least-cost means, over the life of the associated assets, of providing the required level of service within the regulatory framework.

In undertaking this assessment, we will focus on areas that are material, specifically examining the proposed base year, step changes and escalation.

[16] Including those specified in a water management protocol, resource operation plan, resource operation licence or interim resource operations licence.

5.1.1 Assessment approach

Our approach to assessing opex over the price path period generally involves:

- determining an appropriate baseline year of prudent and efficient recurrent costs
- incorporating material step changes in the efficient baseline opex over the price path period
- adjusting for trend growth in the baseline opex and step changes over the price path period by applying input cost escalators, usage growth factors (if applicable) and recognising productivity improvements.

We generally consider that the opex allowance should be set at a broad level, allowing the water business to manage its assets, prioritise expenditures and deliver bulk and distribution services within an aggregate, business-wide allowance. This provides flexibility for the business to redirect cost savings to new initiatives or to mitigate unexpected cost increases.

For Seqwater, we will take into account the findings of our prudency and efficiency assessment in our recent review of Seqwater's bulk water prices (2022 bulk review).[17] Our assessment will therefore focus on irrigation-specific issues such as the appropriate allocation of non-direct opex to the specified schemes and the appropriate trend growth given updated conditions.

Baseline opex

The proposal should justify that the proposed baseline is prudent and efficient and represents annual costs associated with activities and services that are expected to be incurred over the price path period (see Box 3).

> **Box 3: Baseline opex**
>
> Baseline opex should generally be derived from the business's actual historical opex. Adjustments are required to:
>
> - remove expenditures that are non-recurrent in nature
> - include expenditures that, while not currently being incurred, can reasonably be expected over the course of the price path period and are recurrent in nature
> - account for any cost savings or efficiencies expected to eventuate by the start of the price path period that are not incorporated in baseline opex.
>
> A bottom-up forecast may be appropriate for cost categories with significant levels of uncertainty or variability. For example, electricity costs for distribution systems and bulk water supply schemes that require pumping to supplement stream flows should be excluded from baseline opex and separately estimated. The proposal should justify and transparently demonstrate the derivation of any bottom-up forecasts.
>
> The proposal should clearly explain the approach to allocating the proposed business-wide allowance to the scheme level and justify how this approach results in baseline opex at the scheme level that reflects annual recurrent expenditure expected to be incurred over the price path period (i.e. it addresses year-to-year variability in scheme-level operations and maintenance costs).

We will compare the business's actual cost of providing the service and meeting existing obligations with allowances we approved in our previous reviews. If actual opex is higher than

[17] QCA, *Seqwater Bulk Water Price Review 2022–26*, final report, March 2022.

our approved allowance, or if we identify material inefficiencies in actual baseline opex, we will assess the reasons provided by the business for this outcome. Where sufficient justification is not provided, we may determine an alternative baseline amount.

Step changes

With reference to baseline opex, the proposal should include prudent and efficient incremental costs (step changes) that it expects to incur over the price path period that:

- are necessary to fulfil new, or changed, binding statutory or regulatory obligations and are a reasonable estimate of the efficient incremental costs of fulfilling the new, or changed, binding statutory or regulatory obligation
- are reasonably required to achieve an outcome that is explicitly endorsed by customers (for example, improved service levels) or broadly accepted changes in community expectations in relation to corporate responsibility (such as commitment to climate change mitigation)
- are not already funded through other components of other approved allowances
- represent cyclical activities that are not within annual business-as-usual budgets
- are of sufficient materiality such that the costs could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures, or be otherwise mitigated.

Trend growth

The proposal should adjust baseline opex and step changes for trend growth over the price path period using input cost escalators (see Box 4), usage growth (if applicable) and efficiency gains.

Box 4: Input cost escalators

Our most recent views on appropriate approaches to estimating input cost escalators in regulatory reviews are set out in our final position paper of our inflation forecasting review.[18]

Input cost escalation factors that could be applied to baseline opex and step changes include:

- expected consumer price index (CPI) inflation for those input cost categories where the cost drivers do not materially differ from CPI inflation, such as some non-labour components of opex
- input-specific or sector-specific cost escalators for opex items where the cost drivers are materially different from CPI inflation. For example, in recent years, insurance premiums for industrial special risks have generally grown at rates higher than CPI inflation
- location-specific (e.g. Brisbane) cost escalators where there are underlying cost drivers materially different to the national CPI inflation measure—for example, if cost drivers in the local market (e.g. the cost of procuring local materials and services) vary significantly from those in the national market.

Input cost escalation factors should be derived using robust, transparent and predictable processes. Forecasts for expected CPI and wage price index (WPI) are produced by independent and reputable sources and are readily available to all stakeholders.

[18] See QCA, *Inflation forecasting*, final position paper, October 2021, pp. 14–15.

The proposal should outline proposed measures for achieving ongoing efficiency savings—for example, by applying an annual continuing efficiency factor to controllable costs, or through the development of an efficiency plan to be progressed over the price path period.

Materiality

We use judgement to form a view on prudency and efficiency based on the overall proposal before us. In general, we will not generally adjust opex forecasts where:

- the adjustment is not an identified error and is small and/or has only a small impact on the price target at the tariff group level
- the adjustment largely reflects a difference of opinion, rather than an identified error or invalid reasoning
- the proposal represents a genuine attempt at estimating efficient costs, and the water business has been forthcoming with supporting justification and information.

5.1.2 Supporting information

The pricing proposal should explain the business's opex performance over the period 2020–21 to 2023–24, including:

- a year-on-year comparison of actual opex (using latest forecasts for 2023–24) with our approved opex allowance
- explanation of key drivers for any significant variations between approved and actual opex
- any significant cost savings or cost increases.

The proposal should refer to policies, plans and procedures that support the robustness of opex decision-making, and identify any quantifiable savings from improvements in these policies and procedures since the last review.

The proposal should include a forecast of prudent and efficient opex for each year until the end of the price path period. This forecast should be presented by activity[19] and cost type[20], at the total business level (covering the schemes included in this review) and for each scheme.

The proposal should describe and justify the proposed forecasting approach, including:

- the methodology used to develop baseline opex, including identified risks
- justification that baseline opex at the total business and scheme level reflects annual recurrent expenditure expected to be incurred over the price path period
- any incremental 'step changes' in baseline opex, including the nature and magnitude of the cost change and justification of the change
- input cost escalation factors and use of usage growth factors where applicable
- potential for efficiency gains, and how these have been incorporated into forecasts
- all relevant assumptions, inputs and calculations used in deriving forecast opex
- documentation that demonstrates that proposed opex is prudent and efficient.

[19] For example, operations, electricity, insurance, preventative maintenance, corrective maintenance and corporate overheads.
[20] For example, labour, contractors, materials and other expenditure.

The proposal should describe and justify the approach to allocating common or shared costs to individual schemes, including:

- a description of, and rationale for, the proposed cost allocation approach
- documentation demonstrating that the proposed non-direct opex base (before allocation) is prudent and efficient, including for Sunwater, justification of realised benefits of inclusions to base year corporate support costs in the 2020 review that Sunwater expected to incur from 2018–19 onwards[21]
- the rationale for material changes in cost allocation factors since the last review
- all relevant assumptions, inputs and calculations used in deriving forecast non-direct opex at the scheme level.

Given that electricity costs comprise a significant component of overall opex in distribution systems and bulk water supply schemes that require pumping to supplement stream flows, the proposal should provide detailed information, including:

- electricity tariffs (and recent consumption) for each of the large connection points (e.g. pump stations) in each scheme
- a description of, and rationale for, cost escalation factors proposed for each tariff
- a description of, and rationale for, a proposed split between fixed and variable electricity costs
- a description of the business's energy procurement process, including the review of optimal regulatory tariff or market contract arrangements for large connection points
- the potential for efficiency gains and how these have been incorporated into forecasts.

Seqwater should demonstrate how its proposed opex aligns with what we approved in the 2022 bulk review, with the supporting information outlined above focussed on any variations such as irrigation-specific opex not previously reviewed.

5.2 Historical and forecast renewals and other capital expenditure

We need to form a view on the prudency and efficiency of renewals and other capex (see Box 5) and, in doing so, we will focus on areas that are material.

[21] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, pp. 38–41.

Box 5: Prudency and efficiency assessment of renewals and other capex

Our assessment involves assessing the need for the expenditure and the appropriateness of the timing, scope, standard and costs associated with the proposed projects.

We consider renewals and other capex is prudent if it can be justified by reference to an identified need or cost driver. That is, the renewals and other capex is necessary to:

- replace, refurbish or upgrade existing infrastructure or build new assets
- meet legal or regulatory obligations
- achieve an outcome that is explicitly endorsed or desired by customers (for example, agreed service levels)
- achieve broadly accepted changes in community expectations in relation to corporate responsibility (such as commitment to climate change mitigation).

In assessing prudency, we will consider whether the proposed expenditure timing is appropriate (based on lowest whole-of-life costs).

We consider renewals and other capex is efficient if:

- the scope of the works represents the best means of achieving the desired outcomes after having regard to the options available, including non-network solutions, and substitution possibilities between opex and capex
- the standard of the works conforms to technical, design and construction requirements in legislation, industry and other standards, codes and manuals
- the cost of the defined scope and standard of works is consistent with conditions prevailing in the markets for engineering, equipment supply and construction.

5.2.1 Assessment approach

We will generally assess historical and forecast renewals and other capex by:

- reviewing asset management policies and procedures (including frameworks for governance, procurement, capital planning, project management and asset management)
- reviewing historical and forecast renewals and other capex first at the portfolio level, then at the project level, based on a sample of representative and material projects
- identifying any systemic issues from the project reviews and drawing on the assessment of the water business's governance, capital planning and asset management frameworks
- if a renewals annuity allowance is proposed, reviewing the modelling approach for forecasting replacement and refurbishment costs beyond the price path period, including unit rates adopted and the determination of replacement and refurbishment timing.

For Seqwater, we will take into account the findings of our prudency and efficiency assessment in the 2022 bulk review. Our assessment for Seqwater will therefore focus on the review of a sample of capex projects that are material to the price target at the scheme level and were not assessed in the 2022 bulk review.

Asset management policies, procedures and frameworks

We will assess the business's supporting policies and procedures, including overarching governance, procurement, capital planning and asset management frameworks, to determine whether they are consistent with good practice and whether they provide appropriate controls

and mitigate potential risks. We will also test how the business applies these frameworks when developing its capex proposals as part of our review of sampled capex projects.

We intend to conduct our assessment of Sunwater's policies, procedures and planning processes prior to the lodgement of the proposal. This will include a review of the extent to which Sunwater has addressed issues that we identified in the 2020 review. This initial stage will help to inform and target our assessment of forecast renewals.

Historical capex

We will compare the business's actual renewals and other capex since the 2020 review with the approved expenditure in the 2020 review. If actual renewals and other capex since the 2020 review is higher than our approved levels, we will assess the reasons provided by the business and how these have been explained to customers.

Consistent with previous reviews, our renewals forecast in the 2020 review did not make allowances for extreme weather events (e.g. flood damage) over the price path period. Renewals expenditure relating to extreme weather events should be separately identified in historical renewals including any related insurance revenues.

We will generally undertake a targeted approach to the ex post assessment of renewals and other capex incurred since the 2020 review. Our sampling approach will ensure that schemes with material cost overruns are sufficiently represented.

Forecast capex

Our review will generally focus on assessing a sample of renewals and other capex projects that are material to the price target at the scheme level. We will review this sample of forecast projects to test their prudency and efficiency and to assess the application of frameworks and governance processes in practice. The purpose of the project sample review is to identify systemic issues that may have impacted the prudent and efficient delivery of projects.

If a renewals annuity allowance is proposed, we will review the business's modelling approach to estimating longer-term replacement and refurbishment expenditure (see Box 6).

Box 6: Forecast capex over longer term planning period

Our review of the business's modelling approach to estimating longer-term replacement and refurbishment expenditure will include assessing:

- the extent to which the timing of renewals aligns with best practice renewals planning, including a robust assessment of the failure risk and distribution of different asset classes
- the extent to which the business's tolerable level of failure risk takes account of the service standards agreed with customers
- the prudency and efficiency of the unit rates used to derive forecast renewals, including that they are based on modern equivalent replacement values where appropriate
- the overall consistency of the assumed scheduling and unit costs of asset refurbishment and replacements with the business's policies, procedures and frameworks.

Materiality

We use judgement to form a view on prudency and efficiency based on the overall proposal before us. We will not generally adjust renewals and other capex forecasts where:

- the adjustment is not an identified error and is small and/or has only a small impact on the price target at the tariff group level
- the adjustment largely reflects a difference of opinion, rather than an identified error or invalid reasoning
- the proposal represents a genuine attempt at estimating efficient costs, and the business has been forthcoming with supporting justification and information.

5.2.2 Supporting information

The proposal should explain the water business's capex performance over the previous period, including a year-on-year comparison of actual renewals expenditure from 2019–20 to 2023–24 (using latest forecasts for 2023–24) with approved renewals expenditure, by activity, with explanations for any significant variations.

The proposal should refer to policies, plans and procedures that to support the robustness of renewals and capex decision-making and forecasting, and identify any quantifiable savings from improvements in these policies and procedures since the last review.

The proposal should include a forecast of prudent and efficient renewals and other capex for each year until 2032–33. If proposing a renewals annuity, forecast renewals expenditure should be provided over the proposed planning period.

These forecasts should be presented for each scheme at the project level[22], by type of project (e.g. inspections, refurbishments or replacements), asset class and expenditure driver (e.g. asset renewal, compliance or service standard).

The proposal should describe and justify the proposed forecasting approach, including:

- the methodology for calculating forecast renewals and other capex, including identified risks
- if a renewals annuity approach is proposed, the modelling approach to estimating longer-term replacement and refurbishment expenditure over the planning period
- documentation that demonstrates that proposed capex is prudent and efficient, including material projects clearly substantiated
- input cost escalation factors
- the potential for efficiency gains, and how these have been incorporated into forecasts
- all relevant assumptions, inputs and calculations used in deriving forecast capex
- how the business has addressed the issues that we identified in the 2020 review.

Seqwater should demonstrate how its proposed capex aligns with what we approved as part of the 2022 bulk review, with supporting information outlined above focussed on any variations such as irrigation-specific capex or proposed capex beyond 2028.

5.3 Capital expenditure allowance

In previous irrigation price reviews, we used a renewals annuity approach to recovering prudent and efficient expenditure on renewing existing assets.

[22] The project level should be consolidated to include all stages of the project from initiation to closure and cover all years of the renewals project.

In the 2020 review, we recommended that the water businesses work with customers and the government to develop a proposal on transitioning to a regulated asset based (RAB) approach for calculating irrigators' share of asset renewal costs. The Minister for Water has advised that while a RAB-based methodology has merit, proposals from the businesses relating to a RAB-based methodology, and any associated decisions from Government, are not expected to be available for consideration by us as part of this review.

However, we have provided guidance in the event a business decides to propose a RAB-based approach for all or part of its capex allowance.

5.3.1 Renewals annuity

Under the annuity approach, forecast renewals expenditure required to maintain assets is smoothed over the long term. In previous reviews, we accepted proposals from the water businesses to use a rolling renewals annuity approach.

We will conduct an ex post review of actual renewals from 2019–20 onwards, with differences between forecast renewals and efficient actual renewals accounted for through an updated opening renewals annuity balance as at 1 July 2025.

Calculating the renewals annuity

In calculating the renewals annuity over the price path period, the following is required:

- the opening annuity balance at the beginning of the price path period
- forecast renewals expenditure over the price path period and planning period
- an appropriate discount rate that reflects the business's opportunity cost of funds (i.e. nominal post-tax WACC—see section 5.5).

Opening annuity balance

The opening 2019–20 annuity balance for each scheme should be rolled forward each year through to end of 2023–24. The roll-forward should occur each year by making the following adjustments to each year's opening balance:

- adding the renewals annuity allowance from the 2020 review
- subtracting proposed historical prudent and efficient renewals costs
- adjusting for interest each year using the nominal post-tax WACC of 4.37 per cent from the 2020 review.

The opening 2024–25 annuity balance should then be rolled forward to the commencement of the price path period using the same approach. Our approved annuity revenue allowance for 2023–24 should be increased by forecast inflation for 2024–25, using the forecast of inflation used by the government to calculate 2024–25 prices.

Planning period

To calculate a renewals annuity, it is necessary to determine the length of the planning period over which forecast renewals are incorporated.

In theory, a renewals annuity should be calculated over a term equivalent to the longest life asset in the asset base. Where the planning period is shorter than the term of the longest life asset, an under- or overestimate of the annual capital costs applicable to an asset may occur, depending

on the timing of the calculation within the life cycle of the asset.[23] The proposed planning period should seek to capture the whole-of-life benefits of the asset, with care taken to ensure the projects included in the proposed planning period will not result in a material under- or over-estimation of capital costs.

Supporting information

If the business proposes a renewals annuity approach, the pricing proposal should provide:

- the rationale for using an annuity for recovering refurbishment and replacement costs
- a description of, and rationale for, the type of annuity and proposed length of the planning period
- the assets and associated asset life assumptions for assets funded through the annuity
- the roll-forward of the annuity balance over the period 2019–20 to 2024–25, with an explanation of supporting calculations
- the roll-forward of the annuity balance in each scheme over each year of the price path period
- the proposed annuity allowance for each scheme for each year of the price path period.

5.3.2 RAB approach

Under the RAB approach, the firm recovers a capex allowance over the life of the asset (starting from when the renewals expenditure is incurred or when the asset is commissioned).

Allowed capital revenues under this approach comprise a return on, and of, capital with a negative inflation adjustment. Our timing assumptions for cash flows are outlined in Box 7.

Box 7: Timing assumptions for allowed revenues

We generally calculate allowable costs at the mid-point of each year as an approximation of the time value of revenues accrued throughout the year.

For capital-related allowances, this requires converting the initially derived end-of-year values to mid-year values by discounting by the nominal post-tax WACC for six months. The post-tax WACC is the appropriate discount rate so that the mid-year amounts are equivalent in present value terms to the end-of-year amounts.

For opex, no adjustment is required, as the accrual of associated revenues is broadly aligned with the timing of these costs.

RAB roll-forward

We generally recognise capex in the RAB from the year in which a project is commissioned (i.e. on an as-commissioned basis), as it is from this point in time that capex starts delivering a service.

Any opening RABs for each scheme should be rolled forward each year through to the end of the price path period. The roll-forward should occur each year by making the following adjustments to each year's opening balance:

- adding prudent and efficient capex

[23] QCA, *Issues in the Application of Annuities*, information paper, February 2014.

- adding forecast inflation
- subtracting regulatory depreciation.

Return on capital

The return on assets is calculated by applying the WACC to the opening RAB for each year of the price path period. An additional half-year return is provided for new capital expenditure recognised mid-year.

Inflation adjustment

Under our nominal modelling approach, we escalate the RAB annually for inflation (see section 5.4). As a nominal WACC is also applied, it is necessary to adjust the allowed capital revenues by deducting an amount equivalent to the inflationary gain in the RAB value to avoid the double counting of inflation that would otherwise occur from indexing the RAB by inflation and applying a nominal WACC that embodies inflation.

Return of capital (depreciation)

Depreciation is deducted from the RAB. We generally calculate depreciation by applying the straight-line method and adopting the remaining useful lives.

Separately, an allowance for depreciation is provided as part of the allowable costs that are used to calculate the value of the RAB. This allowance means the water business can recover the cost of prudent and efficient capex over the useful life of the assets.

Supporting information

If the business proposes a RAB-based approach for part or all of its capex allowance, the proposal should provide:

- total RAB and RAB by scheme, rolled forward from 1 July 2025 to 30 June 2029 using proposed capex, with all supporting calculations
- a description of, and rationale for, the proposed depreciation method
- a description of, and rationale for, proposed asset lives
- the proposed return on and of capital and inflation adjustment at the scheme level for each year of the price path period.

5.4 Inflation

Our most recent views on approaches to estimating expected inflation in regulatory reviews are set out in our final position paper of our inflation forecasting review in October 2021.[24]

In the context of our inflation forecasting review, our position was to:

- estimate expected national CPI inflation using short-term RBA forecasts for the first two years and then a linear glide path from the RBA's short-term forecast in year 2 to a rules-based anchor-point forecast
- use a single approach to estimate expected CPI inflation, but base the term over which it is estimated on the relevant purpose of the analysis—in particular

[24] See QCA, *Inflation forecasting*, final position paper, October 2021.

- in calculating the return on capital under a RAB-based approach, use a term for expected inflation equal to the length of the price path period
- in calculating renewals annuities as an indexed annuity, use a 10-year term for expected inflation as the indexation rate
- to escalate opex and capex categories for which underlying cost drivers are not materially different from CPI inflation, use annual rates of expected inflation
- in smoothing revenue or prices over the price path period, use a term for expected inflation equal to the length of the price path period.

Supporting information

The pricing proposal should provide:

- annual expected inflation estimates up until the end of the price path period with supporting analysis
- smoothed expected inflation estimates for each of the different uses in the proposal
- if an alternative to our existing approach is proposed, justification and supporting information for the proposed change.

5.5 Weighted average cost of capital

In the context of this review, the rate of return could be used for various purposes, including as a discount rate in deriving an annuity-based allowance for renewals expenditure and as a rate of return in deriving a RAB-based allowance for capex.

We apply a nominal post-tax WACC in our regulatory reviews. Our latest considerations of how we apply our WACC methodology are set out in our final report of our rate of return review in November 2021.[25]

We will determine whether the overall WACC value proposed is reasonable—by considering our statutory obligations, including public consultation; assessing commercial and regulatory risk; and considering factors such as the estimation methods and values applied for each parameter, and the WACC values of other regulated entities.

If the proposed WACC value is not considered reasonable, we will determine a reasonable WACC value—by estimating a bottom-up value and applying a top-down assessment to confirm whether the bottom-up value constitutes a reasonable WACC value (applying judgement in the circumstances), including whether the overall WACC value requires an adjustment to reflect prevailing market conditions at the time of a decision.

The pricing proposal should provide:

- the proposed WACC estimate
- individual WACC parameter estimates and supporting analysis, including comparison of each parameter with those of other regulated businesses and with those used in the 2020 review
- justification and supporting information if an alternative to our existing approach is proposed.

[25] See QCA, *Rate of return review*, final report, November 2021.

5.6 Working capital allowance

Given the strict timing assumptions for allowable costs (see section 5.3.2), we typically provide regulated businesses with a working capital allowance.

This working capital allowance compensates the business for the lag from when revenues are accrued (i.e. invoiced) until when the revenues are received, partially offset by the benefit of the lag from invoicing to the business to the payment of expenses.

In the 2020 review, we did not consider that the water businesses would incur costs to hold capital, as they receive a significant portion of revenue from customers in advance, rather than in arrears.[26] Therefore, we did not provide either business with a working capital allowance.

Calculation approach

We usually calculate a working capital allowance for each year of the price path period by applying the WACC to the working capital balance. The working capital balance is calculated as follows: accounts receivable plus inventory minus accounts payable, where:

- accounts receivable = total revenue x days receivable/days in a year
- inventory = opex x days in inventory/days in a year
- accounts payable = opex x days payable/days in a year

To calculate the allowance, we use benchmarked parameters (revenue, opex and WACC) and contract payment terms.

We have also used a benchmark percentage applied to maximum allowable revenue for deriving the working capital allowance for regulated businesses such as Aurizon Network and Queensland Rail, with this benchmark percentage derived initially using an entity-specific calculation.

Supporting information

The pricing proposal should include:

- if a working capital allowance is proposed:
  - the business's proposed working capital allowance at the scheme level for each year of the price path period
  - a description of, and rationale for, the methodology used to derive working capital (including key assumptions)
  - justification and supporting information if an alternative to our existing approach is proposed
- if no working capital allowance is proposed, the reasoning for this.

5.7 Review events

In previous rural irrigation price reviews, we were asked by the government to allow the water businesses to recover prudent and efficient operational, maintenance and administrative costs, including adjustments relating to historical costs that were unforeseen and unable to be managed by the businesses.

[26] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, p. 91; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, pp. 31–32.

Our general approach has been to develop ex ante mechanisms for adjusting for changes in costs arising from circumstances beyond the control of the businesses, such as the impact of global markets on insurance premiums.

In the 2020 review, we recommended a review event mechanism for dealing with such costs that was accepted by the government. Under this mechanism, cost risks arising from the following events are eligible for review and potential inclusion in prices:

- material changes in electricity prices during the price path period
- material changes in insurance premiums during the price path period
- material changes in regulatory imposts (specifically a change in policy that materially changes the share of costs allocated to medium priority entitlement holders during the price path period or a material change in off-stream pumping costs triggered by requirements under water management protocols).

In addition to these specific cost risks, the risk of a material increase in costs associated with extreme weather events can be recovered through ex post review of prudent and efficient renewals costs related to flood damage (adjusted for insurance revenues) (see section 5.2).

5.7.1 Supporting information

We will assess any claim for costs associated with a review event since the 2020 review, as part of the upcoming review.[27] When making a claim for end of period adjustments to account for review events, the pricing proposal should outline:

- the nature of each event
- the change in cost for each event with all supporting calculations
- evidence that the change in cost is a consequence of the event and is not already funded through other components of the previously approved allowances
- evidence that the event is outside the business's control
- evidence that the change in cost is prudent and efficient
- evidence that the change in cost is of sufficient materiality such that it could not reasonably be met by an efficient entity operating within business-as-usual budget constraints, through prudent prioritisation of expenditures
- the proposed end-of-period adjustment by cost claim for each scheme.

5.8 Tax allowance

We provide an allowance for firms to meet their forecast tax liabilities. Government-owned water businesses are required to make tax equivalent payments as participants in the National Tax Equivalent Regime, consistent with Queensland's obligations under the 1995 Competition Principles Agreement.[28] Tax liabilities, including tax equivalent payment liabilities, are legitimate costs that should be recovered through prices.

[27] We note that the businesses have not initiated any within-period reviews since the 2020 review.

[28] Council of Australian Governments, *Competition Principles Agreement*, 11 April 1995 (as amended to 13 April 2007), cl. 3. To meet competitive neutrality principles, the regime notionally applies the tax laws to government-owned businesses as though they were subject to federal income tax (see Australian Taxation Office, *Manual for the National Tax Equivalent Regime*, January 2022).

Our aim is to provide a tax allowance that reflects the efficient costs of a firm meeting its tax obligations, based on the cost and revenue allowances we provide. We provide an explicit allowance for tax, because this is consistent with our approach of using a nominal post-tax rate of return (see section 5.5). To calculate the allowance, we generally apply the corporate tax rate—adjusted for the value of dividend imputation credits (gamma)—to taxable income.

This approach requires our consideration of forecast revenues and tax deductions (such as operating costs, tax depreciation, interest expenses and accumulated tax losses, if any).

In previous irrigation reviews, we considered that a zero tax allowance was appropriate, since under the renewals annuity approach, renewals expenditure is excluded from the asset base and treated as 'operational'—that is, deductible for tax purposes. However, a tax allowance may be applicable if a RAB-based approach is used in deriving the capex allowance.

5.8.1 Calculation approach

Our general approach is to derive a benchmark tax allowance that is based on benchmarked parameters such as capital structure, cost of debt and RAB.[29] In particular:

- estimates of revenue and costs should be the estimates used to derive allowable costs
- estimates of accumulated tax losses should be derived using estimates that are modelled on a benchmark basis
- interest expenses should be derived using the benchmark cost of debt and the benchmark debt balance (i.e. gearing multiplied by the regulatory asset base)
- an adjustment should be made for tax depreciation.

5.8.2 Supporting information

The pricing proposal should include:

- the proposed tax allowance (if applicable) for each scheme over the price path period
- forecast tax depreciation for each scheme, with supporting evidence of the basis for these forecasts[30]
- clarification on the tax depreciation rules that are applied when deriving tax depreciation for each scheme
- an explanation of the treatment of the income and expenses in the annuity stream for tax purposes and the depreciation approach within the annuity stream.

5.9 Total allowable costs at the scheme level

To derive allowable costs at the scheme level, the following adjustments may need to be made:

- revenue offsets—so that costs are not recovered twice, a deduction should be made for revenue that the water business expects to earn from other sources[31]

[29] For example, see QCA, *Seqwater Bulk Water Price Review 2022–26*, final report, March 2022, pp. 71–74.
[30] Excluding tax depreciation related to capex excluded from allowable costs.
[31] Unless the costs of providing other services are excluded from costs recovered from irrigation prices—for example, the portion of the scheme's allowable costs that is allocated to non-irrigation customers (see section 6.1) and costs associated with the provision of recreation facilities.

- distribution loss transfers—bulk costs associated with necessary distribution loss water allocation entitlements (WAEs) should be recovered from distribution system customers[32]
- other scheme-specific adjustments—other adjustments may be proposed at the scheme-level—for example, if distribution system assets provide a bulk water function[33].

5.9.1 Supporting information

The pricing proposal should:

- explain and provide calculations for any proposed adjustments to allowable costs at the scheme level,
- outline the proposed allowable costs for each scheme for each year of the price path period.

[32] Section 6.1 outlines the supporting information that we require in the pricing proposal to demonstrate that the water business's proposed strategy for its holdings of distribution loss WAEs represents least-cost service delivery.

[33] Appendix B summarises the approaches in previous reviews to making cost transfers where distribution system assets have provided a bulk water function.

6 PROPOSED PRICES

For each tariff group with irrigation customers, pricing proposals should include:

- a price target that is set to recover allowable costs (section 6.1)
- irrigation prices that transition to the price target (section 6.2)
- miscellaneous prices, where applicable (section 6.3).

The water business should ensure it has appropriately engaged with affected customers in developing its proposal (see Chapter 4).

6.1 Proposed price target

Proposals should explain the approach to converting allowable costs at the scheme level to a price target for each tariff group with irrigation customers. The main steps are:

(1) Allocating costs between the fixed and volumetric tariff components.

(2) Allocating costs between priority groups (for example, between high priority and medium priority customer groups).

(3) Allocating costs between tariff groups (where applicable).

(4) Converting allocated costs into a unit cost for each tariff component (for example, a cost per megalitre of water usage).

(5) Smoothing unit costs over the price path period to derive the price target.

Reflecting the terms of the referral, additional requirements apply if the business proposes to introduce new tariff groups.[34] If a new tariff group(s) is proposed, the business is to avoid shifting costs from one customer, or group of customers, to another within a water supply scheme, unless the business has a significant commercial interest in the change and it has obtained the agreement of affected customers.

Proposals should also comply with the additional requirements applying to prices in the Burdekin-Haughton and Central Lockyer Valley water supply schemes.[35]

6.1.1 Allocating costs between tariff components

In the 2020 review, we allocated costs between the fixed and volumetric tariff components to broadly align the tariff structure with the cost structure, because we considered this was an appropriate way to address revenue risk. The approach was also consistent with the requirement in the referral (also in the referral for this review) to have regard to the fixed and variable nature of the underlying costs when considering tariff structures.[36]

The allocation of costs between fixed and volumetric components varied between schemes. For instance, in Sunwater's schemes, 4 per cent of costs (on average) were allocated to the volumetric component in bulk water supply schemes, and 26 per cent of costs (on average) were allocated to the volumetric component in distribution systems. The proportion was higher in distribution

[34] Referral, Sch. 2, para. A, definition of 'price target'.
[35] Referral, Sch. 2, paras. F and G.
[36] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, section 7.2; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, section 7.3.

systems, because electricity costs—which we found were largely variable—made up a greater higher proportion of total costs.

6.1.2 Allocating costs between priority groups

Costs should be allocated between customer priority groups, for example between medium priority and high priority customers, reflecting differences in the costs of supplying each group.

Allocation using the headworks utilisation factor

In previous reviews, we allocated asset-related fixed costs in bulk water supply schemes by priority group using the headworks utilisation factors (HUFs).[37] This resulted in a higher allocation of costs (per megalitre of WAE) to high priority customers, reflecting the greater share of storage assets required to supply high priority customers than customers with lower priority entitlements.

Allocation using WAE

In previous reviews, service-related fixed costs in bulk water supply schemes and all fixed costs in distribution systems were generally allocated to priority group using forecast WAEs[38], resulting in the same allocation of costs (per megalitre of WAE) to all priority groups.

Allocation using forecast usage

In previous reviews, we allocated variable costs between priority group using forecast water usage, resulting in the same allocation of costs (per megalitre of water usage) to all priority groups. In the 2020 review, to forecast annual water usage, we averaged historic usage over the last 20 years. We considered this approach would provide a reasonable forecast, because the 20-year period covered a broad range of climatic conditions.

Bulk costs associated with distribution losses

In previous reviews, we have reallocated some bulk costs by priority group to distribution system customers using our estimate of efficient levels of high and medium priority distribution loss WAEs. We used our estimate of efficient levels in the absence of the businesses having a strategy for the treatment of their holdings of distribution loss WAEs.

In the 2020 review, we recommended that the businesses review their distribution loss WAEs and develop a strategy for their future treatment prior to the next price review (see Box 8).[39] Given this has previously been a contentious issue for stakeholders, it is important that the businesses engage with customers on this issue to allow scrutiny and to assist in achieving customers' acceptance of the proposed strategy.

[37] The HUF approach estimates the share of storage capacity required to supply different priority entitlements and allocates costs accordingly. See QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, p. 140; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, p. 61.

[38] We made some adjustments to forecast WAEs so they would be appropriate for pricing purposes.

[39] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, section 6.2; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, section 6.2.

Box 8: Outstanding issue from the 2020 review—distribution losses

The proposal should explain the business's proposed strategy for its holdings of distribution loss WAEs, including:

- the business's views on the efficient level of its distribution loss WAE holdings
- justification that the proposed strategy represents least-cost service delivery
- a description and justification of how the business consulted with its customers in developing the proposed strategy.

6.1.3 Allocating costs between tariff groups

Costs may also need to be further allocated to tariff groups to reflect other cost differences within a scheme or priority group (for example, if pumping is required to supply some customers but not others).

Where there were additional differences in the costs of supplying customers within a scheme, we have previously adopted scheme-specific approaches to further allocate costs to tariff groups. These scheme-specific approaches to allocating costs have generally been based on the approach proposed by Sunwater in the 2012 review (see Appendix B).

In the 2020 review, we also recommended the following in relation to tariff groups in the Mareeba-Dimbulah distribution system:

- In consultation with customers, Sunwater should consider the interests of customers and provide greater transparency as to the costs underlying the three distinct tariff groups in the channel outside the relift section of the distribution system.
- Sunwater should investigate the cost of supply to customers in the Walsh River and supplemented streams tariff group in the distribution system. If this assessment does not confirm the current cost allocation, Sunwater should engage with its customers and propose an alternative cost allocation for the next review.[40]

Sunwater's proposal should explain progress made against these recommendations.

6.1.4 Converting allocated costs into unit costs for each tariff component

The allocated costs need to be converted into a unit cost for each of the tariff components. In the 2020 review, we adopted the following approach:

- Costs allocated to the volumetric tariff components were converted into a cost per megalitre, using forecast water usage.
- Costs allocated to the fixed tariff components were converted into a cost per megalitre of WAE, using forecast WAEs.[41]

[40] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, pp. 125–126.

[41] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, chapter 5; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, chapter 5. We adopted a slightly different approach in the Mareeba-Dimbulah water supply scheme and distribution system to account for the additional fixed tariff component (an access charge per customer) in that scheme (QCA, *Rural irrigation price review 2020–24, Part B: Sunwater, final report*, January 2020, p. 123).

6.1.5 Smoothing unit costs to derive the price target

The price target for each tariff group should be derived by smoothing the unit costs over the price path period so that prices increase annually by our measure of inflation (see section 5.4). To achieve this outcome, prices in the first year should be adjusted accordingly.

6.1.6 Supporting information

The pricing proposal should include:

- a price target for each tariff group with irrigation customers for each year of the price path period
- an explanation and justification of the proposed approach to derive each price target—if the business is proposing changes to the approach, assumptions or inputs we adopted in the 2020 review, this should include an explanation as to why the alternative approach is preferred and/or why changes to assumptions or inputs should be made
- if a new tariff group(s) is proposed, an explanation of how the requirements in the referral have been met[42]
- all relevant supporting information, data and calculations, including:
  - an explanation of any significant changes to operational and maintenance processes since the 2020 review that would affect the level of variable costs—for example, increased automation in distribution systems
  - forecast water usage for each bulk water supply scheme and distribution system
  - forecast WAEs by priority group—if any adjustments to the forecast are proposed for pricing purposes, the proposal should also explain how the adjusted forecast was derived and why the adjustments should be made
  - proposed factors for allocating costs between priority groups (e.g. headworks utilisation factors)
- an explanation of the business's proposed strategy for its holdings of distribution loss WAEs (see Box 8)
- an explanation of progress made against our 2020 review recommendations about tariff groups (for Sunwater only, in the Mareeba-Dimbulah distribution system).

6.2 Proposed prices

The proposal should include prices for each tariff group that are derived in accordance with the requirements in the referral. The referral specifies the rules for transitioning prices to the price target—the government's pricing principles—although there are exceptions to a strict application of the pricing principles in special cases.

[42] Referral, Sch. 2, para. A, definition of 'price target'.

6.2.1 Transitional price path—general approach

Except in special cases (see section 6.2.2 below), the business should include prices that have been derived in accordance with the government's pricing principles.[43] The pricing principles are broadly the same as the principles for the 2020 review, although there are two main differences:

- Different approach to transitioning fixed prices that are above the associated fixed component of the price target—if the total fixed price or any of the individual fixed prices are above the associated fixed price component of the price target, the relevant fixed prices are to be reduced to the associated fixed price component of the price target in the first year of the price path period. In the 2020 review, fixed prices were generally to be maintained in nominal terms throughout the period until the price target was reached.[44]
- Prescriptive approach to transitioning volumetric prices that are below the associated volumetric component of the price target— if the total volumetric price is below the total volumetric component of the price target, the volumetric prices are to be increased each year by a maximum of inflation plus $2.54 per megalitre ($2024–25, increasing annually by inflation). While this is consistent with our approach in the 2020 review, for that review we were provided with flexibility to decide on an appropriate transitional approach.

6.2.2 Transitional price path—special cases

In any of the following instances, we may apply the government's pricing principles as we consider appropriate:

- where allowable costs include an allowance for expenditure on improved service levels
- where allowable costs include an allowance for capital expenditure associated with the augmentation of existing assets or new assets
- where new tariff groups or new tariff components are considered.[45]

Unless the government has indicated that it is willing to pay any additional cost through the subsidy, we generally consider that:

- willingness to pay for improved service levels would only be demonstrated where prices recover the full allowable costs by moving immediately to the price target
- prices for new WAEs associated with augmentation of existing assets or new assets should immediately move to the price target.

If the business proposes a new tariff group or proposes a new tariff component(s) for an existing tariff group, the business should justify its proposed approach. The appropriate approach will depend on the specific circumstances. For example, it may be appropriate for prices to immediately move to the price target if a new tariff group is created for a higher priority product, which customers may choose to take up. In other circumstances, it may be appropriate to apply the government's pricing principles or, if a strict application of the principles is not possible, an approach that is consistent with the pricing principles—for example, if the introduction of an access charge means that the other tariff components need to be adjusted, but the service provided to customers is otherwise the same.

[43] Referral, para. B(1.1), Sch. 2.
[44] Except for the fixed bulk (Part A) price for distribution system customers.
[45] Referral, para. B(1.1).

6.2.3 If prices reach the price target during the period

If the fixed or volumetric price for a tariff group reaches the corresponding component of the price target during the price path period, the corresponding component of the price target is to apply for the remainder of the period.

6.2.4 Supporting information

The pricing proposal should include:

- prices proposed to apply to irrigation customers by tariff group for each year of the price path period
- an explanation as to how the prices have been derived and how the requirements in the referral have been met
- an explanation as to how prices have been derived for special cases noted in section 6.2.2
- all relevant supporting information and calculations.

6.3 Miscellaneous prices

The proposal should include prices for services provided by the businesses that are ancillary to the core irrigation service. In the 2020 review, we made recommendations about the following miscellaneous prices:

- termination fees—for the permanent transfer of distribution system WAEs[46] to a lower cost section of the scheme, generally the river or in some cases to other scheme sub-systems
- drainage prices—for removing and disposing of excess or run-off water from a customer's property (in Sunwater's Burdekin-Haughton distribution system only)
- drainage diversion prices—for allowing customers to extract water from the drainage network (in Sunwater's Burdekin-Haughton distribution system only)
- water harvesting prices—for facilitating the extraction of additional water by customers during high-flow periods (in Sunwater's Burdekin-Haughton distribution system only).[47]

Supporting information

The pricing proposal should include:

- proposed miscellaneous prices for each year of the price path period
- all relevant supporting information and calculations.

[46] Termination fees also apply for the permanent transfer of WAEs in the Lower Mary (Tinana Barrage and Teddington Weir) tariff group (which has previously been assigned a portion of distribution system costs).

[47] QCA, *Rural irrigation price review 2020–24, Part B: Sunwater*, final report, January 2020, chapter 8; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, chapter 8.

7 OTHER REQUIREMENTS

7.1 Impacts of proposed prices

The pricing proposal should assess the impact of proposed prices. This includes presenting indicative bill impacts based on proposed irrigation prices. The proposal should also explain any other impacts of proposed prices, including those related to matters that we are required to consider as part of our review.

Supporting information

The pricing proposal should outline:

- indicative bill impacts based on irrigation prices:
  - for each tariff group, show indicative impacts on customer bills (based on average water usage for irrigation customers) of the change in prices between 2024–25 prices and proposed prices in the first year of the price path period and over the price path period, including the assumptions used in this analysis
  - for each tariff group, explain the factors contributing to the indicative bill change (such as the removal of the 15 per cent discount, changes in the price target and underlying costs, and the application of the government's pricing principles)
- any other impacts related to matters in Appendix A.

7.2 Revenue and pricing model

A large portion of the supporting information outlined in this guidance should be included in the water business's revenue and pricing model. The proposal must be consistent with the data provided in the revenue and pricing model.

We use a nominal modelling framework to derive forecast revenues and prices. Under this framework, inflation is applied to all revenues, costs, and asset values used in our assessment. However, output tables in the proposal may be presented in real terms.

The model should transparently detail all relevant assumptions, inputs and calculations used in deriving the forecast allowable costs and proposed prices so we can assess the proposal. In addition, the business should make available all relevant input models, including, but not limited to, capex and opex, cost escalators, cost allocation methods and volume forecasts.

This model should include the following calculations:

- application of step changes and trend factors to baseline opex at the scheme level
- for renewals annuity calculations, derivation of opening and closing annuity balances for each scheme from 1 July 2019 up to the end of the price path period
- for RAB calculations, opening and closing RAB values from 1 July 2025 up to the end of the price path period
- calculation of WACC using proposed WACC parameters
- calculation of allowable costs for each scheme
- derivation of the proposed price target for each tariff group

- derivation of the proposed prices in accordance with the government's pricing principles, for each tariff group.

7.3 Approaches to managing risk

In the context of the water businesses' pricing proposals, key risks include cost risk (the risk that out-turn costs differ from forecast) and volume risk (the risk that out-turn volumes differ from forecast).[48] It is important that these risks are appropriately allocated and managed, as an inefficient allocation of risk can impact on incentives for efficient investment and service delivery.

7.3.1 Efficient allocation of cost and volume risk

We generally consider that the businesses should bear cost risk during the price path period, which means that customers will generally not pay more if costs are higher than forecast, while the business will retain the benefit if costs are lower than forecast. This provides the business with the incentive to pursue efficiencies over time.

Further, the businesses should not employ overly risk-averse assumptions in forecasting expected costs (e.g. overly conservative timing of long-term renewals), as this could shift cost risk and result in the businesses bearing less risk than is efficient.

In limited circumstances, the businesses may be unable to manage changes in cost arising from circumstances outside their control (such as the impacts of global markets on insurance premiums). In such instances, it may be more efficient for the business to pass on changes in costs, rather than including an upfront cost allowance that compensates the business for accepting risk.

In previous reviews, we considered that the structure of prices could mitigate volume risk. A tariff structure (such as a multi-part tariff) that broadly aligns with the cost structure of the business will minimise volume risk and signal the efficient use of the service to customers (noting that any price signal may be tempered by the government's pricing principles).

Other mechanisms for managing volume risk include the form of price control. For example, under a revenue cap form of price control, adjustments for under- or over-recovery of revenue (relative to allowable costs) could be incorporated in prices for the next price path period.

7.3.2 Managing uncontrollable cost risk

The referral requires us to recommend appropriate price review triggers and other mechanisms to manage risks associated with material changes in allowable costs outside the control of the businesses.

In the 2020 review, we recommended that the businesses be able to recover unexpected changes in costs associated with:

- opex risks arising from specified review events outside the control of the businesses[49]
- renewals and other capex risks (e.g. major weather events) subject to an ex post prudency and efficiency assessment.

[48] In either case, out-turn revenues would end up differing from out-turn costs.

[49] These review events cover material changes in electricity prices, material changes in insurance premiums, material changes in off-stream pumping costs, and policy change or regulatory impost events.

We have typically provided regulated businesses with the ability to use review events or cost pass-through provisions to recover material changes in costs when there is significant uncertainty about whether an event will occur, or specific costs are unusually difficult to forecast.

Given that the business is generally likely to have some ability to influence costs and manage the risk of an event occurring, we generally consider that the use of a review event mechanism provides a reasonable balance between:

- allocating most cost risk to the business to incentivise it to efficiently manage the risk and pursue efficiency gains
- allocating risk associated with a limited number of review events to customers (with an ex post cost assessment) to provide a reasonable opportunity for the business to recover its efficiently incurred costs and maintain an appropriate level of service, and to encourage customers to make efficient consumption decisions.

Cost pass-through provisions are another mechanism for dealing with costs arising from uncertain events beyond the control of the business. A cost pass-through may be appropriate in limited circumstances when the nature of costs can be reasonably foreseen (but not quantified in advance), the cause of the subsequent change in costs and its magnitude (once it has occurred) are unambiguous, and the cost adjustment is unlikely to result in significant price impacts.

7.3.3 Supporting information

The pricing proposal should outline:

- key risks associated with material changes in allowable costs outside the control of the business
- proposed mechanisms to mitigate these risks, including the rationale for why the proposal reflects an appropriate sharing of risk
- justification and supporting information for the proposed expenditure, if proposing to recover costs incurred to manage a particular risk, including the nature and scale of the risk and the reasons the mitigation strategy is prudent and efficient.

If proposing an adjustment mechanism to account for potential changes in cost associated with uncertain events beyond their control, the businesses should describe and justify:

- the nature of the event and the likely materiality of costs associated with the event
- why the proposed mechanism is appropriate for dealing with the event
- how the proposed mechanism would work
- how the mechanism avoids material price impacts on customers.

GLOSSARY

2006–11 price path	the irrigation prices approved by the Queensland Government for the period 1 July 2006 to 30 June 2011
2012 review	the QCA's review of irrigation prices charged by Sunwater for the period 1 July 2012 to 30 June 2017, which was completed in May 2012
2020 review	the QCA's review of irrigation prices charged by Seqwater and Sunwater for the period 1 July 2020 to 30 June 2024, which was completed in January 2020
2022 bulk review	the QCA's review of south east Queensland bulk water prices for the period 1 July 2022 to 30 June 2026, which was completed in March 2022
capex	capital expenditure
CPI	consumer price index
HUF	headworks utilisation factor
ML	megalitre
opex	operating expenditure
price path period	the period from 1 July 2025 to 30 June 2029
QCA	Queensland Competition Authority
QCA Act	*Queensland Competition Authority Act 1997*
referral	the referral for the review issued by the Treasurer under sections 23 and 24 of the QCA Act
RAB	regulatory asset base
RBA	Reserve Bank of Australia
WACC	weighted cost of capital
WAE	water allocation entitlement
WPI	wage price index

APPENDIX A: MATTERS WE MUST CONSIDER IN OUR REVIEW

Economic efficiency matters	*Business/industry specific matters*	*Customer/social impact matters*	*Environmental obligations*	*Other matters*
The need for efficient resource allocation (s. 26(1)(a)). The need to promote competition (s. 26(1)(b)). The cost of providing the goods or services in an efficient way, having regard to relevant interstate and international benchmarks (s. 26(1)(d)(i)). The standard of the goods or services, including quality, reliability and safety (s. 26(1)(d)(iii)). The appropriate rate of return on assets (s. 26(1)(e)). Considerations of demand management (s. 26(1)(h)). The need for pricing practices not to discourage socially desirable investment or innovation by government agencies and persons carrying on non-government business activities (s. 26(1)(j)). The fixed and variable nature of the underlying costs in relation to tariff structures (s. 24(1)(b); referral, para. C(1.1)(a)).	The actual cost of providing the goods or services (s. 26(1)(d)(ii)). The effect of inflation (s. 26(1)(f)). Legislation and government policies relating to occupational health and safety and industrial relations (s. 26(1)(l)). Any directions given by the government to the government agency by which the monopoly business activity is carried on (s. 26(2)). The findings of the QCA's review of Seqwater's bulk water prices for the 2022–26 period (s. 24(1)(b); referral, para. C(1.1)(d)).	The protection of consumers from abuses of monopoly power (s. 26(1)(c)). Social welfare and equity considerations including community service obligations, the availability of goods and services to consumers and the social impact of pricing practices (s. 26(1)(i)). Economic and regional development issues, including employment and investment growth (s. 26(1)(m)). Customer agreements on costs and/or prices proposed by the businesses, where consistent with the requirements in the referral (s. 24(1)(b); referral, para. C(1.1)(c)). Revenue and pricing outcomes that are simple and transparent for customers (s. 24(1)(b); referral, para. C(1.1)(b)(ii)).	The impact on the environment of prices charged by the government agency or other person carrying on the monopoly business activity (s. 26(1)(g)). Legislation and government policies relating to ecologically sustainable development (s. 26(1)(k)).	Balancing the legitimate commercial interests of the businesses with the interests of their customers (s. 24(1)(b); referral, para. C(1.1)(b)(i)).

Notes: 1. References to sections are to sections of the QCA Act. The section 26 matters are included in the QCA Act, and the section 24(1)(b) matters are included in the referral. 2. The requirement in section 26(2) to have regard to water pricing determinations (which are pricing determinations for private sector water supply activities that have been declared under Part 5A of the QCA Act) is not relevant to this review, because no activities have been declared and, therefore, no determinations have been made. 3. In accordance with section 26(3), we may have regard to matters not listed in this table.

APPENDIX B: PREVIOUS SCHEME-SPECIFIC ADJUSTMENTS

The table below summarises the approaches in previous reviews to making other adjustments between bulk water and distribution system customers where distribution system assets have provided a bulk water function.

Table 1 Cost transfers between distribution systems and associated bulk water supply schemes

Scheme	*Previous treatment*
Bundaberg distribution system	In the 2012 review, Sunwater proposed that 8 per cent of water transported through the Gin Gin Main Channel relates to bulk water and this proportion of costs should be reallocated from the distribution system to the bulk water supply scheme.[a] In the 2020 review, we accepted Sunwater's proposal to update this cost allocation factor to 5 per cent based on updated information.[b]
Bundaberg water supply scheme	
Lower Mary distribution system	In the 2012 review, Sunwater proposed that 27 per cent of the Owanyilla pump station and main channel costs should be reallocated.[c] In the 2020 review, we accepted Sunwater's proposal to update this cost allocation factor based on updated information.[d]
Lower Mary water supply scheme	

***a** Sunwater, Bundaberg distribution system, Network Service Plan, January 2011, pp. 7–8; **b** QCA, Rural irrigation price review 2020–24, Part B: Sunwater, final report, p. 114; **c** Sunwater, Lower Mary distribution system, Network Service Plan, January 2011, pp. 7–8; **d** QCA, Rural irrigation price review 2020–24, Part B: Sunwater, final report, pp. 127–128.*

The table below summarises the scheme-specific approaches in previous reviews to allocating allowable costs between multiple tariff groups within a scheme's priority group.

Table 2 Scheme-specific approaches to allocating allowable costs between multiple tariff groups

Scheme	*Tariff groups*	*Previous treatment*
Barker Barambah water supply scheme	Redgate relift	In the 2020 review, we applied the 2012 review approach of allocating all scheme-level electricity costs to relift customers. In the 2012 review, Sunwater proposed that the existing tariff groups in this scheme should continue with the electricity costs of pumping applying to the separate relift tariff group.[a]
Lower Mary water supply scheme	Tinana and Teddington Weir	All costs transferred from the Lower Mary distribution system relating to Owanyilla pump station and main channel costs are allocated to the Tinana and Teddington Weir tariff group.
Mareeba-Dimbulah distribution system	River—Supplemented Streams & Walsh River	In the 2020 review, in the absence of more detailed information we applied the approach used in the 2006–11 price path and 2012 review of setting fixed (Part A + Part C) and volumetric (Part B + Part D) components of the price target to recover 60 per cent of the bundled bulk and distribution system charge.
	Outside a relift: • Up to 100 ML • 100 ML–500 ML • More than 500 ML	In the 2020 review, in the absence of more detailed information provided by Sunwater we applied the approach used in the 2006–11 price path and 2012 review for stability in pricing and consistency of approach. We noted that the price differential appears to be widely supported by customers in this scheme. We estimated prices by projecting forward the fixed (Part C) prices from existing levels and maintained the existing relativity between these three tariff groups.
	Channel—relift	In the 2020 review, we applied the 2012 review approach of allocating all scheme-level electricity costs were allocated to relift customers. In the

Scheme	*Tariff groups*	*Previous treatment*
		2012 review, Sunwater proposed that electricity costs of pumping should apply to the separate relift tariff group.[b]
Upper Condamine water supply scheme	• North Branch • North Branch—Risk A • Sandy Creek or Condamine River	In the 2020 review, we applied the 2012 review approach for allocation of scheme-level electricity and renewals costs. In the 2012 review, Sunwater proposed that electricity costs of pumping should only apply to the North Branch tariff groups (North Branch and North Branch—Risk A).[c] In the 2012 review, Sunwater submitted that the North Branch—Risk A WAE has a lower priority than medium priority as it has similar characteristics to water harvesting as opposed to the provision of supplemented supply.[d] We accepted a lower fixed (Part A) price reflecting no recovery of renewals costs.

a *Sunwater, Barker Barambah water supply scheme, Network Service Plan, January 2011, p. 9; Sunwater, QCA review of irrigation prices, Electricity costs, background paper, February 2010, p. 13;* ***b*** *Sunwater, Mareeba-Dimbulah distribution system, Network Service Plan, January 2011, p. 26; Sunwater, QCA review of irrigation prices, Electricity costs, background paper, February 2010, p. 16;* ***c*** *Sunwater, Upper Condamine water supply scheme, Network Service Plan, January 2011, p. 28; Sunwater, QCA review of irrigation prices, Electricity costs, background paper, February 2010, p. 13;* ***d*** *Sunwater, Upper Condamine water supply scheme, Network Service Plan, January 2011, pp. 8, 33.*